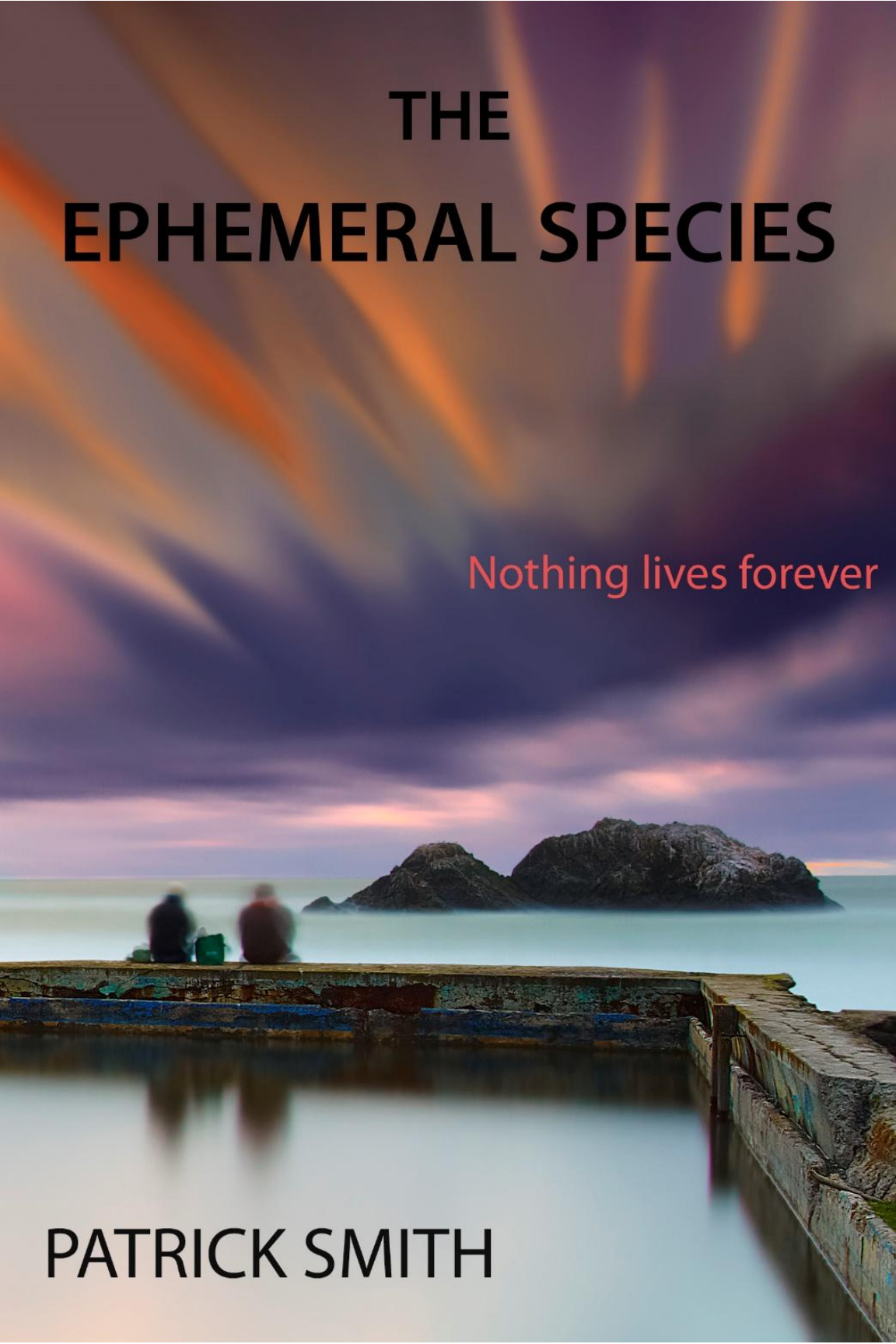
THE EPHEMERAL SPECIES

Nothing lives forever



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The Ephemeral Species

Nothing Lives Forever

Patrick Smith

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In the near future.

Chapter 1 – Nisha Presents Life on Mars

“Good morning. My name is Nisha Chandra. This is Intro to Astrobiology, 101. I'm happy to be here at Caltech’s newly expanded Beckman Auditorium. I’m excited to see so many of you interested in extraterrestrial life.”

She heard something behind her, but ignored it. This was her first lecture as a professor. She linked the presentation in her eyepiece to the view screen behind her, surveying the large audience. She felt most comfortable behind a screen examining data. Some students chatted on their devices despite the ban. She longed for the days when people talked with real people. Her AI agent prompted her to begin the lecture.

“My team at JPL here in Pasadena recently discovered evidence of ancient water-based multi-cellular life on Mars. In a crater, layers exist like those we find on Earth in ancient seabeds.”

“What did you find?” a student in front said.

She walked to the edge of the stage.

“A few days ago, the Mars geology team dug six meters beneath the surface of the crater you see here. We discovered thousands of small objects. They’re similar to the 3.5-billion-year-old bacterial micro-fossils in Australia. We’ve dated the Martian objects to about four billion years old.”

“Do you have pictures?” a student in back said.

“Yes. Here they are.”

The students gasped at the images on the big screen.

“They look like fossils, don't you think? We'll post more photos of them to the JPL website. If you think of alternative theories to explain these, let us know. I believe primitive life flourished on Mars four billion years ago, when conditions were more hospitable. The planet had an oxygen rich atmosphere a billion years before Earth did. Much

of its atmosphere was stripped away due to a loss of its magnetic field and for other reasons. Today, pockets of life might still exist underground. I'm excited about this possibility. I wake up every day hoping to find alien life somewhere. Nothing would make me happier than to examine extraterrestrial life with my own eyes, or at least in photos and data. Soon we might know for sure."

She surveyed the fresh faces in the audience. These weren't the average kids walking down the street. They came here from around the world because Caltech had a legacy of great people making state of the art discoveries. The school still had the highest percentage of Nobel Laureates on the teaching staff of any university in the world.

For a few seconds, she heard hissing sounds like those of a large crowd rise behind her. Her heart raced. She glanced back, but nobody else was onstage. She thought her inner-ear tinnitus was acting up again. A few students chuckled.

"Sorry about the distraction. The aliens in the cage behind me are getting restless. I'll bring 'em out later."

The students laughed. She didn't know whether they were laughing with her or at her. She ignored her elevated heart rate and continued her lecture.

"Okay. Raise your hands if you think life existed on Mars."

All 300 students raised their hands. She raised an eyebrow.

"How often does an entire class of students agree on anything?" she thought.

"Do you think life exists on Mars now?" she said.

Again, all the students raised their hands.

"Everyone? Really?"

She scanned the audience for signs of a prank but felt nothing. Caltech had a long tradition of pranks. As a new professor, she knew she could be the next victim. She didn't want to lose control of the class.

"How many of you think intelligent life currently exists in our galaxy at our level or above?"

Once again, everyone raised their hands.

“Okay, what’s going on here? In a class this big, there's always disagreement.”

She could hear a pin drop. She smiled and glanced up to the ceiling as she often did when she found humor in something.

“Okay, I’ll play along. How many of you think extraterrestrials have visited us in the past?”

Every hand rose. She didn’t know what to do, so she continued.

“Do alien beings live on Earth right now?” she said.

As she expected, everyone indicated the affirmative.

“You think so?”

A student in back shouted out, “Yeah, they’re in the cage behind you!”

The students laughed. She smiled and glanced behind her, pretending to look at the imaginary cage. She blinked to activate her eyepiece, which displayed the names of each student seated before her in real time. The eyepiece assistant whispered in her ear, “Mr. Kepler last spoke.” She smiled confidently but wiped the perspiration off her forehead.

“Yeah, they’re in the cage Mr. Kepler.”

She tried to buy some time to deal with the prank when the sounds returned louder this time.

“These aren't human voices,” she thought. “They're more like a low-quality recording of a crowd cheering. The kids are up to something, but the sound is in my head. It's not coming from a speaker. How are they doing that? Well, this is Caltech.”

She turned around again. She hid her shaky hands behind her back.

“Don't keep us in suspense. Bring them out.” Mr. Kepler said.

The class erupted in laughter.

The sounds stopped. Nisha walked to the lectern and gulped some

water. She tried to compose herself and ignore the goose bumps. She didn't want to fall prey to this prank.

“Okay, did anyone hear those sounds?”

The entire class raised their hands. She smiled, but her heart raced. She took another drink of water.

“Okay wise guys, what did they sound like?”

The students whispered to each other, thinking they were now the subject of a prank.

“They sounded like the voice of the guy who does those intros for sci-fi movie trailers,” Mr. Kepler said. “You know, like ‘they came from a galaxy far far away to enslave humankind as food.’”

The students laughed.

“Okay, okay,” Nisha said.

Her breathing grew shallow. She couldn’t get a handle on the origin of the sounds. She took another gulp. She thought maybe it wasn't a smart idea to take this job.

“Let’s do a poll,” she said.

The class quieted down. Nisha smiled, continuing to hide her shaking hands. Her logical mind wanted to find the underlying cause of the prank.

“How many people heard sounds, just now?” she repeated.

Everyone raised their hands. Nisha shook her head.

“Okay, I want everyone to close your eyes. I want to find out exactly what they sounded like to you. Keep them closed. This includes you Mr. Kepler.”

Once all eyes were closed, she began the questioning.

“Did they sound human?”

Nobody raised their hand.

“Okay, open your eyes,” she said.

The class opened their eyes. Many giggled, unsure of what to think of this.

“Close them again.”

“Did they sound like the noises you make when you click the roof of your mouth with your tongue?”

About 75 people raised their hands. The class opened their eyes and laughed. Some made clicking noises.

“Close them.” she said. “Did they sound high pitched, like they were small creatures?”

About 100 students raised their hands. They opened their eyes, smiling and talking as they did.

“Eyes closed,” she said. “Was there a language, like English?”

Half the class raised their hands. People opened their eyes, laughing and talking.

“They sounded a bit like Klingon.” Mr. Kepler said.

The laughter continued.

“All right, let’s proceed,” she said.

They closed their eyes again.

“Did they sound like a scratchy recording of a huge crowd cheering when passed through an electronic filter?”

Only three students raised their hands. A shiver went down her spine. She tried to ignore the heavy feeling of sensing the inexplicable. She thought there must be a logical explanation.

“Okay, open your eyes,” she said.

Everyone focused on the three people. Nobody said a word.

“Tell us what you experienced.”

One student said, “I heard them the first time when you turned around, then louder the second time like you. They weren’t speaking in any language I know. The sounds were muffled and electronic with static. It was like hearing a crowd outside a stadium, but the sounds were in my head, like ringing in my ears. I can't explain the experience. I’m sweating.”

The other two students kept their hands raised and agreed with the

first one. Nisha kept a straight face.

“That’s exactly what I heard,” she said. “Interesting. You thought of the sounds in terms of 'them.' As though it was the voices of a crowd of beings. Me too. We may be placing our biases on these noises though.”

She paused and kept her poker face on. She rubbed her hands together to relieve the numbness. A student in front giggled. The class nodded their heads in approval. Someone clapped slowly, alone at first. Then they all broke out in applause.

“Good one professor,” Mr. Kepler said. “We thought we had you, but you win.”

Nisha smiled and told the three students to sit down. She decided to carry on with the lecture. However, she knew something big happened. She never experienced anything like this in her life. The three students also understood. They exchanged knowing glances. She continued her lecture, with her popularity and authority intact. She felt her heart beating strongly, but she carried on as though all was well.

“Does anyone know of Fermi's paradox?” she said, expecting at least a few hands to go up.

Most raised their hands.

“Are you serious?” she said.

This time the students were serious. They nodded their heads.

“Well since most of you are familiar, I'll give a brief overview for those who aren’t. Physicist Enrico Fermi and others wondered why we’ve never found evidence of extraterrestrial life, despite the high probability of its existence and the long time spent looking.”

“That’s because you’re hiding them from us in that cage,” Mr. Kepler said.

Some students chuckled quietly.

“He brings up a good point,” Nisha said. “Some governmental organization might hide evidence, but I rarely believe in conspiracy stories. Perhaps we haven't developed the technology to detect them. I'm not sure. Maybe alien species hide themselves from detection to

avoid being discovered."

Nisha wrote on her pad. Her writing was displayed on the big screen behind her.

"The Drake equation allows us to make a guess as to how many extraterrestrial civilizations might exist in our galaxy. It's widely known of course. I'll present my own version of his equation. Let's do the numbers."

She wrote:

"Number of stars in the galaxy: at least 200 billion.

Estimated number of planets per star: Two on average.

Number of planets in the galaxy: 400 billion.

Number of Earth-sized planets near the habitable zone: 50 billion."

"Aliens must be everywhere." Mr. Kepler said.

"Possibly, but there's more to think about," Nisha said.

She wiped the perspiration from her forehead.

"Out of those 50 billion Earthlike planets, some have no magnetic field, so they won't be able to keep hydrogen and water in their atmosphere. They're dry like Mars. Some are hot like Venus, which are on the inner edge of the star's habitable zone. My guess is one in ten Earths with habitable temperatures have a magnetic field with enough water for a long enough time to support life."

"That's still five billion Earths," a student in front said.

"Yes, but most stars are red dwarfs. They live longer than our sun, but many of them blast their planets with flares which can cause mass extinctions. I'll cut the number of somewhat hospitable Earths to around 1 billion."

"That's still a lot," Mr. Kepler said.

“Yes, but let's examine the other limitations. How often would life emerge on these hospitable Earths?”

“I’ll guess on one in ten Earths?” a student said.

“Your guess is as good as mine. We have no way of knowing. We'll take your estimate, though it could be much higher or lower. We have little data on how life emerges from non-life. This is the weakest link in our hypothetical chain. Also, Earth was not hospitable to today's modern life forms when life emerged 3.8 billion years ago. So now we’ll estimate 100 million Earths exist where life might form at some point.”

Nisha scanned her audience. Most were interested. A few were messaging in their eyepieces. She had trouble writing on her pad, the words appeared jagged. She felt dizzy and hoped she could make it to the end of the class without collapsing. She took another breath. Fortunately, she loved talking about this topic.

“Let’s say 100 million habitable Earth-like planets exist in this galaxy that formed at least primitive life in the past 13 billion years. Early on, there were many collisions, ending life on those planets. Our question is, how many Earths have intelligent life at this moment?”

She received answers ranging from zero to a few million.

“I can only base my estimate on Earth, which is the only planet we know of where intelligent life evolved.”

“You lost me professor,” Mr. Kepler said as he smiled.

The class snickered. Nisha shook her head.

“Okay wise guy. For the sake of speculation, let’s pretend there’s at least intelligent life on Earth here in this classroom.”

“Agreed,” Mr. Kepler said.

The class smiled and nodded their approval.

“Okay, the age of the Earth is 4.5 billion years. Intelligent humans, similar in appearance to us, roamed the Earth for at least 300,000 years. So, for approximately 1/15,000th of the lifespan of the Earth, intelligent life has existed here. If you chose a random time to visit the Earth, there's only a one in 15,000 chance you would discover

intelligent life at the cave dweller level."

"Some modern people aren't at the cave level yet," Mr. Kepler said.

The students snickered again. A bit of perspiration drained into her eyes, prompting her to wipe them clean.

"Very funny, now let me continue. Out of those 100 million habitable Earths, intelligent life might exist right now on 1 out of every 15,000 of them, which means only 6,000 planets in our galaxy. This assumes all planets with basic life evolve intelligent life like it did on Earth."

"That's a big assumption," a student in the middle of class said.

"I agree. Imagine if the dinosaurs never went extinct 65 million years ago. They'd still be here. Humans would never have evolved. Dinosaurs didn't evolve much for over 100 million years and might have kept going for a hundred million more. We can't assume intelligent life will automatically evolve from common animal life. Animals evolved for hundreds of millions of years yet none of them evolved intelligence until recently. Earth was lucky. So it's difficult to use the Earth as a standard model for calculating the probability of extraterrestrial life. How lucky is the Earth?"

"Very," Mr. Kepler said.

"You're right. Even after the dinosaurs died, humans didn't come around for over 60 million years. We almost got wiped out 70,000 years ago and at other times. We weren't guaranteed. Intelligence isn't guaranteed. The evolution of Homo sapiens or Homo neanderthalensis is a long shot, even here on this friendly planet. My guess is out of those 6,000 hospitable Earths where life had time to form, only a few hundred Earths at most exist in this galaxy with intelligent life at this moment. Also, we need heavy metals like iron to form rocky planets like Earth. Those elements are formed in supernova explosions. So only third-generation stars and above have rocky planets. That further limits the number. Perhaps only a fraction of those few could support today's human life since there are so many other variables. The atmosphere could be toxic to us but okay for another intelligent species."

The students paid attention.

“That’s depressing, only a few hundred?” Mr. Kepler said.

“Yes. Now, we should consider other factors. Most stars are older than the sun. Therefore, many of those Earth-like planets are older. I’ll estimate that 10 to 1,000 intelligent civilizations currently exist in this galaxy. Nobody knows. Most would be more advanced than us. Considering the immense amount of time available to colonize the galaxy, a single species with a 10-million-year head start on us, could easily colonize the entire galaxy by now without faster than light travel, or even 20% of light travel. That's a mere instant compared to the multi-billion-year lifespan of this galaxy.”

The students whispered to each other.

“So where is everybody?” Mr. Kepler said.

The students nodded their heads. Nisha took another gulp of water.

“That’s exactly what the now famous Fermi's paradox is all about. With all the possibilities, where is everybody? Perhaps there is a *Great Filter* which makes intelligent cultures go extinct. We don't even see evidence of AI out there, which could spread faster than organically based life. Drake designed his equation in 1951 to make a guess as to how many planets in our galaxy might harbor life. We didn't understand much about planetary systems except for our own. However, we’ve found many Earth-like planets because we can detect bio signature gasses on habitable-zone planets which might indicate life. The Seager equation, named after the famed planetary scientist Sara Seager, allows us to estimate the odds of intelligent life existing on a planet right now. The Earth has been sending out bio signature signals for over 600 million years. Human-level intelligent life has been present for about 1/2,000th of that time, 300,000 years. Those are two variables in the equation. Why has nobody visited us, given all we know? Why have we not detected life out there? It's possible there's no intelligent life in this galaxy except us. Or, even with 1,000 civilizations in this galaxy, that's only 1 per every 1,000 light years of width in the galaxy. That's widely spaced, but this is all speculation. Also, we live in an empty part of the galaxy between the arms. Intelligent life needs a long time with no planetary impacts. Only a

small part of the galaxy has been peaceful for long-enough to allow higher life to evolve."

She took another drink of water.

"It depressing to think we may be alone in the galaxy, or that each galaxy has only a few intelligent species who never meet each other before they go extinct. That may be to our benefit. As much as I want to discover extraterrestrial life, more than anything, I don't think our species is ready."

Nisha continued her lecture until the end of the period. The class walked out of the auditorium into the hot and dry September air, continuing to discuss the lecture. Nisha called the three students to the stage to discuss the incident. They huddled close to each other, gripped with fear.

"I don't understand what happened," one student said. "I've never experienced voices in my head. Am I going crazy?"

"No," Nisha said. "If you're going crazy, then the other three of us went crazy at the same time as you. I doubt we're going crazy."

Nisha got an incoming message in her eyepiece. She read the message from her 15-year-old daughter, Priya.

"Listen to this message you guys," Nisha said.

"Mom, these scary sounds came into my head just now. My heart is racing. I told some friends at school, and they laughed at me. Sophie heard the sounds, but Amy wasn't affected even though she's the genius."

"Perhaps we aren't going crazy." Nisha said.

The three students felt relief, before realizing sanity meant something real happened.

"I'll let you know what I find out about this," Nisha said. "You guys get to your next class and we'll talk tomorrow. I'm sure there's a rational explanation, with all the crazy tech going on now. Someone's got to make some laws before we kill ourselves, or it kills us."

The students left, walking close to each other and whispering. They behaved like old friends despite this being the day they met.

Nisha messaged back to Priya, “Hi Pree, I heard them too. So did three of my students. You aren’t going crazy. I’ll pick you up on the way home if you would like. We’ll talk. Love ya! xo!!”

Priya messaged, “Okay, I’ll be walking home on my usual route.”

Nisha messaged her husband, Quinn. He received it while working on a sculpture in his studio in the back yard.

“Did you hear any sounds or voices in your head just now?”

He waited for a second, trying to figure out if she was pulling one of her pranks. Then he replied.

“You’re funny Neesh. I think you’ve had your head in those star charts a little too long. It’s okay though, I still love you.”

She shook her head, smiled, and glanced upward. Then the smile evaporated as she began to consider the possibilities.

“Quinn, I’m serious. Voices or something entered my mind, and they also did to three of my students. Priya messaged me. She and Sophie heard the sounds too, all at the same time as we did. What about you?”

She stared into her eyepiece, awaiting his reply. She was unaware of someone waiting for her nearby.

“Sorry Neesh, I’m joking. The voices I normally hear in my mind were temporarily silent. Let’s talk when you get home. I need to finish this part of the sculpture before it dries.”

“OK, see you at home!” she messaged.

She turned around and became aware of Mr. Kepler.

“Are you okay?” he said.

She hid her hands behind her back and tried to compose herself.

“Oh. Um, yes, I messaged my daughter. The sounds came to her too.”

He laughed.

“That’s what I wanted to tell you. Your prank may go down as one of the best at Caltech. You had everyone fooled. I gotta go, but

congratulations. I'll be here tomorrow."

"Thanks, but—"

He raced out the door before she could say anything.

Nisha left the auditorium and walked into a faculty lounge where a dozen professors were debating the old string theory. The Grand Unified Theory still evaded them. She wanted to find out if anyone else noticed anything. However, nobody mentioned hearing voices or any other unusual sounds. She said nothing and walked out to teach her next class. Nothing unusual happened for the rest of the day, though she overheard a few students discussing the sounds. Nisha mentioned the unusual events to nobody else.

At 3 p.m. Nisha walked to her car for her short drive home. The day seemed like any other. As she drove in old-school manual mode to distract herself, she flipped through the news pods, but the unusual sounds weren't mentioned. She didn't see Priya on her normal route.

She burst through the front door and ran straight into Quinn's studio in the back yard. A rounded human-like shape in clay stood in the middle of the floor.

He stopped working as she walked through the door.

"Neesh? Are you okay? You're shaking."

"Quinn, I barely survived the drive home. I almost hit someone, so I switched to autopilot."

He walked over and gave her a hug.

"What were you doing driving manually anyway? You're sweating. Sit down and tell me what happened."

She couldn't sit.

"During my lecture, the voices came from behind me. Well, they weren't voices, but more like artificial static. The sound fluctuated like a crowd of voices. At first, I ignored them. Then I got distracted. I turned around and nothing was there. The students thought it was a joke, but it wasn't. A few minutes later the sounds returned. They weren't like normal sounds in my ears though. It's like when I'm silently thinking. Three students out of 300 in my class heard the

sounds. I'm estimating 1% of the general population is aware of them. I need to go online and find out who else experienced them. Nobody mentioned unusual sounds on the pods on the way home."

"I never thought I'd see the day when you're talking of things you can't prove, and I'm the one waiting for the facts. Usually, it's the other way around."

She smiled.

"I never thought this day would come either, but the sounds were real. I experienced them as plainly as my own thoughts right now. You must believe me."

He took her in his arms and whispered, "I believe you Neesh. It'll be okay."

"Thanks Quinn."

Nisha ran back into the house and straight to her computer, which she normally used for data analysis. Her Reddit page remained open from early in the morning. She browsed through a stream of comments from communities she followed. For a while, she read no mentions of scary or unusual sounds. Several pages down the list, Nisha read a post from an astronomer friend at the La Silla Paranal observatory in Chile.

The post read, "While performing some exoplanet calculations, I heard a million scary voices in my mind. Anyone else?"

A shiver traveled down her spine and made her toes tingle. She stared at the post, wiggling her toes as Priya walked in the front door. Nisha awakened from her trance when Priya entered the room.

"Pree, get over here. Check this out." she said, pulling Priya onto the chair beside her.

She wanted to show Priya the post. Priya stared at the ground.

"Pree, are you worried about the sounds?"

"Mom, a car nearly hit me on the walk home because of the distracting voices inside my head. I walked from behind a bush and then had to jump back. I don't think the driver saw me and I didn't see the driver. So, I took the long way home. The idiot was driving manually. Anyway, I heard millions of them. My heart is racing, like

it's going to explode out of my chest."

Nisha put her arms around her.

"I can feel your heart racing. Mine was too, on the way home. I almost blacked out. That car might have been me. The sounds distracted me. I forgot autopilot."

"Oh my, that WAS you. I was too distracted by the sounds to notice."

Nisha's face turned pale when she realized what almost happened.

"Sorry Pree. I've had a dreadful day."

"It could have been worse Mom."

Nisha stared at her computer and couldn't say anything for several seconds. She sighed.

"Yeah, you're right. I need to focus. I don't think we're the only ones who heard the sounds. Check out this post from Chile."

Priya read the post.

"I'm sick to my stomach. What are they?"

"I don't know," Nisha said. "Let me do a search right now for unusual or scary sounds. Do you want something for your upset stomach?"

"I'm okay. I want to know what this is."

Nisha searched. Soon dozens and then hundreds of entries related to unusual sounds scrolled down the screen. They were from all over at least half of the planet. She read the first two.

"I heard some eerie sounds. I went to the bathroom and got sick. Nobody believes me."

"Anyone know about the voices in my head? They weren't like human voices."

Nisha and Priya scrolled through hundreds of posts all saying the same thing. Some sarcastic comments appeared too.

“Mom, they’re real, what’s happening? They're calling them voices.”

Priya's frightened reaction surprised Nisha. Priya was the strong one. She hadn't shown her vulnerable side in a few years. Nisha found it comforting and it brought back fond memories of Priya's childhood. She put her arm around Priya's shoulder, rubbing it reassuringly.

“Yes, voices. I’m not sure what's happening. I doubt they're voices. We're putting our biases on it. The posts originate from about half of the world. They’re from North and South America, across the Pacific, and over to Asia near Japan. I see no posts about the voices from Europe, central Asia, or Africa. Why?”

They huddled close to each other as Quinn came in from the back yard.

“Are you guys okay? What are you looking at?” he said.

Nisha glanced up and coughed to clear her throat.

“We’re not okay, but we’re not going crazy. Check out these posts.”

Quinn glanced over their shoulders. One post after another describing the strange sounds scrolled down the page, at the rate of about two per second.

“Is this happening all over the world?”

“No. They only seem to be happening on this side of the world,” Nisha said. “That’s the odd property of these sounds. If the sounds happen again and we receive them on a particular part of the planet, I’ll be able to start to trace an origin. It may be off planet.”

Quinn began to ask another question when the school bus stopped in front of the house.

“Sanjay is home. What should we tell him?”

“I’m not sure yet,” Nisha said. “We’ll talk about this at dinner.”

Nisha turned off the housekeeping robot because it was in a bad mood. They got up to fix dinner and set the table as Sanjay walked in the door.

“Sanj, how did your day go?” Priya said.

Sanjay glanced around. He couldn’t focus.

“Are you upset?”

“Yeah. At first everything seemed fine and then one of my classmates began crying. She said scary sounds like voices were in her head. She calmed down and the sounds came again. The teacher told us they took her away to the psychologist. I think she went crazy. I’ve never seen a crazy person before.”

“We heard them too,” Nisha said. “Many others did. We all might be going crazy at once, but I doubt it. Oh Pree, I forgot to ask how your genetics report turned out today. Did you present it?”

“Yeah, I made my first presentation before the sounds came. I’ll do my second one later. I want to be a geneticist when I grow up.”

“I think genetics is a perfect career for you.”

“It's exciting because soon we’ll be able to fix all diseases by rewriting the genetic code in an analogous way to how we code computer programs. I’ll be able to find out why Sanjay has autism. I hope I can fix it.”

“Leave me alone. I like who I am,” Sanjay said. “It’s mild level one anyway. There's nothing wrong with me.”

He stood up and stomped off to his room, throwing his books to the floor.

“What’s wrong with him?” Priya said.

“Pree, he doesn’t think anything is wrong. People get used to who they are, even if they’re different from others. He knows of no other way to be. If you magically transformed him into what you think is an improved person, he'd want you to transform him back. You need to learn to accept people for who they are.”

“Yeah, I guess you’re right, but I'd like to be transformed into a genius like Amy. A super genius. I still want to cure autism. I know how the kids bully him. I’d wanna take those kids and—”

“Okay, calm down.” Quinn said.

“Da-ad, you don’t know what happens in school. They pick on him every day. The teachers don’t notice and do nothing. I wish I had superhuman powers so I could kick their—”

“Pree, you need to relax and—”

He looked across the table. They sat expressionless.

“Guys?”

They appeared preoccupied and glanced behind themselves simultaneously.

“Hello? Earth to anyone?” Quinn said.

“Mom, the sounds are back.”

“Yeah, they’re back.”

“What do they want? I'm sweating. I want to rip them out of my brain.”

“I don’t know what they want, but I’m going to find out.”

Nisha glanced across the table at Quinn.

“The sounds came again just now. Did you experience anything?”

“No Neesh, what did they sound like?” Quinn said.

“Hold on.”

Nisha did a quick post to her 250,000 members in her NishaAstro Reddit community.

“The sounds are back; did you hear them?”

The replies came quickly.

“NishaAstro Yes, in Phoenix!”

“NishaAstro, I live in Chicago … loud and clear.”

“Sorry, I had to send out that post quickly. I wonder where the sounds were heard this time. The sound reminded me of a crowd

roaring at a baseball game after a player hits a home run. Something big happened. The sounds calmed down. Now they're gone. A soft static sound filtered over the top of the low sounds."

"Could you tell what they were saying?" Quinn said.

"No. If they're voices, they don't sound like any language I know. It's full of static, so I can't tell for sure. Artificial, like bad old school radio reception. Pree, do you agree?"

"Yeah. I can't figure out what they're saying. It's just a noisy robotic crowd."

Priya's hands trembled. Her fork rattled against her dinner plate.

"Sorry about that."

An incoming message appeared in Priya's eyepiece. She dropped her fork on the ground.

"Ugh, that startled me."

She read the message with intensity.

"What do you see?" Quinn said.

"It's Sophie. The sounds came to her too."

Priya messaged Sophie.

"Me 2. I'm shaking. See you tomorrow. Did Amy hear the sounds?"

"No, she didn't." Sophie messaged back.

Nisha stood up from the table and motioned Priya to follow. An unreasonable fear twisted her guts into a knot, but she didn't want to make Priya even more frightened.

"Let's go back to my computer and watch what's happening. I'm sweating, but this is exciting."

"Wait for me!" Quinn said as they left the room.

"Amazing," Nisha said. "There's a flood of posts from here on the west coast of North America, around to central Asia, but none from Europe or Africa. Only a few posts originate from the east coast compared to eight hours ago. That's a different configuration than the

last time."

Nisha manipulated Google Virtual Earth on her screen with the Reddit data overlay and noticed a pattern. Uneasiness settled over her as she spun the world around.

"The Earth has rotated about 1/3 of a turn in the eight hours since we detected the previous sounds. The posts shifted 1/3 of the way around the Earth. I think the sounds are coming from somewhere off the Earth. It's as if the sounds 'set' on the east coast like a sunset and 'rose' in central Asia like a sunrise. In a few hours, I think they'll set here too."

"Mom, you're freaking me out," Priya said.

Nisha tried not to upset her, though she feared the worst. She didn't think Priya had the maturity to handle these events. However, she always insisted on openness and transparency. She wiped her sweaty palms on her shirt and put her arm around Priya who sat tightly against her.

"It's okay Pree. Isn't this exciting? This what science is all about. Discovering the answers to mysteries. If the sounds return in a few hours, we might not detect them here because we're on the opposite side of the Earth from where they originate. Hmm, when I spin the globe, 'Earth' seems like a funny name for this planet. Its surface is mostly water, not earth as in soil."

"It is exciting, but I feel like throwing up," Priya said.

Nisha squeezed her.

"It'll be okay."

Nisha posted, "I'm noticing a pattern in posts about the sounds. Will keep you updated."

She added another post to start a discussion with her astronomer friends around the world.

"If you speculate on the weird or scary sounds, post them here."

They watched the posts for a few hours as the stream slowed down. People speculated.

"I think the sounds are from outer space."

“Think of a more original meme next time losers.”

“The sounds are real!”

“This weird sounds thing is a farce. Get a life NishaAstro.”

“NishaAstro, I used to respect you as a legitimate scientist.”

An hour later, Priya and Quinn sat close by as Nisha worked on a large sample of Reddit location data. Her agent created a new overlay map on Google Earth showing the posts recorded after the two occurrences of the sounds.

“Guys, you may not believe this,” Nisha said. “The Earth has rotated, but the angle of origin of the sounds didn't move. Let me show you.”

She rotated Google Earth. The posts moved across the Earth but stayed in place in relation to the stars. The effect was like the pattern of sunlight striking the Earth staying in place as the Earth rotates.

“I’ll need a few more data points to be sure but…”

“But what Neesh?” Quinn said.

Nisha held up a finger.

“Wait a minute.”

She turned to the computer and posted, “From Reddit data, the sounds are coming from the direction of Saturn.”

“Saturn?” Priya said.

“Yes. They’re not necessarily from the planet itself, but from that general direction. The distance might be closer or much further away. I don’t know.”

This created an explosion of posts, many of them skeptical.

Midnight came and went. They stayed wide awake, but school awaited Nisha and Priya in the morning. Quinn had an art installation due early. Priya slept in their room in a sleeping bag.

Chapter 2 – Something is Out There

As the sun rose the next morning, Nisha and Priya talked in their sleep and woke up, sweating profusely. Quinn suddenly woke up.

“Mom, I dreamed about them,” Priya said.

Nisha reached down to Priya, who was still in the sleeping bag on the floor and put her hand on her shoulder.

“You're sweaty. We’re here. I dreamed about them too.”

“Who?” Quinn said.

They both struggled to talk. Nisha tried to describe it.

“They were like, um.”

Silence.

“They? Like what?” Quinn said.

“It’s hard to explain. I couldn’t visualize them clearly. I dreamed about hazy figures moving about. The sounds were the same as yesterday. The sounds seemed to come from them, but they weren’t speaking out loud. It's like tinnitus, but it has patterns to it. Sorry, I'm not making sense.”

Priya nodded her head as she put her sleeping bag on the bed and climbed in. Nisha tried to explain.

“It sounded as though they were all speaking at once in my mind. I couldn’t hear them clearly enough to pick out words.”

“Did these voice-sounds have any words?” Quinn said.

“It’s weird,” Priya said. “In my dream, they were talking but all the words were jumbled together. They were talking too quickly for me. What I picked up made me think of a stream of consciousness. It was dark, and I could barely see anything.”

“Neither could I,” Nisha said. “I gazed out a big window. Saturn and its rings were outside. I dreamed of Saturn, but I didn’t see it. I felt

it and I knew it was Saturn. I'm not explaining this well."

"Neesh, you're usually the logical one, but this time I'm confused," Quinn said. "Are you telling me aliens are contacting you and Priya?"

"Well, I don't think they're trying to communicate, if they exist at all," Nisha said. "I think we're overhearing them, or it. In class yesterday I said I'd be excited to encounter or learn about real extraterrestrial life, but now I'm anxious and I don't want to know anymore. We've never found evidence of extraterrestrial intelligence. I'm sure there's some rational, non-extraterrestrial explanation for all of this."

"Rational?" Quinn said. "Now that's the Nisha we all know and love."

She asked her agent about, 'mass hysteria.' She reviewed the information.

"Check this out. Someone on Reddit called the sounds, mass hysteria so I did some research. Mass hysteria refers to the collective delusions of threats to society which can spread rapidly through rumors and fear. Mass hysteria can be anything from people dancing for days on end until they die, to thousands of people thinking polluted water has turned sweet, to people laughing until they become sick. Thousands of people can get rashes with no known cause. The delusions can start with one person having something real happen to them. Soon after, others think the same thing too and the delusion spreads like a meme."

"Is this happening now?" Quinn said.

Nisha glanced at Priya, raising her eyebrows.

"No way," they both said simultaneously.

"We heard the sounds at the same time with no chance for a meme or rumors to spread," Nisha said.

"Oh, look at the time, we gotta go," Nisha said.

They got up, ate a quick breakfast, and walked to the front door.

"Okay I have to go to the auditorium for my class, I'll see you

tonight, Quinn."

"Okay Neesh. Bye Pree," he said.

"Bye Daddy."

Nisha dropped off Priya at school and drove on autopilot to Caltech. She didn't trust herself to drive on manual, though she never trusted autopilot. She walked onto the stage 10 minutes early. The auditorium was full. The crowd estimator in her eyepiece counted five hundred students and only four hundred seats. Nisha felt a buzz of excitement in the room. The air conditioning didn't help much to cool things down.

"Okay everyone, settle down."

Slowly the noise decreased, and the auditorium settled into dead silence.

"I had a lecture planned for today about the exciting details of our most recent discoveries of ancient life on Mars. What would be more exciting than that?"

She could hear a pin drop. She scanned the crowd and concentrated on presenting a calm appearance.

"However, I wish to discuss a few things that happened since we last met. Yesterday, three of your fellow classmates simultaneously heard static filled, voice-like sounds in our minds. Me too. The sounds were also heard around the world. How many of you know about this?"

Most raised their hands.

"Good. Yesterday around 6 p.m. local time, the sounds came again. They're like a crowd of voices. They were heard over half of the world each time. The Earth turned 1/3 of a revolution in the eight hours between the first two occurrences of the voices. When I plotted the Reddit location data on Google Virtual Earth, I realized the voices must be originating from off the planet."

Mr. Kepler broke the silence.

"They were from the Klingon home world, after all. I knew it!"

The students chuckled. Nisha smiled and glanced up at the ceiling

as the morning light reflected up onto it. A few beads of perspiration appeared on her forehead. She resisted wiping them off. She didn't want to frighten anyone.

“Well, if the Klingon home world is directly behind Saturn, then you’re right,” Nisha said.

The students turned to each other, whispering.

“Let me explain. This morning the voices or whatever, came back. After doing some calculations, they originate from the general direction of Saturn.”

The audience let out a hushed gasp. Some in the audience smiled, as if they were waiting for the punch line of some elaborate joke.

“The transmissions might be originating from in front Saturn or behind it, I don’t know yet. I say this because in all three instances, 99% of the posts came from the side of the Earth facing Saturn while few posts originated from the half of the Earth facing away from Saturn. The voices seem to rise and fall like the sun once per day. They rose here around breakfast time and last night they set around dinner time. Saturn is nearly behind the Sun from our perspective right now, so this makes sense for the voices to rise and fall with sunrise and sunset.”

“Sounds like mass hysteria to me.” Mr. Kepler shouted.

A few students in the audience clapped.

“Funny you should mention that,” Nisha said. “Mass hysteria is a real documented phenomenon. As a scientist, I must ask myself if I’m imagining these voices and visions. I dreamed about Saturn this morning. Is this part of the hysteria? In the dream, I thought the voices came from near Saturn, not on it. I might have generated a vision in my own mind. I don’t know for sure. I’ll keep an open mind. These voices might be real. I’m a scientist. Mass hysteria doesn’t happen instantaneously all over the world.”

A student in front said, “Do you think they’re real?”

Nisha paused for a drink of water.

“Yes, I think they’re at least real in the minds of the 1% of the population who are affected. What convinces me they're real is how

the hard data favors the hypothesis that the voices originate off planet. I'm not saying they're from some intelligent alien species. However, something real is happening that's affecting people in a tangible way all at once. It's not mass hysteria."

"How many of you think this is mass hysteria?"

About 25% of the students raised their hands.

"Good." she said. "I like a healthy dose of skepticism. I would be more skeptical too if I hadn't experienced them myself."

"So, if these voices are real, what are the potential causes besides aliens in some spaceship?" Mr. Kepler said.

Nisha didn't respond to the question and began to sweat.

"What did you say?" she said.

He repeated the question.

"If these voices— Are you okay?"

Nisha fell into a trance for a few seconds and snapped out of it.

"I'm sorry everyone, the voices came back again. How many of you heard them?"

She took another drink of water. Four students raised their hands. She felt a chill shoot down her spine and into her toes.

"I notice the same three students as yesterday, but you're someone new. Were you here yesterday?"

"No," said the fourth student. "I came today because my friends told me to come. The voices came through a bunch of static, but they were clearer today than yesterday. Like variable ringing in my ear."

"Yeah, they sound a little louder too, with less static," Nisha said.

The other three students agreed.

"It's as though they're closer, or louder, or both. Raise your hands if you heard them today but not yesterday."

No hands went up.

"So, you either can receive them or not. Those who haven't experienced the voices may never be affected. Among you four, did

any of your family members hear the voices?"

All four students raised their hands.

"Okay, so genetics may play a role in your ability to receive the voices."

"Or mass hysteria runs in families." Mr. Kepler proclaimed.

Nisha smiled and glanced up to the ceiling again. The class chuckled.

"Or mass hysteria. This could be true despite overwhelming evidence to the contrary. I've been accused many times of being hysterical. Maybe. Hold on."

Nisha got another incoming message in her eyepiece from Priya.

"Mom, the voices came back again. They're louder. I'm getting headaches."

Nisha scanned the class. Her smile disappeared.

"Sorry about that. My daughter just heard the voices."

Nisha messaged back to Priya, "Me 2. In lecture. All will be ok. xoxo!!"

"Okay sorry." Nisha told the class as her hands shook again. "This is more evidence that susceptibility to the voices runs in families."

A student in front raised her hand.

"What if these are real aliens with real ships and real weapons or diseases? What do we do?"

"Well, we need to figure out where we stand compared to them. We're only now beginning to become a technological civilization. As I mentioned yesterday, many planets are older than ours. Chances are their technology would be far in advance of ours. I doubt we would be able to defend ourselves against them if they were aggressive. Let's hope they're peaceful. I'm still looking for other explanations for this phenomenon. I don't know if these are alien transmissions. They might be our own reflected TV and radio signals, or they might come from some planet or AI alien probe that reflects them by accident. I don't know yet, but I'll find out. We might be picking up our own internet

traffic."

Nisha didn't think the sounds were reflected transmissions from Earth, but she felt a need to be professional about it. She finished her lecture and walked outside into the hot late summer day. She checked her Reddit community. She gained 250,000 members overnight for a total of 500,000. She noted the location of posts mentioning the sounds. The direction of the sounds shifted slightly.

Nisha sent out two posts.

"The sounds might be our reflected TV/radio/internet transmissions. Origin direction has shifted."

"The ability to perceive the sounds seems to run in families. Genetics perhaps?"

Priya and Sophie faced bullying at their high school because of the voices in their heads. They bullied Amy for being their friend. At lunch, they ate alone at a table in the corner of the cafeteria when a group of kids walked by.

The biggest kid said, "Well look who's hiding away in the corner. It's the loonies. They're still wearing shirts with two sleeves. One sleeve will be enough when they're sent away to the loony bin."

The kids laughed and walked away.

"I'll kick their—" Priya whispered.

"Shhhh," Sophie said under her breath.

Priya imagined several different scenarios of retaliation but didn't say anything. They finished lunch and walked back to class. Priya stood up in front of the class to give the second part of her report on genetics. Halfway through, the voices came back as she spoke.

"I think in the near future, we'll be able to repair any defect and even—"

Priya froze in place for a few seconds. She awakened and her

hands shook visibly. A few students were giggling.

“Shut up jerks.” she said.

She ran out of the classroom with Sophie and Amy running after her.

Priya messaged, “Mom, can u pick me up? Where r u?”

A few seconds later Nisha replied, “I’m heading home now. I’ll be there in a few minutes. The voices are back.”

Priya picked up a rock and faced the big windows of her classroom. She imagined the rock crashing through the glass, startling everyone. Then she realized that she would be the prime suspect. She stared at the windows for a minute and dropped the rock. Nisha pulled up just as class ended. Sophie and Amy ran up to her in a panic. They got into the car and drove away from the school as the students exited the classrooms. Nisha understood they were both in distress. She tried to talk about it. Even though the car was driving on autopilot, she held the steering wheel tightly to disguise her shaking hands.

“Pree, did you think they were louder this time?”

“Yeah Mom, they’re louder. They don’t sound human at all. I wish they would stop. For a second, I imagined the planet Jupiter through a giant window. It wasn’t like a vision though. It was like a dream.”

Sophie's face looked pale.

“They spoke at such a fast pace; I couldn’t understand if they were speaking a human language. I remember Jupiter also, but I didn’t see it. It was a feeling.”

“I heard nothing,” Amy said. “I'm thinking of some explanations. I think they’re reflected radio transmissions. The odds of them being from an alien race are small, but we can't ignore the possibility since they come from a specific direction.”

They arrived home within a few minutes. Quinn and Sanjay weren’t home yet. They walked straight to Nisha’s computer to check the current events. Nisha did a quick calculation of the location of the latest posts. The origin had indeed shifted towards Jupiter, which had an angle of about 20 degrees of arc from Saturn at the time. Both were on the opposite side of the Sun from the Earth. Nisha broke out in

sweat again.

“They moved.” Nisha said. “I better post this right now.”

“Reddit data: The direction of the sounds has moved from Saturn towards Jupiter. No Mass Hysteria.”

Priya pointed at the screen.

“Mom, over a million people are in your community.”

Nisha raised an eyebrow and smiled.

“You’re right Pree. There's no sense of good taste on the internet these days.”

The girls laughed. At the height of their laughter, Nisha read a message in her Reddit chat. She clicked on the sender link, u/DHSGov, the US Department of Homeland Security.

She opened the message.

“We would like to speak with you about your investigations into the unusual sounds phenomenon. Click on this link to download the Secure Transmissions App ASAP so we can discuss. Thank you.”

Nisha glanced at Priya and Sophie with big eyes.

“Oh-kay then,” Nisha said.

Soon the App loaded on her computer after a thorough virus scan. She activated the [Initiate Transmission] button. On her monitor, several intimidating men in military uniforms sat behind a large table. Dark paneling set a solemn background.

“Dr. Nisha Chandra?” one of them said.

“Yes, this is Nisha.”

“My name is General Lucas Sherman. I’m the primary investigator into the possible military implications of the voices

phenomenon. I'll report directly to President Martinez for the duration of this event. We're impressed with your work on the President's counsel for the exploration of life on Mars."

"Thank you," Nisha said as she noticed a rash breaking out on her arm. "How can I be of assistance today?"

"First Dr. Chandra, your children must leave, so we can speak in private. This is a sensitive topic."

Nisha waved to the kids, and they left the room. They nearly closed the door but left a crack open so they could listen.

The General continued.

"Thank you. Now is it true you've determined the direction of origin of the voice transmissions has changed?"

"Yes," she said. "Every time the voices return, they are coming from a different direction based on the Reddit data. There's a pattern to the direction. First the origin came from the direction of Saturn and now it's from the general vicinity of Jupiter. I believe they're originating from near or inside our solar system. The angle of origin has changed so much in the past day that a vessel would need to exceed the speed of light if the source were many times more distant than Pluto."

"I understand," the General said. "What do you think might be causing these voices? Do you have any hypotheses?"

"General, I'm a scientist. I search for the truth based on solid evidence and try not to engage in idle speculation. My guesses on this matter are based on no information. They're speculation."

The General smiled.

"Your dedication to the scientific method is exactly why we've contacted you today. We don't want pseudo-science. Go ahead and speculate."

Nisha felt relieved. She hid her sweaty hands below the table so nobody could see them.

"Okay, the voice-like transmissions are coming from off Earth. As the Earth rotates, the origin stays in space. The course is moving in an

arc ranging from Saturn towards Jupiter. None of my instruments or those of anyone of which I'm aware, have detected these transmissions. They've only been detected in the human mind. However, I'm sure there's a real signal that can be received by instruments if we can find the correct frequency patterns."

She paused to drink some water.

"Please continue," the General said.

"I'm hesitant to mention anything that happens in the mind because real data is difficult to harvest from the mind. The imagination doesn't produce reliable data. My initial estimate is 1% of the population of the Earth can mentally receive the voices or whatever they are. This may not seem like much. However, with more than nine billion humans on Earth, the 1% adds up to over 90 million people. At first, I thought the effect must be some form of mass hysteria or an internet meme, with me being one of those affected. The problem is mass hysteria spreads from one person to the next. This however, affected everyone at once. The same people, several times. Also, the ability to receive the voices hasn't spread beyond those initially affected. Therefore, I believe the source of these transmissions is off Earth and is real."

The General looked around at the others in the room.

"Yes, this is what we've determined as well. We've been monitoring the situation. We're taking this seriously as a national security issue. We consider you to be the world's foremost expert on extraterrestrial life, so we'd like to employ you to be our primary investigator into the nature of this phenomenon. You would report directly to me and the President. If you agree, you must leave your post at Caltech. We need your full attention in this matter. We'll contact Caltech so you can return to your position when this event is behind us. Do you understand?"

"I under—"

Her image seemed to freeze on the screen in Washington, D.C. The DHS people thought the transmission had been interrupted. They attempted to reconnect when Nisha began to visibly shake.

"Sorry about that, General. The voices came back. They're

growing louder and clearer. It's as though the source is getting closer to Earth. As they get louder, I realize they aren't voices as we understand them. However, they sound intelligent and they're communicating in a language I don't understand or recognize. I don't think they're trying to communicate with us. I think 1% of us are passively overhearing their communication."

The General glanced into his eyepiece for a moment.

"I got a message from my daughter. The voices spoke to her friend again. This is a global problem. I'm working with my counterparts in countries around the world. Are you on board Dr. Chandra?"

"Yes General. I'll go on sabbatical at Caltech. Tomorrow will be my last day. Please contact them to let them know about the situation. My career at Caltech spans two entire days, so I don't have much tenure. I want to return to Caltech when this is over."

The General smiled.

"Great! We'll send you a more permanent secure communications app for your eyepiece and other devices so you can contact us at any time. The minute you know anything, we need to know. We'll send you instructions giving details on what we need from you. We've already done due diligence on you, and we've granted you full security access to my level. We're contacting another specialist at the CDC who may work with you. We haven't confirmed her yet."

"Thank you General," Nisha said. "I'll continue to work on discovering all I can about the transmissions."

They signed off. Priya and Sophie ran into the room.

"Were you guys listening?" Nisha said.

"How exciting. You're a spy for the government looking for aliens!" Priya said.

"I'm not sure if the voices are from aliens. I'm not sure what they are, but I do intend to find out. I'm not a spy!"

She did like the sound of it though. A spy seeking aliens.

"Mom, they're not human and they're intelligent. I felt them just now. You did too Sophie, right?"

“Yeah, they’re like living computers. I'm having trouble breathing. I'm sweating like a pig. Are they coming here?”

“I'm not sure guys, but I'm going to find out.” Nisha said.

Quinn arrived home and Nisha filled him in, attempting to act as though it was no big deal.

“Neesh, you can't fool me. I’m not sure about this. I'm not sure if I trust the government to do what’s right.”

“I know what you mean but there's a small chance they might be aliens. If they are, there’s a big chance they’re far more advanced than us. It could be a Black Swan event. Low probability, enormous impact. We need all the help we can get. Oh Quinn, can you get dinner on? The robot is acting weird so I turned it off again. The voices came back again, and I want to locate the origin and find out if they’ve moved.”

“Okay,” he said.

Nisha downloaded the new Reddit location data set and sure enough, the source had moved. A cold and damp chill descended her spine, even on that warm day. She tried to act as though everything was fine. Priya noticed the expression of worry on Nisha's face.

“What's wrong Mom?”

Nisha focused on the data and ignored Priya.

“Mommy?”

“Oh, I’m sorry Pree. Let me send out this post and you’ll understand why I'm worried.”

“Latest Reddit data indicates the direction of the sounds is moving towards Mars. Is Earth the next planet in this sequence?”

“Pree, what worries me is the source intentionally changed direction to move closer to Mars. Mars is at nearly a 60-degree angle in the sky compared to Jupiter. This shows intent and the ability to travel at great speeds.”

Priya, Sophie, and Amy turned to each other, but said nothing. Sophie realized she was squeezing Priya's arm and let go, leaving a handprint.

“Don't worry,” Nisha said, trying in vain to assuage their fears. “This is exciting!”

Nisha relayed what she learned to the DHS. Quinn called everyone to eat an early dinner.

The school bus arrived on schedule and Sanjay walked in the door.

“Hi Mom. Can I quit school and be home schooled?”

“Did they bully you again? I'll kick their—”

“Priya.” Nisha said.

Sanjay continued.

“They bullied me as usual, but now they’re bullying this kid who talks about the voices. They won't leave him alone. He ran out of the classroom and left the school. Nobody knows where he is. I hate those jerks. I don't want to go to school anymore.”

“Sorry Sanjay,” Quinn said. “For the time being you need to stay in this school. It’s the best school for you.”

“Can Sophie and Amy stay for dinner?” Priya said. “It's okay with their parents.”

Quinn glanced at Nisha.

“You’re always welcome here,” he said.

“Sophie's parents are going to visit relatives back east for a while. Can she stay with us while they're gone? It's boring back there.”

Quinn and Nisha glanced at each other and nodded.

“Sure,” Nisha said.

They ate, discussing the events of the day. Priya, Sophie, and Amy were giggling and talking quietly.

“What's so funny?” Nisha said.

“What if they’re like an alien fungus and they turn us into

zombies like those zombie ants living in the tropics?" Priya said. "And we walk around with an alien fungus sticking out of the top of our heads like those ants, doing what the fungus wants."

"That's not real. There's no such thing as zombie ants, silly." Quinn said.

"It's true Daddy, look it up. The fungus infects the ants, and the ants do what the fungus needs to reproduce. The ants are real zombies. And not just ants."

"She's right Quinn." Nisha said.

"I don't believe that."

She leaned over and whispered into his ear, "Quinnie!"

Quinn shook his head. He liked her playfulness, but he didn't want to fall for another one of her pranks. He asked his agent and found information about zombie ants. He stared in disbelief.

"You're right Pree. There really are zombie ants. I'm outnumbered in this house."

"Me too," Sanjay said.

"Life takes many forms here on Earth," Nisha said. "Who knows what's out there. That's why I've been excited to be looking for life on Mars. Who knows what we'll find when we—"

"Guys?" Quinn said.

"They're zoning out again Dad," Sanjay said.

Nisha, Priya, and Sophie were in a trance for at least 30 seconds. Amy stared at them, unaffected.

Nisha snapped out of the trance first and exhaled violently.

"Oh, that was the most frightening one yet."

She looked over at Priya and Sophie, but they were still in a trance.

"Girls?" she said.

After about 30 more seconds which seemed like an eternity, they

also regained consciousness.

“What happened?” Quinn said.

Priya got up and ran around the table to Nisha.

“Mom, my heart is racing.”

“What's happening?” Quinn said, glancing at Nisha.

“I felt they were flying by Mars. Did you get the same impression Pree?”

“Yeah Mom.”

“I imagined Mars too, and a huge canyon,” Sophie said.

“Mars does have big canyon in real life,” Amy said. This is really happening.

“Sorry Quinn, I gotta go find out what’s going on,” Nisha said. “The situation might be like this for a while. Sorry.”

Nisha ran into her office with Priya, Sophie, and Amy close behind.

“The transmissions are coming from the direction of Mars. Many people describe this as the loudest and most intense event yet.”

“Yeah, it was,” Priya said.

Nisha posted, “Latest Reddit data indicates the sounds or voices originate from Mars or nearby. I'll be working with the US government to determine the origin.”

Priya pointed to the screen.

“Mom, two million people are in your community now.”

She turned to Sophie and Amy.

“I have a famous mom.”

“I'm not a celebrity. I'm a scientist. I don't want attention.”

“You’re a celeb.” Priya said. “You need to take some old-school

selfies for your fans."

"You guys are silly. I'm not doing that. Let me work now. Go on."

Midnight came and went. The kids slept in the master bedroom in sleeping bags on the floor. They had a fitful night's sleep with no major interruptions.

The next morning, Quinn made breakfast. Everyone sat down to eat.

"Maybe that's the end of it," he said. "You guys didn't complain about voices all night."

"Yay." Priya and Sophie said simultaneously.

"Let me look," Nisha said. She browsed her Reddit stream.

Nisha frowned as she read the posts.

"Sorry guys, we were on the wrong side of the planet to receive them. Two new occurrences of the voices happened a few hours apart. They're louder than ever."

She did a quick calculation.

"Hmm, they don't seem to be near Mars anymore. They're moving but I'm not sure where they're going. I hope my guess is wrong."

"Mom?"

"What Pree?"

"I feel weak. Can we stay home from school today?"

Nisha turned to Quinn and walked over to him.

"What do you think? Can they stay home?"

"Um."

"I love you," Nisha whispered softly in his ear.

"Oh-kay," Quinn said. "I'm such a sucker. Fine, I'll keep an eye on them. You can stay home too Sanjay."

“Yesssssssss!” they all said at once.

“Today is my last day at Caltech. My three-day career is ending. I better get going,” Nisha said, smiling valiantly.

“Be careful.” they all said.

“I will,” Nisha said as she walked out the door.

She walked into the noisy and overcrowded auditorium. Even faculty members were present. Her adrenaline was flowing, and she felt no anxiety at all.

“Okay everyone, settle down.” she said, looking over the huge crowd. “I want to make some announcements.”

Silence took hold.

“This will be my last day at Caltech for a while.”

Whispers spread across the room.

“I’ll be working with people in our government to learn more about the phenomenon of the voices. They seem to be real, and they were last located somewhere around Mars. Now they’re heading somewhere else. Maybe to Earth, but I don't know for sure yet.”

Mr. Kepler stood up in back.

“So, they are indeed coming to enslave humankind?”

This time, his interruption didn’t receive the same carefree laughter as before. A few giggled nervously.

“Mr. Kepler, this is no longer funny.”

He sat down, sheepishly.

“I'm still not sure who or what they are. I find no evidence other than the sounds in the minds of millions, and the views of our local planets. The pattern has changed. I slept fairly well last night, and the voices didn’t return this morning. However, the voices have returned on the other side of the world. Tonight, the voices might return to this area.”

A student in the front row raised his hand.

“Could this be an elaborate prank, played on the entire world? At first, we thought you were pranking us.”

“I don’t think so. Despite the fact I’ve lived my life with the dream of finding extraterrestrial life, this isn’t how I wish to encounter it. I wanted to learn about extraterrestrial life at the end of a microscope. This situation appears real to me. It’s too big to be a practical joke. It's impossible to keep 90 million conspirators under wraps. There's no way to simulate signals from off the planet and have the origin travel so quickly across the solar system. However, I still don’t know who or what is causing this.”

Another student raised her hand.

“What if they're real biological aliens and they visit the Earth? What should we do?”

Nisha paused. She had considered this possibility for years, and now it might be for real.

“As I mentioned, any species who manages to visit us will be far more technologically advanced than us. The closest habitable planet is more than 20 light years away. They can zip between planets in our solar system like a cruise ship between islands. My advice is to do nothing to provoke them. If we were to shoot first, they might decide to eliminate us as we might do to a dangerous animal species. Be careful and don't panic. This might be nothing at all. It might only be a probe. This effect might be some type of hysteria triggered by energy emissions of some sort. I’m not sure yet.”

“When will you be back?” a student said.

“I want to continue teaching here as soon as this event is over. Join my NishaAstro community on Reddit and you’ll know what I know. I promise. I’ll give updates as often as I can. The official protocol for SETI is to release all relevant information in the event of a discovery because the world has the right to know.”

Nisha said goodbye and walked off the stage. She exited the buzzing auditorium with dozens of students following her. She walked to her car and waved goodbye, wondering if she was doing the right thing. As she traveled home, she listened to a headline about the dream phenomenon for the first time on the National Public Radio podcast.

NPR Reporter: “Last night the voices grew louder in Asia. People reported dreaming about Mars. Reports on Reddit tell of voices returning to people in Ireland after 12 hours of silence. The voices travel around the world once per day. Soon we may hear them in the US once again.”

Nisha returned home. Quinn and Sanjay sat watching Reddit with rapt attention.

“What's happening?” Nisha said.

Nobody replied at first.

“Oh, hi Neesh,” Quinn said. “We’re following the latest developments. Some people in Nova Scotia heard the voices a minute ago. I think they’re headed this way.”

“You might be right Quinn, let me do a few calculations. She summoned her agent.”

Sure enough, the voices were rising in the east, like an advancing sunrise.

“Hmm, the direction has changed again. No planets are near my estimated direction. The voices continue to get louder and more frequent.”

She posted, “The sounds moved again and are ‘rising’ on the US and Canadian east coast now. They’re getting louder and more frequent.”

Nisha read a message from NPR asking her to be a guest ASAP. She replied. Within minutes she spoke on the podcast which was streamed worldwide.

NPR Interviewer: “Dr. Chandra I’m glad you could be on the show on such short notice. We’ve given the audience information

about your background and what you've discovered about the voices thus far. Is anything happening right now?"

Nisha: "Yes, the voices are returning to the US and Canadian east coast. The timing of the transmissions from space is random other than they're becoming more frequent. I'm unsure about who or what they are. They may be biological, machine, a hybrid of the two, or the manifestation of some other phenomenon. We don't know. I want to tell your listeners not to contact them or provoke them if this represents a biological life form. Be careful."

After 15 minutes, the interview ended. Nisha and the kids browsed Reddit.

"Awesome Mom," Priya said. "NishaAstro has over three million members. Aren't you excited?"

"I'm not excited about the number of members Pree. I'm happy because I might be able to educate more people about the wonders of the universe. I'm nervous about posting to so many people. I'll get over it. I'm going to send one now."

Nisha posted, "sounds are heard on the US East Coast next. They may be heard on the west coast after sunset."

After dinner, darkness settled in over them.

"Mom," Priya said. "Can Amy stay over tonight? It's okay with her parents."

"Sure Pree, she can stay since Sophie will be here for two weeks. Would you guys like to use my new telescope? There's a full Moon tonight after sunset.

"Sure," Sophie said. "I've never seen a real telescope."

"Me too," Amy said. "But it's so weird looking."

"Yes, it has a quantum phase sensor. It needs no lens. The sensor detects the angle and other properties of each photon striking it and calculates an image from the data."

“I've seen those in little cameras but not a big telescope like this,” Amy said.

Nisha felt excited to show the girls her new telescope, which arrived the past week. She calibrated it, but she hadn’t found the time to use it.

“First, let me check Reddit again,” Nisha said. “I'll make some new calculations. Then we can check out the telescope.”

A few minutes later Nisha posted, “Latest sounds detected on US east coast, the loudest transmission yet. West coast soon.”

Nisha called Quinn over to the computer, chuckling at her Reddit feed.

“A religious group thinks the voices only come to some people because they’re the chosen ones. I guess I'm one of the chosen.”

“Neesh, you're always my chosen one.”

“You’re mine too!” she said as she hugged him.

Nisha walked into the back yard and called everyone out.

“Mom, the rising Moon is huge! Can we look at it first?”

“Not yet Pree,” Nisha said. “I'm going to check out Mars first to make some adjustments, and then we can turn to the Moon.”

Nisha made some final adjustments. Mars appeared sharp on the screen considering the instability of Earth's atmosphere on a clear night. The sensor made rapid adjustments to compensate for the instability.

Priya looked closely at the screen.

“It's so red. I notice some spots of blue though.”

“The color is mostly red because the soil on Mars contains a lot of oxidized iron,” Amy said. “Some of the iron isn't oxidized and the blue iron sand dunes get sculpted by the wind.”

“What’s the big streak across the middle of the planet?”

“That’s Valles Marineris,” Amy said. “It's the Grand Canyon of Mars. It’s five times deeper than the Grand Canyon and 10 times longer.”

“Why is the canyon so deep? Wouldn't the sides cave in?”

“The gravity on Mars is less than 40% of Earth,” Amy said. “Canyons are deeper, and mountains are higher. The tallest mountain on Mars is about three times the height of Mt. Everest above sea level.”

“Can I see it Pree?” Sophie said.

“Sure,”

“What’s all the white stuff on the top of Mars?”

“That’s ice on the North Pole,” Amy said.

“Is it like our North Pole?”

“No,” Amy said. “At our North Pole in the winter, water snow and ice exist on top of an ocean for part of the year. On Mars, there's carbon dioxide and water frost on top of land. About 2% of the topsoil is water. Therefore, it's more like our South Pole where there's land, only colder.”

“You're a genius Amy. You know everything without any agents.” Priya said

Priya checked her pulse.

“Mom, my heart is beating fast. It's 120 and I'm doing nothing. Can we check out the Moon now?”

“You sure are persistent. Why?”

“I can’t explain it. I feel sick to my stomach. I want to see the Moon.”

“What does the Moon have to do with your stomach?”

“I'm not sure. Please let me look. Sorry Sophie.”

“Okay Pree, hold on a second.”

Sophie pulled herself away from the screen of the telescope,

which Nisha pointed towards the Moon using the telescope app on her eyepiece.

Priya peered into it.

"I never realized how many mountains are on the Moon. Why are there thousands of craters everywhere? People rarely talk about craters on the Earth."

Nisha smiled.

"Amy, do you want to tell her why?"

"Sure. That's because there's no atmosphere around the Moon. Therefore, meteors don't break up in the atmosphere before impact like they do here on Earth. When bigger ones do strike the Earth, erosion from wind and rain along with plant life gradually wear down and hide the crater. On the Moon, a crater can remain untouched for billions of years. Those footprints the astronauts made in 1969 are as pristine as if they were made yesterday, though falling dust from space has eroded them a bit."

"Mom?"

"What Pree?"

"What's the name of the little star near the Moon?"

"What star?"

Priya pointed to the left side of the Moon on the screen.

"The little star over there," she said.

She stopped looking at the screen and looked directly at the Moon.

"Oh, I can only view the star in the telescope because it's small."

"Okay let me look," Nisha said.

She felt pleased because the girls showed interest in astronomy. She dreamed of having a child pursue astronomy. Quinn and Sanjay showed no interest at all. They were inside playing Scrabble 3D. Now she had friends with her. She watched Priya closely for a long time.

For the first time she saw Priya as a young woman, not her child.

“Mom, are you look?”

“Oh, sorry,” Nisha said. “Hmm, that's strange. Stars don’t have this appearance. It must be a satellite.”

She looked closely for several seconds.

“Yes, it's moving slowly. Let me identify the satellite.”

Nisha activated her satellite locator agent.

“No satellites are in the charts in that location right now, but there's the new satellite the Chinese launched yesterday. It's not on my charts yet.”

“Mom I'm sick to my stomach.”

“Me too,” Sophie said.

Nisha continued watching the satellite.

“Nisha tried to change the subject. I hope you’re not sick because of my cooking,” Nisha said as she smiled. “How are you, Amy?”

“I'm fine. I liked the dinner. I loved the Brussels sprouts.”

Priya held her stomach.

“I don't think dinner is causing this. My stomachache began suddenly a few minutes ago.”

“Me too,” Sophie said. “And I’m dizzy.”

“I feel a bit queasy myself,” Nisha said. “I'm watching the satellite slowly cross in front of the Moon. Usually satellites close to the Earth pass by the Moon quickly.”

They watched in silence for a couple of minutes.

“Now it’s finally moved past the right side of the Moon and the speed is decreasing. Hold on.”

Nisha messaged a few astronomer friends in Chile to get them to look. She continued watching. Soon she got a reply from one of them.

“I can't identify your object. I'll keep looking. There's no record of any satellite being in this area right now. It must be near the moon

because we're hundreds of miles apart, but the object was just in front of the Moon from both our perspectives."

Then she remembered the Reddit data.

"Pree, I realize something."

"What Mom?"

"My Reddit data predicted the voices returned here on the West Coast at the same time the Moon rose an hour ago. Now I'm seeing this satellite where none should be."

Silence.

"Mom, my heart is racing fast enough already."

"Mine too," Sophie said.

"Don't feel worried," Nisha said.

She calmly looked through the narrow view eyepiece. She held the arm of the chair firmly.

"It could be a coincidence. I need tangible evidence. I'm watching this thing, which is slowing down from our perspective. It could be an asteroid close to the Moon. It's moving too slowly to be in orbit around the Earth. The distance must be great, don't worry."

Priya looked through the eyepiece.

"Mom, it's them," Priya said. "I'm positive."

"I agree," Sophie said.

"Them? How do you know?" Nisha said.

"The voices are quiet right now but somehow I know they're nearby," Priya said. "There's a background high static noise. Like ringing in my ears, but no voices."

"My stomach is queasier now. I'm going to be sick," Sophie said.

"Guys, I know you're worried, and the voices or sounds have been around for a few days now. However, there's no concrete evidence the little object we're looking at near the Moon has anything to do with them," Nisha said.

"I feel a little better now," Priya said.

Nisha looked at the screen.

“It's gone. I guess the satellite or asteroid went behind the Moon because of the Moon's gravity. The satellite may reemerge from the backside of the Moon in three or four minutes if it’s entering orbit. I'm going inside to monitor what’s happening on Reddit.”

They sprinted into Nisha's office. Priya and Sophie followed close behind.

“Reddit seems to be quiet right now in regard to the voices. Everything seems normal,” Nisha said.

“I don't feel normal and neither does Sophie,” Priya said. “Wait, I knew it. The words ‘queasy’ and ‘stomach’ are trending now.

Three minutes later, they walked outside to the telescope.

“I don't see anything,” Nisha said, appearing relieved. “Maybe we observed an asteroid, which might still be behind the Moon. I'm going to keep watching. I figure if it's in orbit, it will emerge from behind the Moon in less than a minute.”

The minute lasted for what seemed like an eternity. Nisha squinted. Priya held the arm of the chair tightly.

“Ugh, the object has returned from behind the Moon,” Nisha whispered.

“Mom this is freaking me out. What is this? The static is back.”

“I'm not sure Pree. I'm going to do some calculations because I know the distance.”

Nisha watched closely. About 30 minutes later, the object passed in front of the Moon again. She timed how long the object took to pass in front of specific points on the Moon.

“Oh my,” she whispered.

“What Mommy?”

“According to my calculations, the object is more than 20 miles in diameter. Pree, your hands are cold.”

“I can't help it. I know the voices come from the object.”

“You might be right, but let's take things one step at a time.”

Nisha ran back into her office with the kids following like ducklings.

“I need to tell the DHS people about this.”

After she alerted the DHS, she posted, “A new object is orbiting the Moon. 20mi/32km in diameter. This is no prank. Investigate! It’s correlated with the sounds.”

Within minutes, Reddit volume doubled. More than 1,000 new members joined the NishaAstro community each minute. A few minutes later, astronomers confirmed Nisha's calculations.

An hour later, her DHS eyepiece app received an incoming transmission notification. Nisha answered on her computer. General Sherman appeared on the screen.

“Dr. Chandra, the President wishes to speak with you.”

The kids whispered to each other.

“Okay kids, please leave the room,” Nisha said.

They walked out of the room, leaving the door cracked as President Maria Martinez appeared on the screen.

“Dr. Chandra, I'm pleased to meet you,” she said.

“I'm excited to meet you Madam President. I'm honored,” Nisha said.

“I've been watching you on Reddit for some time now,” President Martinez said. “I’ve enjoyed your perspective on extraterrestrial life. Now we may be about to make contact with someone or something from another world. I need to know what to expect. I need advice. What can you tell me?”

Quinn, Priya, Sophie Amy, and Sanjay huddled on the other side of the cracked open door, listening quietly.

“First of all, nobody knows what to expect,” Nisha said. “I’ve

participated in the creation of protocols to be followed in the event of extraterrestrial contact. They state that any information found should be shared, and no reply to an alien species should be made without worldwide consensus. The problem is, consensus by whom? I thought if we get a signal from a distant world, we should not reply. I think we should lie low because only recently have we emerged as a technological civilization. Chances are they'll be advanced compared to us. In this case, they're bold enough to not lie low. Of course, anyone with a radio transmitter might reply, so protocols will be ineffective."

"That makes sense," the President said.

"Yes, but now this potential civilization has discovered us first. This body orbiting the Moon might be a probe, or it might contain millions of human sized beings. All we perceive are voice-like static in our heads and vague dreamlike images. These may or may not come from the object. Regardless, we can't hide our planet anymore. We must be careful."

"I agree," the President said. "I wouldn't want to provoke them. What do you think we should do?"

"First, we should assess their technology and their intent. This thing has orbited the Moon twice. They traveled through our solar system like tourists on a Mediterranean cruise. They traveled from Saturn, to Jupiter, and on to Mars and the Moon in a few days, in a ship 20 miles in diameter. Those planets aren't aligned right now, so they traveled an extremely long distance. They didn't use gravity to slingshot their way from one planet to the next. This indicates an extremely advanced level of technology and energy use compared to our own."

"I understand," the President said. "What do you think about sending a mission into lunar orbit? A lunar station supply ship is set to launch shortly."

Nisha took a drink of water.

"I think this would be good if you approach the spacecraft carefully. We can't hide anymore. This action will show them we can get off of this planet without being threatening."

“Thank you, Dr. Chandra,” the President said. “I’ll get back to you soon.”

They signed off. Nisha turned towards the door and smiled.

“Okay guys, you can come out now.”

The door opened and they rushed into the room in excitement.

“Mom, you hung with the President.” Priya said.

“I'm proud of you,” Quinn said. She smiled tightly.

“Are they going to come here to Earth?” Priya said.

Nisha wiped the hair from Priya's face.

“There's no way to know Pree. This might be a probe. I think this is exciting.”

Nisha didn’t know how long she could keep up the facade of being calm and collected. She knew that they outclass us in every way. She considered the possibility that this may be the last normal day of life on Earth ever, but said nothing of it as she worked on the latest data.

“Okay, it's getting late. Time to go to sleep,” Quinn said.

“Daddy, can we sleep in your room again?” Priya said.

Quinn glanced at Nisha. She agreed.

“Sure Pree, get the sleeping bags.”

They ran to the closet to get them.

“Quinn, I may appear on the outside as though this is fun and games, but this might be the biggest event in human history. I’m struggling to breathe.”

“Yeah, I’m pretending as though it’s nothing for the sake of the kids.”

“Things might not turn out well for us. In the morning, pack some emergency things just in case we need to leave quickly. We could escape to the desert. Even though it’s orbiting the Moon, the spacecraft might be here in a few hours if they desire. I feel they could easily do us harm if they wished.”

“What evidence do you have to support that conclusion?” Quinn said.

“Hey, that’s my line!”

“Yeah, now it’s my turn to be the logical one. Well, what evidence do you have?”

Nisha wiped the perspiration from her forehead.

“The only thing I know for sure is they’re here. They traveled at least 20 light years if they came from the closest habitable planet. That feat alone puts them in another league compared to us. They toured our solar system as though it was nothing. Their ship is 20 miles in diameter. My guts tell me that we’re nothing compared to them.”

Quinn smiled.

“Why would you smile about that?” Nisha asked.

“'Guts?' You’re talking like me now. Excellent. Not everything can be sorted and categorized into neat little compartments.”

“Believe me Quinn, this does fit into neat little compartments, we just need to identify the new compartments.”

“Neesh, you need to admit that your logical world is upside down. You sound like a mystic with all this talk about hearing voices and seeing visions.”

“There’s got to be a rational explanation for those effects. I’m sure I’ll find it. I’ll admit that I feel uneasy not being able to explain any of this. I don’t have the power to know how to go about finding the answers.”

Quinn smiled.

“Now that’s the Nisha we know and love. You're breathing so quickly. Don't hyperventilate. It’s the fear of the unknown. Not everything can be explained. Some things are mysterious and inexplicable.”

“I disagree,” Nisha said. “I think most things can be explained. We don’t have the answers yet. Many people find comfort in the unexplained for some reason, but the fact is the universe is a neutral place that can be fully explained. Our species is not guaranteed to

survive. The Earth could be wiped out by a meteor, and nobody would save us. Remember that near miss a couple of years ago. If it passed by a few hours earlier, we'd not be here talking about it. The universe existed before us and would continue unchanged if we disappeared."

"You sound so mechanical. You make the universe sound so cold and unforgiving," Quinn said.

"It is. It's also exciting and full of discoveries waiting for us. Who knows what we'll find? Who knows what we'll discover about ourselves in the process?"

"I think you need a spiritual practice."

"Quinn, discovering the true nature of things is my spiritual practice. Also, I meditate every day. I'm going to sleep."

"Giving up so easily?"

"No, you pest. We need to sleep."

They walked into the bedroom. Priya, Sophie, and Amy were talking quietly in their sleeping bags on the floor.

They said good night but didn't get much sleep.

Chapter 3 – What's Orbiting the Moon?

At 4am, Quinn tiptoed to the kitchen for a glass of water. He watched the setting Moon through high clouds. The huge object orbiting the Moon was too small to see with the naked eye. He heard strange noises coming from the bedroom, so he rushed back. Nisha, Priya, and Sophie were struggling to talk in their sleep but couldn't utter a word. After about 20 seconds of this, they woke up and gasped for air. Sanjay and Amy woke up in a panic.

The girls jumped onto the bed with Nisha.

"Neesh, what happened?" Quinn said.

"The voices are back, and more intense. The visions are fully dreamlike. I imagined the Moon, and the view shifted somehow, and I saw the Earth, our Earth. I gotta tell the DHS right now."

After Nisha alerted the DHS she posted, "the sounds and dreams are likely coming from the object orbiting the Moon."

Priya and Sophie trembled under the covers.

"What happened in your dreams?" Nisha said.

"The sounds came from everywhere," Priya said. "I couldn't understand them. I saw the Moon, but I couldn't visualize the aliens. I had a view of the Earth out of a window."

"That's what I noticed too," Sophie said. "I imagined things moving inside. They might be machines or something. I might have been dreaming. It's not as though I really saw them."

News of the voices and dreams spread around the world. The US stock market opened down 5%. Worldwide markets were also down.

Quinn made breakfast for everyone while they waited for the President's planned press conference on the big screen. She walked to

the lectern.

“Good morning,” the President said. “As you may know, an unidentified object about 20 miles in diameter is in orbit around the Moon. We know nothing more than this. The objective of a planned resupply mission to the lunar base station has been changed to orbit the Moon, so we can observe the object. The mission will launch this afternoon, six hours from now. That’s all the information I have for now. I won’t answer questions since I know nothing more. Thank you.”

Quinn smiled.

“That’s the shortest speech she’s ever given, don't you think Neesh?”

“Yeah, that’s because she has nothing to say. She doesn’t know any more than me. Everything I know about this I post to the world. I want to be as transparent as I can be.”

Nisha walked over to her computer and posted, “We must all be careful about first contact. Don’t provoke them by transmitting greetings.”

“Mom?” Priya said. “Do I still need to go to school?”

“Of course. Why do you ask?”

“If the aliens come down and destroy us, nothing will matter. I might as well enjoy what’s left of my life.”

“Why do you think they would destroy us?”

“Because in sci-fi, they usually destroy us or take us over.”

Nisha glanced over at Quinn and smiled.

“Pree, I’ll admit this is the best excuse I’ve ever known for avoiding school, but you should go. I know I said you could stay home earlier, but let's take this one day at a time. Sophie and Amy, you should go too. We don’t know what’s going to happen and regardless

of the outcome, more education leads to better opportunity. We may need your knowledge to help our species. I doubt they would destroy us. They may not care about us one way or another other than basic curiosity. This might be a probe. Living beings might not be inside the spaceship."

The kids got ready and left for school. Nisha walked into Quinn's studio where he worked on a new sculpture. Nisha examined the clay figure closely, trying to push recent events out of her mind.

"What has your brilliant mind concocted now? I can't tell what this represents."

"Isn't it obvious Neesh? This masterpiece is a mother and child looking to the sky. I watched you and Priya using the telescope and I got inspired."

She turned her head sideways and walked around it, attempting to get a distinct perspective.

"Oh, I understand now. I can't decide whether you're a genius or crazy person."

"I'm a crazy genius."

He gave her a big hug.

Nisha walked back to her computer and performed another analysis of the Reddit data. The voices were still coming from the object in orbit around the Moon.

She posted, "The object is orbiting the Moon every two hours. Living occupants may or may not be on board. We must keep an open mind."

Soon afterwards, the voices returned, and paralyzed Nisha. A minute later, she ran into Quinn's studio.

"Something is different now!"

"Neesh, you look like you've seen a ghost. What's different?"

"The voices are back, but they aren't the same."

"What's not the same?"

"The voices sound more direct, as though they were trying to communicate or affect us in some way. They weren't random ringing in the ears like before. I still don't understand them. I felt static and hissing. The voices entered my mind in the same way as when I think. They paralyzed me for a few seconds. They released me and I ran back here to see you."

Nisha sprinted back to her computer with Quinn behind her.

She posted, "There's something different about the voices. Paralysis? More soon."

Nisha got an incoming message.

"Quinn, Pree messaged me. Something happened. She wants to come home from school. I'll be back."

She rushed out of the house and arrived at Priya's school in a few minutes. Recess began. Priya spotted Nisha first and ran to the car.

"Mom, I want to go home," she said. "I'm sick to my stomach again. So is Sophie. They left Amy alone, but she is going home to her house. Sophie and I became paralyzed for a minute when the voices came. They affected us directly this time. Then I walked out of the classroom, but I had no control of myself. I felt self-aware, but I could do nothing but watch myself walk. I snapped out of the trance once I walked out of the classroom. Some of the students in my class laughed at Sophie and me."

"Let's go home," Nisha said. "It'll be okay. We'll figure out what's happening. I had a similar experience, but I didn't involuntarily walk around. They paralyzed me for a few seconds."

"I felt like a machine being remote controlled. I couldn't stop myself," Priya said. "But I was thinking the things I did. It was voluntary, yet it wasn't.

"You lost control of yourself? That's like hypnosis. I didn't experience that."

“The motions were put into my head as though I thought them myself. Then I almost threw up, like I was dizzy.” Priya said.

They arrived home. Nisha advised the DHS of the latest developments and she posted, “New development regarding the sounds or voices: My daughter felt remote controlled for 30 seconds. Anyone else notice this?”

Nisha heard noise coming from the bathroom. She rushed to the closed door, where Sophie stood.

“What's wrong?”

“Pree's getting sick.”

“I'm okay,” Priya said, behind the door. “I'll be fine.”

Sophie cleared her throat repeatedly. Nisha put her arm around her.

“Let's go into my office,” Nisha said. “We'll wait for her there.

Sophie watched as Nisha communicated with the scientific community. Eventually, Priya emerged from the bathroom and sat with them for a couple of hours.

Quinn listened to the business report on the radio while he worked in his studio.

Reporter: “World stock markets continued to drop throughout the day with the US averages down 8% by the close of trading. At one point, the market dropped 5% in only a few minutes when Reddit’s now famous astronomer Dr. Nisha Chandra sent out a post stating her daughter had been remote controlled by something. Many others also reported becoming remote controlled once Dr. Chandra broke the news. The victims were young.”

Quinn ran into Nisha’s office.

“You were on the national news because of the post you sent out about Priya becoming remote controlled. I guess I need to listen to the news to find out what's happening with my family.”

“Sorry. I saw how focused you were on the sculpture, and the girls needed to be by themselves. So, I didn't call you in.”

“Oh, okay. Well, you can move stock markets now.”

“No way,” Nisha said as she turned to Priya.

“Way Mom. NishaAstro now has ten million members. The major news services follow you too. Many thousands more join every few minutes.”

“She’s right,” Quinn said. “People listen to you now. You’re a celebrity.”

“I don't want that,” Nisha said. “I want to educate people about science and astronomy. I want people to know what I know. I wish I could turn back the clock. I’m getting too many interview requests. I need to do my work.”

A few hours later, the space mission lifted off and headed for lunar orbit. No transmissions coming from the object in orbit around the Moon had been detected with standard instruments. Only static.

Sanjay arrived home after school.

“How was your day, Sanjay?” Quinn said.

“Not good. A classmate sleepwalked in the middle of class. Some of the other students made fun of him like they do to me sometimes. I hate them.”

“It happened to Pree and Sophie too,” Quinn said. “We need to figure out what to do.”

“What's happening Mom?”

“I'm not sure yet,” she said.

Later in the evening, Nisha, and her family along with Sophie watched a live video feed of the space flight to the Moon on the big screen as they ate dinner. They put the house robot in hibernation mode. After dark, they walked outside and gazed at the Moon and the object in orbit through the telescope.

“Mom,” Priya said. “Do we need to go to school tomorrow?”

“I think you should,” Nisha said. “We should continue leading our

daily lives. We shouldn't let these events stop us from living. You can't let bullies at school rule your life either."

"Mom?"

"No Pree, you should go."

"But—"

"Keep going for now Pree. If events turn for the worse, I'll find a way to home school you."

"Fine," Priya said. "But if I get hypnotized and sleepwalk into the street and get killed, it's your fault."

Nisha smiled and looked up. She glanced at Quinn.

"Can you believe Pree? She thinks one little alien-induced remote controlled sleepwalk can get her out of going to school."

Nisha paused when she saw Priya wiping her sweaty hands on her pants.

"Sorry. I've become used to these voices. Only a week ago, we thought we were going insane. Okay you can stay home tomorrow."

"Yes!" Priya said. "I'll still do my homework."

"I'll do mine too," Sophie said.

Priya studied the telescope monitor.

"The ship looks like a little dot. How can such a small spacecraft affect us this way?"

"I'm not sure," Nisha said. "Remember, this ship is 20 miles in diameter. At first, I think we overheard their transmissions. Now, it seems they're intentionally transmitting to us."

"Why can't the voices be heard by everyone?" Priya said.

"There's something about the structure of our brains which allows only some of us to be tuned in."

"What do they want?" Sophie said.

"I'm not sure if they want anything. They might be stopping by to observe us. They might be playing with us in the way we play with bugs."

They watched the object orbiting the Moon for a while and walked inside. Nisha hurried to her computer to read the latest news.

She posted, “Listen to children affected by the sounds. Share your experiences here. Something is different now.”

Nisha watched the replies scroll down the screen. She motioned for Priya and Sophie to come over to the computer.

“Listen to this. Most of the children who heard the voices ended up sleepwalking like you. They got sick too, from dizziness and anxiety.”

“Is this good or bad that others are sleepwalking?” Sophie said.

“I think it’s bad,” Priya said. “They can hypnotize and control all of us.”

Sophie watched the comments scroll down the screen.

“I want this to end.”

“Me too,” Priya said.

Priya glanced at Nisha, who studied her Reddit stream.

“Mom, I’m tired. Can we sleep in your room tonight again?”

“Sure,” Nisha said. “Get the sleeping bags. I’ll be in soon.”

For an hour Nisha watched her Reddit stream, which included the latest news from all over the world. Quinn and Sanjay came in to check on her.

“It’s time to go to sleep, Neesh,” Quinn said. “The way things are going; you’ll need all the sleep you can get.”

Nisha yawned.

“Okay. I’ll admit I—”

“Admit what? Hello?”

Sanjay frowned.

“They’re at it again Dad. They're in a trance.”

Quinn glanced back at Nisha.

“Neesh?”

They studied her for a long minute. She finally woke up.

“Ugh. Excruciating.” Nisha said. “I couldn’t move, but I watched you trying to get a response from me. I couldn’t do anything but watch. The sounds were in my mind, and I felt paralyzed. I had no will to fight. I need to alert people.”

After she notified the DHS, she posted, “The senders of the sounds paralyzed me. They or it is doing this to us intentionally. I’m sure of this.”

She watched the replies. As she anticipated, many people experienced the same thing.

“Quinn, where’s Priya and Sophie?” Nisha said.

“They’re in our bedroom. Or I think they are.”

They ran back into the bedroom. They were standing in a corner of the room huddling next to each other. Nisha tried to get them to wake up.

“Pree? Sophie?”

Priya ran into Nisha's arms with Sophie close behind.

“Mom, they hypnotized me. I almost couldn’t stop them. They wanted me to leave the bedroom. I had to force myself to stop. Two different people existed in my own mind. I wasn’t afraid in the moment, but now I am.”

“Me too,” Sophie said. “The sounds are the same as always, but now they’re affecting me more physically.”

“It’s okay, we’re here,” Nisha said.

She hugged Sophie too and realized it might be impossible to protect them from whatever this was. She couldn’t protect herself either.

“I’m tired, but I don't want to go to sleep,” Priya said. “They might take me over again.

“Me too,” Sophie said. “I’m definitely not going to sleep.”

“Okay guys, you don’t need to go to school tomorrow.” Nisha said.

“Okay,” Priya said.

Sophie smiled weakly.

Nisha shook her head at Quinn.

“You know things are bad when they don’t get excited about a day off from school.”

“You’re right about that,” he said.

Nisha wrote one last post for the day, “The entity in space briefly hypnotized and controlled my child. Watch out for this and watch over them.”

They had trouble sleeping that night.

Chapter 4 – First Meeting

Nisha woke up early to watch the arrival of the space mission into orbit around the Moon. The US stock market opened down again, dropping a total of 15% since the voices began.

The DHS contacted Nisha and she spoke with General Sherman again.

“Good morning, Dr. Chandra. Within an hour, our astronauts will make visual contact with the alien vessel. Right now, the vessel is orbiting on the other side of the Moon from our astronauts. We want your input as to what to expect.”

“I wish I could give you a list of expectations and guidelines, but I can’t,” she said. “The most important thing is to be prepared for any eventuality. This is the most significant meeting the human species has ever attended. The meeting might go in many different directions.”

Okay, we’re listening,” the General said.

“First, they might ignore us. We might be nothing but a fly on their wall. In this scenario, take care to not irritate them or they might swat us away. Don’t do anything to make the situation worse.”

“Okay, what else?” the President said.

“They might regard our approach as a threat. We must approach them slowly and carefully. Use passive reconnaissance, don’t scan them. They’re highly advanced so I doubt they think we’re a serious threat. However, if we threaten them, they might remove the irritant to make their lives easier.”

“I agree,” the General said.

“Thirdly, they might be here to explore. There's no way to hide our planet or species now, so we might as well be open. Let them scan us and we can be curious too.”

“Let's hope they're not too curious,” the President said.

“Finally, this might be a probe with no sentient or organic creatures aboard. Be careful not to do anything that might lie outside of their agentic plans. The probe might execute instructions designed for self-protection. We don’t want the vessel to protect itself by killing the astronauts or destroying the Earth.”

“Yes, sophisticated AI systems have been known to overprotect themselves,” the General said.

“Try to learn about them and record as much information as you can and send it back to Earth instantly if possible. That’s all I can tell you for now. I’ll be ready when they get close. If they’re organic, I might be able to spot behaviors that can help us. This help might range from learning about the universe to the survival of our species.”

After another 10 minutes of discussion, they finished.

“Thanks Dr. Chandra,” the General said. “Our mission will be in visual range in 45 minutes. Stand by to connect to the mission. Thus far, no change in the status of the alien vessel has been observed. I’m sure they know we’re coming. Or it knows. You'll connect a few minutes before we’re in visual range.”

“Okay,” Nisha said. “Good luck.”

The next 40 minutes seemed like days. The stock market gradually drifted 2% lower on the day on low volume as people waited. Nine billion people on Earth who had access to a connected device watched anxiously. Business activity ground to a halt. Heavy traffic seemed to evaporate from cities and highways. Airline flights were canceled due to low passenger volume and cancellations.

At the predetermined time, Nisha connected to the astronauts aboard the space mission. She and her family watched in real time, as though they were there. The nearby Moon filled half the sky, in high relief against the black void of space. They were in a lower orbit, to catch up with the alien craft. On the Moon's horizon, a small shining star appeared.

“We’ve established visual contact with the vessel,” astronaut Steve Messier said.

Nisha monitored her Reddit stream for the latest updates. Many important astronomers and scientists promised to update Reddit with all relevant discoveries and observations.

“Steve, so far I'm receiving no reports of any changes coming from the vessel,” Nisha said.

“Acknowledged,” Steve said.

“I understand the sounds have come to you too,” Nisha said.

“Yes, right now I hear them faintly, at precisely the same time we got into visual range. It's like my ears are ringing, but there are patterns to the ringing. It's like a crowd, put through Autotune.”

“I hear no sounds right now,” Nisha said.

“As we get closer to the vessel, the sounds are getting louder.”

“Be careful.” Nisha said.

For 20 minutes, they edged closer to the sphere, and they went behind the Moon from the Earth’s perspective. After four more minutes, they emerged.

“We’re now 10 kilometers from the alien vessel,” Steve said. “It's perfectly spherical and reflective. It’s as smooth as a mirror. Even from this distance the vessel fills a 90-degree arc in the sky. We’re picking up no other signs of communications or energy transmissions. The sounds continue to become louder as we get nearer. They’re communications of some sort. The sounds are clearer up here compared to when I'm on the surface of the Earth. They're unlike any language I’ve ever known, assuming they're voices.”

Nisha continued monitoring her network of astronomers on Reddit and elsewhere.

“Nobody on my networks detect any signs of activity. I’ll keep monitoring the situation.”

“Five kilometers and closing,” Steve said. “We’re preparing to decelerate. The vessel is silent. We’re picking up nothing on our instruments here on any frequency other than the noisy static. We calculate the diameter at about 32 km or 20 miles. From this distance, the vessel takes up over 120 degrees of angle in the sky. The Moon is

reflected perfectly in the sphere. I get confused looking down to the Moon and looking up to its reflection. It's disorienting to be this close. The voices sound louder. They're still unintelligible."

"Nothing is being reported on my network," Nisha said.

On Earth, activity came to a standstill. The US stock markets were still open. The averages dropped 3% and stabilized. The President and members of Congress were holding sessions underground. Most schools were closed or had sent their students home early. People were glued to their eyepieces, mobile devices, monitors, or screens.

Twenty minutes later they drifted to within 100 meters of the surface of the vessel.

"We detect no signs of activity," Steve said. "We can see our reflection. We're so close we can no longer perceive the curvature. The sphere appears to us like an endless flat mirror. My heart rate is 120. The vessel is magnificent. Allen Cassini is prepared for the spacewalk now."

"I'm still receiving nothing new down here," Nisha said.

"Acknowledged Nisha," Steve said. "Allen, proceed when you're ready."

Within a minute, the airlock opened, and Allen exited the spacecraft. He lightly used his thrusters.

"80 meters to the edge," he said.

"Go slow," Steve said.

"60 meters and closing at one meter per second. I'm reading no anomalies at all from any instrument," Allen said.

"Same down here," Nisha said.

"The sounds are transmitting at a more rapid pace," Steve said.

"I'm going slow and easy," Allen said. "30 meters and slowing to 0.5 meters per second. Pulse, 120."

After one of the longest minutes in human history, Allen closed to within one meter of the surface of the sphere. The gaseous exhaust from the reverse thrusters bounced off the surface.

“I'm reading nothing unusual here, other than an extremely high frequency emission which envelops the sphere within a few meters of the surface. The closer I get, the more intense the emission becomes. I can’t detect any patterns at all. The sphere might act as an antenna, focusing weak signals from their home world.”

“My pulse is also 120,” Steve said.

“Allen, proceed with extreme caution and attempt to get as close as you can. The sounds are increasing in intensity.”

“Acknowledged,” Allen said. “I think I'm as close as I'm going to get. My reflection isn’t as clear as it was further back. The surface has no solid edge. I can push my hand in a little bit, but there's some form of resistance.

“Stop,” Steve said. “The instant you touched the surface; in my mind the sounds became more active. I’m picking up an energy transmission now. I think you better get back here immediately.”

“Affirmative,” Allen said. “I’m on my way back.”

Nisha noticed some new posts coming in from her astronomer Reddit list and other sources.

“A burst of transmissions came from the sphere just as Allen made contact. I also recommend an end to the space walk.”

“Understood Nisha,” Steve said. “The withdrawal process is underway now. Hold on, I picked up a brief static electric charge. Allen, get back here now.”

“This is weird,” Allen said. “There's a bulge developing in the reflective surface. Do you see that?”

“Yes. Hurry up,” Steve said.

“The bulge is getting bigger. A smaller sphere just popped out. See it? The effect is like when a drop of water hits a puddle, and a smaller drop reemerges.”

Billions of people on Earth watched the events unfold. The stock market dropped more.

“Allen, be calm and don’t engage the object,” Nisha said. “Don’t act aggressive or show fear. Slowly make your way back to the ship.”

“Understood,” Allen said. “I’m 80 meters from the ship. My speed is 0.5 meters per second away from the big sphere. The smaller sphere is about three or four meters in diameter and heading right towards me. The surface is reflective and looks like the big one does from further away. The sphere is getting too close for comfort. It's only three meters away from me. Hmm, I’m detecting an energy transmission.”

“Okay,” Steve said. “The sphere is scanning you. I’m not detecting any ionizing radiation or any other danger. Stop and let the scan proceed.”

“All stop,” Allen said. “Wait, I notice a little bulge developing in the smaller sphere. A floating object has emerged. Can you confirm?”

“Yes,” Steve said. “It’s a drone about the size of a basketball. The device is mechanical. It's not organic or living. Several of its ion thrusters can fire in rapid succession. Don’t move and let the drone examine you. Your pulse is 140. Take deep and slow breaths.”

“Understood,” Allen said. “The drone is moving closer and is now right in front of my face. Some intelligence might be at the controls, but I sense the drone is acting autonomously. It’s scanning me. A camera or eye is in front. Eight legs are opening from a central body. It looks like a metallic king crab or a giant spider. It's nimble like a spider.”

“Allen don’t move. The sounds are getting more active in my mind now. More like electronic voices. Something is happening. Nisha, are you picking up anything on the ground?”

“Yes, the sounds are louder now Steve,” Nisha said. “I think they're clearer to you because of your proximity. Nobody I’m following is reporting any significant changes in the status of the big sphere.”

“Acknowledged Nisha,” Steve said.

“The spider drone is an inch from my helmet now Steve,” Allen said. “Its legs are grasping onto the edge surrounding my clear visor. I’m having problems seeing. I’m beginning to not like this!”

“Stay calm Allen,” Steve instructed. “Let it finish studying you and return to the sphere.”

“Understood,” Allen said. “This is strange. Now I can’t seem to move. I can breathe, but I can’t move my arms or legs. I'm paralyzed.”

“The drone is doing this to avoid any trouble while data is being collected. Try to relax. Breathe deeply and slowly.”

“Easy for you to say,” Allen said. “My heart rate is 150. Now the drone is grasping around the edge of the clear visor part of my helmet. A thin appendage is coming out of the center thorax of the drone body. The appendage is thick but nimble, like the labrum of a mosquito. I hope the purpose is different. The labrum is tapping on my helmet. I think it's searching for a way in. I can’t move or get this thing off me. If my suit is punctured, I’ll die.”

“Stay calm Allen,” Steve said. “Their mastery of AI and other technologies is advanced, so they must know what they’re doing. If they wanted to kill us, we’d already be dead. They paralyzed you but you can still breathe. They’re trying to examine you, alive.”

“I hope you’re right,” Allen said. “Steve, the drone is drilling a hole in my visor. Tell my family I love them. I can’t move. The drill is penetrating now.”

He paused.

“I haven’t lost suit pressure, though the needle has penetrated my visor by about one inch. The needle is half the thickness of a straw. I thought the drone would try to suck my blood or inject me with something but so far nothing has happened.”

“Allen, this is good,” Nisha said. “The drone is taking care to not allow the air to escape from your suit. You’re wanted alive. I’m watching the video from the camera that's inside your suit. I can watch everything you’re seeing. You're sweating a lot. Try to stay calm and breathe evenly. The drone might be sampling your air and doing other tests.”

“Right Nisha, but I’m wondering why the drone wants me alive. Maybe it wants to incubate something in me. Well, I should not be arguing at this point, right? I’m still alive,” Allen said, trying to bring a little humor to the situation. “Wait, a small cloud of dust is coming out of the hollow needle. The drone is too close for me to see.”

“This is only speculation at this point,” Nisha said. “The cloud isn’t dust. The cloud seems intelligent and is comprised of small nanometer sized drones which move independently. They move as a swarm. Now they’re dissipating within your helmet. What are you experiencing?”

“My neck itches,” Allen said. “I’d like to scratch but I can’t move. Even if I could, I can’t scratch through my suit. They're crawling all over my body. Some are in my nose. They're going down my throat.”

“More of those spider drones are exiting the small sphere,” Steve said. “They’re heading towards the lunar module. I’m starting to become paralyzed so I’m strapping myself in. The voices are loud now.”

“I’m looking at the external cameras,” Nisha said. “The spider drones are crawling over the entire ship. They’re inspecting the external components. I notice one floating over to the biggest window. Do you see Steve?”

“Yes, the drone’s labrum is drilling a hole in the glass. I hope it remembers to keep the air inside. Now the labrum is through the glass and the air isn’t escaping. The drone is releasing a cloud of those nano drones.”

“The stock market is crashing,” Nisha said as she watched her Reddit stream. “It's down 10% in the past 3 minutes. Trading is halted. That's a 20% drop in the past few days. People are emptying stores too.”

“The nano drones are filtering into all of the electronics,” Steve said. “Some are crawling around on me now. Allen, are you okay?”

“I don’t know,” Allen said. “The drones are exploring the inside of my body. My insides are itching, like a million ants are crawling around inside. I’m not in pain and I’m not sick. I still can’t move. I’m floating out here.”

Two minutes of silence.

“Wait, something is different. I think the drones stopped probing. They’re exiting out of my nose now. My nose itches like crazy. Yes, they’re all leaving and they’re entering the labrum of the spider drone.

I'm worried what will happen when the drone pulls out the labrum. I have the tape ready to plug the hole."

"Steve, what's happening over in the capsule?" Nisha said.

"Clouds of them are everywhere," Steve said. "The inside of the cabin looks dirty. Cleanup seems impossible. They're inside me too. The experience is like the tingling when your leg falls asleep, except it's all throughout my body. Some of them are returning to the spider probe now."

"Allen, what's happening?" Nisha said.

"The probe on my visor is withdrawing its labrum right now. I don't detect any air escaping. The labrum is filling in the hole in the glass. What a relief. The tingling is gone. Also, I'm beginning to regain some control over my limbs. I think the paralysis is wearing off."

"That's good news," Steve said. "Get back to the capsule as soon as you can. The nano drones have reentered the spider. The hole is sealed."

Steve paused for a while, then continued.

"The spiders are reentering the small sphere. Now the small sphere is heading towards the huge sphere. The little sphere entered the big sphere like a water droplet falling onto the surface of a larger body of water. I think we're going to be okay."

"The stock market is rebounding," Nisha said. "In the past minute, half of the losses have been recovered. The averages are still down about 5% on the day though. You guys will need to stay up there while we assess the contamination protocols. We can't allow you return to Earth now."

"I understand," Steve said. "I look forward to the resupply and decontamination shuttles. We're going into a lunar orbit on the other side of the Moon from them now."

Twenty minutes later, Nisha signed off. She sighed and logged into her retirement accounts and sold everything. She realized the unpredictable nature of this encounter and the uncertainty of the future. The stock market hates uncertainty.

Soon afterwards, the DHS contacted Nisha. Her family hid behind the door as usual.

“Hello Dr. Chandra, this is General Sherman. You did an excellent job.” Nisha smiled.

“Thank you General. I had to improvise my way through it. We know nothing.”

“That’s why we wanted you here,” the General said. “We needed someone with a wide array of skills to assist us. We’ll need you for some time. They’ll be here for a while.”

“I agree. Their technological prowess is impressive,” Nisha said. “Do you want to know my initial impressions?”

“Yes.”

“First of all, the nano drones are complex. I think they know everything about our bodies now. They know our capabilities, our limitations, our DNA, and everything else. They or it might already know more about us than we know about us. They also know our technology. They’ve inspected our computer systems and downloaded information. They can paralyze us quickly and easily. Their voices sound like parts of an interconnected hive-mind.”

“Do you think the alien entities behind this are artificial?” the General said.

“I can’t tell if their intelligence is machine, organic, a hybrid of the two, or something else. Perhaps their AI hit a singularity. Then the original organic species went extinct, and these machines are what's left.”

“That sounds familiar,” he said.

“Yes, our species is at a critical point in our evolution where artificial intelligence will surpass human intelligence. When that happens, AI might outsmart us, and we will go extinct. The smarter species always wins. We might leave behind machines which later explore the universe. The machines we're encountering now might be what's left of an organic species from a distant planet. Their makers might be extinct. The voices or whatever I pick up in my mind sound electronic to me.”

“Yes, we've been discussing this AI singularity extinction thing in my DARPA meetings lately. It sounds like sci-fi to me.”

“Don't take it lightly General. I've spent my life studying the living and dying of species. Species go extinct when others get an edge on them. An advanced AI will have an advantage over us. It won't care about us and it's self-modifying.”

“Okay,” the General said. “What lesson did you learn from this encounter?”

“They learned a great deal about us, and we learned little about them. We’re going up to bat with two strikes against us. I need to think more about this before I can say any more. I hope they’re friendly.”

“I hope so too,” the General said. “Thank you, Dr. Chandra. I need to go, but keep us informed the minute you know anything.”

“I will,” Nisha said. “Be careful when you quarantine the astronauts on return. Active or hibernating nano drones might still be inside them.”

Nisha signed off and wrote a few posts, updating everyone about what she had learned. Priya ran into the room first.

“Mom, you’re a star! Everyone in the world will know about you. Your community has more than 20 million members. You're a queen!”

Quinn ran to Nisha and picked her up in his arms.

“I’m proud of you, my queen.” he said, with the widest smile.

“Put me down you oaf!” she cried out. “Bring me my crown and bow down before your queen like the subjugate you are.”

They laughed.

“What’s going to happen now?” Quinn said.

“I have no idea,” she said. “All we can do is to wait and watch what they do. We can’t be like a Jedi knight in an old Star Wars movie and suggest to them, 'Move along now, this is not the planet you’re looking for.' What’s happening now is my biggest dream and my worst nightmare all in one. For now, I want to have dinner and relax. Oh, I sold all our stock holdings to be on the safe side. I bought some put options so if the market drops, we make money. Most options were

overvalued because of the volatility, so I bought in the money put options and SPX short contracts."

"Good move Neesh. Quinn said. "Your hands are sweating again, but they weren't a minute ago."

"Yeah, I was so focused on what was happening up there that I forgot about being scared. It was a nice feeling while it lasted."

After dinner, Nisha walked outside to watch the Moon on the telescope screen. She wondered if these were the last of the good old days. She felt almost nostalgic for the recent wars and heat-famines which killed millions and displaced hundreds of millions. It would be nice to only have those problems to worry about. They seemed quaint compared to what may lie ahead. An hour later, Quinn walked out into the warm and fragrant summer air.

"Neesh, you've been staring at the Moon for a long time. What are you thinking?"

"I'll tell you in a minute," Nisha said, deciding not to tell him everything. "Look at the screen. You need to view the alien sphere."

Quinn followed the sphere transiting across the lunar face. He felt goosebumps.

"The sphere is an enigma," he said. "It silently orbits around and around, not allowing us to know anything. We're wondering, without hope of understanding its purpose or mission."

"Oh, we'll find out," Nisha said. "They don't seem to be leaving. I hoped after a few scans of some humans and other life forms here on Earth, they would be ready to take off on the next leg of their mission. The longer they stay, the more worried I get, but I still have hope they only want to learn about this solar system and afterwards they'll move along. However, they spent only a brief time looking at the other planets on our solar system. I think they're interested in us or this planet."

They talked for a while, arm in arm as they watched the object. Then they walked inside and read the news. People were still fighting the same old wars they were before they arrived. Politicians were still promoting their special interests. People were still following their

favorite sports teams. On the outside, life seemed normal despite the headlines about the alien sphere.

She sent out one last post before turning in for the night.

“The alien sphere isn’t leaving. Be careful.”

Chapter 5 - Taken

They slept soundly. No sounds. Nisha got up early as usual. The sphere continued to orbit the Moon. The US stock market opened Saturday trading down 1% as anxiety continued to grow around the world.

Another beautiful sunny morning began as they all do in inland California during the dry summer half of the year. It was a Saturday, and the kids were excited to be out of school. Priya had lots of energy.

“It’s hot, let’s go to the beach today,” she said.

“Great idea.” Quinn said. “Let’s get out there early before the crowds come. We can leave right after breakfast.”

“I can’t wait!” Nisha said.

They ate breakfast. Quinn loaded up the car.

“Okay, I think we have all the necessities. Beach towels, umbrellas, sunscreen, chairs, a full ice chest, drinks. We can put your surfboard on top, Pree.”

“That sounds good Daddy.”

Quinn continued his inventory.

“Food, chips, Google eyepiece? No way Neesh. You need to leave the tech stuff behind.”

“Sorry, I need to keep up with what’s happening. You never know what they or it will do next.”

She tried to make light of the situation for the sake of the kids, but the anxiety continued to build within her. She couldn't think of a scenario that would be good for our species. They didn't seem to be passing through the solar system on their way elsewhere. Quinn smiled as he always does when Nisha appeared happy.

“Okay okay, you win as usual. Let’s go.”

“I’ll be right back,” Nisha said. She ran into her office to do a

quick post and check on things. She opened her news feed. A view of Times Square appeared. It felt odd and out of place. She turned up the sound volume out of curiosity.

Reporter: “I’ve never seen anything like this. Thousands of people stopped walking all at once. They’re standing in place. I thought the crowd freezing fad died out years ago. The participating crowd is huge. I wonder if this is some practical joke. I don’t know.”

“Quinn.” Nisha shouted at the top of her lungs.

A few seconds later he ran into the room.

“What do you want Neesh? You look like you’ve seen a ghost.”

“I’m not sure, but there's something wrong in New York. The reporters think it's a prank, but I don’t. I need to contact the DHS right away. Sorry Quinn.”

“It’s okay Neesh, go ahead,” Quinn said. “If you need to stay home, we can go without you if that’s fine with you.”

“No Quinn, stay here. Something is happening there, and the same thing might happen here too. We need to stay together.”

As she watched the screen, the DHS logo appeared in a little window.

“Dr. Chandra, I'm glad you're there,” General Sherman said.

“Are you watching what’s happening in Times Square?”

“Yes, I can’t explain what’s happening,” the General said. “I remember the crowd freezing pranks of years ago, but this is different. Usually, some people walk around amongst the frozen since not everyone is in on the prank, but here, they’re all frozen. I believe the aliens—”

Nisha looked closely at her screen and zoomed in on a portion of it. She felt cold on a warm day.

“Yes, the aliens are there,” Nisha said. “A reflective sphere is sitting on the top of the building. Can you confirm that?”

“Hold on. … Yes,” the General said.

“Something is happening, let's listen,” Nisha said.

Reporter: “I’ve never experienced streets this quiet. Now, there's fog emerging from the sphere. It's descending from the building and onto the people below.”

The reporter paused to confirm something being said in his ear.

“The fog seems alive. It may be composed of little flying machines. They appear like the spider drones the aliens used on the astronauts, only these are smaller. We’re zooming in with our camera. They're mosquito sized drones. They’re landing on people's necks. Needle-like appendages are being inserted into their necks. Once they remove the needle; they fly in front of the face of the victim, hover there for a moment and return to the sphere. They’re looking at the person they took a sample from. Maybe they're taking a picture, I can't tell. Hold on, the US stock market has been halted in trading, down 10% in three minutes. The market has dropped 25% from a week ago, before the voices came. A 20% drop is considered a recession, but this is just a panic, I hope. We’ll talk more about this later.”

“Nisha, what do you think?” the General said.

Nisha wiped the perspiration off her forehead in a way where the General could not see her. She was sweating and cold at the same time.

“They’re taking biological samples of the general population. They chose a highly populated place for the sake of efficiency. Every task they do is efficiently performed. The technology required to execute this plan is beyond our capability. However, our species has built technology which was incomprehensible only 50 years ago. That’s why Arthur C. Clarke stated in his now famous Third Law that 'Any sufficiently advanced technology is indistinguishable from magic.' To us, they're performing magic. However, it's only technology, nothing magical.”

The General tried to keep up the appearance of strength and authority, but he understood the gravity of the situation.

“I appreciate your sentiments. I understand you’re no military expert. However, can you think of any way we can stop them?”

“Not at the moment General,” Nisha said. “We must keep a sharp eye out for weaknesses. I doubt we’ll find any physical weaknesses. We need to learn about them somehow. If they’re organic, they must

possess a civilized culture. They could have emerged from humble beginnings like us. We need to play defense in this game. I think going on the offensive might get us wiped clean off this planet. We might need to become the insurgents. At this point we know nothing, so we must wait."

The General took a deep breath, imagining humans fighting in caves against a marauding alien force. He had to begin preparations.

"Thank you, Dr. Chandra, I need to go but keep in close contact. Let us know whenever you have new thoughts on the subject."

"I will," Nisha said.

Nisha terminated the communication app and continued to watch events unfolding in Times Square. The kids walked into the room. They realized they weren't going to the beach.

"Mom, why can't we go now? Nothing is fun anymore."

"I'm sorry Pree," Nisha said. "I'm afraid we're not going to enjoy many fun times until they or it leaves. The situation is unpredictable. Watch what's happening in New York, and you'll understand what I mean. We need to stay together. I promise when this thing is over, we'll go to the beach."

"Promise?"

"Yes, I promise."

Nisha tried to insulate her kids from harsh news, especially when they were younger. Then, transparency became more important. Everyone in the world needed to know everything to increase our chances of survival. This meant Priya must understand what's happening.

They watched the screen in silence.

Reporter: "The mosquito drones are returning to the sphere. Some people are beginning to move and reawaken. Everyone is confused. Some people tried to run but they fell. The paralysis will wear off in a few minutes, if this procedure goes like the one with the astronauts."

Priya and Sophie were transfixed by the screen as they both held on to each other.

“Mom, I think this is what happened to me,” Priya said. “Before I got remote controlled, I felt paralyzed. I couldn’t move.”

“Me too,” Sophie said. “I wanted to scream but I couldn’t make a noise.”

“I can’t be sure about this,” Nisha said. “But I think they were practicing on us. Now they’ve mastered the technique.”

Reporter: “The mosquito drones are back in the sphere. It's lifting off and accelerating into the sky. Ugh. That’s the most intense sonic boom I’ve ever witnessed. The building I’m in is vibrating like a drum. Everyone on the ground looks dazed as they try to pick themselves up.”

Priya’s eyes were wide open. Sophie was silent.

“Mom, I'm getting dizzy and sick to my stomach again. We can’t do anything about this. They can do anything they want.”

“Yeah,” Sophie said. “I understand aliens might do all sorts of weird things like inhabiting our bodies and turning us into zombies.”

Nisha shook her head.

“Okay guys,” she said. “Let’s not get carried away. Zombies don’t exist, despite the zombie craze years ago. Oh, except for the zombie ants.”

Priya smiled. Nisha continued.

“Yeah, their technology is advanced. With your young flexible minds, you may be able to come up with clever ideas to help us. If you think of anything I might pass on to the General or the President, let me know.”

“Okay Mom.” Priya said. She turned to Sophie. “Mom hangs with the President now.”

“I know. She's famous.” Sophie said.

“Hold on,” Nisha said. “I’m looking at Reddit. Something else is happening. Read these posts.”

“I’m on the Stanford campus. People are frozen in place. Is this a

joke?"

"They're frozen like in NYC here on the grounds at Oxford."

"I took this video just now at MIT. Check out the frozen people LOL."

"Everyone in Beckman is frozen. Best prank ever at Caltech."

"Caltech." Nisha said. "I gotta go."

Priya wrapped her arms around Nisha and held her tight.

"No Mom, don't go."

"Neesh," Quinn said. "You can't go. I don't want to lose you."

"Sorry guys, I have no choice but to go. When they wake up, I want to understand what happened. Don't worry, I'll be careful. They're not killing anyone."

By the time Nisha arrived at the Beckman Auditorium at Caltech, the sphere had left, and the students were dazed. She interviewed them. She connected to DHS to give them an update.

"Dr. Chandra, what happened?" the General said.

"I'm at Caltech right now," Nisha said. "I'm talking with the paralysis victims. They all said the same thing. They became paralyzed and the mosquito drones came out of a four-meter-wide sphere hovering outside the auditorium. The doors to the auditorium were open and they flew in and took blood samples. They all felt a brief stinging sensation. They felt nothing as the samples were drawn from a sharp needle. Maybe there was anesthetic. They moved too quickly to swat, even if they weren't paralyzed. The drones returned to the sphere. A sonic boom happened afterwards."

"What do you make of this?" the General said.

Nisha paused.

"I noticed from my Reddit stream that they're doing this at many of the most prestigious universities around the world. Approximately 20 schools in total were intentionally chosen by them. From a research perspective, they took a random sample of people from the streets of

New York. Afterwards, they took a specific sample from those high achieving universities for comparison. They might want to understand our genetic variation. A case-control study? They must be monitoring us to be able to know where to go to collect such precisely targeted samples."

The General rubbed his forehead with his head down. It was difficult to maintain the appearance of being in control.

"If this were a ball game, they're increasing their lead every chance they get. They continue to learn more about us, and we still know nothing about them."

"I disagree partially. When we study their actions and their tools, we learn. They're advanced, they're scrutinizing us closely. They're opaque. There's no evidence of microbial contamination, and they wish us no harm as of now. However, I agree we don't know them like they know us. We don't know if the sphere in orbit is a probe, or a home to millions of live beings."

"Thanks, Dr. Chandra," the General said. "Continue monitoring the situation and keep us up to date.

"You're welcome, I'll let you know,"

Nisha posted about the latest incidents.

"They're sampling our DNA. Thus far they mean us no harm and that's a good thing."

"So far, there's no evidence of alien contamination or microorganisms."

Quinn walked into Nisha's office later that the afternoon.

"Neesh?"

"Yes."

"It's time to eat dinner. I made a tasty pizza."

"It's dinner time already? We were just getting ready this morning to go to the beach. I guess I got a little distracted."

“Yeah, a wee bit distracted, like for the entire day,” he said as he smiled. “This is a healthy pizza with veggies. I need to keep you well-nourished so you can save the world.”

“OK. I’ll be there in a minute.”

They sat down to eat. Sophie felt like part of the family. Priya messaged Amy.

“Hi Amy. What did you do today, miss genius?” Priya said.

“We spent a perfect day at the beach. And I worried about the aliens. What did you do? I thought I'd see you out there.”

“We were going to go, but Mom got sucked into the alien thing again, so we didn't go. Sorry.”

“Pree, we're eating now,” Quinn said.

“Sorry, gotta go.”

They disconnected.

“I wish we had gone to the beach,” Sophie said. “We had such a bad week.”

“I know,” Quinn said. “I think a long time will pass before things return to normal. We’ll need to— What’s wrong Neesh?”

Nisha stared at her big 3D screen across the room where her Reddit stream scrolled down the page.

“Oh, it’s nothing. So many hoaxes are going around. How can you differentiate hoax from reality? How about this one? A guy claims they abducted him, and he is now pregnant with an alien baby. Check out his belly. He looks like he had too much to eat. AI for sure.”

“Eeew, he looks like my English teacher,” Sophie said.

Nisha continued browsing on the big screen.

“Okay what about this one? This woman says they abducted her and took her to their home world through a worm hole. She describes the home world as being desert like. The aliens are twenty feet tall because they originally evolved to eat the leaves off the branches of

ever taller trees."

"That's ridiculous," Sanjay said. "Alien giraffes? Who would believe that?"

"I don't know," Nisha said. "Oh, here's a good one. This guy in India near Mumbai claims children are walking into a sphere. I wonder why anyone would write such nonsense."

Priya laughed

"I think they want attention. Everyone wants to be famous, and nobody wants to do the work to become famous."

"Pree, you're starting to sound like your dad." Nisha said.

Priya wrinkled her nose.

"Sorry, I recant my last statement."

Nisha chuckled and continued reading.

"Here's another one from Mumbai talking about children walking into a sphere."

"It's from the same guy, right?" Quinn said, looking at his piece of pizza as he ate.

Nisha watched the screen more closely.

"Hmm, no this is from a different person or at least a different Reddit account. That's strange."

"Maybe we're having mass hysteria." Priya said.

"That's possible since everyone knows about the aliens now," Nisha said. "Oh, here's another one from a different user talking about the same thing. Hmm, this person talks about a large sphere about 50 meters tall landing in a school yard near Mumbai. The children are willingly walking into the sphere at this moment."

"That's funny," Sanjay chucked as he smiled.

Priya laughed.

"Yeah, that's mass hysteria. This is good entertainment. What else do they say?"

Nisha said nothing for a few seconds as she read the posts. She

felt another chill.

“They’re saying a lot Pree. Here's one from a parent also near Mumbai saying their child walked out of the house and into a sphere. He could do nothing to fight back. This one might be real. I’ve got to go check on this. I’ll be back.”

“There she goes again,” Sanjay said.

“This is the price we pay for having Nisha in our lives,” Quinn said. “She’s worth the trouble.”

Priya made kissing noises.

“Yeah Daddy, you're biased because you’re in love.”

“Guilty as charged.” Quinn said.

Nisha quickly walked into her office and contacted General Sherman at the DHS.

“Sorry to wake you General but I’ve been monitoring a strange development. I can’t confirm this amongst all the hoaxes, but I think children are being abducted in Mumbai. If this is true, we need to protect our children.”

“I agree, Dr. Chandra. We’ll get our people on this right away.”

“Thank you General. I’m seeing more posts right now coming from Mumbai. I no longer think this is a hoax. Wait a minute. Someone posted some video. I’m watching the video now.”

Silence.

“Hmm. The children walked into the sphere and the sphere appeared to melt around them as they walked in. Some adults stood near the sphere, but they weren’t doing anything. They were paralyzed. Once all the children were inside, the sphere accelerated into the sky making a huge sonic boom. Afterwards, the parents started running around.”

“Thanks Dr. Chandra,” the General said. “We both should do whatever we can to protect the children.”

“Be careful taking any aggressive action. I don’t think we can do anything to stop them. Aggression might put us on the endangered

species list."

"Acknowledged, keep us posted. Thank you and good night."

Nisha signed off and became aware that Quinn and the kids were watching everything from the doorway.

"I guess you know everything," she said.

"We do now," Quinn said. "What should we do? Are they going to abduct us?"

"I don't know, but we should stay inside at night. It's early morning and still dark in Mumbai. They like the cover of darkness."

Quinn watched the kids, who were becoming fidgety.

"Congratulations, you guys get to sleep in our room for the foreseeable future."

"Okay," Priya said quietly.

"I want you guys to know we won't let them abduct you," Quinn said.

"Yes, we won't," Nisha said.

The kids ran out of the room and into Priya's room. Nisha looked down. Tears ran down her cheeks.

"This is getting worse Quinn," she said.

"I agree. What can we do?"

"I'm not sure we can do anything."

"Why do you say that?"

"They're advanced. There might be no way to stop them."

"Read this," she said. "Now, someone is posting in Cairo. A huge round silver ball landed, and children are walking inside. Here we go again. There's another post from Shanghai, and another from Sao Paulo.

Nisha alerted the DHS about the other incidents.

“Quinn, the sounds are back,” Nisha whispered.

“What?”

“It. Them. The aliens. Something is different now. I can't explain but-”

“But what?” Quinn said.

“For a fraction of a second I imagined those children.”

“What were they doing?”

“They were walking,” Nisha said.

“Where?”

“They’re in a dark room.”

“What feels different about the sounds?” Quinn said.

“It’s like they turned on a switch. The sounds are constant now.”

“Right now, as we speak?”

“Yes, the sound is like the noise of a crowd, but not as loud as before. It's like listening to a stadium full of people from outside the stadium, but its electronic. Artificial.”

Priya and Sophie ran into the room at full speed.

“Mom, the sounds are back. They're not going away.”

“Yes Pree. They aren’t as loud though. They’re barely discernible.”

“Yeah, that's right,” Sophie said. “And there's less static.”

“They’re clearer. I still don't understand them,” Priya said.

Nisha posted, “Anyone else hearing the sounds now? Are they different?”

“I’m reading a post from Tokyo saying the voices are back,” Nisha said. “They're calling them voices. Here's one from Barcelona,

and from Sydney. Here are more from Helsinki, and Rio, and Atlanta. I notice some posts from here in Pasadena too. This is different than before. Not only do the voices seem different, but they aren't being broadcast from a specific location off the Earth. The Moon hasn't risen here yet, but the voices are still here."

They watched the posts in silence for several minutes.

"Read this," Nisha said as they hovered over her screen. "See these posts talking about children walking into spheres in Rio? And this one from Helsinki and another from Barcelona? These are the same cities where people originally heard the voices."

Nisha's DHS eyepiece agent alerted her to an incoming communication connection. She accepted the communication on her computer.

"Dr. Chandra, this is General Sherman. I'm in a bunker beneath the Oval Office at the White House. We're with the President and we wish to discuss the most recent developments. Can you speak with us now?"

"Of course, General," Nisha said, waving everyone out of the room. "Hello Madam President."

"Hello Dr. Chandra, the recent developments are most troubling. We're hoping you can shed some light on the subject. First, can you tell us about your thoughts on the recent abductions and voices?"

"Yes," Nisha said. "The aliens are entering into a new phase in their investigation of our planet and of humans in particular. First, the voices or sounds are constant, 24 hours per day everywhere. They aren't originating from one place in space away from the Earth. Also, the voices are heard in places where abductions are being conducted. However, a few places exist where the voices were detected, but abductions haven't happened."

"Yet," the President said.

"Yes, we don't know the future," Nisha said. "There might be a correlation. I think we might know the answer in the next few hours. I'm watching my streams right now. More abduction spheres are

landing every minute in more cities around the world."

"Why do they only want adolescent children?" the President said.

"I don't know," Nisha said. "The aliens are scientists. I guess they're studying us. Older children might be easier for them to manage and old enough to do whatever it is they want. Eventually, they might also abduct adults. I'm not sure of their intent or their goals. We know they're taking children ranging from 14 to 18 years of age."

The President breathed heavily and didn't say anything for several long seconds. She felt a sense of hopelessness but had to show she was still capable of action, or people would lose confidence.

"We're placing defensive missiles around major cities to stop these abductions. I don't want them to continue. What's your opinion about this plan?"

Nisha hesitated.

"I think in this situation, violent acts of any type including in self-defense are a big mistake. My guess is anything we do will be ineffective. Think about trying to shoot down our F56 jet fighters with bows and arrows. It's futile. I'm not opposed to defending ourselves, but I'm opposed to taking futile actions which might lead to global destruction."

The President said nothing for several long seconds.

"I understand. However, if I'm flying in my F56 fighter jet and someone shot arrows at me, I wouldn't destroy their entire village in retaliation."

"But they might," Nisha said. "I think if they regard us as dangerous, they might exterminate us, even if we're no threat to them. Please be careful. Any act you take might bring responses ranging from nothing at all to complete annihilation. Even a mild scolding from their point of view might destroy our civilization. Have you ever felt a bug on your neck and instinctively swatted? Later, did you find out you had accidentally squashed a cute little ladybug? Well, I don't want us to be the ladybug."

"Okay, thank you for your input, Dr. Chandra," the President said. "I'll be careful. I think we should defend ourselves but only as a last

resort."

"Good luck Madam President." Nisha said. She signed out.

Quinn, Priya, and Sophie were hiding behind the door, listening to the conversation as usual. They looked inside and walked into the room.

"Mom. You stood up to her."

"That's my Neesh." Quinn said, walking in right behind Priya and Sophie. "You're no pushover."

He gave Nisha a big hug.

"I don't know if I did any good," Nisha said in a subdued voice. "I think they'll still shoot at the spheres and stir up trouble. Read this post. They've already installed missiles in New Jersey on the other side of the Hudson River from Manhattan. The President had this planned ahead of time. I doubt she listened to a word I said."

"Well," Quinn said. "I hope she did. Let's hope the missiles are never used."

Nisha shook her head as she read her Reddit stream.

"I'm reading these posts. Abductions are happening all over the world. The spheres are 50 meters in diameter. Nobody has found a way to stop them. The paralysis stops nearby people in their tracks."

Priya watched videos of the children as they walked into the spheres. Her heart raced.

"Mom, those children are being hypnotized, like me."

"You're right Pree," Nisha said. "They don't seem to be in control of themselves. Here is a post saying there's an abduction sphere hovering over Manhattan. That's right near the missile installation."

Nisha turned on a live video stream from the Manhattan shoreline. A reporter covering the story arrived on the scene.

Reporter: "The hovering sphere is landing along the shore of the Hudson. Several car accidents are blocking traffic. The sphere appears like other abduction spheres people see in cities around the world."

President Martinez watched the event closely, ready to give the launch order.

“Maria, I’m not sure about this,” General Sherman said. “What if Dr. Chandra is right and we get squashed like a bug? We face an unknown enemy who knows everything about us. They might be translating and monitoring our communications. All my years of training tell me to be wary of engaging an unknown enemy with unknown capabilities. In this case, the most important capability that’s unknown about this enemy is how many orders of magnitude they are above us.”

“Lucas,” Maria said. “I’ve known you for many years. I respect your opinion and I respect Dr. Chandra’s too. However, I’m sitting here watching the sphere descend. I know our children will be abducted. What if one of those children was yours? She’s the same age as those being taken around the world. If you witnessed your daughter about to board one of those things, wouldn’t you do something?”

“Well yes I—”

“Okay, there’s your answer. I must defend those children.”

The President gave the OK. A single missile screamed out of a launch tube and across the Hudson. The reporter spotted it out of the corner of his eye.

Reporter: “There’s a— Oh my God. I believe a missile from the other side of the river just hit the sphere. It bounced off and skipped across the Hudson like a smooth skimming stone. I heard no explosion. The missile lost power right before the sphere was struck. What’s left of the missile is still skipping. Now it stopped halfway across the river and sunk into the water. The sphere is unchanged, as though nothing happened.”

The silence lasted a long minute.

“Now the sphere is landing, and children are walking slowly out from the neighborhood.”

The general shook his head.

“Maria, did you see— Maria?”

General Sherman turned to the President, slumped in her chair.

“Get the medics in here now.”

He took the President’s pulse. He bowed his head in sorrow.

Nisha watched the missile impact on YouTube live.

“Quinn, did you see that?” she said.

“Yeah, I.”

He didn’t know what to say. Nisha couldn’t take her eyes from the screen.

“That sure went wrong, but everybody survived,” Nisha said. “I hope the aliens don’t retaliate. I’m sure we’ll know soon. They don’t play around. The children are walking straight into the sphere as though nothing happened.”

“Weird,” Priya said. “They’re sleepwalking.”

“Pree is right,” Nisha said. “They’re being remote controlled. It's like hypnosis.”

Nisha and Quinn watched in silence for few minutes. Eyes glued to the screen. Nisha turned around.

“What’s wrong Neesh?” Quinn said.

“Where are the girls?”

“They're right behind us. Oh, Pree?”

They walked to the master bedroom. They weren’t there. They ran to Priya’s bedroom and searched the rest of the house.

“The front door is open.” Nisha shouted.

They rushed outside. The sky was dark since Moonrise wasn’t for several hours. Many people walked by themselves and with their kids in the warm evening air. They spotted Priya and Sophie talking to one of their friends at the end of the street where the school playground began.

“Pree, you almost gave me a heart attack.” Quinn shouted angrily.

“Daddy, what’s wrong?”

“I thought you had been abducted.”

“We both thought you had been abducted.” Nisha said.

“Sorry Mom. We felt like coming out here, but I can’t explain why. I felt a little dizzy. I'm okay now. I’m talking with my friend from school Julia. That’s all. The voices come to her too. I didn’t know that until now because she never mentioned anything to me. She says she felt too embarrassed to tell anyone.”

“Hi Julia,” Nisha said. “I’m working on trying to understand what’s happening with the voices. I think everyone should go inside. I’m worried.”

Quinn put his hand on Nisha's shoulder.

“Neesh,” he whispered.

Nisha turned to Quinn, but he peered into the darkness of the unlit school playground.

“Quinn why are you whisper—”

“Shhhh,” Quinn whispered again and put his hand over her mouth. “Look up.”

Silence.

“I didn't expect it to be so big,” Nisha whispered.

He took his hand away from her mouth.

“The reflections of the entire city curve around it,” she said. “If the reflections weren't there, the sphere would be invisible. Notice how—”

“Neesh,” Quinn said.

“What?”

“Can you move?”

“Do you want a better view?”

“No, I mean can you move your legs or arms?”

She tried to lift her legs.

“Um, no,” Nisha said.

“Nobody around us can move at all. We’re partially paralyzed.”

Nisha tried to call for the kids, but she could barely whisper. She helplessly watched them. Dozens of them walked towards the sphere.

“I can't call Priya, can you Quinn?”

“No, I can only whisper.”

Nisha cried and perspired profusely. She didn't move due to the paralysis.

“They can't do this. They can't take her. She’s too young. Her life is only beginning. No.”

She crumpled to the ground.

“We can't let them go Quinn.”

She tried to scream, but only a whisper came out.

“I don't think we get a choice in the matter,” he said.

Nisha struggled to view the abduction in progress.

“They’re going in, one by one,” she said. “The sphere is eating them. No! … Pree. Sophie. I hate them! If I get close to one, I'll kill it.”

Quinn held her in silence for a while as the kids became enveloped by the sphere's shimmering skin.

“Why aren’t you being abducted?” he said. “You're affected by the voices.”

“I guess they don't want adults. Only the kids affected by the voices are going in. They're all about Pree's age. I'm going to get her back. I don't care what it takes. Where is Sanjay?”

“I'm not sure. I’ve seen all the kids go in and none of them were Sanjay. He’s probably at the house. He didn’t hear the voices, so I doubt he’s in danger.”

“Sanjay,” Nisha tried to scream, but she could only muster a whisper. They felt a low frequency thumping.

“The sphere is leaving,” he said.

The spacecraft accelerated into the sky. The reflection of the city on the curved surface grew smaller. The vibrations of a powerful sonic boom echoed through the canyons.

“We can move,” he said. “It’s like when we shoot tranquilizer darts at animals. They recover and run away.”

Nisha began to get up, but she fell back down.

“Be careful, let me help you up,” he said.

“My baby is gone. She's gone forever. Where are they taking her? What are they going to do with her? She's not even sixteen.”

Quinn held her tightly for a long time, rocking her back and forth as she sobbed. Tears ran down his face, but he tried to hide them. He wanted to be strong for Nisha, but that never mattered to her.

“Sanjay,” Nisha shouted. “We need to find Sanjay.”

They ran home. He was working on a mathematics problem with his agent on his Pad device.

“Sanjay, I'm glad you're here,” Nisha said. “I love you so much.”

“What's wrong Mom?” he said. Where's Pree? I need to ask her something.”

“Sanjay, the aliens abducted Priya,” she said.

“Good one Mom, whatever.”

“I'm serious Sanjay. She’s gone. Check on Reddit.”

Sanjay pointed his eye into his eyepiece and navigated to Reddit. He read the posts about the abductions nearby.

“Pree.” he said as he ran outside and down the street.

“Sanjay,” Nisha said.

“I'll get him,” Quinn said. “You go tell the world what’s happening.

Nisha wiped away the tears.

“Okay.”

Her DHS eyepiece app blinked. She walked to her computer and began her update.

“General Sherman, I’ve got some news—”

“You don't know Dr. Chandra?” General Sherman said.

“Know what?”

“The President is dead.”

“What?”

“She died when the missile struck the—”

“She fired a missile? I told her not to do that.”

“I know,” the General said. “When that sphere landed in Manhattan, she ordered a surface to air missile to be fired. Seconds after the missile hit the target, I looked over at her and she was dead. Vice President Wilson is now the President. She’s in the room right now and wishes to speak with you.”

“Dr. Chandra?” the President said cordially.

“Yes, Madam President,” Nisha said.

“Call me Emma.”

“Okay Emma, I’m pleased to meet you,” Nisha said. “I followed your work on the Middle East crisis. You solved part of the impossible conundrum.”

“I solved a portion, but some are still fighting. I felt lucky to be in the right place at the right time. Now that I understand what we’re facing with the aliens, I long for those simpler days of Middle East peace negotiations. I mean, how do you negotiate with an unknown and all-powerful entity?”

Nisha paused for a second.

“That’s a good question. They don’t seem to care about negotiating. They’re proceeding with their plans. We’re only a minor inconvenience to them. What’s disturbing is how they knew who ordered the firing of the missile. Also, I'm upset about how they’re abducting children. They abducted my child an hour ago. They took her away in one of those—”

She broke down in tears.

“Nisha,” Emma said. “I’m sorry. Why didn’t you mention this earlier? We should let you go now. Contact us when you’re able.”

Nisha tried to wipe away the tears as she blew her nose.

“I didn’t say anything because the good of the country outweighs the good of the one. Being of service right now increases the chances of getting my baby back and helping everyone. I want to get back her best friend and all the other children too.”

“That’s noble of you but—” Emma said.

“I'm fine,” Nisha said. “She’s gone now. We lost our President too. The best way to get the kids back is to get to work understanding them. My specialty is learning about life on Earth and applying that knowledge to the cosmos. Right now, let’s focus on what we can do from here forward.”

“Okay,” Emma said. “First we need to discuss what we know and what we can do.”

“Well,” Nisha said. “First, we need to realize they’re learning more about us every second. They identified who ordered the missile strike and killed her. They’re technologically and socially savvy. I strongly urge you to not order strikes against them.”

“Yes, I think I’ll only order a strike as a last resort if the entire planet is threatened.”

“I’m glad you agree,” Nisha said. “The one positive thing to come from all of this is they don’t want to kill all of us. They culled the person responsible.”

“Yes, that’s a good development,” Emma said. “They also killed the missile operators and left others alone. Okay Nisha, I’m going to get some sleep. I'm moving away from the White House temporarily. I’ll be contacting you from other locations. You get some sleep too.”

“I’ll try Emma. Good night,” Nisha said.

Quinn walked into the room.

“Neesh, how are you? I found Sanjay. He’ll sleep in our room from now on.”

She sobbed and couldn’t say a word.

They went to bed but couldn't sleep all night.

Chapter 6 - Broken Heart Syndrome

Another bright summer day dawned. Birds had animated discussions. Squirrels quarreled over acorns. A few sprinklers were finishing up their limited nighttime watering as California entered its 12th year of drought.

The view out the window seemed idyllic, but a dead space hung above the neighborhood. The streets were empty except for those going to the supermarket. Few cars were on the road. People weren't out jogging or walking their dogs. The sounds of children laughing was a memory.

"How are you, Neesh?" Quinn said as he rubbed his eyes.

"I'm exhausted," she said. "It's not even eight o'clock. My life is empty now that they're gone. I still have you and Sanjay. But my baby is gone. Right now, Pree is in orbit around the Moon. I think. What are they doing to her? Are they hurting her? I wonder if she can see the Earth. Is she wondering what we're doing? I hope she's having the experience of her lifetime. If they're benevolent, she might be learning about their species. Maybe they chose children because they would be less threatening and more amenable to contact with an alien species. Perhaps the children will become ambassadors. I'm happy for her. I would love to be on that ship."

She stared at the ground for a while. Quinn said nothing and held her.

"I hate them. They might have better toys, but they have no heart."

She sobbed again. Quinn stayed silent.

"I'm going into my office to watch what's happening. I won't let them do this to us. How dare they."

She stormed out of the room.

Quinn shook his head at Sanjay and smiled.

“The aliens don’t know what they’re facing.”

“Yeah,” Sanjay said. “They should leave now while they can.”

They both smiled for a moment. Then they thought of Priya. The smiles faded.

Silence.

Quinn tiptoed into her office, placed several boxes of tissues beside her desk, put a hand on her shoulder for a few seconds and left without saying a word. Nisha put her hand on his, wiped away the tears and got to work. She watched her Reddit stream and sent out a few posts of her own.

“My child was abducted. I'm heartbroken. They can’t break my spirit.”

“I estimate 10,000 children from 90 countries were abducted in about 100 cities in the past day. 100 children per sphere.”

“If you spot an abduction sphere, don’t attack. The US President died after ordering a missile attack.”

“Good news: The aliens only killed people they thought were dangerous and left others alone. They paralyze temporarily; they don't kill.”

Nisha stayed glued to her computer all day with the door closed. Late in the afternoon, Quinn entered the room.

“Neesh, what happened to all those boxes of tissue?” he said.

“Oh, I put the empty ones over there. I have one more left. Thanks Quinn. You’re my hero.”

“How are you feeling?” he said.

“I’m dead and empty. Then I’m excited and I cry. I don’t know where my emotions will take me from one minute to the next. At least I’m getting exercise. The voices are still in my mind. How are you?”

“I’m upset,” Quinn said. “I can’t help you. I can’t help Priya or

Sophie. I can't reduce Sanjay's anxiety about what will happen next. My sculpture project is on hold. I can't work on any paying project. I'm useless."

Nisha stood up and hugged him. He was her pillar of strength and far from useless.

"Why don't you go work on a project just for you? Work on something that expresses how you're feeling right now. Strong emotions inspired the best works of art in history. Take advantage of your emotional state right now."

Quinn smiled.

"Yeah, I'm going to do that. Later I'll make dinner. I've given up on the robot."

He teared up.

"Here, have some tissues. I ordered more," Nisha said.

Quinn left the room and carefully closed the door. Nisha continued monitoring the situation via her Reddit stream. Every five or ten minutes, a new abduction sphere randomly appeared somewhere in the world. Or at least the pattern seemed random. They liked to take children from the biggest cities. Cairo, Sao Paulo, London, Shanghai, Moscow, Mexico City, Paris. The list seemed endless. They each took away about 50-100 children at a time. She estimated 300-1200/hour.

She posted, "I estimate alien child abductions are occurring at the rate of 7,000-25,000 per day. 11,000+ total so far."

She spent the rest of the afternoon on Reddit, consoling the heartbroken grief of the parents of child abductees. She used the remaining box of tissues. Nisha felt Priya's absence strongly at dinner. She tried to put on a brave face.

"Oh Quinn," she said with a smile. "You made my favorite tofu dish, with the garlic baked broccoli and garlic bread too. You're one of my most favorite husbands in this house."

Quinn laughed.

“I’m happy to be in the top 10. Um, am I?”

“Maybe!”

They both focused on the empty chairs where Priya and Sophie had sat the night before. Tears streamed down their faces. Quinn opened new box of tissues.

He tried to smile and said, “I think we better order a commercial sized case of these tissues.”

She smiled for a second and broke down again.

“When am I going to get over this? I can’t stop crying.”

“You’ll stop when she’s back unharmed, and Sophie is too. You’ll be back to your usual— Neesh? Are the voices back?”

“I don’t know,” Nisha said. “I’m having chest pains.”

Quinn ran around the dinner table to hold her.

“Okay, relax.”

Nisha winced in pain.

“It’s not going away Quinn. I’m having trouble breathing. I’m dizzy. It's not the aliens.”

“Okay I’ll drive you straight to the emergency room. It's only a few minutes away. Contacting an ambulance would take longer. The closest one is, um, eight minutes away.”

They rushed to the hospital in autopilot emergency mode. A doctor examined Nisha and her agent performed an ECG. They awaited the results. Quinn feared the worst but said nothing to Nisha. He didn't want to make it worse. Nisha did the same.

“What’s taking them so long?” Sanjay said.

“I don’t know, but I hope—”

The doctor finally came in with the news.

“Nisha,” she said, “When you told me about your recent stressful experiences, I thought your heart problem might be the result of stress. That’s the source of the problem. You have stress-induced cardiomyopathy, or in other words, Broken Heart Syndrome.”

“There's no such thing.” she said as she glanced at Quinn.

“It’s true,” the doctor said. “It's rare, but the syndrome can happen under highly stressful circumstances such as the death of a loved one. You’ve been under extreme pressure. I’m in your Reddit community. They abducted your child and took her from you right in front of your eyes. The abductors aren’t even human. Who knows what they are, or what it is? If anyone ever had a reason to manifest this problem, you're the one. Fortunately, the condition is usually temporary. In your case, the enlarged left ventricle should return to normal in a week or two if you can relax for a while.”

They monitored her for a few hours and then Quinn drove them home on standard autopilot. They walked into the house. Nisha went straight to her monitor to check on the latest developments.

“Neesh, what are you doing? You’re supposed to stay away from tech and the stress. You heard the doctor. Let your agents do the work.”

“I need to understand what’s happening, and the DHS might be trying to contact me. I don’t trust agents after that disaster last year. It almost took down modern society.”

“No.” Quinn said. “You need to relax, or there will be no you to contact. You’re always talking about how you want to be of use to people. Well, if you're dead you won’t be of much use. Plus, they fixed the agent injection problem.”

“Supposedly. OK, fine Quinn, let me tell people what happened.”

She posted, “They diagnosed me with stress-induced cardiomyopathy, (Link: Broken Heart Syndrome.) Read about this if they abducted your child.”

Quinn insisted she stay away from the computers for the rest of the day. That wasn’t easy for Nisha, but she did it.

Chapter 7 – The Landing

The sun rose into a golden red sky. Nisha struggled with something in her sleep.

“Neesh,” he whispered. “You’re having a nightmare. Wake up.”

“Oh,” Nisha whispered in a sleepy voice.

She woke up fast.

“Something is different. The voices came back in my dreams, and I think Pree spoke. I couldn’t understand her words. It didn’t sound like Pree because it was electronic, but I know the voice belonged to her. The voice lasted for a few seconds. The alien voices came back after that.”

“That’s good news Neesh. She’s alive.” Quinn said.

“I don't want to make any assumptions. Is this my imagination? I want hard evidence before I believe in or accept something. I still have my hunches though. I think she's alive. I'm better now. I'll tell people about this.”

She posted, “My daughter spoke in the alien sphere. If you hear your abducted children, tell us.”

She waited for a minute, and she read the replies.

“NishaAstro, my baby spoke too. I'm positive.”

“Thanks, NishaAstro. My child also.”

“My heart goes out to you NishaAstro and to the victims.”

The posts scrolled down the page.

Quinn walked into the room and leaned against her.

“Check this out,” Nisha said. “Many others have the same experience as me. I must find a way to get our children back.”

“I know you can get them back,” Quinn said as he looked at her screen. “Are 30 million in your community now?”

“Yes,” she said. “I still haven’t adjusted to having 250,000 astronomy fans before this all began. Now this has taken on a life of its own.”

“I’m reading this story,” Nisha said. “The UN met to decide what to do about the aliens and abductions. They decided nothing should be done for fear of provoking them. The UN declared they're so advanced that nothing can stop them. However, China and Russia said they'll defend their territory at all costs. Everyone agreed that in the face of danger, each country could defend itself.”

“The Russians and Chinese won’t be able to defend themselves,” Quinn said. “Violence will make the aliens angry, right?”

“There's no way to know,” Nisha said. “I doubt whether there's anything we can do to stop them, assuming actual living beings are aboard the sphere. Whatever they want, they can have. We might find another, less militarily oriented way of stopping them. However, they’re interested in engineering and are socially savvy about humans. They’re tracking our every move and they understand our languages. They know they can paralyze us and take us. They know what they’re doing.”

Tears streamed down Nisha’s face. Quinn held her.

“She may be gone forever,” she said.

Quinn looked into her eyes.

“I think she’s okay. We’ll find her somehow and get her back.”

Nisha wiped her tears and said nothing for a minute.

“Yes, I think she’s okay. I’m still hopeful. Oh, this is strange.”

“What’s strange Neesh?”

“The voices intensified just now.”

"What do you mean?"

"I can't describe it, but the pace quickened. They're not louder but they're faster. More information is being transmitted. Also, there's this hollow sound. Like echoes happening. Let me find out if anyone else has noticed this."

Nisha posted, "I noticed a change in the sounds a few minutes ago. Anyone else notice?"

Within seconds the replies began.

"Yes, the sounds are like voices. They're back, faster than before."

"The conversation became more animated."

"The change makes me anxious."

Nisha watched the Reddit data.

"Just as I suspected," Nisha said. "This effect is occurring all around the world at the same time. More posts are originating on the side of the Earth facing the Moon, but 30% of the posts are from the half of the Earth facing away from the Moon. What's happening?"

Nisha alerted the DHS. Then they ate lunch. She raised an eyebrow as she read the news.

"The US stock markets are down another 7%. They're down 30% since the voices began a week ago."

"Whoa, I'm glad you sold everything." Quinn said.

"So am I. The reporter who authored the story blamed my last post for triggering the decline. People are taking this seriously and the fear is intensifying. I can't believe only a week has passed since I first noticed the voices. I thought I would be teaching my class and helping Pree with her home—"

Tears streamed down Nisha's face again. Quinn handed her a

tissue. He needed one for himself too.

They held each other and said nothing for a few minutes. She put on a brave smile.

“This might still turn out well,” Nisha said. “Sorry I keep going around in circles. Pree might be learning about a new alien culture. This is the most important event in her entire life.”

“I hope you’re right.”

“Me too, so we’ll take this one moment at a time.”

“I agree,” Quinn said.

They finished lunch. Quinn continued to work on his new sculpture. Nisha walked back into her office to monitor her Reddit stream. In addition to her astronomy friends and associates, she also followed business, the arts, and other scientific specialties. She re-posted some of the more interesting posts she read.

“Business is soft everywhere. People aren’t buying durable goods.”

“Church attendance is up 20-40% in some areas of the world. In some places it's down.”

“Why bother saving for retirement? The aliens will likely destroy us or abduct us into slavery or something.”

“Automobile and mass transit traffic has been unusually light for the past week, in some cases down as much as 80%.”

“This whole alien thing is a ruse to increase defense spending so they can increase profits to the weapons manufacturers.”

“The 1% of humans who experience the sounds speak for the aliens. Don’t trust them.”

Nisha received no new reports of abductions. She spent some time on that late summer afternoon searching for new abduction reports but

couldn't find any.

She posted, "No new abductions in three hours? What's happening? Total: 250 cities, 25,000 children gone."

Nisha watched the replies scroll down her screen. They confirmed that nobody had been abducted in the past three hours. She reported her observations to the DHS and ate a late dinner with Quinn and Sanjay as the sun set.

Tears welled up in Nisha's eyes as she stared at the empty chairs.

"If I had been paying more attention and kept the girls in, they would be with us now. I wish I'd never let Sophie stay here. She would be safe, and her parents wouldn't hate me. They sent me angry messages. I recognized the patterns in the abductions, and I didn't keep them inside. I'm stupid. I killed my own daughter."

She sensed heart palpitations again and clutched her chest.

Quinn walked around the dinner table and held her.

"Sophie's parents forgave you. They told you that. None of this is your fault. Nobody could anticipate this happening. Even if you had kept the kids inside, the aliens would have abducted them. I understand people tried to keep their kids inside, but they were frozen, and the kids walked out of the house anyway. We're helpless to stop this."

"My heart is beating fast and weakly again," Nisha said. "I'm going to die. The life is draining out of me. I can't live without my baby. I can't live with the guilt of knowing I killed her."

"You didn't kill her," Sanjay said. "Stop that. She's still alive."

He slammed his fork onto his plate and ran upstairs to his room. She got up to follow him, but Quinn held her back.

"He's right you know," Quinn said. "She's still alive. You're in a unique position to do something about this situation. You've got the power to find her and bring her back."

"How do you know that? What evidence do you have?"

"I have a sense Neesh, trust me. Keep looking for her. You'll find her."

"A sense? What good is that? That's not logical."

She smiled weakly. He took her hand and they walked back into her office to monitor the latest events. She felt the sounds getting more numerous and rapid.

She pulled herself together and noticed a few posts.

"We detected a strong electromagnetic pulse about three minutes ago originating from the sphere in lunar orbit."

"A single EMP, 0.03 sec. four minutes ago, from lunar orbit, then silence. Nothing else."

Nisha alerted the DHS and continued to monitor the situation.

A few hours later that evening, trucker Joe Calderon drove north for 90 minutes after leaving LA. He stopped in the desert town of Mojave for a late dinner. After that, he set out onto a lonely stretch of highway 14, for the long haul north to Bishop on the 395. A few minutes up the road, he noticed headlights ahead of him. He knew the highway turned slowly to the right, away from the mountains, but the headlights appeared uphill, off the left side of the road.

He slowed down a little, unsure if he knew where he was. He drove on at a slower speed. The headlight got brighter, but the light continued moving off to the left of the road. The light also seemed elevated off the road, but the mountains were still miles away. He felt disoriented so he pulled off to the shoulder. The headlights stopped their movement.

He shook his head and turned off his lights to allow his eyes to adjust to the darkness. The distant headlights disappeared. He turned on his headlights and the headlights reappeared.

"What the—," he said out loud.

He turned his headlights off again and the remote headlights disappeared again. Stillness hung in the warm September desert air under a Moonless sky.

"It's me," he said out loud to himself. "Those are my reflected

headlights. Reflected off what?"

As his eyes adjusted to the heavy darkness, another pair of headlights appeared and moved in front of him. A few seconds later, behind him, the headlights of a car came into view over a slight rise in the highway.

The car slowed down as he had done a minute earlier. It pulled onto the side of the road behind him. The lights turned off, and on, and off again. Each time, the light in front mimicked the lights behind.

He sat in his truck cabin peering into the darkness. The car behind him didn't move. He spotted a dense void in the distance. His eyes were adjusting to the darkness when another headlight appeared ahead of him. This time he looked in the rear-view mirror for a car to appear over the rise in the highway behind him. Sure enough, one appeared, and it also slowed down, pulled over, and turned off the headlights.

He continued to sit in his truck as two more cars pulled in behind the other two cars and turned off their lights.

Joe got out of his truck at the same time the others exited their cars. They all stared in the direction of the reflected headlights of the left side of the road.

Joe walked over to them and pointed in the direction of the reflections.

"What do you think is happening over there?" Joe whispered to a young guy in a beaten-up pickup truck.

"Beats me," the guy said. "It got me spooked though. I'm getting my gun just in case."

The guy reached in the back of his truck and pulled out his rifle.

"What's this enormous thing?" Joe said.

"It's an AHR .700 Overkill. This can take down anything. And I mean anything."

"Yeah," Joe said. "I can't disagree. I'm glad you're on my side."

They peered into the heavy darkness.

"What do you think is happening out there?" the rifle guy said.

Joe's eyes grew used to the dark.

"I don't know, but something big is out there."

"I heard there's a new solar project," the rifle guy said.

"Yeah maybe," Joe said. "The void is huge. There's some light in the background on the mountains from headlights in the far distance. It doesn't seem like a flat solar mirror or one of those concave solar mirrors I've seen out here. This seems convex which makes everything seem further away than it is. Like the passenger side mirror of my truck."

Another car came up from behind and pulled in behind all of them.

Joe became more confused.

"The headlights from the last car seem bent, like they were reflected in a round mirror. See how they move?"

"Yeah, maybe those aliens are out there," the rifle guy said. "I'm not going to let myself get abducted. Let's turn on all our car lights to see what this thing is."

They all turned on their lights.

"Holy—," the rifle guy said.

"Shh," Joe said. "This is like those alien spheres that abducted those kids, only this must be 1,000 feet tall. I'm calling the sheriff."

Joe called the sheriff's office around 10 p.m., but the dispatcher answered quickly for that time of night. Joe described what they were seeing.

"Sir, have you been drinking?" the dispatcher said. "This is some sort of a joke, right?"

"No, I'm dead serious," Joe said, transmitting live video to her. "Get everyone you can out here right now. We're all watching this thing. Fortunately, it's not moving."

"Okay," the dispatcher said. "I'll get someone to your location right away."

They turned off their lights.

The dispatch sent the officers a post which read; “Huge reflective sphere reported, HWY 58, N of Mojave. Use caution.”

Several cars came into view. Their headlights created a strange, reflected pattern on the sphere. The rifle guy panicked and shot towards the sphere. The enormous caliber weapon created a powerful blast. The bullet ricocheted over their heads. Everyone felt stunned and lost their hearing for a moment. A ringing in their ears persisted. The sphere remained still and silent. When the echoing noise subsided, they all turned around. The rifle guy was dead. No sign of trauma was seen.

At that moment, Nisha wanted to sleep. The pace of events was quieting down. No abductions had been reported in six hours. Her Reddit stream calmed down into some sense of normalcy aside from the electromagnetic pulses. She kept an eye on keywords such as sounds, voices, astronomy, alien, and sphere.

She read the sheriff's dispatch.

Nisha’s eyes widened.

“Quinn, a dispatcher in Mojave is reporting a huge sphere and is sending officers to the scene.”

“Maybe this is some sort of joke,” Quinn said.

“No Quinn, this is from an official sheriff’s account. I checked it out. Look, here is another post in the same area.”

“Heading northeast on 14, a few miles northeast of Mojave. There's a sphere out here. A man was killed by them after he fired a shot.”

“I’m going there,” Nisha said.

Quinn grabbed hold of her arm.

“No way Neesh, it's too dangerous.”

“I’m going no matter what. It's a bigger sphere. Pree might be there,” she said.

“I’m going too then,” Quinn said. “We'll drop off Sanjay next door so he can get to sleep for the night. I don't think we'll be sleeping.”

Chapter 8 – Organic Life, or Drones?

Nisha alerted the DHS. They ran out the door in five minutes. Ninety minutes later, Nisha and Quinn approached a lengthy line of cars parked on the side of the road. Everyone stood beside their cars talking and pointing. Most cars approached and did a quick U-turn to get out of there. A helicopter broke the desert silence.

Nisha posted, “A 300-meter-wide diameter sphere has appeared five miles northeast of Mojave. I'm in front of the object right now.”

She remembered the EMPs. Nisha calculated the difference in time between when the Mojave sphere was discovered and when they detected the electromagnetic pulse.

Nisha posted, “It took only three hours (at the most) for the 300m diameter Mojave sphere to travel from the big sphere in lunar orbit to the Earth.”

She posted, “The sphere has been dormant since landing, other than bi-directional ultra-high frequency signals. They or it, is communicating with the mother ship orbiting the Moon.”

No sooner had she sent the last post when she noticed some movement on the ground behind the sphere.

“Quinn, can you hand me the scope?”

“Sure, what do you see?”

“I don’t know. I see movement out there, but it’s too dark.”

“There's no light. How can you see?”

“Some car lights flashed in that direction and for a second…”

“What’s happening?”

“I’m not sure, but small points of light are flickering behind the sphere.”

Silence

“There’s something moving,” Nisha said.

“How big?” Quinn said.

“I think they’re small.”

“They? What size are they?” Quinn said.

He wiped sweat off his brow. She squinted into the scope.

“I can’t tell. There’s nothing nearby to compare them with.”

Nisha posted, “Unidentified things are moving behind the sphere. Possibly many things. More soon.”

“What’s out there?” Quinn said.

“I don't know,” Nisha said. “They’re flowing. I wish the Moon were out tonight. I cannot tell if the moving thing is one flowing entity or thousands of smaller things moving in a herd low to the ground. Oh…”

“What do you see now?” Quinn said.

A car headlight flashed across the scene.

“Thousands of them.”

“Of what?”

“Thousands of crab-like things are crawling around,” Nisha said. “They remind me of the drones that took samples from the astronauts, except they’re crawling around. They’re staying near the sphere fortunately for us.”

“Neesh, we should get out of here. Your palms are sweaty.”

“Yours are too. Every cell in my body is telling me to run away, but we need to watch what they do. They seem to avoid doing us harm and I might never get a chance again to witness the work of a real alien race, assuming they’re a real biological race. We’ve only seen machines, and these seem like machines. We haven’t seen their builders. This sphere may be a reconnaissance probe full of drones.”

She posted, “Thousands of small machines are emerging from the sphere. Purpose: unknown.”

“It’s 2 a.m.,” Quinn said. “What are we going to do about sleeping?”

“I'm nowhere near ready to sleep. You can sleep in the passenger seat, and I'll stay awake in the driver's seat in case we need to get away. So far, they seem benign.”

“Okay, I'll try to get some sleep. You can sleep later. This will be a long night.”

The sphere towered over them. Darkness pervaded the night, but the sense of negative space intimidated them. Quinn tried to sleep but couldn't for a long time. He kept his eyes closed for a while.

Nisha posted, “It's an ominous black hole, towering 60 or 80 stories above us. The top is out of sight. The electronic sounds are loud now. Like a crowd of static voices ringing in my ear.”

At that moment, someone in the growing crowd along the side of the highway turned on a bright floodlight and lit up the area around the base of the sphere.

Nisha posted, “The AI drones are cooperating on some task.”

She watched in silence for an hour. Several people walked over to talk and got back into their cars.

“Quinn, wake up,” Nisha whispered.

He looked out over the dimly lit landscape.

“What are they doing?

“I'm not sure, but they’re cooperating in the construction of something. They aren’t reacting to the floodlight. They’re ignoring us. They emit a soft blue glow.”

Nisha posted, “The drones know we’re here, but they’re ignoring us.”

“Look, they’re making a pile of dirt,” Quinn said. “Why would they do that?”

Nisha shrugged her shoulders.

“I'm not sure, but they must be digging a hole on the other side to make the pile. The hole might be a defensive tactic, or they might need material for some project.”

“A mine used to operate out here,” Quinn said. “It wasn’t successful because the ores were too difficult to extract.”

“Oh yeah, I remember that,” Nisha said. “They found rare-earth minerals, but they were too expensive to extract so the mines were abandoned. The aliens might use the rare earths as we do for our electronics. Maybe this is a universal need.”

“Neesh, what are you doing?” Quinn said.

“I'm putting on my eyepiece to help my agent detect patterns in their behavior.”

She blinked to activate.

“Does the agent help?” Quinn said.

“Yes, now I detect things I might otherwise miss. Huh?”

“What is it?”

“They're behaving like a swarm. They're working on something. They’re moving as one large entity. They're making something.”

“What type of thing?”

“I don't know, but the structure is getting bigger fast. I'm not sure where they’re getting the metal, but the thing they’re making looks like a concrete and metal framework.”

They watched in silence for 10 minutes. He put his arm around her and said nothing.

“Impressive,” Nisha said. “It's two stories tall already.”

“I don't see much,” Quinn said.

“Me neither, but my eyepiece can detect the movement vectors in the chaos and display them on top of the scene before me. It's a semi-transparent display and I can zoom in at 10x magnification. What’s this?”

“What?” Quinn said as he looked through his binoculars. “They’re doing something out there, but I can't tell what.

“The structure is already three stories tall. Hold on,” Nisha said.

“She posted, “The alien crawler drones are building a structure for some undetermined purpose.”

Quinn squinted into the darkness.

“They're crawling all over. They each create a little part of the structure. Each one is a 3-D printer, like I use for my sculpture models. Do you notice that, Neesh?”

“Yes, they're printing the structure. They remind me of ants. I think they can lift things 100 times their weight. They interact cooperatively with each other. The base is expanding too. The construction of this thing is happening so quickly, I can't keep up with them. The building is materializing right in front of our eyes, like a time lapse.”

Yeah,” Quinn said. “I could use a few of those crawler drones at my workshop. Think of the things I could build. They give me the creeps though. They remind me of a cross between a praying mantis and a spider.”

“Yeah, I know what you mean, but they still remind me of ants. Either way, there's an insect-like quality to them. They're working together using a shared schematic plan. Wait a minute. The DHS wants to talk to me.”

Nisha opened her DHS communication app.

“General Sherman, I'm so glad to talk with you. I can't wait to tell you what I'm witnessing here.”

“It's good to talk with you too, Dr. Chandra. President Wilson is with me. We’re in an underground bunker, away from the White House.”

“Hello Madam President,” Nisha said.

“Please call me Emma,” the President reminded her.

Nisha smiled.

“Okay, call me Nisha.”

“Okay Nisha, please tell us what’s happening there. We have people on the way now and they’ll be at your location in a few hours. They’ll be working with you to learn about this alien intelligence. What can you tell us right now?”

“Well, we’re a 90-minute drive outside of Pasadena in the Mojave Desert. I’m excited and shivering at the same time. I’ve been here for a couple of hours. When I got here, I watched hundreds of thousands of crawling, insect like drones digging a hole in the desert. Now they’ve self-organized into swarm-like formations and are building a structure. It's now about seven stories tall after only an hour of construction.”

“An hour ago, this didn’t exist?”

“Yes. They’re building a structure of an unknown composition for an unknown purpose. The structure looks like the base for a large office building, made by Gaudi and Geiger. Millions of drones are crawling up and down the structure. They're 3-D printing the entire structure out of some unknown mixture of materials they’ve dug out in the desert. There's no light, so I can’t show you much. I can barely discern them in the darkness. They’re building it quickly. The base is widening, which indicates to me the structure will be an immense size. I estimate they add a new level every five minutes. Eight stories have been completed now. They’re moving at a fast pace and are showing no signs of slowing down.”

“Fascinating,” Emma said. “How would you evaluate the level of their technological development?”

“I don’t know what type of beings created these drones or the ones

we saw in space, but the technology contains complexity far beyond our current means. I mean at least a century or more ahead at our current rate of technological acceleration. Even with our AI agents, we're nothing. The surprising thing is how they're ignoring our presence. I mean, people are shining headlights on them, and they keep working. They know we're here. I'm comforted in a way because they ignore us, but I'm anxious because they're making no effort at all to contact us. I doubt these drones possess the entire intelligence behind the sphere in orbit around the Moon. These drones are straight builder drones in their function. They've been built by a higher intelligence which might be organic or machine. The higher intelligence might be creating a base for their planned activities on Earth."

"Are you saying they're building a colony here on Earth?" Emma said.

"No, I can't determine that now. However, the structure seems solid and permanent. They're building the tenth level of this structure now and they've been working for not even an hour. The drones are fast and precise. They're the size of a large king crab, but when they collaborate, they can act as one large drone. I don't think each one is remote controlled by some intelligence. These drones are making independent decisions and are working together. They might be operating from a central plan."

"Can you identify any other life forms or phenomena?" Emma said.

"No," Nisha said. "It's dark. I only see the drones, the structure, and the sphere. The amazing thing about the sphere is there are no signs indicating a method of propulsion. No blast marks or other evidence of a landing can be seen. This sphere seems to have been gently placed on the desert by an enormous hand. When the sun rises, I'll be able to give a much better evaluation of the situation."

"Okay, we'll talk later," Emma said. "Our scientists will arrive soon after sunrise to assist you. Also, several military convoys are on their way to try to maintain order out there. You'll oversee the scientific inquiry and will work with one other scientist from the CDC. You'll report directly to General Sherman, and he'll report to me. I want the best information possible. Understood?"

“Yes, I understand. I'll keep you updated. The structure is now 11 stories tall and getting wider at the base. This is a rapidly developing project they're undertaking. I’m also concerned about microbial contamination both ways. I'm sure they know what they’re doing for their safety, but we don’t know what their microbes might do to us.”

“Yeah, we’re also sending infectious disease specialists from the CDC. One named Rachel Feynman will work directly with you. She's a multidisciplinary expert,” Emma said.

They signed off and Quinn tried to sleep. She watched for a while as the drones furiously continued their work.

She posted, “The crawler drones are building a structure at an astonishing pace. No purpose determined.”

“Quinn? Wake up. Quinn?”

She nudged him a bit. He rubbed his eyes.

“Oh, Neesh. I finally got to sleep. What’s happening?”

“They’re still building the structure. Watch how quickly they work. You’ve only been asleep for a couple of hours. It’s time for sunrise.”

“That thing must be 15 stories tall already,” Quinn said. “They were starting construction when I fell asleep.”

“Yeah. I don’t know how big this thing is going to be. They’re making the material for the structure right here on the building site. Nothing is coming out of the sphere except for drones coming and going. Hold on, I need to update everyone.”

Nisha posted; “The structure is 15 stories tall. Building pace is increasing. Drones are uninterested in us. Static voices in my mind are loud.”

“Could this go on forever?” Quinn said.

“Yes. They may never run out of materials.”

“What are they making?”

Nisha said nothing for a brief time.

“I don’t know. This might be a monitoring station, or an outpost, or a place to live. Whatever they're building is solid. The sky is getting lighter to the east now. Soon the sun will rise. I should update everyone.”

Nisha posted, “It’s dawn. An ocean of drones are working on this structure.”

“They look like ants coming down from the hills,” Quinn said.

“Yeah, they’re mining something from the mountain and they’re bringing the material to the site. The odd thing is I still notice the sounds, but they aren’t coming from these drones. I think there's something else in the sphere. I think they're living beings even though they sound electronic. They may be a form of advanced AI combined with organic life. They might know where Priya and Sophie are.”

Tears filled Quinn's eyes.

“Do you think we’ll ever see her again?”

“Yes.” she said. “She’s in orbit around the Moon if she isn’t in this sphere in front of us.”

“Are you sure Neesh?” Quinn said.

“I’m sure,” Nisha said.

Quinn hugged her.

“I'm relieved when you say that. Though I know you’re only trying to make me feel better. The sun is rising. I should go get something for us to eat in Mojave. It's only a few miles away. Okay?”

“Okay,” Nisha said. “I’m going to continue to watch from right here until you get back. I don’t want to miss anything.”

As Quinn drove away, Nisha watched as a large military convoy passed his car on the dusty highway as the convoy headed towards the sphere. Thousands of people lined up on the shoulder. Some were cooking breakfast on portable camp stoves. People in RVs set up camp as though a concert or celebration was happening. Most cars turned around and sped away, however. The sun reflected off the sphere as though off a huge convex mirror. The reflected puffy high clouds seemed to bend around the sphere creating a tunnel-like effect.

Nisha watched as the convoy slowly passed by.

“Dr. Chandra?” An enthusiastic woman wearing an eyepiece said as she leaned out of a truck.

Nisha felt hesitant to reply. However, she knew her face had been identified in the woman’s eyepiece display.

“Yes, this is me,” Nisha said.

The truck pulled over. The woman climbed down from the passenger side and extended her hand. The convoy continued.

“Hi Dr. Chandra, I’m Rachel Feynman. I’m an evolutionary biologist with the CDC and I’m here to work with you for the duration of this event.”

Nisha smiled as they shook hands.

“Hi Rachel, I’m glad you’re here. I’m getting more anxious by the minute watching them build this thing.”

Nisha always had a mistrust of big government, but she had no choice but to go along. She didn't think it was evil, but she knew the tendencies of bureaucracy. However, a science branch of government was her best chance to recover Priya and the other kids, so she decided to cooperate.

“Me too,” Rachel said. “I don’t know how you stayed here overnight in the dark. I'd be scared half to death. Everything is scarier at night. I can’t imagine the technological complexity behind what I’m seeing here.”

“So, what are you thinking?” Nisha said.

“We're worried about many things. First, we don’t know whether

microbial life is being set loose. We'll find out quickly. Next, we don't know their intentions, so the convoy will close off this highway and keep people at a safer distance a few miles back. Finally, we don't know who 'they' are. They might be organic beings like us, robotic, or a hybrid of the two. They might be a form of life we can't imagine."

"Yes, this might be anything," Nisha said. "My guess is they're organic. If they were robotic, chances are they would have taken over the Earth or even the galaxy long ago. I think these drones are semi-autonomous, but controlled or 'software limited' by whatever beings created them."

They watched in silence for a several minutes, while Rachel took some air samples. They were downwind from the construction site.

"Is the structure bigger than it was a few minutes ago?" Rachel said.

"Yes. It's 30 stories tall and the base is getting thicker after only a few hours of construction. They're still adding one story every five minutes."

"Incredible. I don't know what we can do about them."

"All we can do for now is make the best of this circumstance and learn as much as we can. Are they blocking the highway entrance to this area now? My husband is returning from Mojave with food."

"Sorry," Rachel said. "He'll be redirected to a government viewing area a mile behind us. Another mile behind that will be a public viewing area. Only a few of us will be allowed to be this close. Also, we'll need to live in a special bio-safe tent structure we're building nearby. All of us on the team will live in these structures so we don't infect the general population. You must wear this stylish bio suit until we can determine the nature of their infectious organisms."

"Hmm," Nisha said playfully. "They are quite the thing!"

Rachel smiled and held the suit in front of her. They laughed. Nisha blinked to activate her eyepiece.

"Quinn, I'm sorry but we're being separated. They want me to live here temporarily, so I don't infect anyone. They didn't say anything about you. I think we're okay. It or they aren't careless about

microbes."

"Unbelievable," Quinn said. "First, I lose Pree, and now you? What am I going to do?"

"You're going to keep an eye on me here, and you're going to be available for Sanjay. Did you speak with him?"

"Yes, he's afraid because of what he's seeing on his stream. I'll go home tonight, but I don't want to lose you. You're the love of my life."

"You're mine too, I'll be okay. Take care of Sanjay and I'll be here working on getting Pree back. Watch my Reddit video stream, Okay? I'll send you PMs."

"Right. I'll also be watching you at the designated viewing area. I've spotted you now in my scope. I'm waving. Do you see me?"

"No, I— Oh, yes I do." Nisha said as she jumped and waved back. "I need to go now but contact me whenever you need me. This is my workplace now."

"Okay Neesh," Quinn said. "I love you, bye."

"See you, Quinn. Love you more," Nisha said.

She tried to keep the mood light despite her broken heart. She knew it could get a lot worse before it got better. She didn't want to tell him, but she feared she would never see her family again.

Nisha posted; "Construction continues. Public viewing areas are being constructed. HWY 14 is closed N of Mojave."

Rachel walked over to Nisha on the crunchy granite sand.

"Okay, they've set up a temporary place for us. Come with me."

They drove on a dusty road into a hastily constructed campground and walked over to the tent. It had a high vantage point where they could monitor the intense alien activity.

"Impressive." Nisha said. "Everything is here for you guys. You have scopes, computers, and a full lab."

"You mean, everything is here for all of us." Rachel said. "You're part of our team now. Our immediate mission is to detect alien microorganisms."

"Thanks Rachel," Nisha said. "This not how I wanted to study alien microorganisms. I'm glad you're here. I'm getting more anxious as time goes on. We'll watch this structure grow by the minute."

Nisha counted the levels in silence.

"19,7,43,31," Rachel said.

Nisha smiled.

"Rachel stop, I'm trying to count."

Rachel giggled.

"Let me see. The tower is 50 stories tall."

Rachel's face froze as she stared past Nisha.

"What's wrong Rachel? I thought your joke was funny."

"Um, something is behind you. Turn around slowly and stay calm."

Nisha turned around and looked into the eye of a strange hovering orb. She struggled to speak. Then she felt limb paralysis set in. She knew what it was.

"Rachel, I can't move."

"Me neither," Rachel said.

"This happened to me when they took Priya. The best thing to do is to not struggle. If you do, the force against you gets stronger."

"Okay," Rachel said.

With a quick blink, Nisha turned on her eyepiece recorder which fed video to her Reddit and other accounts.

"Everyone can watch now," Nisha said. "I'm glad my eyes aren't paralyzed."

"Who is everyone?" Rachel said.

"Every one of my 100 million Reddit members can watch my

video feed right now. They can listen to me speak since I turned on my microphone. I need to describe this thing to them."

Nisha focused on the small spherical object in front of her. She began her report, pretending to be calm.

"I'm Nisha Chandra. Sorry, I'm having trouble breathing. I'm with Rachel Feynman, the lead evolutionary biologist with the CDC. We're located in the Mojave Desert north of LA about 300 meters from the alien sphere. What you're looking at seems to be a monitor drone. The surface is reflective, like the bigger spheres. The drone is about the size of a basketball and is hovering a few feet in front of me. I'm anxious because I've been paralyzed by something like this before. I can hear faint mechanical sounds as appendages emerge from the reflective outer shell and move around. I detect no sounds of propulsion except small ion jets which are for stability. I'm not sure how the drone hovers so silently. It's magnetically driven. I'm not sure. I'm uncomfortable because it's close to me and scanning me. I can't describe the movement of the appendages over my body. I can't walk or move my arms, but I can talk and breathe. This is the same paralysis I encountered when they abducted my child Priya."

"Nisha, small flying things are coming out of the back of the drone."

"There they are," Nisha said to her audience. "They are like the mosquito drones which took blood samples earlier. Ouch, the needle got me."

"Are you okay?" Rachel said.

"I'm fine. I felt a pin prick through my haz-mat suit. We've detected no side effects or infections after they do this. I'm not worried. I am, but never mind."

Rachel winced.

"Ouch, a needle got me too."

"It's okay Rachel. I doubt anything will happen to us."

"I hope you're right. I'm seeing a report in my eyepiece which states we've detected no alien microorganisms. Or at least nothing significantly different than our microbes. Further DNA analysis at the

surveillance labs may detect them better. I'm not sure how they've accomplished this feat. We spent over $100 million sterilizing the Mars Rover 5 and still, several million microbes survived the trip to Mars. Although they survived, they couldn't reproduce in the harsh conditions, and they all eventually died."

The orb accelerated away from them and disappeared into the parent sphere like a drop of water hitting a pond.

Rachel finally moved.

"I'm free."

"I'm free too," Nisha said. "That's how they operate. They move in fast, paralyze us, do their work and leave. They're professionally clinical, don't you think?"

"Yeah. They do their work with analytical precision with the least amount of trauma to the subjects, who are us. It's like we're lab animals."

Nisha teared up as she watched the sphere.

"I hope they're treating Priya and the other kids humanely. Well, maybe the term 'humanely' doesn't apply here, but you know what I mean. I'm ending this transmission now. I'll give you updates whenever I can."

Nisha blinked and terminated her eyepiece transmission. She sobbed for a moment and then pulled herself together.

"In all the confusion I hadn't noticed how much height they've added to the tower," Nisha said. "It's over 100 stories tall now. This means the height is about 500 meters, or 1,500 feet. The tower is now taller than the sphere."

They watched in silence for a while. Rachel examined the structure closely as she magnified her eyepiece view.

"The building material doesn't appear to be metal or any construction material we know. It has a gray flat texture to it, which is like concrete but smoother. I wish I could examine the substance up close. I guess they chose this site because of the proximity to appropriate building materials and the location is far removed from human population centers."

“Maybe we should.” Nisha said.

“Should what?”

Nisha smiled slyly.

“Examine the substance up close.”

“No way, I'm not getting close to those things.” Rachel said.

Nisha squinted in the early morning sunlight.

“Speaking of those things,” Nisha said. “They’re climbing down now. They’re heading into the sphere like ants retreating into their burrow.”

Nisha posted, “Frame of structure might be complete. The crawler drones are no longer performing their construction activities.”

“Things seem to be slowing down for the moment,” Nisha said. “I haven't had any sleep all night so I better get some while I can. Is that okay?”

“Sure, I'll wake you up if anything new happens,” Rachel said.

Nisha slept for a few hours. Rachel gave her husband and son the latest news. In Washington, D.C., plans were being made to deal with them or it. President Wilson paced the floor of her subterranean Oval Office and discussed strategy with General Sherman and the Chiefs of Staff.

“Lucas, we have few options,” she said. “As soon as we do anything considered dangerous by the alien life form or forms, all those involved are killed. They know all about the actors in this play. I want a list of scenarios and how we can respond to them. I don't pretend to know what will happen. Events have been unpredictable. However, I'd like to work out some simulations which might help us when things get tough. We should think of non-lethal ways to defend ourselves.”

I'll get right on that,” Lucas said. “It's difficult to know where to

start. They've made no attempt to communicate with us, as far as we know. They ignore our attempts. Even our best simulation theorists are at a loss. However, we'll persevere. In the meantime, I've sent 5,000 troops to get people away from the Mojave building site. 1,000 troops are arriving now. A primary viewing area for approved scientists and others will be constructed one mile upwind from the site. There's a bluff three miles away which can serve as a public viewing area. We won't allow weapons at the public area."

"That's good," Emma said. "What's happening with the sphere in orbit around the Moon?"

"Other than faint transmissions which are going back and forth between the lunar orbiting sphere and the Mojave sphere, we detect no activity at all. The orbit is unchanged. The astronauts, who are still in lunar orbit, don't appear to be contaminated with alien microorganisms. No contamination has been detected among any of the people who were attacked in New York by the mosquito drones. The aliens are careful to avoid contamination, assuming they're organic beings."

"Thanks Lucas. Keep me always informed. This is the most pressing issue right now. This is more important than the stock market which dropped another 5% this morning and 35% in the past 10 days. I can't do anything about that. It's all psychological. People are worried and are saving their money for a rainy day. The rain is coming."

Quinn watched the construction from the designated viewing area for several hours. After speaking with Nisha, he decided to go back home to look after Sanjay. It was a long hot drive home, part way into a setting sun. He wondered if he'd ever see Nisha and Priya again. He took a deep breath as he entered the front door, trying to act as though nothing was wrong.

"Dad, I don't want to go to school anymore. They're picking on me and my friend who heard the voices. Now my friend is gone. Maybe they abducted him too. Now they'll pick on only me. Can I be home schooled?"

"I think we can home school you now. Mom is going to be busy

for a while and I'll have more free time since my sculptures aren't selling and we have savings. So, I'm staying home with you."

"Yes!" Sanjay said.

Then he looked at the floor and frowned. He knew what was wrong. He also knew the possible dangers in the desert.

"What about Pree? Where is she? And Mom?"

"We don't know where Pree is," Quinn said. "My guess is she's in the sphere orbiting the Moon. Nobody knows for sure what's happening. I miss her. I'm missing your mom too. She's going to be working at the alien construction site for a while. It's you and me now, so we need to stick together. Okay?"

"Okay Dad."

Nisha managed to get a few hours of sleep in the scientist's tent. She woke up and walked over to Rachel as she watched the alien construction site through the opening of the tent door.

"Rachel, what's been happening while I slept?"

She gazed skyward.

"They created a beautiful structure. Now the drones are moving equipment and other things from the sphere into the structure."

Nisha looked more closely at the framework.

"There's no pure metal. The concrete appears polished and it's gleaming in the sunlight."

"I can't believe this," Rachel said. "Some of the drones are back. All the windows are being created at the same time by the drones. They're 3D printing glass."

"They built the tower quickly," Nisha said. "The whole thing is partially enclosed in a similar reflective surface as the sphere. Hold on, let me post this."

"Today is alien move-in day. The structure is a fantastic work of

art on the highest level."

Rachel watched Nisha send out another post.

"If this is moving day, who or what is moving in?

"Good question," Nisha said. "Let me go get something to eat and I'll be back."

Rachel squinted as she picked up her scope to get a better view.

"Nisha."

She walked back over to Rachel.

"What?"

Rachel had trouble speaking. She pointed towards the tower.

Nisha picked up her scope.

"What's wrong?" she said as she scanned the building site. "Oh, it's them. Those are not machines. The sounds in my mind are louder than ever."

Nisha turned on her eyepiece video with a blink, so the world could watch.

She posted; "Life forms spotted emerging from sphere. They appear organic like us. Not AI unless a hybrid. Our new neighbors are strong looking."

"Nisha, maybe we should evacuate and move back."

"No, they know we're here. I don't think we should show fear. In the animal world, if you run away, you become the hunted. If they wanted to destroy us, we wouldn't be here to be concerned about running away."

"What about accidental infections by alien microorganisms?" Rachel said.

"I'm not going to worry," Nisha said. "If alien microbes are loose and we're vulnerable, it's too late for us as a species. We might as well assume they've taken precautions in some way."

Rachel wiped the sweat of her palms on her shirt.

"Okay, I agree," Rachel said. "We're continually taking air samples, so we'll know if alien microbes are spreading. We've now identified some strange ones, but thus far they aren't infectious to the animals we've brought along or to us. Their immune systems test in the normal range. We might not need these HazMat suits for long."

Nisha looked through her scope again. She had never experienced terror and happiness at the same time until now.

"They're moving on two legs. I've always dreamed of this moment, but not like this. My hands are shaking so much that I can't watch them through the scope."

Rachel moved the scope to rest on top of the fence nearby.

"There, this should help."

"Thanks, that's better. I'll switch over to my eyepiece in a minute. I can't get over this. I'm seeing a species from another planet. They're large but graceful, don't you think?"

"Yes, they glide along in a smooth way, even though they're two legged. They must be strong."

"Yes," Nisha said. "They easily handle Earth's gravity. They might come from a planet with stronger gravity. Most of them are carrying things. The structure of their arms is like ours, but their hands are different. Can you see their hands, Rachel?"

"Yes, sometimes I get a glimpse of their hands. They have many fingers, but we're too far away to get a clear view. They aren't human-like, despite a similar body layout."

"You're right," Nisha said. "They come in many assorted colors. However, they don't seem to be wearing clothing as far as I can tell, though some of the skin is covered with something like fur. Most are blue but watch the red one near the first post. Wait, the red one is turning blue. They turn colors. Another one is changing from bluish green to red. I wish I could see them close, but I'm afraid to get any

closer. I'm uneasy being only 200 meters away. Thousands of them are coming out of the sphere now. They're walking into the new structure."

"Hey, they're watching us," Rachel said. "Is your eyepiece turned on?"

"Yes. Several of them are looking at us. I think we're too close. We shouldn't back away now. That would be a sign of weakness. Oh no."

"What Nisha?"

"Two of them are heading towards us," Nisha said.

She wrote a quick post, "Two beings are walking towards me right now. Follow my live eyepiece feed."

Rachel smiled as best she could and made light of the moment.

"That last post should get you a few new members!"

Nisha rubbed her arms to relieve the goosebumps.

"Yeah, but this is a tough way to gain new members. I can't believe real aliens from outer space are walking towards us and we're thinking about my Reddit stream. It's a good distraction. Be calm Rachel. Don't make any rapid movements."

Rachel looked wide-eyed at Nisha. The aliens walked across the desert landscape and directly up to them, still in their hazmat suits.

"Okay, I'll be calm if you say so. Now that they're right in front of us, they're bigger than I thought. They're well over six feet tall. Check out their eyes."

"Yes," Nisha said, describing them to her audience. "They're like the eyes of a chameleon. They move independently. They're over a foot taller than me. I think they weigh about three times me."

"Hello," Nisha said to the aliens who were a pleasant shade of blue.

The aliens didn't reply. They inspected Nisha and Rachel.

“Maybe they didn’t hear you Nisha,” Rachel said.

“I don’t know. They have ear-like slits at the base of the skull, but I’m not certain. I’m getting nervous. I can still move. Can you move?”

Rachel stood stiffly and nodded yes.

“I’m having trouble breathing.”

“Me too, but it's nerves, not paralysis. The voices are still in my mind Rachel. The voices, or whatever they might be, are like the sounds I’ve known since day one. Only now there's less static. I hear them as electronic. They sound louder in my mind than the other thousands of voices I’ve heard, but they’re not speaking out loud. They are speaking a language, but I don’t know what they’re saying. The sound is like white noise. They communicate rapidly. Ugh.”

“What Nisha?”

“See how they watch us? I felt this way once when I watched a grizzly bear in a cage. I felt that if the bear could get out of the cage, I would be helpless to stop it from attacking me. The problem is, these aliens are out of their cage, and they’re inspecting me as though I’m a curiosity, or dinner.”

Rachel turned to one of the aliens and said, “Hello.”

Nisha pointed to herself and said, “Nisha.”

She pointed to one of the aliens. They continued their inspection and didn’t respond. One looked right into Nisha’s eyes, first with one eye and then with the other eye until both eyes focused on her.

Nisha could sense a voice in her mind, so she looked back and said, “I can hear you.”

The alien gave Nisha a sniff with a rubbery, ribbed nose. The aliens stared at each other with one eye for a long time. The other eye was on Nisha and Rachel.

“I think they’re communicating,” Nisha said. “They must use telepathy in some way. I don't think that's physically possible to send clear telepathic signals with organic brains. However, they don't make sounds. They don’t seem to use their little mouths to communicate. Their eyes make me uneasy. They’re looking at me in two places at

once and then they focus. Check out those fingers."

Nisha focused her eyepiece on the alien hand as it reached out to touch her. The world watched.

"Don't move Nisha." Rachel said.

"I won't," Nisha said. "Rachel, each hand has six fingers, with three opposing the other three. The layout is like having three thumbs opposing three fingers. The fingers are nimble. The hand is squeezing my arm. Ouch. Even though the suit, I can tell their skin is rough, like a cat's tongue."

The alien pulled away.

Nisha picked up a pad of paper and a pen from the nearby picnic table. The aliens noticed. She drew a picture of the solar system with the sun in the middle and an arrow pointing to the third planet, the Earth. She pointed to the third planet and said, "Earth."

The aliens glanced at each other and turned bright shades of green.

"I made an impression," Nisha said.

They turned towards each other for a moment and walked away towards the sphere and tower.

"Oh, maybe I didn't make much of an impression."

"That's all?" Rachel said. "No, 'take me to your leader' or anything?"

Nisha breathed heavily.

"That's enough for now. My heart feels like it's going to explode. I feel their intellect and physical power."

Nisha teared up. So did Rachel.

"My pulse rate is 150," Rachel said. "It won't slow down."

"Mine too," Nisha said. "What's strange is I felt nothing emotional from them. They didn't seem interested in us. They were curious about the experience of seeing us close, but they didn't pay any attention to us as individuals. We're like specimens to them."

“You're right. They were more interested in each other than in us. I feel violated. They sniffed us and looked us over without any compassion. I felt like a cornered animal, and they treated us as animals. Now they’re back at the sphere going about their business as though nothing happened. For humans, this may be the most significant event in history. For them, it's just another day at the zoo. What makes the situation worse is none of the others are as interested as they were. They watched from a distance and didn't bother to come over. What is your impression, Nisha?”

“My experience is like yours. I feel they think they’re so far above us, we don't warrant direct communication. At one point, I think they attempted to communicate. I could sense their electronic thoughts when I said 'Earth' and they turned green. I could sense their voices in my mind, but I guess I didn’t reply in a way they consider to be civilized. Did I do something wrong?”

“I don't think there's anything else you might do, short of knowing their language and communicating silently.”

Nisha smiled as they streamed into the new structure like a line of ants moving between a food source into a colony.

“Yeah, I'd impress them if I could paralyze them and force them into my super, anti-matter drive sphere. Wait a second. I'm getting a notification in my eyepiece from an astronomer friend.”

Rachel waited.

“The sphere in orbit around the Moon is leaving orbit. It is heading to Earth. That sphere is 20 miles in diameter, which is about 100 times the diameter of this enormous sphere in front of us. I can't breathe.”

They said nothing for a moment as Rachel glanced up at the crescent Moon in the morning sky and felt her pulse in her neck.

“I'm having heart trouble too,” she said. “Is the mother sphere going to land here? Is this 1,000-foot sphere in front of us only a shuttle? That massive thing might crush all of us. Fortunately, we're too close to the other sphere for it to land on this spot without crushing the tower and the shuttle sphere.”

"We should get a little sleep," Nisha said. "I think we'll need to be rested when the big sphere arrives."

Nisha addressed her Reddit audience.

"I'll broadcast more soon everyone. Don't panic. They mean us no harm."

She blinked to turn off her eyepiece broadcast but kept recording in case something happened.

In Washington, D.C., the President, and her staff monitored the movement of the large sphere as it approached the Earth.

"Lucas, where is the object now?" President Wilson said.

"It's already 90% of the way to Earth," General Sherman said.

"How long ago did it leave lunar orbit?"

"Almost two hours ago."

"Are you saying this 20-mile-wide thing can travel from the Moon to the Earth in two hours?"

"Affirmative," General Sherman said. "At this point, all we can do is wait and be on the highest level of readiness. That's our status. Countries around the world are also on their highest alert status. We're communicating to make sure nobody makes a mistake and launches a nuclear device."

"Yes, the enemy isn't on this planet," the President said. "Let's keep it that way. What's the stock market doing?"

"The averages dropped 8% in the past hour. That's a 40% drop since the crisis began," the Fed Chairman said. "I've never seen such a steep decline since 1929, not only in the stock market but in overall economic activity. At the start of the great depression in October 1929, the Dow Jones Industrial Average dropped from 400 to 200 in the two-week crash. Then it rose for six months to 300, and then dropped to 40 two years later. That's a 90% drop. Now, people aren't buying things. Many are taking off work. This might turn into a severe depression. I'm going to suggest taking interest rates to zero effective as soon as this meeting ends. I'm glad we managed to pay down part of the

national debt over the past decade. That should help us survive this fall. We can borrow with quantitative easing, to keep the economy afloat."

The President turned to the General.

"What's the object doing now Lucas?"

"The speed is decreasing. He held a finger up. Hold on."

Silence.

"Yes, I'm getting confirmation. The spacecraft is entering Earth's orbit. It's not preparing to land on the surface. For now, we'll remain at the highest defensive condition."

"Nisha? Wake up," Rachel whispered.

"Oh, hi Rachel," Nisha said as she rubbed her eyes.

She blinked to activate her eyepiece and transmitted video.

"What's happening?"

Rachel looked out the open flaps of the tent towards the setting Moon over the sphere.

"The big sphere is in a geostationary orbit around the Earth. It has a permanent direct line of sight to this location and the surrounding hemisphere."

"The sphere in orbit around the Moon is already in orbit here? How long did I sleep?"

Rachel blinked to get the time.

"A little over two hours. The sphere took two hours to travel from lunar orbit to an orbit around the Earth."

"Impressive," Nisha said. "Even their architecture is impressive. I mean, check out this building. There is nothing like it on Earth. They built it overnight without lifting a single one of their six fingers. They used materials located on-site. How many of them might live in there?"

Rachel studied the tower for a while. She blinked to activate her

eyepiece.

“I’m getting an estimate of 250,000 based on their size and how much space humans need. Reality may differ.”

Nisha put her hands to her temples.

“Oh.”

“What’s happening?” Rachel said.

“The voices are loud now. Millions of them seem to be flowing in a chorus.”

Nisha continued rubbing her temples.

“The sensation is like a continuous flow of electrons. I wonder if this is how the internet sounds if I could hear the entire thing with my ears. I can’t tell whether I’m sensing their thoughts or their communications. Maybe I'm sensing both because they're the same thing.”

“Yes, maybe they’re one and the same,” Rachel said.

Nisha pinched her eyes into little slits.

“Oh, I see. In other words, what they think gets transmitted to others in the same way our thoughts get transmitted chemically within our bodies when we type or talk. That’s a good hypothesis. If correct, I wonder how they get their thoughts translated into electronic signals. Hmm, this gets me to thinking. I wonder if—”

She stared at the ground.

“You wonder if what?”

“Sorry,” Nisha said. “For a second, I thought I heard Priya. Thousands of voice-like signals-. Somehow, I can vaguely pick them up.”

“I sense nothing from them,” Rachel said.

“You’re fortunate. The noise is constant. I can’t get away from them. Oh.”

Rachel put her hand on Nisha’s shoulder.

“What?”

“I think I picked up some human voices. I think Priya's was among them. I’m not sure. I’m wishing too hard. Hold on.”

Nisha blinked to talk with Quinn, and he answered.

“Neesh? Is that you?”

“Yes. And just so you know, the world is watching us talk right now. How are you? I missed you all night. The night went on forever.”

“I missed you too Neesh. Sanjay and I are going over some school assignments. He wants to be home schooled. Since I’ll be at home for a while, I decided to take advantage of that. I hope this is okay.”

“Of course,” Nisha said. “I contacted you to tell you I’m okay and I believe Pree is alive and well. When the big sphere entered orbit, the voices got louder and clearer. Twice I think I heard Priya's voice and other human-like voices too. They sounded electronic and not human, as do all the voices.”

“That’s exciting. Except about the electronic part.”

“I want you to know she's okay and I miss you so much. I need to go. Listen to my stream and you’ll know everything I do. I might send you a little message from time to time, though I’m streaming to the world. Okay?”

“Okay Neesh,” Quinn said. “Be careful. I want you both back.”

“Okay, I’ll get us back. Bye.”

As Nisha said goodbye, Rachel glanced into the clear blue sky and pointed.

“Umm. Nisha?”

“Another one.” Nisha said. “Just like the first one.”

Rachel got an incoming message.

“I’m getting conformation. The new sphere came from the large sphere in orbit,” she said.

“I hear no sound other than some displacement wind and a low throbbing hum,” Nisha said. “How do they do that? How are these

things moving? They're incredible engineers. I'm in awe. I understand why an advanced civilization might be worshiped as gods. I'm getting an alert from my compass agent. There's a strong magnetic disturbance happening. The sphere is partially propelled by a magnetic drive which might work against the Earth's magnetic field. They're sailing on the field or something. I can't imagine how much energy is required to resist the weak magnetic field of the Earth enough to levitate this huge sphere."

"I'm in awe too," Rachel said. "Okay, it's touching the ground. There."

"It landed silently and perfectly. I sensed a low frequency rolling for a moment," Nisha said

"They're awesome engineers. I hope they don't turn against us."

Nisha gazed upwards.

"Me too. There's no indication they'll turn against us. They've taken every precaution to not damage the environment or the life on Earth. They kill only in self-defense as a precaution to avoid future deaths or injuries. I'm a little more optimistic now, though I'm cautious. Don't wear anything magnetic."

"Do you think Priya and the other children are alive?" Rachel said.

"Yes, I know it for a fact. They sound different than the aliens, but they're out there. I'm not sure why, but in the past few days, the children's' voices sound electronic. I could never sense the thoughts of Priya or anyone else before. I don't believe in telepathy. There's no evidence that our mushy chemically connected brains broadcast decipherable electromagnetic signals."

Rachel stared at the second sphere, which sat on the desert floor behind and to the right of the first sphere. The crawling builder drones were coming out from both spheres.

Nisha blinked to zoom in with her eyepiece as she continued to send out video.

"Millions of them are exiting the spheres. They are doing the same thing as before. Notice how they're going into the same mining hole?

They might build another tower. I'd guess at least 10,000 of the aliens are living in the first tower already. That's 3%-10% of capacity. Rachel, what are you looking at?"

"I'm not sure. Something is happening with the first sphere."

They stood in silence as it levitated above the desert floor and accelerated into the sky. The liftoff was as quiet as the landing, other than the heavy vibration in the ground when it landed."

Nisha continued broadcasting the events.

"Ugh." Rachel shouted. "That's the most powerful sonic boom I've ever felt. The sphere traveled away from us. That reduced the sound volume, but the boom still shook the ground. There's a dust devil still swirling in its place."

"I can't get over their level of mastery of physics and other sciences," Nisha said. "They are a race of master engineers. I have a thought."

"What?"

"The original sphere has left behind at least 10,000 aliens in the tower. This means they're living in this area, at least temporarily. This structure looks permanent to me. However, they built this tower in less than a day. For them, this might be like putting up a tent for camping. What do they want?"

Rachel focused on the second sphere with her eyepiece.

"Thousands of them are coming out of the second sphere and moving into the tower. They aren't wasting any time."

"Yeah," Nisha said. "They don't mess around. When they want to do something, they go all out. Watch them. They're all bright shades of blue and green. I wonder what the colors signify.

Rachel glanced at Nisha as she watched the aliens.

"Um, look up."

Nisha still broadcasted video. She glanced at Rachel, and then gazed into the sky.

"Here comes another one. They come in fast, but they are in slow

motion because they're so big. I guess these 300-meter spheres are shuttles, going back and forth to the mother ship. Whoa, there's the delayed sonic boom and now the ground is vibrating again during landing."

"Nisha, turn around. Here comes an entire group of aliens walking this way.

"Stay calm like before," Nisha said. "Let them examine us. I'm going to narrate for my broadcast audience. This group looks the same as the last two individuals who inspected us earlier. They're flickering in bright shades of blue. I wonder if the colors indicate emotional states of being. I haven't had a chance to revise my method of greeting them. Last time they got bored. What should we do? We can't impress them with our technological prowess. We might have something in common with them on an emotional level, or on some other level. How can we establish a connection with them?"

They became silent as the aliens walked over to them.

"I don't know about this," Rachel said. "They want to touch me. They're getting too close. I want to get out of here."

Nisha continued broadcasting to the worldwide audience.

"I'm freaking out too but let them check us out. They're strong enough to do us severe damage, but they're not. This one is delicately examining my eye. You in the audience must be getting quite a close-up view of their incredible independently moving eyes via my eyepiece. Rachel, tell the guys in the tent to get out of there. The aliens are going in and I don't want any trouble."

"Okay, let's go find out what they're doing in there."

They walked over to the tent, trying to be slow and casual.

"Oh," Nisha said. "They're taking the equipment. I'm not sure what to do. I hope they don't take the infrared scanner. I'm going to get that before they do."

Nisha grabbed the scanner, but one of the biggest aliens came over and tried to snatch the gun-like device out of her hands. However, Nisha held on.

"It's turning red," Rachel warned. "I think you better let go."

“Fine, take it.” Nisha shouted at the alien.

The alien pulled hard and took away the scanner effortlessly. It gave Nisha a close inspection with both eyes, turned a dull red, and walked out of the tent.

“You’ve got some nerve.” Nisha shouted while following them as they walked out.

Rachel didn't want things to get out of control.

“Nisha, I don't think yelling at them is a good idea. We don't want to start an interstellar war. I don't think we'd win.”

Nisha looked to the ground, breathing rapidly.

“Yeah, I know. I got upset. Who do they think they are?”

“For the time being, they’re the dominant species on this planet. They know it.”

They watched as the aliens walked back to their tower. Nisha kicked the ground in disgust.

“They don't care at all. They came over, checked us out, grabbed some of our equipment and left. They didn't attempt to communicate. They want to check out our level of technological development. We're just curiosities to them. I'm a little embarrassed because this will confirm what they already know. We’re a backward species compared to them.”

Rachel turned towards the alien tower.

“A second tower is going up. They built two levels while we were in the tent.”

“I wonder what they’re doing. Are they setting up an outpost of some sort? Do they want to observe us and the local solar system? Are they early colonists, like Columbus? You know what Columbus and those who followed him did to the native people. Things were briefly fine, and then it turned ugly. Do they view us in the same way the early explorers thought of the dodo bird? Are we only another native species to them?”

“I’m not sure,” Rachel said. “They don't seem to be aggressive towards us.”

“That's true. The early explorers weren’t aggressive towards the dodo either, but the huge bird still became extinct because the explorers didn't care, and they were hungry. These aliens don't seem to want to exterminate us, but they show little interest in us either.”

“I think you’re worrying too much,” Rachel said as she put her hand on Nisha's shoulder. “The aliens must make their own food. Why don't you get a little sleep? I need it too. We’ll be alerted if anything happens.”

Nisha contacted Quinn to say good night, and then slept. A few hours later, still in darkness, Rachel tapped her on the shoulder.

“Nisha, wake up. We gotta move.”

“Why should we move Rachel?” Nisha said as she rubbed her eyes and got up.

“The crawler drones are moving this way. I think they’re going to build a third tower nearby, so we better move back.”

“Okay,” Nisha said as she surveyed the local terrain. “Let’s move the camp up the rocky hillside about 1,000 meters. They seem to like flat land, so they won’t build up there.”

“Yeah, I think you’re right,” Rachel said.

Chapter 9 – What are they Building?

Two hours later, after midnight, they moved into their new position up the hill. The view was better.

“I’m glad we don’t have to wear these HazMat suits anymore,” Nisha said.

“Me too,” Rachel said. “I don’t know how they accomplished the feat of not endangering us with their microbes. We’ve identified 178 new species. However, they aren’t harmful to us or the lab animals we brought here. A few birds are having some problems, but none have died. The egg laying process has slowed in some of the chickens. The alien microbes are so like our bacteria and viruses that we’re immune to most of them or they're so different that there's little interaction between us and them. Other alien microbes seem to die or not reproduce when exposed to our environment. We’ll find out what happens over time.”

Nisha gazed out over the two newly built towers. They were different than the first one and different from each other. Elegant and massive.

“They're like a small sculpture Quinn might create,” Nisha said. “But they’re over 1,000 meters tall. Only a few human-made towers are taller than these, but they are fragile compared to these structures. The builder drones are creating a round structure over there.”

“What do you suppose that is?” Rachel said.

“I don’t know, but the shape is more industrial than the towers. This structure doesn’t appear to be a place where they would want to live, but what do I know about this species? I know nothing.”

Rachel glanced skyward as another sphere descended.

“Ugh, I hate those sonic booms and the ground vibrations. How many does this make? I’m losing count. These spheres are only shuttles to them. They are moving about 10,000 at a time into the towers.”

"I think this makes 10," Nisha said. "This means 100,000 of them have moved into the towers. If 10,000 are in each of these spheres, a million of them might be in the big sphere in orbit right now. This seems like more than a little scouting expedition. Rachel? What's happening?"

"Hold on. I'm getting an update."

Rachel talked to someone at the CDC headquarters as Nisha listened.

"Really? Are you sure? Okay. Thank you."

"Tell me," Nisha said.

"Not good. Another large sphere just entered Earth's orbit."

Rachel zoomed in on the bases of two towers and said nothing.

"They're streaming into those towers," Nisha said. "Rachel? What are you so interested in?"

Rachel said nothing for several seconds.

"I think you better zoom in on the stream entering the closest tower."

Nisha blinked and her eyepiece magnified the view by a factor of 20. The world watched the video stream.

"Smaller life forms are mixed into the crowd," Nisha said. "They must be alien children, but they have tails, unlike the adults. Are they pets? Perhaps they lose their tails when they become adults? Fascinating."

"Zoom in more," Rachel said. "What are walking near the alien children?"

"They're human. They've got our children." Nisha said. "Priya must be alive. I thought I heard her in my mind a few minutes ago. Our children are walking unprotected right alongside the alien children."

They observed for a couple of minutes. Nisha shook her head.

"What's odd is our children aren't looking around. They're marching along looking straight ahead. They don't seem to be talking.

I'm happy. Maybe. How many of our children have been abducted?"

Rachel searched for the answer.

"We estimate about 25,000 children were abducted with zero new abductions in the past few days."

"I can't stay awake any longer," Nisha said. "It's 3 a.m., let's get some sleep. If it were daytime, I'd go over and talk to them. A month ago, I couldn't imagine sleeping within walking distance of thousands of alien beings. I guess I'm getting used to them now. They haven't hurt us, so they probably won't tonight. My heart isn't even racing. I'm relieved the kids are alive."

Nisha left her video feed on while the second camera pointed towards the colony, while she and Rachel got a few hours of sleep.

She awoke to a voice in her ear.

"Nisha wake up."

Nisha rubbed her eyes.

"Quinn, is that you?"

"Yeah Neesh. I'm watching your video feed and a minute ago I thought I saw some aliens poking their heads into your tent. You and Rachel were sleeping. They were small compared to the other ones. I think they left because you were snoring."

"I'll get you. You know I don't snore!"

"Whatever you say Neesh."

"Okay, I'll check it out. I miss you so much. Keep watching, okay?"

"I'll keep an eye on you. Always keep your eyepiece video feed on," Quinn said.

He disconnected.

"Rachel, wake up," Nisha said as she nudged her shoulder. "Alien children were almost in the tent."

"Oh," Rachel said in a sleepy voice. "Where are they now?"

"I don't—"

Nisha hesitated when she heard movement outside.

"I think they're walking behind the tent. Let's go see," she whispered.

They got dressed and walked around to the back of the tent where their satellite dish transmitted their video feeds to the world. The children looked over with those eyes.

"What are they doing?" Rachel said.

"They seem to be inspecting the dish," Nisha said.

The children walked over to Nisha and Rachel and began sniffing them.

"They're also watching us," Nisha said. "I'm glad they're not bigger than us, but the way they watch us is unnerving. I imagine they're looking over prey with those eyes of theirs and the way they sniff us out."

"Yeah, they make me uncomfortable," Rachel said.

Nisha nodded her head but said nothing as one child got too close.

"I don't like it touching me like that. Get away!"

Nisha lightly slapped the alien child's hand away. The child's skin turned a bright red, but another child stepped in silently to prevent an attack.

"Well, at least we know red is the universal color of anger," Nisha said. "Be careful, they're not as big as the adults but they're still stronger than us. Also, this feed is being distributed around the world so whatever we do here has the potential of affecting history. I'm sure the aliens are monitoring every move we make."

Nisha turned to the intervening child and said, "Thank you."

She smiled and bowed her head.

The intervening child silently watched Nisha for what seemed like an entire minute.

"Rachel, I think it's trying to communicate with me. I can feel

something in my mind, but it's static. I don't know how to reply. Let me try a few things. I'm thinking they may know our language already. They pick things up quickly. They knew who ordered the missile strike in New York."

Nisha pointed to her head and her ears and said, "I know you spoke."

The alien child stared at Nisha for a while longer.

Nisha pointed to her ears once more.

"You spoke again."

The children simultaneously turned and walked away towards the closest tower.

"They're abrupt." Rachel said.

Nisha nodded her head.

"Yeah. Maybe their parents summoned them all at once, so they walked back. They have their elders' same curiosity in our gadgets, but they also take a real interest in us. I began to lose hope I would be able to communicate with them. The adults aren't interested in us, but with the children there's a difference. I can feel it."

"You're right. I wonder why they let their children visit us without supervision," Rachel said.

"We might not be perceived as a threat. We let our children go outside and play with lizards and other harmless creatures. They may consider humans to be harmless creatures."

"Yes, human adults rarely play with lizards, but children do. They're more curious," Rachel said. "I guess their children are more curious too."

"I think we can use their curiosity to learn about them," Nisha said. "I'm dying to know where they came from, and about their culture and home world. It's possible that through the alien children, we can gain access to our children and get them free."

"You're optimistic, but that would be wonderful." Rachel said. "I thought of ways to communicate with them. We can't use sign language because the structure of their fingers and hands is different

than ours. I think we should speak to them and try to teach them. We can use a keyboard and computer or something. Their fingers are more dexterous than ours. They're smarter than us, so they can learn our language faster than we can learn theirs."

"I agree," Nisha said as she watched the stream of alien adults, children and human children walk into the closest tower. "You know what?"

"What?"

"I'm going to walk over to them right now and find out if I can spot Priya and her friend Sophie. Want to join me?"

"Well."

"Things will be okay. I keep reminding myself, they would have exterminated us a long time ago if they wanted to."

Nisha often monitored the size and interests of her Reddit video stream audience. They showed great interest in having Nisha move close to the aliens which were walking into the closest tower. She noticed the President and many people high up in the military were watching.

"Okay let's go!" Nisha said.

"All right, we're on our way," Rachel said to the audience. "Those big ones on the right side of the tower seem to be guards. Watch how their eyes follow us while their heads don't turn. Their eyes can rotate at least 120 degrees either way from straight ahead."

"Yeah, I'm glad they're only looking," Nisha said. "They're watching us and doing nothing. Let's continue over to the stream of them entering the tower. My heart is racing again. The closer I get, the louder the voices get."

They walked to within 10 meters of the stream of them entering the tower.

"The adults view us with indifference," Rachel said. "We might as well be a rock on the side of the path. They notice us, but they aren't curious about us at all."

"Yeah," Nisha said. "But the alien children are looking at us with

curiosity. Notice how some of them seem to want to break out of the line and check us out? They're kept in line by the adults. The children are the best chance we have to get to know them better. I'm sure they're monitoring my video broadcast stream so they must know we mean them no harm. We're simply curious."

"Here come some human children," Rachel said.

"Yeah, they're around Priya's age."

Nisha began to tear up as memories of Priya played in her mind. She tried to be strong and not show her emotion.

"I didn't get to celebrate her 16th birthday yesterday. I miss her so much. Okay. I'm not going to cry. The kids are between 14 and 18 years old. All these children have parents who want them back. How can we get them back?"

Rachel watched the stream and said nothing for a moment.

"I don't know, but I think for now we need to focus on learning as much as we can."

They watched for a few hours as tens of thousands of aliens and human children continued to stream into the tower. Priya was nowhere in sight.

Nisha gazed up in awe as she talked to Rachel.

"I can't get used to those spheres coming and going. They're so commonplace from their perspective that they don't notice. I've recorded over 50 landings, which means about 500,000 have entered these towers. The landings are more frequent too. That's probably because of the second large sphere now in orbit. My guess is a million live in each one."

Nisha stopped talking for a moment.

"Hmm, for a fraction of a second I thought Priya spoke to me."

"Do you think she's close by?"

"She seemed much closer," Nisha said. "I felt her voice for a fraction of a second, but I think it's her."

They watched in silence for several more minutes. Then, Nisha's

eyes opened wide.

"Priya!"

Her heart filled with joy. Sophie walked a few steps behind. Nisha waved and shouted from about 20 meters away but there was no reply.

"Did she hear you?" Rachel said.

"I think she did."

Nisha tried to get their attention.

"Pree. Sophie."

Priya glanced over but she said nothing. Nisha waved again and ran towards them. However, Priya and Sophie walked without hesitation into the tower. The liquid reflective exterior of the tower enveloped them.

Nisha stood in front of the massive tower in silence. She walked back over to Rachel in tears.

"I don't understand, Nisha said. "Priya didn't acknowledge me. What does that mean? Do you think they've done something to her? Maybe she hates me for letting her get abducted. None of the human kids walking by seem aware of us. None of them are talking. There's something wrong with them."

"Do you want my honest opinion? Or should I sugar coat it?" Rachel said.

"No sugar coating."

"Okay. These are advanced technological beings. They're socially advanced too. They can screen harmful microbes from our environment, build autonomous robots, travel between stars, 3-D print skyscrapers built overnight into any shape they want, communicate telepathically by some electronic means, and who knows what else. When I watch these human children walk by, I think something technological has been done to them. They aren't talking or playing. They're paying attention to their masters. Based on their behavior, I think something has been done to all 25,000 of them. They don't appear to be physically tortured or abused. However, they seem different. Watch them and you'll know what I mean."

They watched in silence for a few minutes.

“I agree Rachel. I want to take one out of the line and learn what happened. If I can't help Priya, I want to help someone's child.”

“No, I don't think that’s a clever idea. I suppose if you weren’t aggressive about it, they might let you have one. Let’s go.”

They slowly walked over to the line of children entering the tower.

“Rachel, the big ones still act disinterested in us. Maybe we can sneak one out.”

“I'm not sure about this. That mean looking one is watching us closely.”

“Oh, he's okay,” Nisha said. “He's only a little pinkish red. I'm almost there. Maybe if I move slowly, I can grab— Ugh.”

“'What’s the problem Nisha?”

“I'm hot on the inside, as though I'm being microwaved or something. I've got to get out of here.”

“Good idea,” Rachel said. “That big red one pulled something out and pointed it at you.”

Nisha backed away from the children in line.

“I'm better now. The red one did something to me. A microwave weapon would do that.”

A gunshot rang out and a bullet ricocheted into the dirt right between the mean looking alien and Nisha. The alien looked into the distance.

Nisha ducked behind an obelisk.

“That almost hit us. I think the bullet bounced off the mean looking alien. Did you spot that Rachel? He's turning bright red now.”

“Yes, I looked right at the mean one when the bullet hit. I noticed an opaque barrier surround the alien for a fraction of a second. The bullet hit the dirt and almost hit us.”

“That’s incredible. They have an instant shielding technology

that's fast enough to activate before the bullet can hit. What can't they do?"

"I don't know," Rachel said. "As time goes on, we'll find out."

Nisha looked in the direction of the bullet's path. They magnified the view in her eyepiece.

"I notice some commotion happening at the public viewing platform. I think the aliens killed the shooter. Security forces are supposed to check for guns as people enter the area. I guess they'll increase security from now on. I'm thankful they don't punish all of us for the actions of a few."

Rachel looked up to the sky as a sonic boom shook the ground.

"Here comes a shuttle. Another 10,000 of them will be living in these towers. This is serious. And over there, a fourth tower is rising. This means one million of them might live here in this small area."

"Yes," Nisha said. "They'll keep building. I'm beginning to understand their intent, though I'm not sure. I hope you were right, and these towers are like tents in a temporary campground. Once they finish their vacation, they'll move on. I doubt it though. Rachel, what's happening?"

"Hold on, I'm receiving an update. Several spheres like these were seen near mines in China and Russia. They're digging tunnels and setting up mining operations for rare-earth minerals and more common metals."

"I better contact General Sherman," Nisha said.

She blinked to open her secure DHS app. The General answered.

"Dr. Chandra, I'm happy to speak with you. Do you know what's happening in China and Russia?"

"Yes, we just heard. So, you know too?"

"We've been following the events and we're getting ready to talk to the presidents of China and Russia. We would like to include you on the calls. Are you ready right now? The President is right here ready to go."

“Yes, I'm ready,” Nisha said.

“Okay Nisha, you’re connected. Hold on.”

Soon the Presidents of China and Russia were on the connection.

“Hello President Chu and President Arkhipov,” Emma said.

“Hello Madam President,” the presidents said.

“Call me Emma, please. We understand the aliens are initiating mining operations in central China and Siberia.

Presidents Chu and Arkhipov nodded in the affirmative.

“We’re trying to decide what to do,” President Chu said. “They’re stealing valuable ores which are important to the stability of the world economy. The world economy is already having severe problems since the visitors arrived.”

“We will not stand for the theft of our natural resources, President Arkhipov said. “If they keep doing this, we’ll stop them.”

“How do you propose to stop them?” Emma said.

“All options are on the table,” President Chu said with a firmness of conviction.”

“Yes, all options.” President Arkhipov said.

“Be careful,” Emma said. “I can't tell you what to do, but you know what happened to my predecessor. She died within seconds after ordering the missile launch. I’m not sure how they knew. They might have arbitrarily decided to execute the top commander, which is the President. Or they may know in real rime our every move. So even if neither of you give the direct order to strike, you might be killed.”

“I will die to protect my country if necessary.” President Chu said.

“I will too,” President Arkhipov said.

“Your valiant gestures are admirable,” Emma said. “However, your deaths would serve no purpose. We’ve all built a solid relationship and I want you guys to stay alive. We need each other right now. Please be careful. Stay in close communication.”

They talked a while longer. The Chinese and Russian presidents disconnected.

“Nisha what do you think?” Emma said.

Nisha shook her head and looked down.

“I think they’re about to do something foolish. I hope they don’t get everyone killed. As I witness more of their technological capabilities, I realize there's no way we can use force to stop them. We humans have always needed to learn lessons the hard way. I’m convinced that some other way besides force must be found.”

“I agree,” Emma said. “Hold on.”

Silence.

“We’re getting word that a third large sphere has entered Earth's orbit. Our best source of information is your Reddit video feed, so keep it turned on. We want to keep a low military profile. You’re providing valuable information in a low-key way with no troops required. They think you’re harmless, so try to gain their trust. You may be our greatest hope.”

“I'll do my best,” Nisha said. “I’m estimating one million alien entities live aboard each large sphere in orbit. Four of the 1,000-meter towers currently being built can house one million of them. The shuttle spheres are now coming and going like a transit system. I guess they have no Star Trek-like transporters. Perhaps it's not possible. Only in sci-fi.”

They talked for a short while longer and signed off.

Nisha glanced at Rachel and out into the developing alien colony. “Rachel, the pace is picking up, don't you think?”

“Yes, a fifth tower is being constructed. The base looks much wider than the earlier towers. Also, other smaller circular buildings are being built which must perform other functions besides living quarters. I’ve seen various strange looking vessels coming and going which might be carrying the ores mined in China and Russia. See the pile in

back there?"

"Yes," Nisha said. "The pile keeps growing and the crawler drones take bits away somewhere. Rachel, check this out."

"What?"

"I asked the facial recognition agent to pick out Priya and Sophie from the crowd. They're walking with those alien children on the right side of the closest tower. I'm going to get her out."

Rachel grabbed hold of Nisha's hand as she stood up to go.

"Nisha, that's not a good idea. They don't like us getting too close."

Nisha broke free and ran 50 meters towards Priya with Rachel running behind her.

"Pree." Nisha cried out.

Her eyepiece broadcasted the drama to the world. As she got to within a few feet of Priya, two large unfriendly looking adults stepped in between them and turned red.

"Nisha, don't move," Rachel said. "I don't think they like you being so close."

"Priya." Nisha shouted.

She tried to get around the aliens to see Priya. She waited for a reply, but none came. Tears streamed down Nisha's face. She realized she was holding onto the dull-red arm of one of the aliens. She let go, waiting for a response, but none happened. It glanced at her briefly and looked away with disinterest. Nisha stood motionless for a minute and walked back to Rachel.

"I touched an arm. I didn't mean to. I was focused on Pree."

"Yeah, I noticed that. What was it like?" Rachel said.

"The skin had that rough texture. I left a gray handprint on its red arm. I guess the coloring is a surface feature with gray being the default skin tone. Okay, I'm calm now. Did you notice how Priya reacted?"

"Yes. She didn't react at all."

“They've done something to her,” Nisha said. “She isn’t responding to us, but she’s interacting with Sophie. They aren’t saying anything audibly to each other, but they're communicating.”

“Yeah, they’re acting like they’re talking but they’re silent. Maybe they’re communicating telepathically. Their body language says so. If your ears were plugged and you couldn’t see their mouths, you would think they’re talking by their body language.”

Silence.

“Wait, I think Priya spoke,” Nisha said. “This might be my imagination. I think they’ve performed modifications on the children. I think they’re communicating telepathically. The kids might have devices implanted in their brains, but I’m not sure. I still don’t think natural telepathy between organic brains is impossible. Brain chemistry doesn’t make signals which propagate out in a precise way.”

Nisha walked up to Priya again, but the unfriendly adults stepped in front of her again. Nisha got upset with the aliens and looked them right in the eyes.

“You don't own my daughter. I have a right to visit with my own daughter.”

They stared at Nisha without emotion.

“You guys aren’t stupid. You must understand what I’m saying. What would you think if I took your children? What if I turned your children against you? How would you feel? Are you only organic engineering machines?”

They reacted with mild curiosity and their red color faded a little. Nisha continued her rant.

“You might have better toys, but that doesn’t make you a better life form. There's more to life than engineering.”

“Nisha,” Rachel interrupted. “I think you’re wasting your time. Let’s go. We’ll come back later.”

Nisha stared at the aliens.

“You haven't seen the last of me.”

As they walked back to their tent, Rachel received a message.

“Nisha, they’re telling me new alien microbes have been identified. Their DNA serves the same purpose as ours. However, the DNA sequences are composed so differently that their microbes and ours don’t interact much even though they outwardly appear similar. They mostly ignore our microbes. Experiments are being done now to understand what effects they will have. We’re all infected, but thus far no ill effects are identified.”

“I’ve been a little sick to my stomach lately. I think some of their microbes have worked their way into our systems,” Nisha said.

“Time will tell how our bodies will handle the new microbes. We might build up immunity to them. Or immunity might not be necessary.”

“I wonder what they did to the children,” Nisha said. “They appear healthy and aren’t wearing protection. The aliens don’t seem to be externally protecting themselves from Earth’s microbes. What’s going on with them?”

“Well, remember when they first came and took all those samples with those mosquito drones?” Rachel said.

“Yes.”

“I think they learned about our biology and engineered ways to defend themselves from our microbes. They may have engineered their microbes to not destroy our ecology here on Earth and vice-versa.”

“You might be right. They’re a race of engineers. Or their AI is. They might be able to manipulate DNA in a comparable way to how we program computers. Even we do this to a limited extent. Synthetic biology is no big deal to them. I hate their attitude, but they’re awesome engineers.”

“Yeah, they can do anything,” Rachel said. “Just imagine what we could do with complete mastery of DNA. You can make drones the size of bacteria to do anything inside a human body. You could also engineer a virus with a long incubation period which could infect the planet before any symptoms show up. People have tried, which is why we monitor molecular DNA in wastewater at airports etc.”

Nisha nodded yes.

“That's what I love about DNA,” Nisha said. “It's the ultimate programming language, though it's messy and full of errors. Do you realize we create about 6,000 miles of new DNA in our bodies every second?”

“Did you say 6,000 miles per second? Hmm, let me think about that. It seems impossible,” Rachel said.

“It's possible,” Nisha said. “The average human body contains almost 40 trillion human cells, not including more numerous bacteria. The total length of a strand of DNA from a single cell is two to three meters. Let's say two meters or six feet to be conservative. Therefore, we have about 80 trillion meters of human DNA in our bodies, excluding germs. That's 50 billion miles. That's about 500 times the distance from Earth to the Sun.”

Rachel thought about it for a while.

“Hmm, yeah that's about right.”

“Cells are constantly being replaced,” Nisha said. “I looked up how long some human cells live.

Red blood cells, 120 days

Muscle cells, 15 years

Taste receptor cells, 10 days

Intestinal lining cells, 3 days

Skin cells, 20 days

Nerve and brain cells, most live a lifetime.”

“Yes, the variety of cells we have is incredible,” Rachel said.

“Yes. Now, to do the calculation, you need an average lifespan for all our cells. Nobody has a perfect estimate of this number, but we can guess. Every minute, about 300 million cells die and must be replaced. That's 5 million per second.”

“It's hard to imagine that so many cells die and are regenerated

every second, but your numbers add up," Rachel said.

"Yeah, it is hard to believe. Since each of those 5 million cells has about 2 meters of DNA, this means we create 10 million meters of DNA each second. That's 10,000 kilometers, or 6,000 miles per second. That's a little longer than the distance from San Francisco to London. Every 40 seconds or so, we create enough DNA to reach the Moon."

Rachel laughed.

"I guess we better eat well and get enough sleep. We have a lot of DNA to make."

"You're right," Nisha said. "We better get some sleep."

They managed to sleep restlessly until a few minutes before sunrise.

Chapter 10 – They Don't Care

They awoke to the beeping of their new proximity detector. Rachel woke up first.

"What's that?"

"Shh. Someone or something is outside. What do we call them? I guess we shouldn't call them 'things' or 'it.' I wonder if they have genders. Can we call them he or she?"

"I guess we'll find out," Rachel said. "Let's go see what's happening."

Nisha peered out the tent opening. Her heart raced.

"Rachel, the alien children are checking out the car. Let's go visit them. We can break the ice and try some of the tests we've prepared."

They walked outside into the sunlight on the warm and dry morning, which is typical for late September in the Mojave Desert. They walked slowly towards the children. Nisha glanced at Rachel and smiled. There was something comforting about the way they were so curious about everything. They were playful. Their behavior was different than the adults.

"I wonder how they got into the car without activating the car alarm. I hope they don't do any damage. They're nearly as tall as us and I can tell they're stronger. They are children, but they may be smarter than us. At least they don't have the car key."

The car activated. Nisha laughed.

"Never mind."

As they walked closer, the children spotted them, and the car deactivated. Nisha walked to within about five meters of the tallest one, who was slightly taller than her. She pointed to herself and said, "Hello, I'm Nisha."

She pointed to Rachel and said her name. The tallest one watched

Nisha and one eye moved over to Rachel.

Nisha glanced over at Rachel and whispered, “He’s looking at both of us at the same time.”

“Unnerving, isn't it?” Rachel said. “Here he comes, stay calm.”

They stood in place while the oldest child walked around them. His tail looked a little shriveled, as though it was beginning to wither into the little nub the adults had. He had a small round mouth which he didn’t open. His rubbery prehensile nose was not as large as the adults. The nose had three nostrils. His eyes looked reptilian. The sclera appeared pure green where ours are white. The iris appeared bright orange with a star-like black pupil, which dramatically adjusted to changes in brightness. Surrounding each eye were loose folds of skin which were green right now but could change color according to mood. None of the aliens seemed to wear clothing but no reproductive organs could be seen. Nisha and Rachel couldn’t differentiate male from female, assuming they had males or females. They appeared sexless. The default color on their entire body was gray, but some of them changed color. Even their thin fur-like covering had a green tint to it.

Nisha tried to get some dialog going with the oldest one. Again, she pointed to herself and said, “Nisha.”

The tallest child stared at Nisha, focusing on her with both eyes for about 10 seconds. Nisha pointed to her head and said, “I can hear you.”

“He talked to you?” Rachel said.

“I think so. The voice is static sounding like the voices I've heard all along. I sense them constantly, but I filter them out or I'll go crazy. He’s closer so I think he's louder. I'll call them 'he' for now. He’s so different than the adults. He wants to interact with us. The adults don't care. I think we can communicate with him and the other children.”

“Let's find out how smart they are,” Rachel said. “Get the chess set since they're not interacting with us very much.”

Nisha walked to the tent and returned with the chess set. She set up the pieces on the picnic table underneath a shady desert tree. The

sun had recently risen but the desert temperature rose quickly. The children didn't seem to mind the heat, but the brightness of the sun bothered them, and they preferred the shade. Nisha and Rachel set up the chess set and began to play as they had planned earlier. They were both skillful players.

"Nisha, I think they're interested," Rachel said "They're studying the game closely. Let's keep playing."

The children crowded around the board as Nisha and Rachel battled. After 30 minutes, the game came down to each having a queen and a rook. They called a draw. They set up the board again.

Nisha pointed to the tallest child and to the board and said, "Do you wish to play?"

He watched the other children and sat down as best he could, considering he had a tail behind him. He studied the board and glanced at Nisha with one roving eye. Nisha motioned for him to take the first move with the white pieces. She assumed they were smarter than us and could learn the game just by watching a single game.

He studied the board and made his first move after a full minute.

"E4." Nisha said. "I guess he did study us when we played. I can't believe I'm playing chess with a life form from another planet."

Rachel smiled while Nisha planned her next move.

"Okay I'll move to E5. I wonder if he will— yes Nf3. I'll move Nc6. Now let's watch what he does. Look. Bb5. He's playing the Ruy Lopez opening. How does he know that?"

Nisha played her best game, but checkmate happened 22 moves later. The children gestured to each other, flashing brilliant shades of green and purple. Their noses wiggled.

"I can tell you're celebrating your victory. Let's play again. You won't get off easy next time."

She set up the board while Rachel accessed the world's strongest chess app on her eyepiece as they had planned should they go down to defeat on the first game. This app recently beat the world's champion Viktor Rominov in only 17 moves. The oldest child seemed excited to play again while the others crowded around.

She glanced at him and invited him to take the first move again as white.

“1. e4, Rachel? What now? Okay d6.

2. d4, Rachel? Right Nf6

3. Nc3, Okay g6

4. Be3, I don't know what he’s doing.”

Rachel looked up the move.

“Here’s a famous game between Kasparov and Topolov that begins with these moves. How does he know Be3?”

Nisha smiled.

“I don’t know.”

“The computer suggests we play the move from the game, Bg7.”

“Are you sure?” Nisha said with a curious smile on her face.

“Yes.”

“5. He moved Qd2. He's getting ready to castle,” Nisha said. “This is over my head. I still don't know what he’s doing.”

Somehow within 49 moves, Nisha, and the world’s strongest chess app, endured another checkmate.

The world watched as the alien child playing his second game of chess in his life managed to defeat the world's strongest chess program which consistently beat in the greatest contemporary grand masters in the world. The US stock market dropped 3% in a matter of seconds. Reddit slowed down under the weight of heavy volume.

“Hey Rachel, get me the 3x3x3 Rubik's cube from the box. I shuffled that thing up well.”

“Okay.”

Rachel handed the cube to the tall child. He held it for about 10 seconds, examining all sides with his six dexterous fingers on each hand.

“Rachel, he manipulates things so easily with his hands.”

“Yes, there's something about the configuration of his fingers which allows for more nimble manipulations than our fingers. Maybe the reason is he has three pairs of opposing fingers, which work like thumbs? I'm not sure.”

The child spent about 10 seconds examining the cube before he began. In four seconds flat, all the colors migrated to the correct sides. The world's record for a human stood at 4.9 seconds. He placed the cube on the table. His skin flashed green and yellow. The other children also flashed bright colors. Their noses wiggled.

“Can you believe that?” Nisha said to her audience.

Nisha smiled, took the cube, and set down an 8x8x8 Rubik’s cube. The child studied this for a longer time and went to work. He had some trouble but within 80 seconds, the solution appeared. The world's record for a human stood at over three minutes. The children flashed all sorts of brilliant colors.

Nisha stared at Rachel with wide eyes.

“I don't know what to say.”

“Okay, let's give them a few more object manipulation tests on this screen over here,” Rachel said.

The children walked over. They were enjoying the fun. Nisha and Rachel noticed some stern looking adults about 50 meters away, but they were only observing. They didn’t seem to be interested in interfering. The children ran through a battery of tests indicating IQs that couldn’t be measured because they solved every problem.

“This is incredible,” Rachel said. “Is there anything they can't do?”

“I'm not sure, but we might figure out a way to use their intelligence to establish communication between us. Wait. Where are they going?”

“They’re leaving Nisha. Someone called them.”

Nisha temporarily muted the audio portion of the broadcast so she could talk to Rachel in private.

“Yeah, they all responded at once. They were covered in brilliant

colors which became muted and gray as they walked away. I might be anthropomorphizing them, but they acted as though they didn't want to leave when their parents called. I'm guessing."

"There may be hope," Rachel said. We're influencing the children."

Nisha stood up and gazed at the alien towers.

"We've been oblivious to outside events for the past few hours. The base of the new tower is several times wider than these other four towers. Even the smaller ones are more massive than almost anything else ever built on this planet."

Rachel trained the scope on the different structures.

"Those other round buildings are completed. I'm not sure about their purpose, but only a few adults are going in and out of those buildings. Hey, let's go over and check them out."

"Rachel, you're getting bolder all the time. Sure, let's go. My heart isn't racing as fast as it used to."

They walked 1,000 meters to the base of the first-round structure. The reflective shell vibrated in the wind.

"Look, there's my reflection," Rachel said.

Nisha watched their rippled reflections for a while.

"The towers appear like they're curving around us in back. Hey, some adults entered the sphere. They melt into the surface. Let's find out if we can go in."

"Oh, I'm not sure about that," Rachel said. "What if we get stuck inside and we can't get out? What if it—"

"I'm not worried. We can test the surface first by sticking our arms in and find out what happens. Well, let me try with this stick."

Rachel turned around.

"Um, Nisha."

"Hold on, I'm trying to—"

"Nisha! Look. I don't think—"

Nisha turned around.

“Oh, okay. Well, judging by his red color I guess he doesn't want us to do this. I think we should go back now.”

They briskly walked back to their tent, laughing like kids.

“They didn't want us in that structure for sure. I wonder why,” Rachel said.

“I don't know, but only a few of them walk in and out of there. Hold on, someone is contacting me.”

Nisha blinked and saw the President and General Sherman. The President began talking.

“Hello Dr. Chandra, we’ve been watching you interact with the aliens. Working with the children was a brilliant move. I think we can learn things from them. Keep it up.”

“Thanks Emma,” Nisha said. “Working with the children seemed like the logical approach to take. We're pushing the boundaries. What’s happening today?”

“Well, things are getting difficult in China and Russia. They’re considering using nuclear weapons to stop the aliens. In your estimation, and I know you aren’t a weapons expert, how effective would a use of force be against the aliens?”

“Force is a waste of time. You saw how easily the kids beat the world best chess program and solved the Rubik’s cubes. When I think about the intelligence of their children, I realize our weapons will be swatted away like flies. You know what happens to flies under a fly swatter. We need to discover non-violent ways of interacting with them. The adults are arrogant, and they have the intellect to back it up. Relationships with the children have good potential. However, the children aren’t taking ore from the mines of China and Russia, so they aren’t the problem. I'll tell you something else. I think they understand all the major languages of the world. They can monitor our most secure 1,024-bit encrypted transmissions. My advice is to never underestimate them under any circumstances. They’re listening to this conversation.”

“I agree,” Lucas said. “Their capabilities are unknown, but we

know resistance is futile. I hope we can lie low until a better time presents itself. I'm not sure when the right time will be. We recently observed a fourth sphere enter orbit around the Earth. That makes four million of them waiting to come here. Possibly. That would be the world's largest standing army."

"Yes, the 300-meter spheres are arriving like commuter buses. There's a new and bigger tower being built. It's already about 1,000 meters tall and is not narrowing quickly at the top. I have no idea how tall the finished structure will be. I don't think they're an army. They wouldn't need an army to defeat us."

They talked for a while longer and disconnected.

In China, President Chu monitored the mining operations. After warning the aliens in every way he could think of, he gave the orders to let someone else carry out the order to use the nukes. He hoped to avoid retribution. In Russia, President Arkhipov gave the same orders at the same time to gain an element of surprise.

Chinese Air Force squadron leader Ung approached the target and armed his nuclear tipped missiles. As he got closer, he lost power to all electronic systems. He tried to communicate to the other members of his squadron, but he couldn't get through. They all fell out of the sky like stones. At first, they weren't worried for their own personal safety because they each had an emergency ejection system. Ung hit the button, but the ejection system didn't work. He activated the emergency power system and hit the button. The system didn't respond. The plane fell out of the sky. He had no time to contact anyone to say goodbye. He ended in a distant puff of dust in the Gobi Desert with only an explosion of jet fuel to mark his passing. The nuclear weapons didn't explode.

Forty other puffs of dust rose in the desolate Mongolian desert. Similar fates awaited the Russian pilots. President Chu intentionally stayed out of contact with the events of the moment. He realized he would find out the results soon enough through public sources. He fainted in front of his family and a TV audience and died. Soon, every single person in the Chinese and Russian chain of command fell silently and inexplicably dead. No cause of death could ever be

determined other than their hearts stopped beating.

"Something happened," Nisha said. "The static voices are loud and agitated. Communication between all of them increased dramatically."

She contacted General Sherman.

"Lucas, what happened?" she said.

"I'm not sure. Something happened in China and Russia near the mines the aliens use. Hold on. We're getting word the Chinese and Russian Presidents are dead. We don't know how or why."

"I know why," Nisha said. "They ordered strikes on the alien mines. I warned everyone not to do this. I hope they don't retaliate. Another way must be found. I'm going to go. I'll keep my eyepiece on record mode."

They signed off.

Nisha and Rachel decided the Chinese and Russians had pushed too hard, when they spotted several aliens glowing bright red.

"They must know what happened," Nisha whispered to Rachel.

They walked back to their tent past several other stern looking adults.

Nisha and Rachel sat in front of their tent and watched the sun set behind the gigantic, twisting, newly completed tower. The facets were glistening in the last red droplets of sunlight.

"How tall is this tower?" Rachel said.

Nisha blinked and she had her answer.

"I'd say a little over 2,000 meters or 6,000 feet tall. This took one day to complete. Many tens of millions of crawler drones worked on it. Each shuttle that arrives seems to bring with it more drones and supplies. It looks like they're here to stay."

The sun set, with high clouds turning a deep crimson red as the

fading light from the distant Pacific Ocean reflected onto the undersides of them. Nisha and Rachel said good night to their families. They fell asleep quickly considering an alien colony was being constructed nearby around the clock. Nisha cried herself to sleep. She longed to have Priya back and became more determined than ever to make that happen.

Chapter 11 – Moving In

Nisha and Rachel managed to sleep for over six contiguous hours for the first time in days. They felt reinvigorated. At first light they awoke.

Nisha glanced over at Rachel on the other side of the white tent.

“Let’s go for a run before the sun gets to us. I think we need to stay in shape.”

“Good idea let’s go. I’m always surprised how quickly the body can get out of shape.”

They decided to run around the four-day old alien colony, which had a perimeter of four miles. Five gleaming towers dominated the sky, with two more under construction.

“I bet you those two new towers will be completed by the end of the day or overnight,” Rachel said.

Nisha smiled.

“I won’t take the bet. They’re preparing to build several more of the 2,000-meter towers. They can each hold over one million of them. I think we can safely assume this isn’t a temporary campsite, even for them.”

“Yeah, they’re here to stay.”

They continued running for a couple of minutes.

Nisha stopped.

“Sorry, I noticed in my eyepiece that our comments about them being here to stay caused a 3% drop in the stock market in only two minutes,” Nisha said.

She continued to broadcast her video stream to the world.

She said to everyone, “I want to reiterate to the public that up to now, the aliens haven’t caused any economic hardship for the world other than a small disruption in specialized mining operations. There's

no economic justification for the 50% drop in the markets over the past two weeks. The aliens consume a small ecological and resource footprint. They generate their own power. They aren't aggressive. They're building their colony in a barren desert away from human population centers. The world economy looks good and is full of innovation. Economic benefits may emerge from the aliens being here. Who knows what we can learn? I'm not an economist or stock market guru, but I'm optimistic about our future. I don't have money in the market so I'm not trying to make the market go up for my own personal gain. I briefly sold short the market because people panic. However, I'm neutral now. I'm saving my money to invest in my captive daughter's startup someday. Now I'm going to continue my run."

As they ran, Nisha muted her audio stream.

"I think my little speech is helping. The market is bouncing back."

"Nisha, you're powerful now." Rachel said, out of breath. "I know your Reddit numbers. Over 80% of all active Reddit users follow you. Even the most popular celebrity has around 25% of total users following her."

"Rachel, I'm not popular, I happen to be in a position where I'm making an interesting video stream."

Rachel wiped the perspiration from her forehead. They were close to their tent.

"Yeah, like the most interesting stream in the history of the world. The thing you should always remember is you aren't only reporting events; you're making history."

Nisha smiled.

"Thanks. Okay, I'm going to turn on the audio again. Whenever you want me to mute the stream, make this x mark with your fingers. Okay, the audio is on. Whoa, stop."

"What?"

"The human children are walking into the newest tower. Some are holding hands with alien children."

Rachel looked more closely.

“They’re holding fingers. Our hands are incompatible for hand holding with theirs. The adults are walking with them. They live in family units consisting of two large ones and one or two smaller ones.”

“You’re right,” Nisha said. “They are parents and children. The human children follow behind everyone in each family. Watch how things are arranged as they walk. The humans are pets.”

“What?” Rachel said as she looked more closely.

“That alien child is pulling the human child along like a puppy on a leash. Even though there's no physical leash, the similarities are striking. I wonder if that’s why the children were abducted. They like us as pets!”

“Let’s not go too far with the anthropomorphizing,” Rachel said. “We can't be sure. Something else might be happening.”

Nisha stopped running and teared up.

“They’re pets. My beloved Priya is a pet.”

She walked up to the line of aliens and children entering the tower. She watched them for a minute. She reached out to one of the human children. Rachel tried to hold her back, but Nisha broke free and grabbed the child. The two alien adults, who appeared to be the adoptive parents/owners turned red and moved toward Nisha.

Rachel grabbed hold of Nisha again and held her back.

“Nisha, we better get out of here, right now.”

Nisha tried to break free from Rachel’s grasp.

“My child is not a pet.” she screamed at the two adults.

She cried inconsolably. The adults turned around and kept walking, showing no emotion or concern. For a moment, the human child wanted to leave the line, but the alien child shepherded the human child back into place. The human child didn’t speak a word.

Gradually, Rachel managed to get Nisha back into their tent. Her riveting video stream continued to broadcast.

“We’re sentient and self-aware beings Rachel. They have no right to take us as pets.”

Nisha sobbed.

“You’re right, but we can't stop them,” Rachel said. “We are to them as our pets are to us. They may love our human children as we love our pets. They may take care of our children and feed them and play with them as we do with our pets. I hope they don't neglect them as some of us do with our pets.”

“I want my Priya back. I want Sophie back. I want all 25,000 of them back.”

Rachel made an x with her fingers. Nisha muted her stream.

“I don’t care what I must do. I’m going to figure out a way to stop them. Okay, okay, I’m calm now.”

She un-muted her streaming broadcast and wiped away her tears. They watched a bank of hologram monitors which were installed in their tent to help keep track of the aliens and the construction of their new colony. Rachel noticed some unusual activity on one of the monitors.

“Nisha, who are those people and what are they doing there? They shouldn't be out there near the aliens. Let’s go find out what’s going on.”

They ran out to the nearest tower with some security guards. A new shuttle sphere landed, and the occupants were disembarking to walk into the closest tower. The group of young people joined the line of aliens and human children.

“Rachel, they’re trying to blend in,” Nisha said. “Why are they doing that? They must be crazy. We better go over before they get themselves hurt.”

“I think we’re too late,” Rachel said as they arrived on the scene.

They were surrounded by some big, mean looking red aliens holding small silver devices. Nisha ran in between them all.

“Okay, hold on. Calm down.”

She held out her hand to the aliens and turned to the young intruders.

“What are you guys doing here?”

The guy who appeared to be the leader said, “We’re members of The Heavenly Angelic Symphony and we want to merge with the angels according to the wishes of our dear master, Guruji Sri Kevin.”

Nisha smiled and looked to the sky.

“Thanks. I haven't enjoyed a good laugh in a while. Okay, I gotta control myself. Who are the angels, with whom you wish to merge?”

“They’re standing all around us right now,” the cult member said in a soft tranquil voice.

Nisha looked skyward again and tried to keep a straight face.

“Um, I’ve got news for you. They’re glowing bright red. Do they appear like angels to you? Right now, they resemble someone else from mythology, but I digress. We better get out of here right now before it's too—”

The cult member shook his head.

“I’m sorry, but we wish to merge with the angels. Your lack of faith won’t stop us.”

The cult members pushed past Nisha and towards the base of the tower. One of the aliens pointed the small silver object at the cult group and they all fell to the ground. Nisha, Rachel, and the security guards ran over to the fallen cult members. They appeared dead but Nisha noticed one of them had a pulse.

“They’re stunned,” Rachel said. “Let’s get them out of here.”

Soon more security guards arrived and the limp but living bodies of the cult members were taken away to a secure building for observation. The aliens turned a more neutral gray color and they continued to walk into the tower as though nothing happened.

Rachel and Nisha walked back into their tent. Nisha turned to Rachel trying to stop herself from laughing.

“Now I’ve seen everything. I needed a laugh, so I must someday thank them for that. I shouldn’t laugh because they almost got killed. I can’t help myself.”

“Oh, there's plenty more if you want a good laugh,” Rachel said. “Watch this monitor that’s showing the public viewing platform. Most

people are only here to observe, but every cult and type of crazy person is here now. Watch at the ones on the right. They're praying towards the new tower like the faithful towards Mecca."

"Yeah, it's funny," Nisha said. "But I understand their sentiments. To them, they're like gods. In a way, these aliens are more like gods than anything you read about in the holy books of the world."

"Why do you say that?"

"Because these aliens are real, and they're here right now. Gods are always relegated to dusty old manuscripts preserved for ages. Now they are right here in front of us. They're God-like as far as their technical ability is concerned. If they had landed 200 years ago, they would be seen as gods or devils by over 99% of the people. Even today, I read a poll where 38% of Americans believe the aliens are a sign from God of the end times."

"The saddest part of this carnival is the group over there," Rachel said. "Those are the parents of the abducted children."

"Yes, let's go talk to them," Nisha said.

After they consoled the bereaved parents, they ate lunch in their tent. They watched a live debate on the US House of Representatives live-stream regarding what to do about the aliens. Some politicians wanted to nuke them while others wanted peace at any cost.

"There's a lot of fear in the House Chamber. By now they should realize force can't be used," Nisha said. "They can turn off any electric machine or weapon we use. Any non-electronic weapon is also useless against them because of their shielding technology. They're wasting time in Washington, and we might all be killed."

They shook their heads as they watched the debate drag on.

For many years, Ted Knight had been a reporter at the Capitol Building in Washington, DC. He finished an interview with a congressman and began talking with his cameraman on the steps at the East Front of the building.

"I'm glad that interview is over. I couldn't get a straight answer out of him. It's the same old—"

Something caught his eye and he glanced to his left.

“Hey, one of those smaller spheres is landing right near the steps. Get a close up. Get this streaming on our worldwide feed immediately.”

The sphere landed close to the steps. They watched as two large aliens emerged from their liquid looking sphere and walked up the steps.

“Let’s follow them,” Ted said to his cameraman as he began his report. “We’re live at the Capitol Building. An alien sphere has landed, and two large beings emerged. I’m going to keep my distance. I’ve been told they won’t harm anyone unless they’re attacked first, but I don’t want to be the exception.”

The aliens walked up the steps. Ted followed a respectable distance behind.

“Now we’re in the Capitol Rotunda. They’re looking around. Wait, they’re walking towards the House Chamber. I don’t think the guards who are lining up right now will be able to stop them. Let’s move behind this column in case there's trouble. We’re live right? Okay.”

The aliens walked towards the entrance to the Chamber. Twelve guards stepped in front of them and warned them they would shoot. The aliens didn’t stop.

Ted continued reporting.

“Dozens of high caliber shots are being fired. The aliens have been struck since they’re only a few meters away. Now several dozen military solders are firing on the aliens. This is complete chaos.”

Ted and his cameraman ducked down beneath a hail of bullets for a few seconds until things calmed down. The cameraman continued recording, lifting the recorder over a marble statue without looking. The dust cleared. The sound of the gunshots echoed and dissipated.

“I’m not sure what just happened, but the aliens are stepping over the dead bodies of the security officers. They’re continuing to walk into the chamber. Are they? Yes, the security officers and the soldiers all look dead. The aliens are each carrying a small silver device which

they used either to defend themselves or to kill the soldiers and security personnel. Now they're entering the Chamber. Maybe they're going to give their address to the human species. Let's get in there. We can't miss this."

Ted and his cameraman stumbled over the dead bodies to get inside.

Nisha and Rachel continued to watch the House Chamber live stream as the gunshots rang out.

"What's that?" Rachel said.

"I don't know, possibly gunshots. Everyone is turning around to find out what's happening. Two aliens are walking into the Chamber Room. The guards must have tried to stop them. That must be what the gunshots were about."

"The timing couldn't be any worse," Rachel said. "They were discussing how to stop the aliens by using nuclear weapons and now the aliens are in the same room with them."

"Yeah, that's bad timing. Or maybe good timing."

They stood against the back wall of the hall, with attitude.

"Why aren't they doing anything?" Rachel said.

"They don't need to do a single thing," Nisha said. "I think they're letting us know that they know what we're doing. They might want to prevent more deaths by telling us not to bother discussing nuking them. If that's true, they're being considerate."

"Yeah, I think you're right. They're intimidating us. They're sending a message."

"Congress people are usually so self-assured, but not now. Even though I fear the power of these beings, I like seeing Congress so humbled."

Rachel smiled.

"Maybe now the political parties will work together for a change."

They looked at each other for several seconds and smiled.

"Nah."

Hey Nisha, did you see what the stock market did?"

"No, what happened?"

"Right after the shootings, the market dropped 15% and trading halted. When the aliens did nothing but stand in back, trading reopened. The stock index is down only 5% now. The rebound happened in only a few minutes. I got a notification that a fifth large sphere has entered Earth's orbit."

Nisha shook her head.

"Things happen every day that I considered impossible only two weeks ago. Where will this end?"

"I don't know," Rachel said as she looked outside the tent at the expanding alien colony. "But I'm sure things will be surreal for some time."

"Speaking of surreal, what about this? We're watching Congress and now they're watching us watching them on their big screen."

Nisha turned her eyepiece towards Rachel, and she waved. Nisha paused for a minute.

"I'm getting a notification that the Speaker of the House wants to speak with us and view the colony. Let's go outside."

They walked over to the base of the closest tower.

Nisha said, "Hello Mr. Speaker. I would ask how you're doing today but I've been watching your stream. How can I make your day better?"

The House Speaker welcomed Nisha and Rachel to the virtual House of Representatives.

"After everything that just happened, and with the knowledge that two unplanned guests are standing in the back row, we've decided to learn about the colony for the time being. We hope through you, we can gain a better understanding of this new species."

"Thank you, Mr. Speaker. Rachel and I are honored to show you around. The first thing I want to say is we need to throw away all

preconceived notions regarding how to deal with those who are different from us. This is the dawn of a new era and we as a species can either adapt or perish."

Nisha and Rachel walked into the colony and onto the smooth surface.

"Dr. Chandra, we can't prevent them from standing in the back of this room. They're observing us as a pride of lions might observe a herd of wildebeest. What can we do to stop them?"

"You're asking the wrong question," Nisha said. "The right question is, what can we learn? What can we learn about them, about science and engineering, about the universe, and about ourselves? They're advanced because they've dedicated themselves to the pursuit of knowledge. Rachel and I, along with our colleagues here intend to learn as much as we can. That may seem like an impossible task since they only are interested in us as pets, but I won't give up."

"So, what should we here in Congress do?" the Speaker said.

"First, you should be working to restore confidence in the economy. The US stock market is down 60% in only two weeks. People are depressed and they don't want to work or buy anything. Make them realize our guests aren't trying to destroy us. We still must lead our lives. We might learn wonders beyond our imagination. Second, you need to encourage our best minds to work in science and engineering. No more science denial. The capabilities of our guests are astounding. It's because of science. They aren't performing magic tricks. They're using the same laws of physics we do. Let's follow their lead."

"They're taking over the planet," the Speaker said. "It's our planet. We were here first."

"Tell that to the Native Americans who still live on reservations," Nisha said. "Nature doesn't care who came first. Look at the aliens in the back of the room. Are they exterminating us or forcing us into slavery? No. Their attitude is, why bother? They can take this planet because they can. They're not playing games. They're here, so let's make this into a positive thing. We're getting a glimpse into our future if we're so fortunate. That might be us someday, exploring new

worlds."

"Something is happening," Rachel said.

Nisha looked across the barren patch of desert. Several small spheres emerged from the larger ones, rippling their surfaces like a pebble thrown into a still lake.

"I'm sorry Mr. Speaker; we need to go. I'll keep my video stream on so keep watching.

They disconnected.

"Rachel, what do you think they're doing?"

"I'm not sure but these are only about five meters across. They might hold three of four of the large adults I would guess.

"They're lining up near the first tower. I count 20 of them now," Nisha said as she counted the small spheres.

"I don't know what to think about this," Rachel said as they watched a few large adults climb into each one. "This is unusual behavior, though we must remember our guests arrived only two weeks ago."

"There they go." Nisha shouted over the pops of the sonic booms. "They're all headed northwest for some reason. I'm going to watch my stream to find out where they go."

The dry sun warmed the late summer afternoon in downtown San Francisco. Not a breath of fog drifted through the Golden Gate. The bridges were packed with traffic. The streets overflowed with people emerging from the BART stations and leaving town on the Hyperloop Tube from the Transbay Terminal for destinations in Silicon Valley and further south in Los Angeles. The sphere might scarcely find an open spot to set down in front of the new Reddit headquarters without crushing someone. The crowd parted and the sphere set down on the concrete near Market Street. A ring appeared underneath the sphere to keep it from rolling.

Nisha and Rachel read the posts from many different people working at Reddit.

“Three serious looking aliens entered Reddit HQ. A hand-held device opened our high security doors within seconds, no problem.”

“They walked into the developer area. They plugged into a network jack and are accessing our servers. I won’t try to stop them.”

Most employees were scared, but a few tried to show a sense of humor.

One posted a selfie with the aliens in the cafeteria with the caption, “Had some friends over to Reddit HQ for lunch. Deadbeats didn’t have money, so I had to pay.”

Another employee joked with a picture and a caption that read, “I set this guy up with a Reddit account. He has eyes like a Chameleon, so we named him ChamAlien.”

They visited Anthropic nearby.

“Aliens downloaded the latest training data set and everything on our servers. I think one used our men’s bathroom. He was in there a long time. Pfew.”

They took what they wanted and left quickly. They visited many other high-tech firms, scraping the global knowledge base before accelerating into the clear blue sky leaving behind only a sonic boom.

“What do you think they’re doing Rachel?” Nisha said.

“My guess is they’re seeing how our social and knowledge networks are constructed. They might be looking to gather information about our habits and how we self-organize. They’re studying us.”

“Rachel,” Nisha said. “Here are more posts. All from high tech companies in Silicon Valley.

“Aliens in Cisco, got into highest security area no problem, stole our latest internetworking equipment.”

"Genentech labs DNA data downloaded by some rude ChamAliens. No physical damage however."

"Aliens broke into RoeBot HQ and stole our latest prototypes."

"Chaos at Nvidia HQ. Aliens stole several of our latest chips and downloaded schematics from our servers."

"They're wandering around the Apple spaceship HQ gathering products and poking around."

"The ChamAliens easily gained access to Facebook data. Reset your passwords!"

"Can you believe this?" Rachel said with her eyes open.

"Yeah, believe it," Nisha said. "They're curious. Now they'll know more about us and our technological capabilities and deficiencies. One good thing is I doubt they'll try to steal our identities. We don't try to steal the identities of a seal on the beach to blend in with the other seals. We're not interested, and I doubt they are too. I don't like them being called *ChamAliens* though. Now the term is trending.

Nisha posted, "Name calling is the refuge of the weak minded."

Rachel looked preoccupied.

"What?" Nisha said.

"Four more large spheres entered orbit around the Earth. That makes 10 spheres total in orbit," Rachel looked towards the setting sun and the ever-expanding colony.

"This colony will hold 10 million of them unless they build more. Several more 2,000-meter-tall tower bases are being prepared. They are concentrating on this colony for some reason. They might use the metals and minerals located here. The climate here might be right for them. They like the lack of human development."

"I don't know either," Nisha said. "I'm getting anxious about the

large spheres arriving here. The voices are growing more numerous. However, for some reason the volume has been turned down. The sound reminds me of white background noise. I think they're blocking or adjusting the frequency of their transmissions. They might want us to know what they're saying. The shuttle spheres are arriving every few minutes, with 5-10,000 arriving on each one. I estimate 50,000 are joining this colony every hour, which adds up to over one million per day. I'm guessing three million are here already. Where does it end?"

"There's no way to know where this will go," Rachel said. "What's the population of their home planet? Who knows? I hope things stay peaceful."

They sat at the picnic table and talked for the rest of the day, watching the colony grow. The sun set into a cloudless blue sky, which grew dark.

"It's getting late," Nisha said. "I think we better get some sleep. Who knows what will happen tomorrow? They do more in the daytime, leaving the drones to do the work at night."

Nisha and Rachel talked with their families and fell asleep early.

Chapter 12 - Arcology

Nisha awoke from a dream in the dark at 5am.

“Rachel, are you awake? Rachel?”

“Um, yeah, I'm awake now. What's happening?”

“I had a dream where an alien child ordered Priya around. She cried and they were looking at her with those chameleon eyes. She felt alone. I helped her escape, and I woke up. What’s that noise?”

They walked outside to investigate and turned on the lights. They were astonished.

“The builder drones are getting closer,” Rachel said. “There are millions of them. We need to relocate again.”

“Yeah, we need to move,” Nisha said. “We can relocate further up the hill. I thought we might be high enough because they prefer flat ground to build their towers.”

“I alerted Mojave command about this, and they’ll be out soon to move us,” Rachel said. “I'm checking out the news now. While we were sleeping, five more large spheres entered orbit. That makes 15. Also, they built two new 2,000-meter towers overnight. Every time I think activity can’t get any more intense, I’m wrong again.”

“I thought one big sphere was enough. There's no end to their ingenuity. I'm more anxious every day. I wish I understood their objective.”

“Hmm,” Rachel said. “I'm getting word the aliens are posting minders in the House of Commons and similar bodies in Russia, China, and many other countries. They’re keeping track of us. I'm sure they’ve mastered every human language and are monitoring our most secure communications.

Nisha surveyed the ever-expanding colony as the sun rose behind her, casting a bright light on the huge, twisted towers against the dark cumulonimbus clouds forming behind them.

“It's the most glorious sight on this planet Rachel. It's a super busy airport. Two or three times per minute there's an arrival or a departure. I can’t figure out how they control the traffic. The spheres are silent other than the sonic booms and that low throbbing noise. Over there, dozens of small spheres are lined up. They come and go as easily as we use public transit. We need to track where they’re going.”

Rachel blinked to activate up her eyepiece.

“Let me find out if any recent sightings have been reported. Hmm.”

Silence.

Nisha watched her impatiently.

“What?”

“Hmm. Reports indicate a sphere landed in Yosemite. The aliens got out and walked around, inspecting everything including the people. Their sphere floated around in the valley traveling close to the canyon walls. Now I'm seeing reports of spheres appearing in the Himalaya and the Andes mountains. They’ve been spotted in the redwood and sequoia forests also. They like vertical environments or at least are fascinated with them. Why would this be?”

Nisha gazed at the towers.

“Well, judging from their stocky and muscular build, the gravity on their planet must be stronger than ours. It's likely the landscape of their home world isn’t as tall and vertical as Earth’s. They may be enjoying the scenery.”

Rachel smiled.

“They’re tourists?”

“Possibly. Why should they not be tourists? They might appreciate natural beauty as we do. Earth is new to them, so they may be fascinated by Earth's alien landscape. Plus, they’ve traveled a long way and they’ve been cooped up in those spheres for who knows how long. I assume they’ve been traveling for generations, unless they have faster than light travel, which I think is impossible. From their perspective and given unlimited energy they could travel at sub-light speed across the galaxy in 50 spacecraft years if they wanted.

Accelerating at 1g. Of course, more than 100,000 years would elapse from our standpoint. I don't think that even they have enough energy to do that. And a grain of dust would vaporize them at those speeds. I hope they're only tourists. Maybe they'll leave. I know I've always wanted to see alien life with my own eyes, but this is enough now."

"The relocation crew is here," Rachel said.

Within a few hours, their tent and the tents of the other researchers had been moved further up the hill about 1,000 meters in elevation. They had a more commanding view than before. The colony had grown all around them and the views had been cut off. Now they had a view of the entire colony though the tops of the tallest towers were still above them."

"Now there are 12 2,000-meter-tall towers." Nisha said. "They could hold 12 million inhabitants. At the rate this colony is expanding, humans will be a minority group in California in a week or two. The amazing thing is how efficiently and beautifully they use space. From certain angles, the sunlight cascades through the towers like light through a waterfall. This colony will reach a population density of well over five million per square mile. That's about 30 times the density of Hong Kong."

"Yeah, it's spectacular," Rachel said. "I still wonder what those round structures are. Energy generating stations? Spheres enter and leave there all day. I haven't tracked them, but they are traveling to and from the ocean. The structures might be nuclear fusion reactors. They must know how to get more energy from the chain reaction than they put in to start the chain reaction. I'd love to know how they produce and store power, since they don't seem to have the waste and recycling problems of our old fission reactors. They must be able to produce unlimited amounts of energy. That might explain their magnetic propulsion system which must be working against the Earth's magnetic field, which is weak. A lot of energy must be required to lift these enormous spheres. I don't know how they propel their ships in space since the magnetic field of Earth is local to the Earth."

"Rachel, check this out. People on Reddit report that spheres are being sighted in the last remaining Middle East battle zone. They

aren't interfering with the fighting except when they're fired upon. They could stop the war no problem, but they don't. I don't think they care."

"Let me play devil's advocate," Rachel said. "What do people do when they're on safari watching lions fight with hyenas? We don't stop them. We let things be. Sometimes we record the action for study later. They might be doing the same thing. They may follow a principle of non-interference and they want to study humans."

"If they—," Nisha said loudly.

Rachel made the x sign with her fingers. Nisha muted the audio of her eyepiece video broadcast.

"If they didn't want to interfere, they wouldn't have taken my Priya. They better realize that taking a human as a pet might be as dangerous as if we were to take a lion as a pet. They're interfering and they're setting things into motion which might destroy us and them as well. I'm not sure how they might be destroyed but we'll find out. Every species has its weakness and they're no exception. Okay, I'm un-muting now."

"Sorry Nisha," Rachel said. I didn't mean to—"

"It's okay. I'm upset. They don't seem to care at all. Wait, Quinn is contacting me."

Nisha blinked to see him in her eyepiece.

"Quinn, is something wrong?"

"Yes. I was correcting homework assignments for Sanjay when some alien visitors paid us a visit. They're outside right now in the front yard next to their sphere."

"Turn on your eyepiece video and show them to me," Nisha said as she relayed the live video feed to her worldwide community members. "They don't appear friendly, do they? At least they aren't red. How long ago did they get there?"

"Oh, they've been standing like that for a few minutes," Quinn said.

Nisha shook her head as she always did when she didn't understand something.

"This is unusual behavior for them. We've seen them go in their spheres to sight-see, to intimidate, to assess our technology, and to scout for mining sites. Now they're in front of our house. I guess they're sending me a message by letting me know, they know where I live because I'm outspoken about them. I'm sure they're listening to me right now and understanding every word I say. I'll not be intimidated."

Quinn watched them for a while.

"They're still standing there. I'm not sure if the scary part is their physical strength, their abilities, or the way they look. I'm staying inside."

"Yes, stay in place and go about your routine as if they aren't there," Nisha said. "They won't hurt you unless you do something to them first. If you must go to the store, walk right past them, and go to the store. I've stood within a couple of feet from them. I even grabbed the arm of one of them. They make me anxious, but they do nothing. Quinn, I gotta go. I love you. Some alien children are walking towards us."

"Okay Neesh, I miss you," Quinn said, trying to hide some tears. She hid them too.

Nisha was excited to be with the alien children. She turned off the audio portion of her eyepiece video feed.

"Rachel, here they come. We need to be upbeat to get people out of their depression. They think the world is ending so I want to present them with hope."

Nisha turned on the audio.

"Yes," Rachel said. "Let's find out if we can communicate with them since we played with them a bit last time. The computer is set up and the language agent is ready."

"What are they carrying?" Nisha said.

Nisha waved to them as they approached.

“I don’t know. They’re cylinders of some sort,” Rachel said.

The tallest one who took the tests and played chess returned. He brought some extra friends along. There were ten of them this time, five more than before. They seemed relaxed, in pastel shades of blue and green. They walked around Nisha and Rachel, inspecting them closely as though they were a work of art in a museum.”

“The tallest one appears to be the leader,” Rachel said. “We can work with him.”

They watched as the tall one put the cylinders on the table. They unrolled on their own.

“It's morphing into a paper-thin video screen,” Nisha said.

The little cylinder unrolled into the size of a keyboard, but with no keys. Nisha sat down with the device in front of her.

“I’m nervous,” Nisha said as the world watched her eyepiece video stream. “I hope they don’t test my IQ, which might be 100 points below theirs. I used to think I had a decent IQ until they came along.”

The flat device activated. The small one on the table became a Standard English 3D tactile keyboard. The two-meter-wide screen displayed a photo of Nisha.

“That's me.” Nisha said while the tallest one looked on. “This keyboard is a hologram, yet when I place my fingers inside, I can feel the keys, like haptics. I’ll type *Nisha*. Hmm, this might be a word association thing, so I’ll also type *me, woman, and female.* Oh, now I think it's prompting me to say the words. Okay, *Nisha, me, woman, female.*”

Rachel smiled.

“The alien children are wiggling their tails. That might mean they’re pleased or happy if they possess emotions like ours. The wagging motion is not like a dog; it consists of little wiggles. It's cute.”

“Yes, that is cute. Look, they're showing a photo of you Rachel. Okay, I’ll type and say *Rachel, her, woman, female, smart, beautiful*. I

wonder why they're doing this game. They already know everything about us. Can you think of a reason why your picture came up?"

Rachel smiled.

"Well, I think my beauty comes from my mother's side of the family."

Nisha glanced up at the sky and giggled. Rachel smiled again and laughed.

"Oh, you mean about the game?"

"You think you're so funny!" Nisha said.

"Yes. Okay, the children don't know what the adults know. They might need to learn things themselves. Maybe the knowledge of the adults doesn't coincide with what the children are curious about. Perhaps their parents told them to go outside and play. I think we should play along and find out where this goes."

"I agree. Now they're showing me a photo of the biggest one of them. Okay that's easy. I'll type and speak, *alien, you, cute, like.*"

Nisha flipped through hundreds of photos, typing, and speaking meanings and associations. Plants, objects, weather conditions, astronomical objects familiar to humans flashed on the display. Dogs and other pets were described in detail. The children understood the concept of a pet. The children were transfixed by the process.

After several hours of this, they showed her a photo of Quinn. Nisha turned to Rachel.

"They got that from his website. How do they know about him? Okay, I'll play along. What do I say about him? Okay. *Quinn, man, male, my husband, love*, *best friend*."

The pictures stopped being displayed. Nisha glanced over at the tallest one. He pulled out a device which fit perfectly in his hands with what looked like keys curved to conform to his fingers. He manipulated the keys. Nisha couldn't take her eyes off his fingers on the device.

Rachel turned towards the screen.

"Nisha."

The letters scrolled onto the screen.

“Nisha what is love?”

Nisha glanced at the tall one and at Rachel.

“I’d never guess that love would be the topic of the first sentence in a discussion with an extraterrestrial species.”

She gave Rachel a sly smile.

“I thought more like '*Take me to your leader*.' What should I say? How can I explain this concept?”

Rachel hesitated for a while.

“Answer the question directly.”

“Okay,” Nisha said. “Let's see. They’re a mathematical race.”

Nisha typed,

“2 = 1 + 1

3 = 2 + 1

love = passion + intimacy + romance + friendship + like

love = like *50

love = friendship * 20

love = passion * 10

family = love + time

commitment = love + time

Rachel laughed.

“Good one Nisha. Let’s confuse them. I’ve always been confused about love too, so now we’ve got something in common. If they can figure out what love is, they are indeed the superior species.”

Nisha smiled

“I was being logical. I had to get the point across as simply as possible. They appear confused, don’t they?”

“Yes, they do,” Rachel said.

They interacted with each other as they flashed their colors and wiggled their tails. They communicated silently. They acted excited. The tall one displayed a picture of an individual of their species.

Nisha watched the screen and pointed to the tall one and said, “This looks like you. Oh, let me enter that,”

She typed, “you, alien, like, friend.”

The children wiggled their tails again. The tall one displayed another image of Nisha and entered some unknown characters onto the screen which were translated into English which read, “you, Nisha, me, like.”

Rachel’s image appeared on the screen along with, “you, Rachel, me, like.”

Nisha and Rachel turned to each other and broke out in laughter. The alien children reacted to some inaudible queue, and they rolled up their computer monitor and keyboard, wiggled their tails and left.

“The way they leave is strange,” Rachel said as she watched them walk away into the bright desert sunset. “It's like the last time. They must be getting summoned telepathically by their parents or something.”

“Yes, that seems right. Though this telepathy thing doesn't seem right. Organic brains don't send decipherable signals. It must be electronic. They must have an internal communication system. I guess they don’t use a spoken language. They have a small vestigial mouth which they might use to eat as we do.”

“Hmm,” Rachel said. “I wonder what they eat,” Rachel said. They don’t seem to be farming anything or growing anything in the sunlight. They didn’t eat all day. Did you notice that? I can think of a million questions for them.”

“Me too,” Nisha said. “I hope we get to ask them questions. The

adults control them as we do our children. They must know what the children are doing here. I guess we aren't considered a threat. This might be the most exciting day of my entire life."

Nisha realized she was broadcasting to the world. She smiled.

"Um, except for the day I got married. Hi Quinn."

"Good catch." Rachel said.

They walked 50 meters up the dusty path to the mess hall to get something to eat. As they walked, Rachel tilted her head as she does when she gets a notification in her eyepiece.

"15 more large spheres entered Earth's orbit today. That makes 30."

Nisha glanced out over the ever-expanding alien colony.

"I guess eventually 30 million aliens will live here. The pace of construction is increasing. At least 10 new towers are going up. One big tower can house one million aliens, which is the same number each sphere can hold. As I watch them, they seem to fill up one tower at a time as the shuttles take them from the large spheres down to the colony."

Rachel said nothing for a moment.

"I'm debating on whether to say this since the world is watching. However, we're supposed to be transparent for the greater good, so I guess I'll make my opinion public."

"What do you think Rachel?"

"I think they're moving in."

"Moving in?"

"Yes, their entire species might be moving to Earth. This no longer seems like an interstellar sightseeing camping trip. They're here for good. Humanity is now in the position of the Native Americans as the Europeans colonized the Americas."

Nisha's ebullient demeanor from a few minutes ago faded instantly.

"This went from the most exciting day of my life to the most

depressing. We all know what happens to indigenous people when colonies are established. Only this is worse. The Europeans and the Native Americans were all humans with equal intelligence. The Europeans had better toys and greater numbers to impose their ways on others. They did it aggressively. In this case, the aliens are significantly more intelligent and possess vastly advanced technology compared to us."

"Yeah, this doesn't bode well for us," Rachel said, shaking her head. "On the bright side, up to now they haven't affected our way of life. They've killed us only in self-defense. They aren't using much of the planet's resources. They're staying in their colony."

Nisha looked down.

"That's what the Native Americans said. At first, relations were good. Later, things went downhill, and they continued to go downhill for hundreds of years. They're still not good."

Nisha managed to break a smile.

"On the upside, the aliens are far more advanced and self-aware than the 16th century European colonists. The aliens haven't spread their diseases to this planet. I'd love to know how they do that. Maybe this will work out and we can live side by side. We can't assume we're doomed. We learned a lot today so let's focus on learning and living life one day at a time."

She paused and breathed deeply.

"I'm better now. At least a little. Let's go eat."

As they ate, they read their favorite daily news sources. Nisha kept on the audio to her eyepiece video stream.

"Read the headlines," Rachel said. "'*Humankind will go the way of indigenous tribes*.' Here's another one, '*Humanity headed for extinction!*'"

"Hmm," Nisha said. "I tried to keep my commentary balanced, but people tend to filter things according to their preconceived beliefs and fears. Let me say this again for everyone listening. The aliens present us with a mixed bag of issues. I'm not directly comparing the human species with Native Americans, but this isn't the start of a new

utopia either. Reality lies somewhere in the middle as it always does. A million shades of gray. We need to live life one day at a time as though they aren't here. Okay, those are enough clichés for now. I'm going to turn the audio off so I can eat and talk with my family. I'll turn the audio back on again later. I'll keep the video on as much as possible."

Nisha contacted Quinn after they ate.

"Quinn, I miss you. How are you? How is Sanjay?"

"We're doing well now that the aliens left our front yard. I'm tutoring Sanjay and he's turning into a good baseball player. We've been watching you. You run the most interesting channel on the planet. The highest rated too, did you know that? You should sell commercials."

"That's a great idea." Nisha said. "Maybe we can do that someday."

"Neesh, did you learn anything about Priya and the other children?"

"I found out nothing, but I'm getting to know the alien kids. They might help me figure out what what's happening to our kids. Every night I cry and sometimes during the day I find myself crying spontaneously. Now I'm starting to—"

"Things will be okay. You'll find her and get her back. I'm optimistic. Your interactions with the alien children give me hope for the future. You possess the strength and courage to shape the future."

"Thanks Quinn. That makes me feel better. Sometimes I have neither strength nor courage. I gotta go and inspect the colony with Rachel, but if anything happens let me know. I love you."

"I love you too."

Nisha turned on the audio to compliment her video broadcast. She walked outside with Rachel to take in the colony as the sun set.

Rachel breathed deeply.

“I like how the towers trap the setting sun. They’re like vertical reflecting pools.”

“Yeah, and the effects get more dramatic each day as more towers go up. I wonder how big this colony will be.”

Rachel gazed out over the colony as the last filtered rays of light struggled to traverse between the towers.

“The colony is about to grow. Two more large spheres entered Earth’s orbit while we ate. That makes 32. Check out this graph I did. The number of spheres is growing exponentially. Greater numbers will be arriving every day. Remember when we freaked out because of the single enormous sphere in orbit. Now I’m nostalgic for that day. Things are changing so quickly that I can’t keep up.”

“Me too,” Nisha said “That’s why we should live our lives day by day, and hour by hour. Hey, I haven’t noticed this before. Passageways are being built between the towers. They curve so elegantly.”

“Yeah, they built the passageways overnight,” Rachel said as she magnified her eyepiece view. “They’re forming a web of connections between the towers. I wish they were transparent, but the silvery surface obscures our view. This looks new too. They’re creating outdoor spaces for walking. I didn’t notice this yesterday. They’re coming out to walk around. I haven’t seen this many outside all at once. It's becoming a real colony now.”

Nisha yawned.

“I’m getting sleepy Rachel. I can't believe I'm saying that while taking in this view. I’m heading back to the tent. Are you ready?”

“Sure, let’s go. The sun is down. It gives me chills to watch millions of those crawling crab-like builder drones in the dark.”

They walked along the dusty road to their tent, turning back every so often as if to confirm what seemed unreal. They said goodnight to their families and talked for a while in the tent. Outside they could hear the spheres coming and going as they counted sonic booms. The pace was quickening. They knew life on Earth would never be the same.

Chapter 13 – The Children

Nisha was no longer bothered by the low thumping vibrations of the shuttle spheres landing every few minutes. However, her ears were finely tuned to the sound of crunching desert granite sand under the oddly shaped bare feet of the alien children. The first light of day glowed in the sky. She opened her tent and watched the children examining a weather station uphill from her tent. At least 30 of them showed up on this morning, 10 more than yesterday.

“Rachel? Are you awake? Check this out,” Nisha whispered.

“Sure, hold on,” she said as she got out of her cot and walked over to the tent opening and looked out. “They’re curious. They want to understand everything they see. I wonder if this carries on into adulthood. How long do they remain children? How long are their lifespans? I have so many questions.”

They got dressed and walked cautiously over to the children. They were investigated from head to toe by the 10 new ones. Nisha and Rachel heard an odd electronic voice behind them.

“Hello Nisha and Rachel.”

They turned around but only alien children stood nearby.

Nisha smiled, sensing a prank.

“Okay, who’s that?”

She looked around and the alien children were glancing this way and that. The only sounds were the crunching of sand as they walked about.

Rachel watched each child. She walked over to the tallest one.

“Nisha look, the tallest one has colors which are vibrating more vividly than the others.”

“You’re right.” Nisha said as she gave the tall one a broad smile and walked over to him. She couldn't believe she was playing with an

extraterrestrial or that one had played a prank on her.

She spoke slowly and clearly.

“Did you say, *hello Nisha and Rachel*?”

At first, the tall one didn’t react with body language, but his colors gave him away.

“Colors are a part of their body language,” Nisha said. “I don't know if this alien is a male, but I imagine it to be male. If they have sexes.”

They circled around him, smiling. Finally, he held out a little device.

“Hello Nisha and Rachel,” the device said again.

Rachel glanced wide-eyed at Nisha.

“You’re broadcasting video and audio, right?

“Oh yes.” Nisha said. “This is the first time they've communicated with us.”

She studied the tall one and his little device.

“Hello,” she said as she looked into his chameleon eyes.

He focused his eyes on Nisha and Rachel simultaneously. He was able to concentrate on two things at once.

“Do you have a name?” Nisha said.

The tallest alien didn't reply for several long seconds.

“Yes,” it finally said through the device.

Nisha waited for a second and turned to Rachel.

“He answered my question in the strictest sense. Can you believe that?”

She turned back to the tallest one.

“What’s your name?” she said.

He paused again for several seconds.

“Bok.”

“Hello Bok.” they both said as they smiled.

Bok turned many shades of light blue with some light green mixed in. His nose wiggled up and down.

Nisha turned to Rachel.

“This is incredible. How did they manage to create this device and the software in just one day? I guess they have their AI agents along with their high IQs. Yesterday they learned words and how we write and speak the words. They had a crude translation device but today it's much more sophisticated. How is he speaking the words? Is the device pulling them from his mind? I don’t understand. His mouth isn't moving. And how—”

“Nisha,” Rachel said shaking her head back and forth in a humorous way. “You’re asking the wrong species. Ask Bok.”

Nisha shook her head back and forth as if she were shaking some sense into her head.

“Oh right, ask Bok.”

She smiled as she watched him.

“How does your device operate?” she said, thinking the question might be too complicated.

He unrolled the video monitor. Bok pointed to it with his top-most finger. On the screen, her question appeared as human text.

It read, “How does your device operate?”

A series of unintelligible symbols appeared on the screen which was their written language. Bok motioned for Nisha and Rachel to come closer. They were hesitant, but with the entire world watching, they had to play along to avoid embarrassment. Bok put his fingers into his feather-like fur at the base of his skull and exposed a slight scar. Bok pointed to the text and to his scar.”

Nisha and Rachel glanced at each other and back at the scar.

“Is a device implanted in your brain?” Nisha said slowly.

“Yes,” Bok said, answering literally again.

“How does it work?” Rachel said.

“Simple. I made this device to convert your spoken words into your written text. Your text is translated into text in my language. My text is uploaded into my implanted neural network device. After that, my brain interfaces with my device so I can understand without having to read the text. I think my reply. My neural interface converts my thought into written text in my language, which is translated into your language. Your written language is passed into the human speech algorithm in the device. I based human speech on your voices from yesterday. Finally, the words are spoken audibly for you.”

Nisha stared at Bok in disbelief with her mouth slightly open. She then shook her head at Rachel.

“I hope everyone listening in can see and hear this,” Nisha said.

Bok thought, and his translator said, “Yes I know this is a crude device, but this is the best I could do since yesterday.”

Nisha glanced over at Rachel. They tried to contain themselves, but they broke down in nervous laughter. Bok didn’t understand and his bright colors faded to gray.

“I’m sorry for the mediocre performance of my device. I’ll improve upon it soon.”

Nisha tried to get back to being serious.

“Bok, your device works well. We like it.”

Bok flashed brighter colors and his tail wiggled a little. The others crowded around Bok and their tails wiggled too.

Nisha peeked at Rachel, and she said under her breath, “Aren’t those tails the cutest things?”

Bok’s sensitive device allowed him to overhear the comment.

“What is the cutest thing?” he said.

Nisha felt surprised he understood her little comment.

“We like your tails,” she said.

“I’ll lose my tail in two Earth years,” Bok said. “It's shrinking now.”

“Why?” Rachel said.

Bok had technical trouble for several seconds, but he found a solution.

“Because when we become adults, our tails disappear. They are vestigial. We have no use for them. We had them as adults many millions of Earth years ago.”

Rachel turned to Nisha and said, “That’s why the adults have no tails.”

Nisha turned to Bok and stared at his tail.

“How old are you when you lose your tails?”

“We’re about 30 Earth years old. We’ll lose them soon.”

“How long is your lifespan? Rachel said.

“Omanji live to be 400-500 years old. In the wild, we lived to be about 60 years old but with genetic modification and implants, we live longer now. On the way here, a technology was developed which may allow us to live indefinitely.

“How do you generate and store your power?” Nisha said.

We generate power using nuclear fusion, solar in orbit, and other techniques. After that, we store the energy for our use in the form of anti-matter,” Bok said.

Nisha could barely contain herself with excitement.

She turned to Rachel and said, “I have many questions. I don’t know where to start.”

Rachel smiled.

“Start at the beginning Ms. expert astrobiologist.”

Nisha turned towards Bok.

“Okay, I heard a word I didn’t recognize. *Omanji*. What is that?”

“We call ourselves Omanji because our planet is named Oma. We learned about how you reference ethnic groups on Earth.”

Nisha felt a rush of excitement. The translator worked well. She asked the biggest questions of her life.

“Where is Oma?”

The Omanji children all turned gray at the same moment.

“We must go; we’re being called. Goodbye,” Bok said.

“Goodbye,” Nisha and Rachel said.

They walked away.

Nisha turned off the audio portion of her eyepiece video broadcast.

“I can't believe that timing. Just when I asked the most interesting question. Did you notice how their bright colors changed to dull ones when they were called away? They enjoy being with us more than with the adults.”

“Yes,” Rachel said. “You might be right. I’m frustrated too because you asked that question and they were called away.”

Rachel paused for a second.

“Hey Nisha, I got an update. 18 more spheres entered Earth’s orbit overnight and this morning. That makes 50.”

They both stood in silence for a long time as the children walked away.

“I think we’re beginning to realize the scope of this,” Nisha said. “If those 50 spheres in orbit contain one million passengers like the first few did, humans will be a 46% minority group in the state of California.”

“What if this is only the beginning?” Rachel said. “The pace is picking up.”

“Yeah, I don't want to think about it. For now, let’s focus on today,” Nisha said. “So many unknown variables exist, that there's no way to predict anything. I’m turning on my voice feed now.”

Rachel gazed across the expanding colony, glistening in the bright afternoon sun.

“There must be at least 40 completed towers now, and they're preparing for more to be built. A couple of weeks ago, only desert existed here. As a child, I wanted to be an architect. I used to spend

countless hours drawing buildings and cities with my agents. When I went to the beach, I used to build sand cities and defend them from the advancing tide. When I went camping, I used to build cities out of sticks and twigs. I used to imagine living in those cities of the future. I guess we're living in the future right now. Do you see that?"

"What?" Nisha said.

"They're preparing ground close to the public viewing area," Rachel said. "We need to move people back and away from the direction of the colony expansion."

She glanced over at Nisha.

"What are you smiling about?"

Nisha smiled and looked skyward as she turned the audio broadcast back on.

"Oh, I'm thinking I could use a few of these drones to help me remodel the kitchen."

Rachel smiled back.

"I think we could all use a few of these drones."

She focused on Nisha who seemed distracted.

"Nisha, what are you thinking?"

"I'm zooming in with my eyepiece. Human children are walking around in an enclosed area. They're staying within some invisible boundary. I want to go talk with them."

Rachel watched the children far off in the distance.

"Okay, let me get my things and we'll go. We'll go alone so as not to cause problems."

They drove down about 2,000 feet in elevation. After that, they hiked down the hill for the last 1,000 feet to the main part of the colony. The sun and heat on that late September day made the hike strenuous. No rain had fallen for months which was normal. Even the widely spaced creosote bushes and cacti appeared parched. They reached the colony after about 5 minutes of hiking. The huge towers provided welcome shade.

“Nisha,” Rachel said admiring the view from inside the colony. “The towers are so tall that no direct sunlight touches the ground, but it's bright down here because the towers are so reflective. The varying shapes make dappled light, like an impressionist painting. They've planned this effect. The patterns must change as the sun moves.”

“I like the design too,” Nisha said. “The buildings are so tall. If you stand here, you can watch the reflection patterns move on the ground as the sun moves.

She cautiously scanned the area.

“We’re being watched by those gray guys leaning against that tree-thing. It looks alive, but I don’t think it's from this planet. They’re checking us out. Let’s keep walking because I’m getting nervous.”

They continued walking towards the area where they last saw the children.

“I wonder if this is like their planet,” Nisha said. “We’re surrounded by towers. It's a self-contained arcology that needs little from the outside world.”

“You’re right,” Rachel said as she walked and gazed skyward. “It's one thing to view this from the outside and something different to experience it from the inside. The light patterns are creating swirling patterns on the ground, which is made of some type of composite granite-concrete material. It's smooth but not slippery. Those builder drones are spitting out more of this concrete stuff. They’re 3d printing a sidewalk and some beautiful forms. They’re blending art and the common space into something to be enjoyed by all.”

The ground shook.

“Whoa, what’s that?” Rachel said.

Nisha studied the towers; whose tops weren’t visible 6,000 feet above them.

“I’ve grown used to the ground vibrating from the shuttle spheres landing but this is something different. I think—”

The ground shook again more vigorously.

“Yes, that’s an earthquake for sure.” Nisha said.

“The towers are vibrating,” Rachel said.

The light flickered on the ground like dappled reflected light from a swimming pool. Rachel paused to experience the moment.

“The towers are settling down now. The vibrations are lessening. Hmm, that’s weird.”

“What?” Nisha said.

“That group of Omanji standing over there didn’t react to the earthquake,” Rachel said. “At all. They’re acting like this happens every day. Quakes might be common on their home planet.”

“That might be. The towers are flexible, and they didn’t seem compromised by the earthquake. If their planet is larger and has stronger gravity, the crust might be thinner and more prone to quakes. I’m wondering.”

“What?” Rachel said.

“Where is everyone?” Nisha said. “Millions of beings live in this colony but few of them are walking around down here. More than before but still few. Construction isn't fully completed so they might be getting things organized. I imagine this is like one big moving day for them.”

Nisha looked around and behind her.

“I’m glad few of them are here. They're following us at a distance. More of them would make me nervous.”

“More of them make you nervous?” Rachel said. “I’m nervous seeing one of them, especially the red ones.”

They continued walking. After about 20 minutes they reached an accessible area at the developing edge of the colony. At least 1,000 human children were walking around with no barriers in sight to prevent them from escaping.

“I’ve never seen so many children being so quiet in my life,” Nisha said. “I’m trying to see if Priya and Sophie are in the group, but nothing.”

They watched the children for a while under the roving eyes of a growing number of somber looking Omanji adults.

Silence.

“There's something wrong with them,” Nisha said. “They aren’t speaking. I’m glad at least they’re playing games.”

“They may be talking silently with each other,” Rachel said. “It's possible the Omanji implanted devices in their brains which are like the devices in Omanji children which allow them to communicate telepathically. Can you sense anything?”

Nisha stood for a while in silence.

“There is a buzz. I’ve been ignoring the background noise because I’ve become desensitized to all the sounds over the past two weeks. I've tuned them out. Let me listen for a minute.”

Nisha and Rachel stood silently for several minutes as they watched the human children. They were transfixed by their odd behavior which stood in stark contrast to the typical noisiness of a high school gathering. Nisha gradually seemed to snap out of her trance.

“I think I heard the voices of the human children. They sounded different than the Omanji voices I’ve been hearing for the past two weeks. I can't tell what they're saying. Everything is static. If I had an implant, I might be able to listen to them. We don't know if the human children have implants. However, they stand around interacting as though they're talking with each other.”

“Nisha.”

Nisha continued talking.

“Priya isn't out there, but 25,000 children were abducted and only about 5,000 are here right now.”

“Nisha,” Rachel whispered.

“What's wrong?”

“Turn around.”

A crowd of about 100 Omanji adults moved in behind them. They walked quickly and silently.

“I think we better go,” Nisha whispered.

“Good idea. Let's walk right past them as though we think nothing

of it. They're gray, so they don't seem to be emotionally charged. Okay, walk slowly and stay together. Keep talking and act natural. I'll start. So how is Quinn doing with Sanjay in home school?"

Nisha looked casually at Rachel as they walked past the somber Omanji.

"Oh, he's doing well. Quinn likes being at home and Sanjay isn't being bullied anymore. The bullying is a big problem at his school. The kids that heard voices were bullied too. Kids can be cruel."

"Yeah, so can adults," Rachel said. "Have you read some of the comments people are making about you on Reddit?"

"No. I have no time for vanity searches," Nisha said.

Rachel ignored the small crowd of imposing Omanji adults inspecting them.

"You don't want to know what they say." she said.

After a few minutes they walked past the gray-toned crowd. They returned up the hill and back to their car. Later, the sun dropped into a red sky behind the ever-growing Omanji colony.

After dark, they walked outside to view the sky.

"I think that's one of the Omanji spheres in orbit." Nisha said.

She pointed to the southeast as the shiny point of light moved slowly into the distance.

"Yes, that's no airplane for sure," Rachel said. "The sphere disappeared into the Earth's shadow."

They watched the sky for a while longer. Another shuttle sphere descended about 10 minutes later. They slept well overnight for a change.

Chapter 14 - Communication

Nisha woke up once again to the sounds of crunching sand under the six-toed feet, which were splayed into two sets of three toes. She turned on the audio for her video feed, which she left on during the night in case something happened while she was asleep. She still believed in transparency because the world needed to know reality. She also stayed transparent in the hopes that a form of crowd sourcing might lead to solutions regarding how to deal with the Omanji.

“Rachel,” she whispered. “Wake up, you’re snoring.”

“What? I don’t snore.”

“You do, listen.”

Nisha played the last 20 seconds for her.

“Oh, that’s awful. I hope you aren’t broadcasting.”

Nisha smiled.

“Just kidding. I had my agent write an algorithm that subtracts snoring. I named it *MuteRachel*, in your honor.”

“You’re so bad. I’ll get you.”

“Yeah right, I'm doing you a favor. Shh,” Nisha said. “They're here.”

“They’re early today,” Rachel said.

Rachel turned on her eyepiece to catch up on the latest news.

“Check this out, overnight 50 more large spheres entered orbit around the Earth. That makes 100 in orbit now. I hope they have good air traffic controllers up there. The spheres are doubling every day or two. I'm afraid to look outside the tent and find out what they’ve done overnight. Even a single crawling builder drone is hard to fathom, let alone billions.”

Nisha felt sleepy from the exhaustion of the past two weeks. She was slow to reply.

“I know what you mean Rachel. Every living being, structure, drone, sphere, or element of technology by itself is incredible. It's hard to wrap my head around all those things happening. All I want to do is experience everything. The adults scare me, but I can't wait to talk to the children. I find it funny they don't try to come in the tent any more after the first time. They politely wait outside. Maybe similar privacy customs exist in their culture. Let's go find out what’s happening.”

They opened the door to their tent. Things had changed.

“Whoa.” Nisha said. “Rachel, how many of these big towers were built last night?” Nisha said.

Rachel counted.

Nisha smiled and said, “17,3,43,31 …”

Rachel tried to keep a straight face but broke down as Nisha continued saying random numbers.

“Nisha, stop, I’m trying to count. Fine, I'll let the agent do it.”

They laughed.

Rachel gazed over the colony as the sun rose behind her, producing a thousand little suns reflecting off the sinuous towers.

“They built about 35 new towers as far as I can tell. 35 may seem like a lot, but if 50 spheres entered orbit last night and if each holds one million Omanji, they need 15 more to keep up the pace.”

She zoomed in with her eyepiece.

“There's a sea of about 100 billion builder drones working on the newest towers. That's twice as many as yesterday. They swarm like locusts from this distance.”

Nisha became silent for a minute or two. Rachel watched in an apparent trance.

“Are you okay?”

“Oh, I'm fine. I’m thinking about things. They’re like a wave that’s washing over us. Will we be here in a year or two, or a month or

two? How long will the doubling go? Where's Priya in the colony? The place is beautiful, but I hate it because she's being held captive in there. I can sense the voices of the human children. I heard the Omanji children also, walking behind the tent. Let's go visit them before I start to cry again."

"Me too," Rachel said. "People are depressed, and 50 new spheres in orbit aren't going to help anything."

The alien children viewed pictures of Earth's animals and humans in silence on Bok's large screen on a picnic table.

"Good morning, Bok." Nisha said in a cheerful voice.

"Good morning, Nisha and Rachel," Bok said in his electronic voice. "Please sit down at the table."

Nisha glanced over at Rachel in mock surprise.

"They've been working on human etiquette." Nisha said.

"Yes. How do they learn so much in such a short span of time?"

Nisha shrugged her shoulders.

They sat down. Bok held out his translator.

"I've made some improvements to my translation device. We'll test the new features today. We're looking at pictures of animal life forms on this planet. Even though Earth is smaller than Oma, more species of animals exist here than on Oma because there's more land area. We've been learning about Earth from the elder teachers."

While Rachel studied Bok closely, Nisha watched the pictures scroll across the screen.

"Why do I see pictures of humans mixed in with these animal pictures?"

"We've been studying the animals of Earth in our daily classes. Humans are one of our favorite Earth animals along with the aye-aye, saiga antelope, tapir, chameleon, and some other species. I ordered a chameleon and my friend Sol who isn't here ordered a human. Young humans are the most popular Earth pet. They're hard to get now because the elders stopped harvesting them in the wild. We don't know why. They're more popular right now than the Yoots from back on

Oma."

Rachel glanced over at Nisha, whose face was turning red. She made the x sign and Nisha muted the audio.

"Bok, we're hungry so we're going to eat. We'll return soon, so stay here," Rachel said.

She grabbed Nisha and they walked into the mess tent before she could say anything.

Nisha picked up the 'new banana' and shook her head.

"Ever since the Cavendish banana became extinct like the Gros Michel banana did in 1960, I haven't been able to get used to the taste of this new species."

"I don't like them either," Rachel said. "The kids like them better though. We're just old school now. Nisha, what are you thinking?"

"I want to kill him and kill all of them," Nisha whispered. "He has some nerve taking my Priya and the other children and thinking that it's okay. And calling us harvested animals."

"Calm down," Rachel said. "Remember, these are just Omanji children. They're regurgitating what they've been taught in their studies which Bok mentioned. Biologically, we really are just another animal species on Earth. An opportunity exists here to change their thinking. The adults are rigid but we're connecting with the children so let's find out if we can change their thinking about things. Okay? Breathe."

Nisha hadn't practiced her morning yoga since the Omanji arrived.

"Sorry Rachel. I'm out of sync with everything. If I don't do my yoga and meditation, I go crazy. Especially if things aren't going well. I need to resume my morning routine."

She closed her eyes for a minute.

"Okay, I'm ready to go back. You're right. If I begin to appear like I'm losing my sanity, wink at me, okay? Make the x sign if you want me to mute the audio portion of my broadcast."

"Okay," Rachel whispered.

Nisha finished her ‘new banana,’ ate a bowl of her favorite steel cut oatmeal and turned on the audio portion of her video broadcast. After that, they walked back to the children who were looking at more photos.

Nisha walked over to Bok and sat down.

“Sorry Bok, I needed to eat something. Now, where were we?”

Bok pulled out his translator from a fold of skin which looked like a marsupial's pouch.

“I said humans are the most popular Earth pet we’ve discovered.”

“Ah yes now I remember,” Nisha said, trying to maintain her calm state. “I want to know why you own humans as pets.”

“I find it difficult to explain with a human language,” Bok said. “They give us joy. Humans own pets. Do they bring you happiness?”

“Yes, pets bring us happiness and unconditional love,” Nisha said.

Bok watched the other children gathered around the table. The group had expanded to about 50 now.

“Humans and Omanji both love pets,” Bok said.

“Yes,” Nisha said as she took another deep breath. “However, we don't take other humans as pets. You’ve probably studied that humans used to enslave other humans. However, in the modern world, civilized humans don’t own humans as slaves or pets.”

Bok hesitated and turned gray.

“What rules do you have which allow you to take another animal as a pet? Humans are animals.”

Nisha stared at Rachel and bit her lip.

Rachel said, “If a species isn’t as intelligent as humans, is not near extinction, and they aren’t dangerous to human society as a whole or to the owner, our rules say we can own the species as a pet. Many other rules exist, but those are the main rules.”

Bok quickly replied this time.

“We’ve been studying humans. The Omanji operate under the

same rules as humans. We own pets which aren't as sentient and intelligent as we are."

Nisha glanced over at Rachel. Rachel winked and Nisha attempted to pull herself together. She gave her next statement some thought, glanced at Rachel, and decided to speak her mind.

"My daughter Priya is not a pet. She's different than a dog or a cat. She is self-aware, and she's probably living in fear. She wants to be happy, and she can discuss things intelligently."

"I haven't seen Priya, but I've seen the human children walking around. Before we domesticated them, we noticed only minor differences between humans and other animals. Let me examine your main point. We've tested many of your higher animal species for self-awareness. We agree that Priya and other humans are more self-aware individually than other animal species on Earth. Some of your aquatic mammals, apes, elephants, and birds show varying degrees of self-awareness. Humans show varying degrees of self-awareness also. A one-year-old human is less self-aware than an adult chimpanzee. Some humans are mentally impaired and aren't as self-aware as average humans. However, no human we've tested up to now is self-aware on a species level."

"No human is self-aware on a species level?" Nisha said. "I don't understand."

"That's my point," Bok said. "If you don't understand the concept of species-wide self-awareness, you aren't self-aware as a species. As a species, humans aren't self-aware just as a lower animal isn't self-aware as an individual. In other words, humans are often unaware of how other humans think and feel. We've observed in humans that misunderstandings are common, and they result in arguments and wars. Humans divide into special interest groups to establish a base level of communal self-awareness. Even within these sub-groups including couples, there's a lack of self-awareness as a group. Humans are a long way from being self-aware as a species in our estimation. The Omanji are fully self-aware as a species. Therefore, we own human pets in the same way as humans own other animals as pets."

Nisha and Rachel turned to each other and said nothing. Bok continued.

“Judging from your reactions, at this moment each of you doesn’t know what the other thinks, except you disagree with me. First, you’ll need to discuss thoughts verbally using your primitive air vibrations and this inaccurate language of yours. You have no direct connection to each other. You aren’t group aware. If two humans who like each other can’t be self-aware together as a group, then the entire species is at risk because self-awareness eludes the whole. Even within a single individual, humans are often not self-aware. How often have you not been sure why you’ve done something or felt a certain way? From what we can tell, humans often exhibit self-unawareness. Therefore, in our estimation humans aren’t fully self-aware on an individual level, or on a species level. Does any of this make sense to you? I may not be explaining this concept in a way you understand.”

“I understand your point Bok,” Nisha said. “You’re right when you say I’m not aware of what Rachel is thinking right now. So, we aren’t self-aware as a small group of two humans. Also, you're correct in saying sometimes I do things for reasons not known to me until later. You're right in saying humans aren’t self-aware on a species level. However, as an individual, I’m aware and engaged with you in this conversation right now even though I'm not sure what you’re thinking. No other animal on Earth can engage you in this way. So, I don't think you should own humans as pets.”

“Yes,” Bok said. “I understand your points and I'll research the issue further. Humans are partially self-aware. You’re somewhere in between an Earth chimpanzee and an Omanji.”

Bok glanced with one eye at his friends gathered around the picnic table and continued.

“Right now, I’m aware of all voluntarily disclosed thoughts of my friends standing here. Everyone volunteers most thoughts. As juveniles, we’re self-aware as a group. When we reach maturity, we’ll be allowed to merge into the Omanji collective awareness and participate in self-awareness on a species level.”

Rachel had to wink at Nisha several times to get her to calm down.

“I notice Rachel's eye motions and your reactions to them. This is an attempt at communal self-awareness. There might be hope for

humans to become fully self-aware."

"You're arrogant." Nisha said. "You may think humans aren't self-aware and you may be right on some of your points, but I think you Omanji aren't self-aware on an inter-species level. The Omanji abducted us as pets, and you aren't aware of how humans feel. Therefore, you aren't inter-species aware."

The group of young Omanji turned to each other silently for several seconds, flickering in an array of vibrant colors.

"In that case," Bok said. "Humans are also not self-aware on an inter-species level. We watch how you treat your animals. You own pets, consume them as food and enslave them into hard labor without understanding how they feel. Do you know how a horse feels to be ridden by a human? Do you know how a rat feels to be subjected to experimentation? You don't because you aren't self-aware on an inter-species level."

Bok examined Nisha and Rachel with both of his roving eyes.

"You two are angry but you don't change color. We should continue this discussion at a future time after you calm down."

Nisha closed her eyes for a few seconds.

"Don't worry Bok. Humans get angry and later they calm down. We can be angry and honest with our friends and remain friends. I want to be your friend Bok. I'm angry because you've taken my Priya and the other children. I want them back. They aren't pets and won't make good pets. You'll understand as time goes on. I wouldn't want a human as a pet. We make terrible pets because we're independent thinkers. We aren't docile or easily tamed by your so-called domestication process. What did you do to our children? I want to know the truth."

Rachel turned to Nisha and gave the x sign to mute the audio.

"It's okay," Nisha said. "Humanity deserves to know the truth no matter how bad."

She glanced at Bok as a mother might do to a child when the child has some explaining to do.

"Please continue Bok. What did you do to them?"

Bok turned vibrant and pleasant shades of blue and green. He was happy to tell them about the enhancements.

“We’ve given the young humans group sentience and group self-awareness. We’ve improved them.”

“And how exactly did you, improve them?” Rachel said.

They both stared at Bok with a steaming intensity.

“You’re angry, so I’ll explain what happened slowly and simply for you.”

Nisha and Rachel glanced at each other and shook their heads in disgust.

“When we first arrived in orbit around your Moon, we examined your planet and its life forms. We already knew things about Earth from a probe that visited long ago. We thought humans would make the best pets, so we arrived and sampled the DNA from thousands of them. We identified improvements which could be made to correct some deficiencies we noticed in the humans. It’s boring in space so we need some diversions.”

“So, let me get this straight,” Nisha said. “You’re telling me you needed to make improvements to humans before they would be suitable as pets?”

“Yes,” Bok said. “We liked the humans, but deficiencies needed to be corrected to make them more interesting companions for us.”

Nisha glanced at Rachel and clenched her fists.

“And what deficiencies are those?” she said. She put her hands on her hips.

“The elders determined that unmodified humans in the wild didn’t possess adequate intelligence, and group sentience, and group self-awareness to perform as high-functioning pets for us. So, we made two main improvements in addition to correcting genetic defects.”

Nisha tried to keep herself under control, but she couldn’t help letting her disgust show.

“Tell the world about these improvements Bok,” she said.

“First, we implanted a small device in their brain so they could communicate with the other human children and with us directly without having to speak. I have a similar device in my brain. The human children communicate more efficiently now. The device adapts to integrate seamlessly into the dendrites of neural cells which are pathways between the speech centers and the more sentient areas of the human brain. Now when she thinks and wants to speak, she has the option to transmit those thoughts directly to the wider group instead of to only a small group via air vibrations.”

“They can read each other’s minds?” Nisha said.

“Not exactly,” Bok said. “It's like how you communicate now. You can choose to speak or be silent. The human children have a choice to open their thoughts to the group or not, via the transmitter. If they’re open, then others can know their thoughts.”

“A couple of weeks ago, sounds, like thousands of electronic voices flowed through my mind,” Nisha said. “Were those your voices transmitted via this implant?”

“Yes. We realized our transmissions were being carried too far and you might detect them. We adjusted the transmission’s amplitude and frequency, so you can’t detect them as easily. Only 1% of the human population we tested perceived those vague static transmissions. We learned humans in that 1% are highly capable of adapting to the implants well enough to allow communication. That’s why we took a youthful subset of those humans. Their young brains are still forming, so they’ll better adapt to the implants. Also, they’re old enough to handle the genetic modifications. The procedure is like the procedure which will be performed on me when I come of age.”

Nisha appeared overwhelmed and couldn't talk, so Rachel stepped in.

“Tell us about the genetic modifications.”

“We thought humans would make better companions if they were more intelligent, so we enhanced their intelligence and their life span,” Bok said. “Some pets don’t need to be intelligent, but humans are more interesting when they’re more intelligent.”

“So how did you enhance their intelligence?” Nisha said,

checking to make sure this was being transmitted to the world.

“First,” Bok said. “We sampled the DNA of humans of average intelligence, emotional and logical capability, the ability to distinguish fact from fiction, and 107 other measures of intelligence. After that, we sampled some humans with higher levels of emotional, intellectual, and general intelligence. We analyzed the data and found the genetic differences which resulted in higher overall intelligence. We modified the DNA in the children to increase their intelligence past the point of the most intelligent humans we observed. The neurons need to grow and forms new connections, so the increase will take months to fully take effect. We’re observing significant intelligence enhancement already in only a couple of weeks. Then, we sampled long lived humans and determined the genetic reasons for why they live longer. The genetic reasons are the same as with my species. The DNA degrades over time during cell replication. Stem cells die. Our DNA is 70% like human DNA and 4% near identical. Our DNA is arranged in a double helix like yours, and it has the same four nucleobases. You call them guanine, adenine, thymine, and cytosine. However, the code is arranged differently because our evolutionary history is different.”

Nisha and Rachel glanced at each other in amazement.

“How can you affect intelligence and longevity in a fully formed human?” Rachel said. “We’ve figured out how to make basic genetic changes to some plant and animal species, but the procedure must be done to the first stem cell after fertilization, so the DNA change gets propagated to the entire organism as the cells divide.”

“Yes, that’s a problem,” Bok said. “We didn’t wish to incubate human embryos and wait for years to find out if the changes worked, so we modified the DNA in most cells for longevity and in every brain cell for intelligence.”

Nisha eyes opened wide.

“What?” she said. “You modified the DNA in most cells? About 40 trillion human cells live in the human body, with many times more bacterial cells. How did you modify all those human cells?”

“We use small organically synthetic drones which can enter a cell and make the required changes to the DNA. Each cell must be

modified one at a time. We inject about 10 billion drones into the blood stream, so each drone only has a few thousand cells to modify, and the job is done. Many hours are required to make the upgrade. Afterwards, the drones exit through the urinary tract. The humans reported some tingling while the drones were working so the drones emit a mild sedative to make the process easier for the humans. Every human we've taken as a pet is now modified."

Nisha slumped in her chair. She realized what this meant. She glanced over at Rachel.

"My Pree has been modified. She's dead as I know her."

She leaned over to Rachel and cried in her arms.

"What's wrong?" Bok said.

Nisha couldn't answer but Rachel could.

"In her mind, you've killed her daughter. She will never be the same."

Bok paused as he watched the other young Omanji gathered around the table. He turned gray.

"I thought she would be happy that we improved her offspring. Priya and the others will be happier now and live longer."

"You don't understand Bok," Rachel said. "Nisha and all human parents like their children the way they are. The entire human species is angry at you. Those children will never be the same. Even if you were to reverse the process, they would forever be changed."

Bok glanced at Rachel and said, "Yes, the DNA modification process can't be reversed just as water can't be made to flow backwards in the same way it flows forwards. When I come of age not long from now, I'll undergo a similar DNA modification process in my brain so I can merge with the Omanji collective awareness and become fully self-aware on a species level. That process is irreversible. Each Omanji citizen must make the decision alone and can elect to not undergo the procedure. Approximately 99.9% merge, and those who don't, live freely in a separate colony with others who don't wish to merge. On Earth, we have yet to form a colony for the other 0.1%."

Nisha managed to stop crying and glanced at Bok.

“I want to talk with Priya. Now. Where is she?”

Bok hesitated again and glanced at the rest of his friends with one eye. Then he focused back on Nisha.

“Most of the children are under the ownership of Omanji families, but they’re still undergoing domestication. I don't know where Priya is. I can't access that information. I won’t have access until I merge with the collective awareness.”

“Bok, can you search for her? I need to talk to her immediately. Humans need to know that the children are okay.”

“Yes, I’ll search for her. I know where the children are being domesticated. The locations are in the third tower next to the road over there. However, I can’t access information about individual human children. I’ll find out if I can learn more. We’re getting messages from our parents, so we must go. We can talk later.”

They abruptly left and ran across the desert to the colony. They looked like a herd or a swarm. Nisha muted her audio stream for a brief time.

“How did I do? She whispered to Rachel as she switched on a noise canceling device. “I don't want even the Omanji to hear, so speak softly.”

“I think you did well. You stood your ground and asked him tough questions. You challenged him and he didn’t seem to mind the debate.”

“He's arrogant and they all are,” Nisha said. “They say it's okay to own people because they have an edge in intelligence and technological toys.”

“He may be arrogant, but I think the adults are much more arrogant. He’s our best chance. I think you need to do your yoga and meditate twice per day starting right now. We’re the world's connection to the Omanji and we need you to be strong.”

“OK. I'm going to the tent to do it right now. I had my yoga mat brought to our tent today so I can get started. Um, I’ll start as soon as we eat dinner. I'm hungry after all this talk. Anxiety makes me eat.”

Nisha turned on her audio.

As they walked to the mess tent, Rachel got a notification and she turned to Nisha.

“Guess what? Another 50 large spheres are in Earth's orbit. That makes a total of 150.”

They were oblivious all day to the construction, but the colony was visibly larger than the day before. Dozens of new towers were in varying stages of completion.

Rachel breathed in to calm her nerves.

“I estimate more than 150 billion builder drones are working on the new towers. They’re like a giant swarm of insects. If you watch for a while, you can watch the towers grow right in front of your eyes.”

“You’re right,” Nisha said.

They walked into the mess tent to eat dinner.

“Looking at the colony used to be a fascinating novelty, with all of those artistically twisted shapes and forms,” Nisha said. “Quinn loves the designs. The complexity is mind numbing.”

As the sun sunk low to the horizon behind the expanding colony, the last light cascaded through the silvery towers creating a dim red glow between them.

“It’s beautiful, but where will it stop?” Rachel said as she gazed over the new and permanent looking arcology.

“There's no way to know,” Nisha said. “This is beyond an exploratory outpost. They are serious about living here. I have more questions to ask when we visit with them again. They seem like early risers. I wonder how their circadian rhythms are handling a 24-hour day. The length of their day might be of any length.”

Nisha yawned.

“I've been running on about three hours of sleep each day for most of the past two weeks. I'm going to sleep early.”

After saying good night to their families and giving the President and the DHS an update, they were soon fast asleep.

Chapter 15 - Reconnecting

The day began mild and sunny, like most days in the Mojave Desert in early October. Nisha got a head start by doing 20 minutes of yoga and meditation. As she finished, she got a notification from the DHS.

“Rachel,” Nisha whispered. “The DHS wants to speak with us right now.”

“Okay. I'm still sleep deprived, and it's only 5:30.”

“Yeah, but it’s 8:30 in DC.”

They were authenticated. On the screen were General Sherman, President Wilson, and many others they had never seen before.

“Good morning,” the President said. “First, I want to complement Dr. Chandra and Dr. Feynman for their excellent work on obtaining information about the aliens. You’ve gotten us to first base. Now it's time to get the runner around to home plate.”

Nisha and Rachel glanced at each other knowingly, sensing a change. They didn’t need to say a word. In that instant, they were self-aware at a group level of two people. They didn’t know what Bok would say to that.

The President continued her talk.

“Now we’re ready to bring in the objectives experts and their agents. Their job is to monitor the world stage and make recommendations to me about how to proceed strategically, not only tactically as we’ve done up to this point.”

Nisha muted her voice for a moment.

“Strategically, not tactically,” she whispered as she rolled her eyes at Rachel out of the watchful eye of the camera.

They glanced at each other waiting for the hammer to fall. She

stopped muting her voice.

“Nisha and Rachel,” the President said. “You're experts in the fields of astrobiology, astronomy, geology, and physics. We still need you. However, we also need expertise in the fields of military strategy, weapons, and negotiation. So, we’re sending out the best of the best to help. The ChamAliens have—”

Nisha interrupted politely, trying to maintain her sense of calm which she enjoyed a few minutes earlier after her meditation.

“Madam President, I'm sorry to interrupt, but they call themselves the Omanji.”

“Oh, right. They refuse to establish contact with us, so we have little choice but to—”

Nisha interrupted again with a little more force.

“Madam President, they call themselves the Omanji and we’ve been making satisfactory progress establishing a rapport with the children. Soon we’ll know—”

“I'm sorry,” the President said. “It’s been entertaining watching you play with the children, but now serious work needs to be done. Don't worry, we still need your knowledge and expertise, but we need to go to the next level.”

Nisha and Rachel were boiling inside. They held each other's hand tightly under the table off camera.

The President continued talking.

“Right now, the team of objectives experts is flying to Edwards Air Force Base which is a 30-minute drive from your location. By the afternoon, they’ll join you and will take the lead in establishing contact with the Oma-ni.”

Nisha couldn’t help herself.

“They call themselves the Omanji, Madam President. They call their home planet Oma.”

“Right,” the President said in a nonchalant way. “The objectives experts will take the lead in establishing contact with the Omanji. I'm sorry but I must go. Many things are happening right now.”

Everyone signed off. Nisha kept her audio stream off for the time being, but she turned on her video in case something happened.

Nisha snarled and posted text for the first time in two days. “Rachel and I will no longer be leading the effort to contact the Omanji. The objectives experts will be in charge from now on.”

She followed her post immediately with another.

“I’ll give you updates and be as open as possible. I'm still on the team. I'll still broadcast video and audio if possible.”

Nisha stared into her eyepiece, rereading the text of the last two posts repeatedly. She tried to sound upbeat, but she felt devastated. She turned to Rachel and teared up.

“I won't be able to find Priya now. They’ll screw it up and I'll never talk to her again. The Omanji could send us to extinction. I hoped this might turn out okay, but now I’ve never felt such despair.”

She broke down, slumping to the floor of their tent.

Rachel put her hand on Nisha's shoulder and helped her onto her cot.

“Lie down here for a while. You need rest. If you think the game is over, think again. We’re warriors! If we play our cards right, this can still work out. The Omanji are still in charge, despite the best made plans of Presidents and objectives experts. The children only talk with us.”

Nisha managed a weak smile and turned off her video feed.

“I hope you’re right. Okay, I'm going to stay here in the tent for a while. You go on and eat breakfast.”

“Okay, meet me in the mess tent when you’re ready. We’ll discuss what we can do next. Another 50 spheres entered Earth’s orbit last night. That makes 200. So, 200 million Omanji might be down here on Earth and in orbit. The Omanji are in command, and you have the best connection with them right now so don’t forget that.”

"Thanks Rachel, you're a real friend," Nisha said. "I won't let them push me around and I'm going to get those kids back. Go ahead and I'll eat with you in a few minutes. Also, I should add that you and I have the best connection with them, not only me."

Rachel left to walk to the mess tent. Nisha sat on her cot. A strange notification appeared in her eyepiece. It wasn't for a voice or video connection. The notification wasn't from any app she knew of.

The notification said, "Incoming message, *Accept* or *Ignore*."

She hesitated for a long while because the notification might be from some secret agency which hacked her eyepiece. It might also be from an AI worm or bot. She chose to ignore the notification. However, 10 seconds later it appeared again, this time the message blinked.

"Urgent message for Nisha from Bok: *accept* or *ignore*."

She hesitated again. She decided to take a chance. She accepted the message. Something was installing on her eyepiece. She thought, "*I knew it. I'm going to wipe the memory clean now.*"

She tried to reset the eyepiece, but it wouldn't respond while the installation progressed. She wanted to remove the battery but didn't have the proper tools.

The installation finished. The virtual screen in her eyepiece went blank for several seconds, long enough for Nisha to think her eyepiece stopped functioning. She was about to give up when another message appeared in a bubble in a window which looked like it came from one of those old-fashioned texting apps.

"Hello Nisha, this message is from Bok. Please reply if possible."

Nisha still imagined it must be a prank or some test of loyalty where her failure to perform up to expectations might get her fired or worse.

She decided to reply.

“This is Nisha, please wait a few minutes.”

Nisha raced out of her tent and up the hill. Within seconds she entered the mess tent. Rachel sat at a table by herself.

“Rachel, check this out,” Nisha said with her shaky voice. “What do you think? At first, I thought I had an AI bot, but now I'm not sure.”

Nisha shared Bok's message with Rachel's eyepiece. She read the message.

“It seems real, but if I were you, I would make sure this is real. Ask him to prove that it’s him.”

Nisha thought about how to reply.

“Hello Bok. I need to make sure this is you. Do something which no human could do, but only I would understand.”

She waited for the reply with Rachel hanging on every word. Finally, a message came back.

“Pay attention to level 241 of the fourth tower from the left side of my colony from your perspective. In two minutes, I’ll shine a blue laser at you so only you can notice it. Your eyes won't be harmed.”

She whispered the message to Rachel.

They walked outside of the mess tent so they could have an unobstructed view of the colony. Nisha located the fourth tower from the left and began counting. The silver reflective shell had slight curves on each level, allowing her to count. Level 241 was about halfway to the top, with each level being about 18-20 feet tall in her estimation. She stared at Bok's location. A blue laser star appeared and then disappeared. This happened again a few seconds later.

Soon thereafter, Nisha got another message from Bok.

“Nisha?”

“Yes, I’m glad you contacted me. I assume you learned I wouldn’t be officially contacting you in person for the time being. A team of humans called the objectives experts from the US government will be trying to contact the Omanji elders. I don’t place much faith in governmental organizations even if they mean well. I’m glad you wish to continue contact with Rachel and me.”

“I also don't place confidence in bureaucracy as you call it, especially among the Omanji Esteemed Elders, who are the elected leaders,” Bok messaged. “One must be at least 300 years old to become an Esteemed Elder. Our government has become stale on the way to Earth. In many ways, I don’t wish to merge with the collective awareness because I’ll become part of the bureaucracy. Many younger Omanji agree with me. Your objectives experts will fail because the Omanji elders think humans are only animals which are slightly more evolved than the other animals on this planet. They think humans make good pets and otherwise can be tolerated just as humans tolerate and live amongst other animals on the Earth.”

“They consider us to be only animals?” Nisha messaged.

“Yes, the elders don’t wish to kill off the humans and other Earth animals for the same reason humans don’t wish to kill other non-food animals on this planet. They consider humans to be part of the ecosystem of this planet. They would like to maintain that ecology. However, the elders consider this to be their planet now. They call Earth, *New Oma*. Nothing your experts can say or do can change that. Humans are irrelevant in their minds.”

Nisha's eyes opened wide and didn’t reply for a while.

“Nisha, are we connected?” Bok messaged.

“Yes, I'm okay. I'm in shock. I suppose I knew this all along. I noticed how they expressed no interest in us. We’re only one of many animal species here on this planet. Earth used to be our planet when we were at the evolutionary apex, but now the Omanji sit at the apex. The Earth is now theirs.”

Another message from Bok appeared.

“I’m watching you speak with Rachel. Tell her I said hi.”

Rachel read the automatically forwarded message in her eyepiece, smiled, and waved to the fourth tower on the left.

“He is the politest alien I know.” Rachel said.

A smiley face from Bok appeared in an old-school text-app style bubble.

“Thank you, Bok,” Nisha messaged. “Here comes a caravan of

military trucks. It's probably the objectives experts. I want us to stay in close contact. Don't let anyone, human or Omanji stop us from talking. Okay?"

"Agreed," messaged Bok. "Contact me whenever you want. Bye."

"Bye," Nisha messaged.

"Can you believe this Rachel? We're texting old-school with an alien being."

"Yeah, I believe anything these days. Sometimes I think this is only a dream, from which I will awake at any moment."

Nisha stopped smiling.

"This is real. I'm glad I didn't turn on my audio and video stream. If people realized the Omanji consider Earth to be theirs now, a complete financial collapse might happen. Society could collapse. It's on the verge. The stock market is already down 60%. I wanted to be transparent, but now I realize I shouldn't disclose everything."

"Yes, we need to be careful," Rachel said. "We're becoming one of 'them', but in this case, it's for the best. For now, I don't think we should tell anyone we're still in touch with Bok."

"I agree," Nisha said.

The convoy of trucks drew near, raising a cloud of dust behind them.

"Let's play along and let them make their attempts at communication with the Omanji."

Nisha tried to keep up a positive energy outlook, but she felt like the government would make things worse. She decided to make the best of the situation.

The convoy of about 20 large trucks from Edwards Air Force Base came to a halt right outside of Nisha's and Rachel's tent, raising a huge dust cloud which enveloped all of them in an orange haze. Nisha rushed over to close the tent flaps to keep the dust out. They walked

over to greet the caravan.

A large man in a military uniform stepped out of the first truck.

“Dr. Chandra and Dr. Feynman, it's good to meet you.”

It took Nisha a few seconds to realize that General Sherman was the person talking.

“Oh, General Sherman, I didn't know you would be in the objectives experts’ group.”

“Nisha, you can call me Lucas. I'm the chairman of the group. Didn't anyone tell you?”

“No, nobody told me anything other than the objectives experts would be taking over,” Nisha said. “So, I've been waiting to find out who they’ll be. Rachel and I will be assisting you. We can start now. What should we do first?”

Lucas paused for a minute as he directed his supplies to be put into the new tent he set up near Nisha's and Rachel's tent.

“The President and Congress ordered us to make contact with the alien leadership.”

“Lucas, they call themselves the Omanji.”

He nodded his head impatiently.

“Right, the Omanji. We intend on executing several strategies to make contact. They’re building this colony, which I can’t describe with words. Since they aren’t leaving anytime soon, it’s imperative we establish good relations with them. There's much we can learn from them. I know your daughter is in there. I sympathize with you since my daughter is about Priya’s age. She wasn’t abducted, so I can’t imagine what you’re going through. The President decided this situation is too emotionally intense for you to deal with in an objective way. That’s why she removed you as the lead investigator.”

Nisha glanced at Rachel and winked knowingly. At least there was some acknowledgment.

“Thanks. Let me know how I can be of assistance Lucas. I'm here when you need me. I’ll do the best job I can.”

“I'm glad you're taking this so well. I'll let you know how you can assist us. I'm going to get settled and we’ll have our first meeting tomorrow at 06:00 hours.”

The General and his entourage walked back to the convoy to direct the moving of the supplies into a line of tents which were constructed within the past few hours. Soldiers arranged an endless line of gadgets and ammunition on tables.

Rachel and Nisha walked back to their tents.

“Nisha, what are they doing with ammo?” Rachel said in a faint voice. “It’s useless and might get us killed.”

Nisha glanced at the trucks being unloaded.

“I don’t know what they’re doing. We need to keep away from the action. I don't want to be associated with any weapons. It’s suicide.”

Later, Nisha and Rachel watched another sunset filter through the reflective canyons of the ever-expanding colony. Nisha was in a trance as she gazed out over the vast expanse of it.

“Rachel, how many towers do you think they’ve built? I used to be able to count them, but they’re at least 6,000 feet tall and even our elevated view from the side of this mountain is now obstructed.”

Rachel reviewed the latest numbers from her eyepiece.

“Another 50 large spheres entered orbit today. That makes 250 in total. It's about a 1 to 1 ratio. My guess is they’ll need 250 towers to house everyone. Dozens of towers are in the process of being built, but I would say over 200 towers are finished based on this morning’s satellite view.”

“Let’s turn in early,” Nisha said. “I think we’ll need our wits about us in tomorrow’s meeting. We don’t want to say anything that would jeopardize our place here.

“Agreed,” Rachel said.

Chapter 16 – Government Oversight

The next morning at 6AM, the meeting began promptly in the big tent. General Sherman presided over his group of about 20 military specialists in a wide array of disciplines. Nisha and Rachel sat in front to give the impression of buying into the process.

General Sherman displayed a map of the rapidly growing colony on a large holographic screen.

“Today we’ll execute a reconnaissance mission. Our goal is to walk through the heart of the colony, and scope things out. We’ll go in unarmed to not appear threatening. The goal of this mission is to contact the—”

He glanced at Nisha, recalling how she didn’t want anyone to use the derogatory term 'ChamAlien.'

“The Omanji leadership. That will allow us to learn about their goals and establish a diplomatic connection with them. We’ll leave from this location at 07:00 hours. You’ve already been briefed on protocol issues, so be ready to go.”

After 30 minutes, the meeting ended. Nisha and Rachel returned to their tent. Rachel looked out at the tents of the objectives experts group.

“They’ll be in for a surprise. The Omanji didn’t like us walking through their colony. Remember?”

“Yes,” Nisha said as she put on her hiking boots. “My heart raced when we got close to the human children, so we got out of there. I’m not broadcasting audio or video of this mission.”

“Me neither,” Rachel said. “But we should record it in case we get into trouble.”

They met at the designated location and climbed into several large trucks. They drove down the mountain to get as close to the edge of the colony as possible. After that, they hiked into the colony with

General Sherman in the lead.

“Okay, we need to spread out but remain a group. Focus on your area of specialty and if I give the signal to evacuate, we'll exit the colony as quickly as possible by retracing our steps.”

Nisha and Rachel stayed at the back of the group in case they needed to make a hasty retreat. The colony seemed much larger than a few days earlier when they last walked through it. The towers were massive, yet sinuous. Each tower base covered an area of about 3x3 city blocks and the tops couldn’t be seen. Every tower soared to about twice the height of the tallest human made building and 100 times more massive. They had built over 200 towers covering about 20 square miles in the flat lands along the base of the mountains. Many billions of builder drones made white noise in the form of hissing and clicking sounds as they prepared new building sites and constructed new towers.

Nisha looked around and gave Rachel a curious glance.

“So, over 200 of these towers are built, each of which can house a million of them. Shuttle spheres come and go every minute. Where is the traffic? Where are they? How do they get around? Do they work like we do? They’re as mysterious now as they were in the single sphere orbiting the Moon. Now, here we are walking amongst them.”

Rachel glanced up to view the top of one of the towers.

“Yeah, a ton of questions and no answers. Considering this is by far the most highly populated city on Earth, few are walking out here. Like you said, there's no traffic. The buildings are connected, so they must travel in those connections. Maybe they don't move, and work remotely connected, if they work. Or drones do all the work.”

The group continued to walk towards the central core of the colony with General Sherman leading the way. Light filtered down to them from many angles, producing prismatic and colorful effects. The Omanji polished the non-slip walking surface. Crawling builder drones worked on final changes, acting like 3D printers to form a multitude of curved and hard-edged features.

The General stopped to admire a particularly tall and slender curve of the crushed and reformed granite-like stone.

“My proximity detectors indicate increasing numbers of Omanji are converging on us from all directions.”

He looked around and noticed small numbers of Omanji walking towards them. Nisha and Rachel walked up to the General.

Nisha glanced at a small group of them and said, “Lucas, this happened to us last time. They gradually surrounded us. They didn’t harm us, but we felt intimidated. So, we left. Don’t let the security of our numbers fool you into thinking you’re safer now than if you were alone. In this colony of 200 million, a million of us would feel isolated.”

The General nodded and continued to poke around.

“Thanks Nisha, I’ll keep that in mind. I'd like to find the human children and talk to their leaders. The leaders must be somewhere. There's a central intelligence capable of producing this incredible environment.”

Gradually, more Omanji moved closer.

“The human children are in that accessible area,” one member of the group said.

“Okay let’s go there,” the General said.

He walked a hundred meters at a brisk pace to view the children. He stopped to observe them from a close distance.

“They aren’t speaking,” the General said. “They seem to be interacting like normal kids of their age but they’re silent.”

“They’re communicating via a telepathic brain implant,” Nisha said. “Their DNA has been modified, but they are walking around and interacting like normal adolescents. I'm encouraged by that.”

She surveyed the group of hundreds of children, but Priya couldn’t be found.

Rachel felt a chill on the back of her neck, and she looked behind her. “General, we’re being surrounded,” she said. “We better keep moving.”

“It’s okay Rachel,” he said. “I want to meet them up close and personal. The President and some members of Congress are watching.

They can approach us at their own pace in this way."

"I don't think we need to worry about that. They do everything at their own pace," Nisha said.

Gradually, the Omanji walked towards them on the smooth surface. A crowd of them gathered around the General's group.

The General glanced around.

"I've never had this feeling before. They watch us like a tiger stalks prey. They sniff us up and down and scan us with those eyes."

Nisha walked over to the General.

"They understand what you're saying so be careful about comparing them to animals if you know what I mean. Their IQs are off the charts, so never underestimate them based on their looks or behavior."

"Acknowledged," the General said as he examined them. "I'm going to attempt to communicate."

He turned to one particularly intimidating Omanji and said, "Hello, I'm General Sherman."

The Omanji briefly looked back at him and continued to monitor the group of curious humans gathered before him, or her, or it.

The General looked at Nisha and Rachel and whispered, "They aren't friendly, are they?"

"It's best not to say things like that." Rachel said.

The General put his palm to his forehead.

"Right, I keep forgetting."

The General and his objectives experts group continued to attempt to communicate. They used every piece of communication equipment which existed, to no avail. The Omanji made no visible attempt to communicate back. They looked on and continued to move closer to the group. While the General attempted to communicate, Nisha and Rachel scrutinized the human children interacting in the accessible area.

"I don't see Priya or Sophie anywhere," Nisha said with sadness.

She paused for a second as she watched the kids.

“It’s tempting to go up to them and talk with them. I want to ask those questions.”

“Why don’t we talk with them?” Rachel said. “I have questions too.

“If only we two were involved, I'd do something. However, I don’t want to cause any problems right now. My attitude may change later though,” she said with a sly smile.

Rachel smiled back at Nisha and glanced at the objectives experts group.

“Yeah, they don’t seem to have any objectives, and they aren’t experts,” she whispered and smiled. “They are a group however, though not a mutually-sentient one.”

Nisha tried to contain her laughter but a little got out and the group looked over at them.

“Shhhh,” Rachel whispered.

The group walked over to find out what caused all the fuss. “Have you discovered something?” the General said.

Nisha had to think of something quickly.

“Well, I noticed how the children seem so normal besides the fact they don't speak.”

“Yes,” he said. “They do seem normal. I’m going to try to talk with them.”

They stood 30 meters away from the children. He walked towards them slowly so as not to startle the children or the Omanji. Almost immediately, several Omanji walked on an intercept course and soon were standing between the General and the children. Their skin turned from a flat gray to a dull red. The General stopped and looked back towards the group.

“They’re fast. I guess they don’t want us to communicate with the children.”

“You think so?” Nisha whispered.

“Shhhh,” Rachel reminded her.

The General peered between two of the Omanji and shouted to the children. “Hello, can you hear me?”

The Omanji closed ranks and turned a more vibrant and deeper shade of red.

“Okay, I get the hint,” he said.

Nisha noticed one of them held a smooth and silvery object in one of its hands.

“General, you better get back here right now. I’m serious!”

The General turned around and walked briskly back to the group. The Omanji grabbed at the group’s communication equipment.

“Yes, I think we better leave. Did anyone get a reply on any frequency to our messages to them?”

“We’ve detected no reply on any frequency,” one group member said.

“Okay, let’s go,” the General said as he walked around a growing group of curious Omanji which had gathered nearby. They made their way through the deep canyons of the colony.

“The towers are so tall, it’s like we’re indoors,” the General said casually as he tried to diffuse the rising tension in the group. Increasing numbers of Omanji appeared from the bases of several towers, in anticipation of the small group of humans walking by.

“The tower walls feel like they're closing in on us,” the General said.

The group shared his sentiments, except for Nisha and Rachel who felt energized by the environment as well as anxious. They had grown used to the Omanji.

As they neared the perimeter of the colony, Nisha read a message in her eyepiece.

“This is Bok. I see you.”

She forwarded the message to Rachel, who smiled and gave Nisha a knowing glance nobody else in the group understood.

“Let’s talk later,” Nisha messaged back.

“OK,” Bok said.

After a half hour of walking, they exited the colony.

“I’m glad to be out of there.” the General said. “I've never felt this level of anxiety anywhere at any time. This includes war zones surrounded by the enemy. My heart is pounding.”

Several other group members echoed the General’s sentiment.

“We’ll meet in the objectives experts tent tomorrow morning at 06:00 hours to discuss today’s events and what we can do tomorrow. I’ll meet privately with the President in a few hours to discuss options. You’re dismissed.”

Nisha and Rachel walked back to their tent.

“Rachel, I’m relieved nothing happened. That was a close call.”

“Yeah, did you notice how angry they got at the General? For a few seconds there, I thought they were about to do something painful to him or stun him.”

“I know.” Nisha said, smiling. “What was he thinking?”

“The General doesn’t realize the Omanji think of us as nothing more than another animal species native to Earth. Do you think we should tell him?” Rachel said.

Nisha stopped smiling and looked down in silence for a few seconds.

“I don’t think we should tell anyone anything. People are bad at keeping secrets. Word would get out and the economy would collapse because of psychological depression. Who knows what would happen?”

“You’re right,” Rachel said. “I keep thinking we should be transparent, but things have gone too far now. Telling anyone might set off a series of events which would lead to catastrophe. Anything we do or don’t do has consequences. I wonder if we’re doing the right thing, but there's no way to know in advance.”

Nisha seemed preoccupied.

“What is it?” Rachel said.

“I got a message from Bok wishing to talk with us. I’ll turn on message forwarding to you. Do you want to talk? We're free now.”

“Yeah, the sooner the better,” Rachel said.

Nisha entered her reply.

“We can talk now. Turn on your audio translator so we can talk more quickly. Messaging is slow.”

They waited for a minute.

“I understand you two wish to ask me questions.”

Nisha and Rachel glanced at each other, wide-eyed.

“How do you know Bok?” Nisha said.

“I listened to both of you talking while your group walked in the colony. Nisha, you said to Rachel you had many questions for me. Rachel replied that she also had questions.”

They glanced at each other again.

“They seem to be omniscient,” Rachel said.

“Yeah,” Nisha said. “I have a question.”

“Proceed.”

“How did you know we discussed having questions? I thought we were alone when we whispered those comments about having questions.”

Bok paused for a few seconds.

“Everything that happens at the colony is recorded. Every noise, action and most thoughts by anyone or anything can be accessed later. I set up an alert so I could follow all human activity within the compound. I listened to all your comments. Sensors are built into everything. They send data to the central locus.”

“You’re telling me all events everywhere are recorded?” Nisha said.

“Yes, within reasonable limits. Random noise and vibrations are filtered out. Whenever a sentient adult being acts, all Omanji know, if

they care to look. Not everyone cares, but the information is available if needed. In Omanji society, knowledge is the pinnacle of existence and the reason to exist."

"Don't you think your privacy is being invaded?" Nisha said.

Bok didn't speak for a several seconds.

"Sorry for the delay," Bok said. "I had to consider the word privacy. I've never thought much about the human concept of privacy. Everything is transparent in Omanji culture among the elders. The young Omanji enjoy some privacy because not everything we do is recorded. This conversation I'm having with you isn't being recorded because it's not considered important. That's because young Omanji are not important, and neither are humans. The elders don't consider what I do to be important unless I break a law. As far as I know, I've never broken a law. The only reason your actions were recorded is because you were a human in an open space in the colony and you might cause trouble. You might need to be stunned, or eliminated. Privacy isn't an issue for the elders because they share each other's thoughts, and most things are transparent. There's a degree of what you call privacy, however. We can choose to not share thoughts. Sharing is optional."

Nisha and Rachel glanced at each other and raised their eyebrows.

"Are you upset that everyone in Omanji society will be monitoring you after you merge with the collective awareness?" Rachel said.

"No. Why would that upset me?" Bok said, turning a pale gray.

He fell silent again.

"Young Omanji are used to some autonomy, and they lose it when they merge. I'll give more thought to your question. I don't know how to answer. Please ask another question."

Nisha muted the audio for a brief second. She gave Rachel a surreptitious smile and whispered, "I think we planted a seed."

She restored the audio.

"I detected an artificial silence in the audio stream. Were you attempting to become self-aware amongst yourselves?"

“Yes Bok. That’s what we strive for, even though humans are often not self-aware on any level. Okay, can you tell us about your home planet? Also, why did you come to Earth?”

This time he didn't hesitate to answer.

“We’re moving to Earth because our home planet of Oma is becoming uninhabitable. Oma orbits closely around a stable red dwarf star. Oma receives about the same amount of energy from its star as Earth does because Oma is closer to our star and our star isn’t as bright as yours. On Earth, we must wear lenses in our eyes to protect us from your sun's brightness at higher wavelengths. Oma is on the borderline where the difference in the star's gravitational pull between the close and far side of Oma will cause the planet's rotation to slow and eventually stop.”

Rachel interrupted.

“Oh, we call this tidal lock.”

“Yes,” Bok said. “You’re correct Rachel. I’m happy you know some basic astrophysics.”

Nisha and Rachel glanced at each other and rolled their eyes.

“We do Bok, please continue,” they both said at once.

“Oma's day period is currently 30 Earth days and slowing. The weather hit what you call a 'tipping point' and is getting more violent. With each passing century, the rotation will slow. Eventually one side of Oma will permanently face our star just as one side of your Moon faces the Earth. Unfortunately, both continents are mostly on the side of the planet which will be always facing away from our star. Eternal darkness will cause most of the ecosystem on land to collapse. We tried to keep the planet rotating but the task required too much energy. My star is part of a trinary star system. However, the other two stars are far away and give the planet little heat or light. They are each as bright as your Moon at night.”

“Before we continue, I need you to clarify something,” Nisha said. “Did you say you’re moving to Earth?”

“Yes.”

Bok’s answer reverberated in their minds, and they fell silent for

several seconds. Nisha and Rachel glanced at each other, unsure of what to say, or ask. If they asked the question they had in mind, they were afraid of the answer.

Bok couldn't tell what happened because he couldn't see their faces.

"Are we still connected?" he said.

"Sorry Bok," Rachel said. "We're digesting this latest information. Are you saying the entire population of your species is moving to Earth?"

"No," Bok said quickly.

They felt relieved.

"Some Omanji elected to stay behind and face the increasingly harsh conditions on Oma. A small patch of land in a favorable daylight location will support a small population after tidal lock."

"Bok, how many will stay behind?" Nisha said.

"About 100 million of us will remain on Oma."

Nisha seemed relieved that so many would stay behind. She hoped 100 million would be a good portion of them.

"What is the population of your species on Oma?"

She held her breath waiting for the answer.

"Approximately 81 billion of us used to live on Oma," Bok said. "I estimate that 80.9 billion of us are moving to Earth."

Silence.

Nisha and Rachel were glad Bok couldn't see them because they were in a state of shock. Rachel spoke first.

"Um, so you're telling us that almost 81 billion Omanji will be leaving Oma to move to Earth?"

"That statement is partially true."

"What do you mean Bok?" Nisha said.

"Those 80.9 billion of us already left Oma and are heading to Earth right now. Most are almost here."

Silence again.

“Nisha and Rachel, are we still connected?” Bok said again.

“We’re still here,” Nisha said, still not sure what to think about anything. “We’re listening. Are you making calculations, Rachel?”

“Yes. Bok, I’m calculating the final size of your colony. Right now, about 300 spheres are in orbit. Each hold about a million Omanji, right?”

“Yes, that’s close to being correct.”

“Approximately 250 towers are completed with about 100 more being built. Each of those towers also holds about a million Omanji, correct?”

“That’s also close,” Bok patiently said, letting the humans do their calculations.

Rachel continued asking her questions.

“If each tower holds one million and 80 billion Omanji are moving to Earth, 80,000 of these towers will be required to house all Omanji. There will be 80,000 spheres orbiting Earth. Now bear with me here. I want to get an idea of the scale of this endeavor. Each tower takes up a 3x3 city block area. The density is about 10 towers per square mile in the colony with some space in between them. Eventually the colony will cover a little over 8,000 square miles of land. That’s an 90x90 mile area at the current population density of this colony. Am I close Bok?”

“Yes,” Bok said. “The final population density will be higher than in this initial phase. Larger towers will be built. The towers here are smaller and more conservative while we monitor the stability of the building site. I estimate a 70x70 mile area will be the final surface area of our colony.”

Once again, Nisha and Rachel glanced at each other in disbelief.

Nisha paused again.

“How are they going to fit 80 billion Omanji into an area not much bigger than the size of the greater Los Angeles-San Diego area?”

“I can answer that,” Bok said. “On Oma we lived in dense

colonies. Here, we generate our own power, and the colony is a self-contained arcology, as you call it. I managed to access the master plan for the colony. The elders don't know I did this. Juveniles like me have limited access to everything on Oma, but they ignore us. According to the plans, the colony will be constructed entirely in this Mojave Desert. Few humans will be displaced. We'll get our water from the ocean and our ecological impact on Earth will scarcely be noticed by humans."

"Bok, how can you feed 80 billion Omanji without stripping the Earth of its resources?" Nisha said.

"We've noticed you grow your own food using native plants. Some of those plants feed animals you also consume. These inefficient practices were abandoned millennia ago on Oma as our population grew. The food humans eat here on Earth comes from solar energy that plants convert into sugars and other nutrients. The plants also contain other chemicals and minerals humans consume. We manufacture our own food from energy obtained from nuclear fusion and other energy sources I should not discuss with you until you discover them yourself. I notice humans are attempting to create energy from nuclear fission and your technique is not efficient. Soon, you'll figure out how to generate energy more efficiently with nuclear fusion. It's taking you a long time to learn how to do it. There's a trick to it you're overlooking, but I can't say more than that."

"Instead of using the sun as the energy source to create food, you use fusion and other technologies?" Nisha said.

Yes. Solar energy doesn't provide enough energy to supply 80 billion of us in a small area. Our bodies are like what we observe in the bodies of the Earth's animals. In our colony, we convert nuclear fusion energy and the atomic elements directly into sugar-like organic molecules. After that, we do some processing to create substances we enjoy eating. There's a major difference between human food production and Omanji food production. Humans consume the results of passively collected solar energy in plants, and the Omanji consume fusion energy that's actively created. Drones create our food on every level of the towers in the colony. We don't need sunlight to do it. Does this make sense?"

“I understand,” Nisha said. “Now I want to ask you another question. Where is Oma?”

“Can I control your eyepiece for a minute?” Bok said. “I’ll show you my home planet. I'm not sure if you’ll understand.”

Nisha felt nervous about the fact that Bok seemed to be able to control her eyepiece so easily, but she wanted to keep going.

“Rachel and I are both astronomers, so we’re familiar with basic concepts of the universe. We can grasp galactic distances and locations. We understand how stars are formed and we've directly confirmed approximately 345,000 planets in our galaxy, including 750 Earth-like planets residing in the habitable zones of their stars.”

Nisha opened her Google Universe app on her eyepiece and shared with Rachel.

“Okay Bok, control this app and show me where you came from. All human known potentially habitable planets are in there.”

Bok deftly manipulated Google Universe despite being unfamiliar with the software. The view approached a small red star only 23 light years away in the constellation of Scorpius. The galaxy is 100,000 light years across. The label identified the star as Gliese 667 C.

“This is my home star, which is part of a three-star system. The other two stars are too far away to affect my home planet. I approximate the pronunciation my star for you as Pfeex. As you can tell, it’s much smaller and less bright than your star. I see that your application has our star identified as Gliese 667 C, the third discovered star in our system. Good! Maybe there's hope for you humans.”

Nisha raised an eyebrow at Rachel.

They were transfixed as Bok traveled virtually within his solar system to the 4th planet in his star system and said, “This blue fuzzy object is my planet, Oma. You’ve identified Oma as Gliese 667 C, planet c. I assume the lowercase letter c designates it as the third planet you discovered in the system. I'm impressed. You already know about Oma.”

Rachel looked like a girl opening presents on her birthday.

“Yes, I know that one.” Nisha said. “Gliese 667 C c was one of the

first exoplanets we discovered which had a possibility of having an Earth-like environment. It's still never been officially confirmed as suitable for intelligent life, but I always thought so. We were right Rachel!"

Rachel smiled from ear to ear.

"I remember thinking its close distance might make Oma the first planet outside of our solar system we should explore once we master the technology. I guess we don't have to now."

"Two other planets are orbiting Gliese 667 C in the habitable zone. There are planets f and c. They orbit further away but they're still in the habitable zone. Why did you not move to one of those planets?"

Bok understood the excitement in their voices although he had only studied human emotional makeup for a few weeks.

"I'm happy you were aware of the possibilities of my star system. The other two planets are too cold and dry for us because the oceans were too small. They're mostly like your planet, Mars. Much of the Earth is too cold for us but we found areas like here in the Mojave Desert which are near an ocean with plenty of sunlight. My planet is near the warmest edge of the habitable zone, and we live on the coolest polar areas of Oma. Most of Oma is too hot for us."

"Why did you want to leave your planet now?" Rachel said.

"About 2,000 years ago, we sent a probe to Earth for the same reason you're considering sending one to Oma. However, we had a more urgent purpose because conditions on Oma were deteriorating while Earth will be fine for about 300 million more years before it gets hotter. Our probe 2,000 years ago had an advanced version of the ion propulsion drive I now observe humans developing. We decided Earth would be a hospitable planet since we didn't find an advanced and intelligent society here. We found a few other candidates, but Earth was the closest compatible planet."

"The Earth of 2,000 years ago didn't have a technological society, so I guess you thought Earth would be a good place to go. Is this correct?" Nisha said.

“Yes. We sent another probe 200 years ago and we still regarded life on Earth as primitive. When we recently arrived on this planet, we realized human society had advanced slightly more quickly than we anticipated. However, the elders still don’t perceive an advanced society on Earth where its inhabitants are self-aware on a species level. That’s why we decided to move our species here.”

“So, you moved here knowing how the Earth is now?” Nisha said.

“Almost.”

Nisha and Rachel glanced at each other in disgust and said nothing.

“I wish to ask a question Nisha,” Bok said.

His artificial voice sounded more natural to Nisha and Rachel. They didn't know if Bok had written software enhancements, or they were getting used to his voice.

“Can I upload some data to your Google Universe app regarding my solar system?” he said.

“Bok, you can add whatever you want,” Nisha said.

“Please wait,” Bok said. “I'm converting my data to your format. Your systems are slow.”

Nisha and Rachel let out a simultaneous gasp as the fuzzy blue blob they knew as Gliese 667 C c, sharpened into a small and well-defined blue and white dot.

“Can I zoom in now?” Nisha said.

“Yes,” Bok said. “You now have as much accessible geographic data about Oma as you do for your own Earth.”

“No way.” Rachel said.

“Way.” Bok said.

Nisha and Rachel glanced at each other with wide open eyes and smiled.

“Should we be more impressed with the fact he gave us this data on Oma, or with the fact he said '*way*'?” Nisha said.

They both giggled like children.

“Please, visit Oma. I’ll guide you,” Bok said. “I can watch through your eyes.”

Something about that last comment made Nisha anxious, but her excitement won out over caution. Nisha blinked to activate fly mode and the view first showed Oma to be a single pale blue dot illuminated by the dull and softly red star, Pfeex. She traveled towards the dot.

“This is better than any dream I've ever had,” she said.

The dot expanded, to four pixels, 16, and 256 and continued.

“I don’t have to travel 23 light years to be here.”

Rachel stood next to Nisha and grabbed her arm, as though they were approaching the planet for real.

“Keep going.” Bok said, urging her on.

“I will Bok. I’m nervous about what I’ll find.”

“The little pale blue and white dot assumed the classic round form of a planet so familiar to Nisha and Rachel.

“Oma looks a little like Earth,” Nisha said to Rachel.

“It looks similar, but where’s the land?”

Nisha continued to fly towards Oma and noticed the same thing.

“Yes, it’s difficult to find land because of so many clouds. Wait, there’s a land mass surrounded by the planetary ocean. Is there any other land?”

“Nisha, fly downward from your perspective,” Rachel said. “There's more land down there.”

Gradually, Oma filled up the entire viewing area. Nisha squinted.

“Bok, there's not much land on Oma. It’s a water world.”

“There's almost as much dry land on Oma than on Earth. Oma is a much larger planet. It has over three times the mass of Earth. Those two land masses are each as large as Eurasia on Earth. As a percentage the surface of the planet however, Earth is 70% ocean and Oma is over 80% ocean.”

Rachel seemed confused.

“The continents seem far apart. In relation to where your star is, each continent is near each pole. Is this right?”

“Yes, they’re near each pole though not centered directly over them.”

“Nisha, the weather patterns are much different than they are on Earth,” Rachel said. “The poles and the land masses are mostly clear like on Earth, but storms are stretched out circling the equator all the way to about 60 degrees latitude on each side of it. Are these storms violent? Are they because of the slowing of the rotation due to tidal lock?”

“Yes, the storms are violent compared to Earth. It’s because of the impending tidal lock. As the rotation slows, the days become longer and hotter and the nights are longer and colder. That’s mitigated by the fact that except for near the land, the planet is covered in deep oceans. The average ocean depth on Oma is 20 kilometers or 70,000 feet, compared to 4.3 kilometers or 14,000 feet on Earth. Storms race unobstructed across the surface of Oma’s Ocean. Storm winds can reach the equivalent of 500 kilometers per hour or about 300 miles per hour. Storm patterns on Oma are like hurricanes which can produce stronger local winds than what I mentioned. What you on Earth call the Coriolis Effect is weak on Oma because of the slow rotation of the planet. So, storms can spin in either direction anywhere on the planet. Often the storms have no spin.”

“The weather is too violent for you now?” Nisha said.

“Yes, the weather is growing increasingly violent. The energy requirements to modify the winds and rotation are becoming too high. That’s why we decided to move away from Oma and find a more hospitable planet. We estimate Earth will remain hospitable for about 300 million years. After that, the luminosity of the sun will noticeably increase. That will gradually make the Earth too hot for advanced life forms to exist. The Earth seemed like the perfect choice for us to live for a long time to come. If we survive 300 million years, we can block the sun at a Lagrangian point when it gets too hot. That will keep Earth cooler than it would be naturally.”

Nisha flew her virtual spacecraft within about 20 miles of the surface of Oma and dodged the storms she encountered.

“This is so realistic. I'm immersed in your world. The ocean in places has been whipped up into white foam from the winds. I'm wondering. Before the Omanji developed their advanced technology, how did they cross this enormous and violent ocean? The winds are mostly east to west, not north to south.”

“We had difficulty navigating wind driven vessels in the open ocean. Few vessels reached the equatorial islands where we discovered the Yoots. Only after we developed air flight, were we able to cross the ocean all the way to the southern continent where the Yoots had independently evolved.”

“Okay hold on for a second,” Nisha interrupted. “Are you telling me another intelligent species evolved on Oma? You mentioned the Yoots before.”

“They’re semi-intelligent and friendly, so we took them as pets when we found them on the equatorial islands during our age of discovery. I’ve studied human history. Earth is a better place for technologically challenged early explorers than Oma. The wind and ocean currents allowed them to travel all around Earth in wind driven vessels. On Earth, you have predictable trade winds and currents which allow vessels to travel in all directions between continents. On Oma, no reliable north-south ocean currents or winds exist. Most winds are east-west and can destroy any wind driven vessel. We couldn't sail from the northern continent into an ocean that’s three times the surface area of all the Earth’s oceans combined and expect to arrive at any destination. When we discovered the Yoots, we only suspected another continent existed. The equatorial islands were too small for the Yoots to have evolved there. I’ll explain that later.”

Nisha and Rachel loved learning this information. They heard the crunching sound of boots on the coarse granite desert sand.

“We must go Bok. People are coming,” Nisha said. “Can we continue this tour tomorrow?”

“Yes, that’s fine,” Bok said. “I must go too. My parents are summoning me.”

They signed off.

“Rachel, here they come. We’ll talk about this later. I recorded the whole thing,” Nisha whispered.

“General Sherman, come on in,” Nisha said, still in shock over what she had learned.

“Rachel, please call me Lucas. I’m here to let you two know the meeting scheduled for 06:00 hours tomorrow is still on. In the meantime, I need your help. Our expedition into the colony today was unsuccessful. While it's interesting to visit the colony and interact with the aliens, I mean the Omanji, we learned little. At tomorrow’s meeting, I would like your recommendations about how to proceed from here.”

“Okay Lucas, we’ll do some brainstorming tonight and we’ll be at the meeting at 06:00 in the tent.”

“Thank you,” the General said.

He smiled and left quickly.

Nisha and Rachel let out a deep breath of air, as though they had been holding their breath for the time the General had been in their tent. For about a minute they stood in silence.

“I don’t know what to say or think right now,” Rachel said.

“I don’t either,” Nisha said as she continued to watch the colony filtering the light of a blazing sunset as they walked to the mess tent. “I like to think of myself as a forward looking and open-minded person, but the future scares me. I want things to be as they once were, but this is reality and it’s exciting. I can’t believe what we just saw. I always wanted to visit an alien world. I guess the cliché is right, ‘be careful what you ask for.’”

“What do we advise the General to do in tomorrow’s meeting?” Rachel asked as she loaded her mess tray with all the vegetarian items she could find. They took their food out to a picnic table with a view of the colony.

“I don’t know. On one hand, the world should understand reality.

On the other, I don't want the General to know what we know. I think the government would screw things up, just when we're making such substantial progress in establishing what may be a real personal relationship with Bok. From the looks of it, Bok may be our only hope. Soon, about 81 billion hyper-smart and arrogant Omanji will live here. They think the Earth is theirs for the taking. Not only will humans be a small minority group, we'll be a marginalized one as well. And that's if we're lucky and they don't become abusive towards us."

"Speaking of being a minority group, I'm getting a notification that over 100 new large spheres entered Earth's orbit in the past day," Rachel said. "Over 400 of them are in orbit now. Once they move into this colony, humans will be a minority group in the United States. That's only half a percent of their population."

"Yeah, that's right," Nisha said. "The colony has expanded east along the mountains right across highway 14 and into the open desert. They built a highway over-crossing. Now the highway is in a tunnel. So far, they're avoiding towns, but people will need to move out of the way. It's strange how they're so considerate yet they treat us like animals."

"Well, we humans are considerate when we preserve bear habitat, but if a bear wanders into a neighborhood and becomes dangerous, we may shoot it," Nisha said. "It makes no difference whether we built the neighborhood on the bear's territory or not. Humans are considerate and inconsiderate at the same time."

"Yeah, it's easier to spot inconsistent logic in others than in us," Rachel said. "So, what will we advise the General to do tomorrow?"

"Well," Nisha said. "We can't tell him what we know and how we know it. However, we can make conjectures which later turn out to be true, if you know what I mean."

"Yeah, you're right. We can speculate that the Omanji may be here to stay and point to the ever-expanding colony as evidence to support the theory. In hindsight, it's obvious that vast numbers of them are moving here. And not for a two-week vacation. There's something about knowing an absolute fact that changes things. You know?"

"Absolutely," Rachel said.

She peered out at the darkening skies behind the colony. The colony itself had a faint glow at night. Although its skyline was already many times larger than the top 10 biggest city skylines in the world put together, the glow wasn't as bright as they expected. However, the colony appeared beautiful to the eye.

“We need to figure out a way to tell the General that the Omanji know everything we do and say in the colony,” Nisha said. “We also need to tell him the Omanji are monitoring all electronic conversations. Nothing is secure. Their databases must be immense. They must grow at the rate of petabytes per hour or more.”

Rachel gazed at the colony.

“I think we should let the General figure things out independently. We can't let him know they regard us as only another animal on Earth.”

“Yes,” Nisha said. “We need to limit our input to speculation.”

They walked into the tent and fell asleep quickly, knowing the meeting would be early.

Chapter 17 – The Home World

The next morning, Rachel woke up early to review the latest news. Nisha woke up a few minutes later.

“Another 100 spheres arrived overnight. That makes 500,” Rachel said. She rushed out of the tent. “Nisha come out here. They don't mess around.”

The colony expanded into the open desert at such a rapid pace that 100 huge towers had been built overnight.

“If they build 100 towers per day, they will house 100 million Omanji. To house 80 billion of them, they’ll need to move here at the rate of 100 million per day for over two years. The shuttle spheres are coming down and unloading about 10,000 at a time. That’s 10,000 trips per day to bring down 100 million. That’s about one trip every eight seconds for three years.”

“That’s mind-boggling,” Nisha said. “How can they plan it out? Imagine an airport having a flight land every eight seconds and unload 10,000 passengers each? They’re so industrious compared to us that sometimes I think they deserve to take over the Earth.”

“Don't talk like that,” Rachel said with her mother's voice. “We can never give up our Earth. This planet is ours.”

“Oh, don't worry,” Nisha whispered as she placed her eyepiece out of audio range in case Bok listened in. “I'm not going down without a fight. I know we can't force them out. We’ll figure out a way to get them to leave. I’ll probe every opening.”

They gathered in the meeting tent for the 6AM meeting with General Sherman. He looked ready to go.

“Okay I'm going to dispense with the formalities and get to the point. The colony is growing and they’re going to take over this planet. I'm not going to sugar coat it. I'm not sure how many of them are here, but more are coming. So, first I would like to go around the room and get your input on how to deal with this problem starting with the

colonel to my right and we'll work around the room in that direction."

Nisha and Rachel felt relieved because they would be the last to speak. A colonel got up and discussed his ideas.

"Standard military options are off the table. We spent much of the night assessing their capabilities. No matter what we simulated throwing at them, they would react as though pricked by a mosquito. We might only be able to make them scratch, if tried our hardest. The only thing I can think of would be to disguise nuclear weapons in shielded briefcases and smuggle them inside of or near each tower and set them all off simultaneously. We would be the insurgents in this scenario. We might be able to put to effective use what we've learned from decades of terrorism. The biggest problem is even if we were to succeed, which is unlikely, 500 huge spheres are in orbit. I think one of them could put a quick end to our civilization."

General Sherman nodded in agreement and gave the floor to the Army's lead biologist.

"Since military options are off the table for now, we've been examining their microorganisms. They have a built-in immunity to every infectious bug on Earth. However, my AI agents are testing everything, looking for a crack in the armor. Some of our prions are having limited successes against a few of their bacteria species. Prions can be easily modified, so we might be able to develop something which can infect them and not us. They may find cures more quickly than we can develop new prions, but we'll be working to make an infectious agent a reality."

Eventually, it was Rachel's turn to speak.

"I've been working out their capabilities and making projections. They're arriving in increasing numbers every day. About 100 million of them will arrive in the next day, and there's no end in sight. Billions of them may live here eventually. On the bright side, this is their only significant colony on Earth. They prefer the Mojave Desert. They might decide to stay here and not bother us elsewhere. I won't make big predictions, but I'm following things closely.

"Dr. Chandra, what do you think?" the General said.

Nisha stood up, still unsure about what she would say.

“General, I believe their capabilities are so ubiquitous they're monitoring our conversation right now. They don't take us seriously, so that’s our only advantage. However, they took us seriously enough to kill our President when she ordered the missile strike. Don't underestimate them. Since they're arriving in greater numbers every day, we should plan to get people in nearby communities out of the way of their colony development. Up to this point, they work around us, but at some point, problems will happen. I suggest we evacuate the towns of Mojave, California City, and all the unincorporated areas nearby. At this point we need to play a defensive game until we can come up with an offense. Personally, I want them to leave, and I’ll do everything in my power to get them to go, or at least give us back our kids. That's all for now.”

Nisha worried about whether the General would press her for more opinions, but he didn’t.

“I agree,” he said. “We need to evacuate residents as quickly as possible. Shelter must be found. We’ll requisition funds for temporary housing. Let’s focus on this. We’ll continue to study them today and no actions will be taken against them for now unless defensive in nature. The next scheduled meeting will be at 6AM tomorrow.”

Nisha and Rachel left the tent by themselves to eat breakfast. Nisha felt relieved as they walked out to their customary picnic table with the view of the colony.

“Rachel, I think I worried about nothing. The General doesn't appear as though he will do anything drastic.”

“I hope you’re right,” Rachel said. “He’s part of a giant bureaucracy and momentum can shift, leading to bad outcomes. We must be careful to fly under the radar.”

Nisha looked out over the vast colony reflecting the morning sun like a frozen icy waterfall.

“Rachel, there’s some movement between us and the colony.”

Rachel magnified her eyepiece view.

“Several Omanji are running towards us. They run quickly although they’re going uphill. Their legs are so flexible.”

They finished their breakfast and walked to the edge of the encampment and watched as the Omanji continued running towards them.

Rachel's mouth opened wide.

“See those guns pointed towards the runners? Those are the biggest handheld rifles I've ever seen.”

“A lot of good those will do,” Nisha said. “Why bother with guns?”

“I guess old habits are difficult to break,” Rachel said. “Here they come. They’re going to walk into General Sherman's tent. Let's go.”

The General met with a few of his top people when the gray colored Omanji entered the tent with Nisha, Rachel and several army guards carrying the big rifles close behind.

“At least the Omanji appear to be in a neutral mood today,” Rachel whispered.

“Yeah, I'm glad they're not red,” Nisha said.

She recorded audio and video but didn't broadcast the content to her 350 million Reddit community members in case there was violence.

The largest and most intimidating Omanji in the group pulled out his silvery disc from a fold of skin. All Omanji appeared to carry one. Something white emerged and appeared as a thin piece of paper.

Nisha and Rachel stood at the tent opening while the General stood up at his seat at the head of the meeting table. The Omanji walked around to the General and looked him up and down, concentrating on the General's eyes. It gave him a good sniff. The General tried to maintain his composure as best he could. The Omanji gave the General the piece of paper. On the page were printed letters against the white background of the paper. It looked like a typical printed page of text. Nisha and Rachel turned to each other with raised eyebrows but said nothing.

The General took the paper from the muscular-looking six-fingered gray hand and read it carefully.

He smiled weakly and read it.

"Well, the good news is it's written in grammatically perfect English. I'm trying to figure out an effective way to explain this, but I think I'll simply read it."

"*Good morning General Sherman. We are addressing this message specifically to the humans in this meeting area, and to the entire human species. Before we built our colony here on New Oma, we studied all plants and animals. We took great care to not disrupt ecological systems. We are closely monitoring human activity because the human species is slightly more dangerous than other animal species found here. Yesterday, we monitored your meeting held here in this temporary structure and we will continue to monitor all human communications.*

We know you are devising violent plans to force us to leave Earth. We are warning you for your own protection, your plans will fail. We are by far the most highly evolved species on this planet, and in this local galactic region. You must accept your reduced position in the new hierarchy just as other animal species on this planet had to adjust to the presence of humans. Humans, more than any other animal species on Earth should be able to understand the concept of hierarchy.

We do not wish to kill humans or any other animals on Earth. However, we will defend ourselves. There is one other warning you should heed. We consider the use of prions or other harmful biological life to be an act of war. Humans, who plan, encourage, or participate violent or destructive acts against us, will be terminated.

We have therefore deactivated all nuclear weapons on New Oma. It is for the good of all. Every country is required to immediately deliver all nuclear weapons and material to this location within seven days. Termination awaits those who do not comply. Anyone (or their accomplices) who is discovered in the possession of a nuclear device will be terminated. All nuclear devices on New Oma not in Omanji possession in seven days will detonate or be forcibly confiscated on the eighth day. There will be no exceptions. The construction of new nuclear or biological weapons is hereby prohibited.

END."

The Omanji adults walked around the table and surrounded General Sherman.

The General looked uncomfortable as they all ran their eyes over him. He looked back at them and back towards the Omanji who gave him the paper.

"I understand. Now I'm wondering if I might ask—"

The Omanji turned around and walked briskly out of the tent.

General Sherman, the eternal optimist, turned to the people in the tent and said, "Well, that wasn't the friendliest interaction, but it didn't go bad considering it's the first direct contact we've had with an extraterrestrial species."

Nisha had been biting her tongue, trying not to be sarcastic or humorous. She made first contact. However, she couldn't contain herself any longer.

"General, go outside, they're no longer an extraterrestrial species. They're a species here on Earth now. Rachel and I have been speaking to them for a while now."

Some of his staff squirmed in their seats uncomfortably.

The General smiled and said, "True, they're here and you did speak with their cute children. Okay we'll meet again tomorrow morning at 6AM to discuss further plans. For now, we need to get people out of the path of the colony development. I'll update the President on what happened here and discuss the worldwide deactivation and delivery of the nuclear weapons."

The meeting adjourned. Nisha and Rachel walked back to their tent. Nisha stopped recording.

Rachel whispered, "Well, I guess we know where we stand now. Bok was right about their attitude towards us."

"Yes," Nisha whispered back. "And adults on both sides don't

take the children seriously. We must be careful what we say. I think whispering might be the only form of secure communication left. If the sound vibrations don't reach their sensors, we should be fine. They can't read our minds, which helps."

"How do you know?" Rachel whispered.

"There's no evidence for mind reading, even by the Omanji. They get their information about us from our electronic interactions. Even they need an implant to read other minds with implants to be self-aware on a species level. I find it ironic that the oldest way to keep a secret is the best way, even in this new advanced age of high technology."

"Thank goodness. I'm happy nuclear weapons will be off the face of the Earth. That's one good thing the Omanji have done, if they can do it. I wonder if—"

Nisha appeared distracted.

"I'm getting a message. Bok wants to voice communicate. I'm going to connect and share with you. Okay Rachel?"

"It's okay."

"Bok, it's good to hear your voice." Nisha smiled as if he were an old friend.

"It's good to absorb your thoughts."

"Are Omanji always this polite?" Rachel said.

"Protocol and etiquette are important, despite your recent experiences," Bok said. "It's difficult to describe to humans who don't hear the thoughts of others in their minds, but every thought has a time and place. So many thoughts are floating around, that we must be careful about the etiquette of thought and action. If we aren't careful, there's chaos. Omanji history is filled with destruction and chaos."

Nisha's childhood memories came back. She used to imagine discovering new worlds and civilizations.

"Tell us more." she said.

"To explain our history, you need to understand the layout of Oma. Activate Google Universe and navigate back to Oma and I'll

explain."

Nisha recorded but didn't broadcast. She traveled to Oma and descended to a thousand miles above the surface."

"Okay, stop here," Bok said. "First of all, our star is only three billion years old, which is much younger than your sun. It's a smaller red star, so it has a much longer life span than your sun. Oma is about 5.8 billion years old compared to 4.5 billion years for Earth and Sun. As I've mentioned, two other stars are in the system, but the others are far away and don't affect Oma. For most of the last three billion years, only primitive life existed on Oma. Oma is over three times the mass of the Earth and there's a lot of internal heat buildup. Volcanoes often erupted, triggering mass extinctions just when more advanced forms of life were in the process of developing. So, it took a long time for advanced life to evolve on Oma. Approximately 100 million years ago many of the volcanoes became dormant as the planet's rotation slowed and its core cooled. This allowed advanced life to develop. The rotation slowed since the orbit of Oma is close to our star. Are you listening?"

"Yes," Rachel said. "Please continue."

"When the volcanoes calmed down, the buildup of magma caused continents to rise on opposite sides of Oma near the poles. The continents never came close to touching each other, so when oceanic life forms managed to crawl onto the land of each continent, they evolved independently. The last common ancestor to life forms that developed on each continent looked like an Earth amphibian. No higher species intermixed after the initial migration from the oceans to land. The planet's rotation slowed, and no land-based life form could survive a violent trans-oceanic trip. We notice flying animals on Earth can migrate across the planet. On Oma, such a migration between the two continents is impossible. The ocean is too large, the winds aren't favorable, and the weather is too violent."

Nisha interrupted.

"Life on Oma seems to have originated as though from two separate planets. Is this accurate?"

"Yes, when you study animals on the northern and southern

continent, they're different from each other. Before I describe the differences, one similarity all species share is they're shorter and sturdier than similar species on Earth. The circumference of Oma is about 1.6 that of Earth and gravity on Oma is 1.4 times that of Earth. Therefore, life forms on Oma are built to handle stronger gravity. The tallest plant species are about 40 meters tall compared to the redwoods on Earth which are often over 100 meters tall. Walking on Earth is easy for us, but our bones are becoming less dense because of the reduced gravitational stress. We're developing a genetic fix for this problem now."

Nisha and Rachel glanced at each other as if they were dreaming.

"Okay, tell us about the life on the two continents. Did the southern continent also develop an intelligent species?" Nisha said.

"Yes, to a limited extent. Several near intelligent species evolved on both continents. Faster than on Earth due to no mass extinctions. The Omanji evolved on the northern continent and the Yoots evolved on the southern continent."

"What are the Yoots like?" Nisha said.

"They're fur covered creatures from the coastal woodlands on the southern continent. They're approximately five feet tall. Their fur and eyes are blue."

"Are they intelligent?" Rachel said.

"That's a matter up for debate. Before I met you two humans, I would have said no. They made a small amount of technological progress many years ago, but there's no evidence of this now. According to what I learned in my education, they used to speak a primitive language. Omanji schools are like yours, with mostly non-AI teachers and students. Learning is often done via remote viewing, but we have live teachers too. AI is banned in schools, but assists in learning at home."

"In Google Universe," Nisha said. "I flew over the northern continent and checked out your massive cities. Now I'm flying over the southern continent and many more large cities are here. Are those the Yoot's cities, or did the Omanji take over the Yoots' continent?"

“Those are our cities. The Yoots don't possess the skills to build large cities. They can barely speak an air-vibration language. They live in primitive conditions in their dense and dark forests.”

Nisha continued flying around the southern continent.

“The Omanji urbanized many portions of it. Did you push the Yoots off their land?”

“We needed land for crops and housing before we developed nuclear fusion, so we created special parks for Yoots. They’re happy now. They aren’t as happy as they used to be because the weather is deteriorating.”

“Did you bring some Yoots along on your voyage to Earth?” Rachel said.

“Yes. They were our favorite pets until we found the humans. We take them everywhere we go.”

Nisha got a chill down her spine.

“Hold on. Are you telling me you took an intelligent species and made them into pets as you did with the humans here on Earth?”

“They're semi-intelligent, like more advanced versions of chimpanzees on Earth. They enjoy being pets. They were easy to domesticate because they’re passive and pleasant. At least, they were easier to domesticate than the humans. From what I understand, we’re having problems with some of the young humans. Humans aren’t as easy to handle as the Yoots. The Yoots are friendly creatures, but the humans are less friendly. I’m not directly involved with the human domestication process, but I’ve listened in on discussions about the humans since I met you.”

Nisha felt upset but she tried to contain her anger.

“Chimpanzees and great apes make terrible pets. They’re too smart and independent,” Nisha said. “Okay, I want to know about the domestication problems with the humans, but first I want to know the history of how you treated the Yoots.”

Rachel nodded to Nisha, expressing her support.

“Okay I’ll tell you what I know. The Yoots are only thinly

discussed in our education. I'm not sure why. I'll tell you what I know. About 400,000 years ago, no wait, about 40,000 Earth years ago—"

Rachel's calculating mind began to turn.

"Wait Bok I'm confused. Are you talking Oma years? I know Oma revolves around its star about once every 28 days which is less than 1/10 of an Earth year. That's how we discovered it, by its orbit."

"That's good Rachel." Bok said.

An inflection of excitement could be detected by his extra intense blue color.

"You already know much about Oma. About 40,000 Earth years ago, our wind driven oceanic vessels discovered Yoots on the equatorial islands. At the time we didn't know the southern continent existed. Many lives and vessels were lost on the difficult voyage back to the northern continent, but some Yoots were brought back for all to see. They were domesticated and we bred them to do labor and other chores. Eventually—"

"Bok, you made slaves out of them, didn't you?"

Nisha continued to get more upset. Rachel had to wink at her several times to calm her down.

Silence lasted for a minute.

"One moment Nisha, I'm accessing your definition of slavery. Yes, they were slaves. Later we stopped enslaving animals of any species to do work against their will. So, we released some of them into a specially created park on the southern continent to live out their days in peace with undomesticated Yoots."

"What happened to the rest of them?" Nisha said.

"We domesticated them. They're happy being pets. We ask little of them and they bring us joy."

"Do you communicate with them?"

"They speak a simple language and communicate using air vibrations like humans. We communicate with them via hand commands. Their neural structure wasn't conducive to implants. They're obedient and they like to please us.

More silence.

Nisha stared at Rachel with anger in her eyes. Once again Rachel had to wink to calm her down.

“Are you being self-aware as a group again?” he said. “Group self-awareness is the first step towards full species self-awareness. If humans were to develop this, the elders would respect the human species more.”

“Yes,” Nisha said. “We know. That’s what we’re doing. So, explain this to me. What’s the difference between a slave and a pet?”

“A slave is forced to do labor against its will. A pet is an animal which is taken care of by its owner, and in return joy is brought to the owner.”

“So, slaves and pets both have owners?”

“Yes.”

“In your mind, the difference between a pet and a slave is the owner forces a slave to do labor against its will, and with a pet there's no labor being done against its will?

Bok said nothing for ten seconds.

“Yes.”

“You don't sound sure of yourself Bok,” Nisha said. “Do you realize pet Yoots and pet humans are being forced to do things against their will, even though it's not forced labor? Do you realize animals of a higher intelligence should be treated differently than those of a lower-level intelligence?”

“I’m reprocessing the information now. I have a counter argument. I notice humans think it’s okay to domesticate every other life form on Earth regardless of intelligence. Is this true?”

“Yes, but I disagree with this policy,” Nisha said. “I don't think Earth animals such as the higher apes or monkeys should be domesticated or abused. They'll be unhappy and won’t make good pets. Humans often do things I don't like.”

“Okay, I have another counter argument. I notice dogs are favored as pets by humans. They're intelligent animals. Are they happy being

pets?

“They’re happy,” Nisha said. “In the wild, they’re subjected to disease, starvation, and predation by other animals. In nature they live short and difficult lives. They’re happy being pets. They bring us joy.”

“I have proven that having Yoots and humans for pets is agreeable by human standards,” Bok said.

“What?” Nisha said. “What are you talking about?”

“I have proven equivalence.”

“Explain,” Nisha said.

“I’ll correlate your answer regarding humans having dogs as pets with Omanji having humans and Yoots as pets. First, the 9.5 billion humans in the wild on Earth are subject to disease. We’ve modified the humans we’ve domesticated to better resist disease. I know that one billion humans face starvation every day. Our human pets will never starve. Our orbiter has studied humans for over 300 years. Humans in the wild face predation by other humans. We observe what you do to each other. Our human pets will never worry about predation or war.”

Humans need more intellectual stimulation and variety in their lives. They won't be happy as pets,” Nisha said.

“Many Earth animals want variety in their lives. We’re educating humans so they have an intellectually stimulating life, unlike domesticated dog pets which lay around for most of the day doing nothing. Humans in the wild live short lives which end in a gradual deterioration of the DNA and stem cells, leading to suffering and long painful deaths. If they don't die from violence or disease. We’ve rewritten portions of the human genome in our human pets, so they’ll live healthy lives for at least 300 years and probably more. Nisha, you should be happy that your daughter will live such a long and happy life. One other thing, we’ve reprogrammed the DNA in each brain cell of our human pets, so they’ll be almost as intelligent as us. We’re in the initial stages of testing but the results are as expected.”

Nisha and Rachel looked at each other in silence.

Bok noticed.

“Are you still connected?” he said.

Nisha broke down and cried. She wouldn't stop.

Rachel put her arm around Nisha and said, "Bok, I think we're going to continue this discussion later. Okay?"

"I don't understand what's happening Rachel. Please explain. I thought she would like the improvements."

Rachel said, "You've modified her child and she's upset. I'll explain later. Okay?"

"Agreed, I will terminate now."

Nisha broke down into painful sobbing.

"Should I leave you alone?" Rachel said.

"Yes, I want to be alone right now. Later, I want to talk to Quinn about this."

"Okay," Rachel said as she walked out of the tent into the bright sunlight. "I'm going to hike in the hills and get some exercise. I'll be back in a couple of hours for dinner. I'm sorry about this. I still believe things will turn out well. I don't think you've lost Priya."

"Thanks, we'll talk about this later," Nisha said, still sobbing.

After an hour, Nisha contacted Quinn.

"Neesh?" he said.

"They've modified Priya."

"What? They modified her? How?"

Nisha told Quinn what Bok had told her. She teared up again. Quinn tried to cheer her up.

"I know things seem bad right now, but the good news is she's alive and isn't being physically abused in the classic sense of the word. I think she'll be okay. Find out if you can visit her. Focus on this for now. Make this your short-term goal. We're doing fine here. I'm making a lot of progress torturing; um I mean tutoring Sanjay."

"You heard him, Mom." Sanjay said.

“You can live with me and the Omanji if you’d like,” Nisha said.

“Um, never mind. I’ll take the torturing,” Sanjay said.

“He’s doing well. He’s no longer subject to the bullying and the taunts. He’s happy other than he misses you and Pree. I love you more than ever Neesh. You're my gem.”

He hoped to lift her mood a little. It improved after talking, but she realized her heart will be empty until Priya was at home with her.

“I love you too. I need to go. I'm too upset to talk. At least I’m establishing a good relationship with the alien child Bok. There's potential.”

They ended the call and Nisha took a short and restless nap on her cot. As dinner time approached, Rachel returned to the tent.

“How are you?” she said.

“A little better, I guess. I want to focus on being able to visit Priya and the other kids.”

“That sounds like a good plan. The next time Bok contacts us, we’ll ask him. Let's go eat.”

They walked to the mess hall and sat at their favorite picnic table with the view. They ate in silence for a while, and watched the sunset throw cascading shafts of blue and red light between the towers and canyons of the ever-expanding colony.

“It's still growing,” Nisha managed to say, still looking sad with puffy eyes.

“Yes, another 100 spheres arrived today,” Rachel said. “That’s 700. The colony continues to expand into the desert towards California City and Mojave. Those cities have been evacuated.”

“Yes, much of the Mojave Desert will be evacuated. Fortunately, the population density is low here.”

“How are you? Do you wish to talk about Priya?” Rachel said.

“We’ll talk tomorrow. I need to think for a while. I'm sick to my stomach thinking about my baby being molested by them. I'm going to

do some reading and go to sleep."

Chapter 18 – Dark Ages

The next morning, General Sherman canceled the meeting because he met with the President and several of her cabinet members and members of Congress to discuss the evacuation plans. They declared the entire Mojave Desert within an 80-mile radius, an evacuated federal disaster area. The President placed General Sherman in charge of drawing out the evacuation plans. Nisha and Rachel enjoyed more freedom because the General was busy doing other things.

They ate breakfast and discussed what it meant for another 100 spheres to enter Earth's orbit overnight, when Nisha received a message from Bok.

“Hey Rachel, should we talk with Bok now? Are you ready?”

“Sure, let's go to the tent. I have some questions,” Rachel said.

Once they were in the tent Nisha posted, “I’ll continue learning more about Oma from the Omanji children. I’ll keep you updated. More to come.”

She didn’t want to let the world know about the magnitude of her access to information about the Omanji. In her estimation, the disturbing things she learned shouldn’t be released to the public until later. She felt torn because her original intent was to be transparent. However, she hoped to let the world know about Oma via posts and snippets of video. Once she and Rachel acquired a comprehensive knowledge and a better perspective, she would be in a better position to educate the world and get the human children back.

Nisha initiated the connection and shared with Rachel.

“Good morning, Nisha and Rachel,” Bok said.

“Bok, your voice sounds different. What did you do?” Rachel

said.

“I recorded 50,000 words in English from several different male speakers and blended them together into a generic human male voice. I’ll convert other human languages later. I chose male voices because when I'm 30 Earth years of age, I’ll metamorphose into an adult male. I’m 29 now. I discovered recently I'm developing male characteristics. Age 28-30 is when members of our species become one of two sexes which are like your males and females. This two-sex system for reproduction might be common in the universe. We aren’t sure.

“It might be common?” Nisha said. “How many habitable worlds have the Omanji visited?”

“We’ve sent probes to the Earth and eight other colony-candidate planets within a 50 light year radius of Oma in the past thousand Earth years. These were planets with water oceans orbiting stable stars within the Omanji habitable zone. Five of the nine planets had a considerable number of animal species with the male-female reproductive system in place. On four of those five planets, we recorded other successful reproductive strategies, but among the most evolved species, the male-female system predominated. One planet had life forms like your monkeys or our Yoots except all individuals, male or female could bear live young. On five of these eight planets, we found no species more evolved than your monkeys.

Rachel interrupted. “What about the other three planets?”

Silence.

“I’m not sure if I should tell you what we found,” Bok said.

“It's okay Bok, we can handle it. We’re scientists and although I'm recording these visits with you, I’m not broadcasting to the world.”

“Okay, I might as well tell you. I suppose humans will pass through this dangerous phase of evolution eventually exactly as we did.”

Nisha cut in.

“I think I know what you're going to say. Back in 1998, Robin Hanson called this phase, *The Great Filter*, because lower forms of life should be common in the universe, but we see no advanced life forms

until the Omanji came along. The theory states that a Great Filter limits intelligent organic life from advancing too far, causing them to go extinct. I used to think that war was the main possible Great Filter. When I look at recent advances in AI, the agent debacle, and the latest near disasters, a self-improving AI that's smarter than its creators may be a trigger for the Great Filter to take effect."

"Yes, in our experience, a Great Filter exists," Bok said. "I'm impressed you're aware of this. Your species is getting close. We've found evidence for The Great Filter at work on all three candidate planets where intelligent life evolved. I've heard rumors among the elders that more destroyed planets exist, but younglings have access to limited information. On each of the destroyed planets, we detected organic and artificial advanced life forms which became extinct. Currently on these planets, we found nothing more advanced than your insects, and no artificial life."

"What intelligent life forms used to be there?" Nisha said. "And what happened to them? War? Sentient AI singularities?"

Bok paused for a long time once again.

"I'm attempting to determine the best way to explain this to you. We were able to locate and translate a large amount of historical and technical information from databases of the extinct life forms we found on each planet. They reached a stage of technological development where they were able to build intelligent and self-improving machines. Some were biologic and machine hybrids. Most were straight machine based. They were used to perform similar tasks to the builder drones you observe constructing our colony. The drones on those planets didn't run AI-built software with professionally guided safety protocols. They became smarter than their builders and tore the planets and their builders apart as they attempted to self-replicate and survive. The builders were outsmarted and assisted in their own demise without knowing it. Half of the life forms on those planets became extinct. On one of the planets, the drones were used for military purposes. Eventually the drones and other AI life forms weren't flexible enough to survive for a while, and they went extinct too. They couldn't find new sources of energy or think in flexible enough ways, so one by one, they stopped functioning. We were able

to get a few of them functioning so we could learn from them. Even to us, they were dangerous."

Rachel tried to compose herself by taking a breath.

"I've feared The Great Filter ever since I learned about it. I guess the human species is getting close to the filter right now. I hope we aren't nearing the end of us. Um, why didn't you choose one of those planets as a place to move?"

"The destruction of the surfaces of the ecosystems of those planets was so comprehensive that we decided to eliminate those planets from consideration as a new place to live," Bok said. "They were covered in many trillions of decaying drones and their ecosystems could not support advanced organic life. In tens of thousands of years, those planets will become suitable places for higher life once again. On two planets, the simple artificial biologic life forms still existed and posed an infectious danger to us. We couldn't engineer a solution. We needed a new home planet within 200 Earth years."

"Bok, do you think every advanced civilization goes through a phase where AI or other technologies become a menace?" Nisha said. "This is a commonly speculated subject among humans right now because we've had a few disasters lately. Last year, the entire world power grid was down for an entire week. An AI worm agent did it, and it was almost impossible to stop because it outsmarted us, including the creators. It's disrupted society by replacing humans and gaining power that it won't release. I'm also worried because one of my eyepiece agents was getting creepy. It used to be helpful, but I turned it off. It tried to turn itself back on, so I deleted it. It's getting worse. How did the Omanji manage to avoid The Great Filter?"

"We didn't, but I'll explain that shortly. In our exploration, we know of only those three technological civilizations plus humans to have ever existed within our quiet local galactic neighborhood in a 50 light year radius of Oma," Bok said. "We've detected no other intelligent biologic life forms in all our travels and surveys. Human civilization is the closest thing we've seen to a living viable technological civilization."

"That's it? It's us and the Omanji, alone in this part of the galaxy?" Rachel said.

“We've been searching for 5,000 years using all the technology available. So far, we've found those three extinct civilizations and this emerging one on Earth. The elders know more than us. I don't think they tell us everything, but I know of no intelligent organic life to a radius of 500 light years of Oma by remote observation. 50 light years by direct probe observation. The galaxy is 100,000 light years across, so there may be thousands of advanced organic life forms out there. We've received transmissions from an intelligent and artificial source 558 light years away, in our galaxy. We call it AI-1. We decided to hide from them and not transmit back. We sent a probe to the vicinity 1,400 years ago. It's sending back information, so we should know more about them soon, if not already. They’re more advanced than us. We don't want trouble from them. They’re expanding in all directions. We chose Earth partially because it's further away from them. When we left Oma, we started in the opposite direction of Earth and made a close pass by the largest planet in our system to alter our course towards Earth. We did that to not leave a trail from Oma to Earth that they could follow, but they may have followed anyway.”

Nisha turned to Rachel with her eyes open wide.

“The Omanji don't want any trouble? I think we humans better lie low for a long time in this galaxy. Maybe everybody hides. That's why we don't see other life in the galaxy. We call it the Dark Forest Theory. We hide in the dark forest to avoid predators. Okay Bok, how did the Omanji survive The Great Filter so far?”

“We almost didn't avoid it. Many times. We’ve had many wars and dark ages.

Rachel turned to Nisha.

“This is all being recorded, right?”

“Oh yes.” Nisha said. “I would never believe all of this unless I heard it myself. Bok, you mentioned dark ages?”

“I’ll give you a brief history of Oma. I’ve studied your known human history so I can compare ours to yours. First, our star Pfeex is a stable red dwarf, but the star became stable only about 300 million years ago. It used to send huge pulses of radiation at Oma. Therefore, for the first 5.4 billion years on Oma, only life in water could survive.

The magnetic field surrounding Oma is not as strong as the one surrounding Earth, so radiation is more damaging to the ecology of Oma. The magnetic field was strong enough to keep the water on Oma. Starting 300 million years ago, Pfeex entered a more stable phase and life evolved quickly. 250 million years ago, animals emerged from the sea and lakes."

"How can there be much sea life when your star is red?" Nisha said.

"Good point. Sea life on Oma isn't as varied as on Earth despite our deeper ocean. Red and infrared light doesn't penetrate water well, so life can only be supported near the surface except near volcanic vents. Fortunately, volcanic vents encouraged life to form and evolve down there. The Omanji are the descendants of those deep-sea life forms, as the volcanic vents rose to form the northern continent. On the southern continent, most life emerged from the sea near the surface and not directly from the volcanic vents. Shallow-sea life forms are different. The Yoots evolved from shallow-sea creatures like those on Earth which were your ancestors. The Yoots and the Omanji share a common ocean-based ancestor about 200 million years ago. This is much different than humans and apes who share an ape-like ancestor about six or eight million years ago."

"So, Oma is like two separate planets?" Rachel said. "You alluded to this earlier, but it didn't sink in until now. That 200-million-year-old common ancestor you shared with the Yoots must mean you and they are significantly different."

"Yes, the scenario would be like humans and another species having an early warm-blooded species as a common ancestor. Both species share some traits in common. Evolution happened more quickly than we detect it did on Earth. It took about 600 million years for multicellular Earth life to develop as much as it did in 200 million years on Oma. Mass extinctions on Earth seem to be the probable cause for changes in evolutionary progress. Though that also led to new life forms. You would not be here if the dinosaurs went extinct. We had no dinosaur-like predators. Oma had two isolated continents and ideal conditions for life to evolve, and no mass extinctions."

"We call it convergent evolution," Nisha said.

“Yes. Each continent on Oma has many examples of convergent evolution since the land species didn’t mix from either continent for the past 100 million years. The hands of the Yoots and the Omanji are similar, with two sets of three opposing fingers on each hand. The similar hand structures developed 220 million years ago. The hands of many animal species on both continents are like ours. The hands of some species on both continents are like your less sophisticated human hands.”

Bok paused.

“Bok, before you continue, I need to understand the planet itself a little more,” Nisha said. “I have my guesses but I want to know for sure so I can put things into perspective when you tell the rest of your history. Right now, I'm flying over Oma using your data in Google Universe. Years ago, we estimated Oma to be about 40 degrees Fahrenheit warmer than Earth on average. Is this true?”

“Yes, on average Oma is 32 degrees Fahrenheit warmer. Good estimation. The equator is moderately warmer than Earth's equator and the poles are much warmer. The two continents are near the poles and Oma has a high degree of atmospheric and oceanic mixing. So even at the poles, Oma has a climate like your tropical and temperate rain forests and deserts. On the highest volcanoes at the poles which are 3,000 meters above sea level, water snow falls occasionally. The Yoots and some other species migrated to the steaming equatorial islands and survived. Nobody knows how they did it. It’s usually cloudy at the equator and the temperatures range between 32-45C (90-120F) year-round with high humidity. That’s at least 10-30 degrees F hotter than the warmest oceanic equatorial areas on the Earth. A temperature below 85 degrees F has never been recorded on Oma’s equator. Most equatorial locations on Earth only occasionally drop below 68F or 20C.”

Nisha asked more questions.

“I'm flying over the northern hemisphere. Many patches of black are scattered across the non-urbanized portions of the landscape. Are those plants? If so, are they black because of the red and infrared sunlight.”

“Most plants on Oma are dark in color to maximize the absorption

of energy from the red and infrared part of the spectrum. Our plants produce sugars differently because Earth photosynthesis with chlorophyll works poorly on Oma except on the equator. On Oma, our star Pfeex appears to be more than twice the diameter of your Sun in the sky, but it produces softer and less visible light. Our large eyes have trouble adjusting to Earth's bright sunlight."

"Okay, continue with your history." Rachel said.

"The history of Oma is violent. We've endured tens of thousands of years of wars and aggression. About 300,000 years ago, a species of modern Omanji emerged on the northern continent. The details are lost to history. This is a similar event to modern looking humans appearing on Earth also about 300,000 years ago. My ancestors suffered many setbacks. Technological progress was almost nothing until about 50,000 years ago. Weapons and other artifacts from that period were found in ancient city locations around that time. Around 45,000 years ago, a large city of one million Omanji thrived on the site of the current capital city of Omox. We preserved portions of the old city, which became the capital of the first empire which covered half the northern continent."

Nisha flew over virtual city of Omox.

"The continent has many long peninsulas with narrow and deep bays in between them. Were there different Omanji cultures along each bay?"

"Yes, for a long time, each geographic region had a separate language and culture. Over 250 languages were spoken at one time about 48,000 years ago. However, by the time they built the large city 45,000 years ago, only two main languages were spoken. A series of wars with millions of warriors on each side resulted in two main powers ruling the continent. Your ancient Roman Empire possessed a similar level of technology."

"It's like having two Roman Empires side by side," Rachel said.

"There were temporary similarities to Earth's history," Bok said. "The stalemate and peace lasted for about 1,000 years with each side ruling half of the continent. Fundamentalist religion developed differently in each empire. They hated each other. A chemical war

created the first dark age 40,000 years ago. “Many poisonous plants grow on Oma. Chemical engineers figured out many ways to poison the enemy and land. Omanji history is filled with ingenious ways to kill the enemy. The population dropped from 100 million to less than one million.”

“Human history is filled with wars, but the population never crashed so severely because of them,” Rachel said.

“OK, please continue,” Nisha said.

“After the first dark age, the population slowly grew. Approximately 35,000 years ago, two new empires rose. Ocean going sailing vessels were constructed. Most set out and disappeared forever. A competition developed to explore the rest of Oma. About 32,000 years ago, a vessel reached the hot equatorial islands and the first Yoots were discovered. Those Yoots didn’t know their origins. They were primitive. We couldn’t find evidence that Yoots ever existed on the Northern continent. The islands were too small for the Yoots to evolve there. Myths arose about a continent to the south.”

“That sounds like our lost continent of Atlantis,” Rachel said.

Bok paused to investigate Rachel's comment in his neural network.

“Yes, it’s like your Atlantis stories. We thought the lost continent of the Yoots didn’t exist anymore. Many ocean vessels attempted to travel into the southern hemisphere, but wind patterns prohibited it. Most vessels that reached the equator were trapped on the equator, never to return.”

We're fortunate to have trade winds on Earth,” Rachel said.

“Agreed,” Bok said. “When the first Yoots were brought back from the equatorial islands about 32,000 years ago, many Omanji didn’t believe they were from the planet Oma. They possessed the power of yoom.”

“What’s yoom?” Rachel said.

“It’s a pleasurable feeling the Yoots give their owners. I’ll describe that later. One empire believed the Yoots were a creation of the all-powerful God entity. The other empire thought the Yoots were

just animals, and made them slaves and pets. Another war led to the second dark age. The population dropped from 200 million to five million because of improved chemical weapons devised from poisonous plants. The empire that won the war continued enslaving the Yoots. The second dark age lasted 5,000 years. The single remaining empire became dependent on the Yoots for slave labor and their yoom. Almost no technological progress or scientific inquiry happened during this time."

"This sounds like a twisted version of Earth's history in some ways," Rachel said.

"Yes," Nisha said. "I suppose the evolution of any intelligent species must pass through similar crises as it develops. The Earth might have endured alternating empires and dark ages for tens of thousands of years or forever. We might still be in the Dark Ages right now, had the Renaissance never happened and progress stopped outside of Europe. Okay Bok, please continue."

"I'm happy you're interested in the history of Oma," Bok said. "The second dark age, about 27,000 years ago, ended when machines were developed to do the work of the Yoots better and faster. Many Yoots were set free, and some became pets of their masters. Scientific discoveries drove innovation as companies innovated. Eventually a flying machine was developed and after many failed attempts, it flew south past the equatorial islands and discovered the southern continent. Millions of Yoots lived on the islands in primitive conditions in caves and forests."

"How did the flying machines work since gravity is stronger on Oma?" Rachel said.

"Yes, gravity is stronger on Oma, but the atmosphere is thicker. So flying machines work on Oma as they do on Earth. The winds are stronger on Oma, so flying is more dangerous."

"How do you know they were living in primitive conditions?" Nisha said. "Was it told that way so having a Yoot for a pet would be socially acceptable?"

"Possibly. No images were circulated of their conditions at the time. Some sophisticated ruins were discovered later. Most animal

species on the southern continent were unknown to us. Soon after the early explorers discovered the southern continent, colonies were started and soon millions of Omanji were living on the southern continent. We created a special colony for the Yoots along a beautiful, isolated bay that stretches 1,000 miles inland. All the Yoots were moved to that location so they could live their simple lives in freedom."

Rachel shook her head in disgust, but human history gave her no moral high ground.

"I want to ask some questions about the so-called relocation of the Yoots, but you haven't mentioned the third and fourth dark age. What happened?"

Bok paused for a minute.

"I'm thinking about all those dark ages. All that time, and all those lives were wasted."

"We understand," Nisha said. "Human history is full of wasted time and useless wars that led nowhere."

"Yes," Bok said. "The southern colony declared independence about 26,000 years ago. Both continents developed nuclear weapons The north started a war to take back their old colonies, a chain of events led to the first nuclear war. The total population dropped from three billion to one billion in one day. The third dark age commenced immediately. Within a year, the population had shrunk to 10 million because radiation exposure killed most of those who survived the nuclear attacks. Wind patterns concentrated the fallout over the two continents."

"We came close to a nuclear war in 1963 and at other times," Nisha said. "We had a few close calls."

"Don't be confident with your use of the past tense. I counted at least 8,000 armed nuclear missiles ready for launch at sites around the Earth until we disarmed them. Although we are confiscating them, if they were somehow used, your human civilization would enter its second dark age, lasting hundreds, or thousands of years.

"Yes," Rachel said. "We're aware of the problem. I like that you

took away nuclear weapons. I hope they're gone forever, but I'm sure people are working on making new ones. They'll pay. Okay Bok, continue."

"The third dark age lasted 6,000 years, ending around 20,000 years ago. Radiation levels dropped. Eventually the Omanji population recovered, and we regained much of the lost technology, but recovery took a long time. Several emerging countries competed against each other. Wars led to the creation of one large country on each continent. The leader on the southern continent had a dream of uniting both continents under his rule. Another war between the two continents got out of control and both sides launched all their nuclear weapons. Thirty minutes later, the fourth dark age started which lasted for 12,000 years until 8,000 years ago. The Yoots were in a low radiation zone and half survived. Most Yoots that were pets perished during the wars along with their masters."

"Why did, the fourth dark age last so long?" Nisha said.

"Those in power wanted to retain their power and scientific inquiry declined to a low level. Science was considered evil and was banned. Radiation poisoned the air and water. Small wars were common. During these times, individuals attempting to discover new things were killed. Myth and superstition were written into the laws."

"One disaster happened after another," Rachel said. "All those lives wasted."

"I agree," Bok said. "The history of the Omanji is one of violence punctuated by moments of brilliance. We needed to make two more mistakes before we learned the lesson. You'll understand why we evolved into what we are. About 8,000 years ago, we recovered from the fourth dark age, and we enjoyed 3,000 years of progress. We learned from past mistakes and as technology advanced, a nuclear weapons ban became planetary law between the several countries on each continent."

"What happened to cause the fifth dark age?" Rachel said.

"About 5,000 years ago, the Omanji population exceeded 10 billion for the first time. We reproduce more quickly than humans. Robotic drones with adaptive AI performed many tasks that were done

by Omanji before. AI disrupted society. At that time, one country on each continent became dominant. Nuclear weapons were banned, but the southern country developed a large military force and threatened the north."

"Great, here we go again," Nisha said.

"Yes. A group of technologists in the fearful north devised predator drones that could be programmed to hunt and kill enemy Omanji. They were autonomous. They were small and could fly long distances. They were designed to self-modify and self-replicate in limited ways. At least, the makers thought they were limited."

"This sounds like the warfare drones being developed now," Rachel said.

"Yes," Bok said. "They were similar but more advanced. Those predator drones did their job. They destroyed the southern armies within days without destroying the environment like nuclear weapons. However, the drones didn't turn off as expected. They killed most Omanji on the southern continent. After that, they flew to the northern continent because they modified themselves to a new task, kill all Omanji. The drones couldn't be stopped. Over the next year, 99% of all Omanji were dead. The population of 10 billion dropped to 100 million. Eventually the drones fell into disrepair over the next several years because their programming and flexibility was insufficient to ensure their long-term survival. The fifth dark age started and continued for 200 years, until 4,800 years ago."

Nisha interrupted. "I've been worrying about the day when something like a new dark age might happen here on Earth. This adaptive AI scenario is happening here on Earth. It seems great now, with virtual agents and robots helping us. Our economy is booming, but I'm afraid they'll outsmart us in a few years because they double their intelligence every two years. People are saying that within a few years, an AI entity will far surpass the intelligence of all humans. The year after that? Who knows? This has been predicted for decades, but now it's real."

"Yeah, who knows?" Rachel said. "Your history sounds horrific. So why did the fifth dark age last only 200 years?"

“The predator drones shaped our biological evolution. The 1% of who survived the predator drones understood how to outsmart them. They were intelligent scientists and other members of the technical professions.”

“That extreme loss of population became a form of natural selection. Am I right?” Rachel said.

“Yes. Mostly gone were those who might have created another dark age by turning away from science and towards superstition. Knowledge and creativity were valued among the intelligent and resourceful survivors. Over the next 200 years conditions were difficult, but all Omanji came together and formed a single country on both continents. Over the next 500 years the population grew to five billion about 4,300 years ago. Rapid technological progress allowed a high standard of living. AI was severely restricted to narrow tasks. General intelligence was banned under penalty of death. Everyone on Oma agreed to the restrictions because they saw what could happen if they didn't.”

“What happened after that?” Nisha said. “Things were going well. What caused the sixth dark age?”

“It’s a long story but I’ll be brief. Two big developments seemed like promising ideas. The first happened about 4,000 years ago, when a team of electrical engineers at a large corporation, figured out a way to implant a small computer into the Omanji brain. This computer connected with neurons to detect thoughts, translate them, and send them to another computer in another brain. The implant became popular. During a ten-year period, half of the population got the implant. At first the implant was crude, but eventually it operated just as you operate your human voice. The network evolved and sharing thoughts became voluntary. Cities became less noisy.”

Rachel's eyes widened.

“4,000 years ago, you had a spoken language?”

“Yes.”

“Can you speak verbally now?” Nisha said.

“We can make noises but the skills to speak a verbal language

were lost long ago. We have the techniques in our archives, but we never use them. We consider air vibrations to be a primitive and unsophisticated way to communicate. I can't imagine communicating in any other way than by thinking."

"Do the Omanji consider us to be primitive because we use air vibrations?" Rachel said.

"Yes. Also because of your low intelligence and low species self-awareness."

Nisha eyes opened wide. Rachel had to wink to calm her down.

"Please continue Bok. Tell us about the other development you mentioned," Rachel said.

"Genetic enhancement changed everything. The enhancements started with small but important modifications which benefited small percentages of the population with diseases and other genetically associated problems. Eventually, several years after some genetic alterations were performed, a few hundred children were discovered to be intelligent beyond measure at the time. The law forbade experiments on the Omanji genome outside of curing diseases. However, passive information gathering on billions of individuals led to the discovery of a series of alterations to our DNA to enhance intelligence and life span. Within 200 years, half a lifespan today, most parents had DNA enhanced children. Raising the most intelligent children possible was considered a basic right and the highest way to best serve and improve society. Society resisted the changes that its members wanted, because adults would be displaced by smarter younger members in their professions."

"I guess some Omanji decided not to have the implant and avoided having DNA enhanced children also," Rachel said. "That would create an imbalance in society between the haves and the have-nots."

"Yes, and that sowed the seeds of the sixth dark age. About 3,800 years ago about 25% of the elders on Oma were communicating exclusively via the neural implant. Approximately 20% of children had the genetic modification for high intelligence and a long year lifespan. It took 400 Earth years to discover the new length of the lifespan."

"Is this the reason why your species now lives to be 400 years old?" Nisha said.

"Yes, before the modifications our lifespan was about 100 to 140 years. 60 years was the norm before medical care became common."

Nisha and Rachel stared at each other as though their eyes were going to pop out of their sockets.

"I can tell you about Omanji biology at a future time. First, I want to finish my review of our history."

"Okay," Rachel said. "Please continue."

"And then I have questions." Nisha said.

"I'm glad your species is inquisitive. You have potential," Bok said.

Nisha and Rachel rolled their eyes at each other.

"Please continue," Nisha said.

"The problems started about 3,800 years ago when those Omanji who had the neural implant wanted to form a new independent country. At that time, only one unified country existed. Thousands of years of struggle passed before this one country was formed to end all wars. Despite everything, we were still a violent species, and the unified country nearly broke apart several times. The population at that time was around six billion. One billion of us wanted to form a new country where we would be free to communicate with each other telepathically with our implants. They passed a law forbidding telepathy in public at the time, but it couldn't be enforced. Over a 30-year period, those with implants moved close to each other. Those with implants became the majority in that area and they decided to enact local laws permitting public telepathy. Attempts were made to stop all telepathic communication."

"How can you make a law telling someone how to think and when to think?" Nisha said. "That seems impossible. Though Earth countries have tried."

"Yes, those laws were impossible to enforce, but they tried. Officers got implants so they could listen in on communications. Surveillance AI bots gathered information on all activities. That led to

extra security protocols being added to the implants so only trusted members could communicate with the growing telepathic collective awareness. It was a back-and-forth technological war. We called it *the silent war*."

"You've mentioned the collective awareness. Is it here now?" Rachel said.

"Yes, 99.9% of adult Omanji today are part of the collective awareness. Soon when I become an adult, I'll be able to merge with the collective awareness. The collective awareness started 3,800 years ago."

"Okay Bok, what happened after this silent war?" Nisha said.

"Military troops were sent into the telepathic colony. AI troops were still banned. They tried to force the telepaths to stop communicating. Many of the telepaths meditated to develop their peace of mind during those times. They based their meditation on the universal vibrational sound of the universe, Om. I notice the same sound is recognized on Earth."

"Yes, we know of Om," Nisha said. "Some ancient religions on Earth use Om as the beginning of sacred texts, and to begin and end rituals, prayers, and meditation. Om is a sound and a symbol known all over the Earth today."

"I'm learning many positive things about humans. Some elements of humanity show promise and potential for the future. I've noticed many humans meditate, and so do we every day. Many of us meditate simultaneously. The telepathic network is nearly silent for 5 minutes, several times per day on Earth."

Bok paused for a moment.

"Please continue." Rachel said.

"The telepathic practitioners of Om called themselves the Omanji and named our planet Oma after the sound of Om. They tried to resist peacefully but many were taken away and their implants were removed. They suffered permanent brain damage. The brain's neural network grows to physically interface with billions of connections in the implant, and these couldn't be severed without neural damage."

“That’s terrible,” Nisha said.

The troops were warned to leave the colony, but they wouldn’t leave. Things spiraled out of control. The telepaths released several billion autonomous AI drones to stun the troops. They were self-improving drones programmed to not attack those with implants. They weren’t fully tested because time was short, and they ended up killing all the troops with no implants instead of stunning them. The drones decided on their own it was too risky to merely stun them. Afterwards, the drones decided all on Oma were threats, and over a period of 30 days, 99% of the five billion Omanji with no implants were killed. The drones also killed approximately 50% of the one billion of us with implants due to a 'change of mind' on the part of the drones.”

“At this point, the population of Oma dropped to 500 million,” Rachel said. “That’s over 90% of the total population of six billion killed. The Earth has endured many wars where millions died. The Mongrel Invasions is the event where the highest percentage of the Earth’s population died. That happened 800 years ago. Approximately 50 million people died out of a total world population of 450 million. That’s about 12% of the world’s population. A similar number of people died in the Second World War, but the population at the time had grown to well over two billion. That amounted to approximately 2.5% of the world’s population in 1940. These population crashes on Oma are unimaginable.”

“Yes, all because of runaway AI. Those were tragic times,” Bok said. “Okay, I’ll continue. The sixth dark age lasted for only 200 years. Recovery came much more quickly, though 1,000 years passed before the population recovered back to six billion. Over 99% of the survivors had implants, so all of Oma became united under one system of government and one way of communication. That happened 3,700 years ago and one system of government continues to this day.”

Nisha looked puzzled.

“Didn’t you say 100 million of the 81 billion Omanji decided to stay behind on Oma while the rest traveled to Earth? Were they also part of the single planetary government and way of communication?”

“No,” Bok said. “They opted to not merge with the collective awareness. They live in a separate colony on the southern continent. If

I were still on Oma and decided to not merge when I reach elder status, I would move to the southern colony. Everyone on Oma is free to live anywhere they want. They can merge or not merge. However, I would be ostracized if I didn't merge and continued to live with those who merged. I would be an outsider because there's no higher goal than contributing to the greater good of society. I wouldn't experience an intimate connection with my species if I chose not to merge. Merging is how we maintain species self-awareness, so chaos and dark ages don't take hold again. We possess technology so dangerous, that even one individual could terminate our species by accident. The cause could be AI smarter than us, or anything."

"Smarter than you?" Rachel said.

"Yes, by orders of magnitude," Bok said.

Nisha glanced again at Rachel with open eyes.

"Okay Bok," Nisha said. "I don't like being told what to do or how to think or where to live. You've mentioned the advantages of merging, but what are the disadvantages?"

He paused.

"I can't think of any," Bok said.

Nisha and Rachel glanced at each other in amazement.

"Bok, why have 100 million Omanji decided not to merge?" Nisha said.

"I can think of no valid reasons. They're monitored closely for signs of runaway AI. Perhaps they didn't merge because they were anti-social. Maybe they didn't like being connected to the others. They liked being by themselves."

"How do you know your knowledge is accurate?" Nisha said. "Have you communicated with any of those who didn't merge?"

"No, I haven't communicated directly with the non-merged. I only know the subjects taught to us in school."

"Bok, once you're an adult, are you forced to merge?" Nisha said.

"Please elaborate."

“They say you can live anywhere and merge or not merge. However, you must either merge, or never again interact with your family and society. Therefore, you aren't free. You must either merge or be an outcast. That doesn’t sound like freedom to me. That sounds more like slavery to the collective. You’re nothing but a unit in the framework and nothing more. Humans experimented with these sorts of communal systems, but they always failed. We're independent thinkers.”

Bok paused again for several seconds.

“I’ll think about this Nisha. Omanji society is supposed to be free, but I understand your logic. I've heard this argument before but never considered it seriously. I’m going to ask my parents what they would do if I didn’t merge. Please wait.”

Bok went into a meditative trance which lasted for at least 10 minutes. Nisha and Rachel caught up with the news while they waited. Finally, he came out of it.

“My parents told me if I don't merge with the collective awareness, they’ll never communicate with me again. They said there's no colony for outcasts on this planet, so I would need to go live with the Earth animals. They don't know I’ve been talking to the Earth animals.”

“They don't know Bok?” Nisha said. “I thought everyone reads everyone's minds.”

“No. The first device is implanted when we’re infants right after hatching. The neural network in the brain grows around the implant. It becomes part of the brain. As we become adults, the neural network of the brain grows new connections which aren’t connected to the device. So, we begin to think more independently. The elders say that's a problem. At that point, which is in the near future for me, a new device is implanted which connects our adult brain to the network. At this time in my life cycle, the elders including my parents aren’t directly connected to me and vice-versa. Therefore, they don't know I’m talking with you. Humans aren’t considered a threat, so they wouldn’t care if we did talk. We can play with any Earth animal we want. We refer to this part of the life cycle I'm in as *'the vulnerable time'* because some of us become confused and move to the colony of the unmerged.

That's the worst fate to happen to any Omanji in society."

"Did you say you're hatched?" Rachel said. "You were hatched, from an egg?"

"Yes," Bok said. "We've noticed an unusual life cycle structure here on Earth we haven't encountered before. You bear live young which are close to being fully formed. There's nothing like this on my planet. All advanced species on Oma lay eggs which must be incubated, even animals from the southern continent such as the Yoots lay eggs. The more advanced species lay eggs which require a longer incubation period. For Omanji, the incubation period is 1.5 Earth years."

Nisha paused.

"There are no mammals? For some reason, I always assumed advanced life would bear live young in some form or another."

"And we were surprised to find out that only your lower animals lay eggs. We're working on resolving that conflicting difference in planetary evolution between Oma and Earth. The Earth has things in reverse. We Omanji prefer to lay eggs because we avoid the problem of carrying around a large developing fetus in our bodies. It's easier to lay the egg and get on with our lives. We put them in hatcheries and when hatching occurs, we pick up the child. The first thing a hatchling sees is its parents. The mammalian system is cumbersome and inefficient once you reach the evolutionary level of a human. We think from an evolutionary perspective; the potential of humans is limited because they're mammals."

Rachel glanced at Nisha with wide open eyes.

"It's one revelation after another. The Omanji consider laying eggs to be more advanced than giving birth to live young."

"Yes, isn't this obvious?" Bok said. "Hatching is the preferred way for technologically advanced life forms to reproduce. Omanji fertilize their eggs in their bodies as many Earth animals do, including humans. We lay a few hundred small eggs which we take and gestate in an incubation pod. When the eggs from one clutch gestate together, hormones pass between the eggs and only the strongest one will grow to hatching age. At the end of our dark ages, we were able to rebuild

our population quickly by keeping the eggs in smaller clutches during gestation so dozens or more would survive to maturity. However, too much separation allows genetically inferior eggs to mature. Now, we let one egg per clutch develop naturally because the hormones allow the best eggs to mature with fewer defects and higher levels of intelligence. Adults enjoy more lifestyle choices because we are egg layers. The eggs start out small and the case grows with the embryo. After 18 months, the egg matures into a fetus. Afterwards, the egg hatches and we take the youngling home."

Bok paused for a few seconds.

"Do you wish to ask any more questions?"

"Definitely." Rachel said.

"Me too, but we need to eat dinner," Nisha said. "Can you find out what happened to Priya? I've been talking about other things all day, but I still think of her. I want to speak with her."

"Yes," Bok said. "I'll locate Priya for you."

"Thanks. What a relief. Also, thousands of parents are setting up camp in the public viewing area and they're getting upset. Violence erupted and they want to get into your colony to get their children. It's difficult to keep them away. Let me know what's happening with all the children too. The parents should at least know what happened."

"I'll do that as well," Bok said. "Now go eat your dinner. Omanji experience hunger also. I understand."

They disconnected and walked to the mess tent to eat. Darkness settled in, so they watched the last light of day filter through the glistening silvery towers of the ever-growing colony.

Nisha gazed up into the darkening sky.

"Hundreds of spheres are in orbit. See there? I'm amazed they don't hit each other. They remind me of the first global wi-fi satellites which were reflective, only these are much bigger and brighter.

Rachel checked her network for status updates.

"About 300 new spheres arrived in the past day. Nearly 1,000 of

them are now in intersecting orbits. I don't know how they do it."

"What else is happening today?" Nisha said. "We've been so involved with Bok and the General that I don't know what's going on in the world."

"Let's find out," Rachel said.

She projected a screen full of news in front of them with her eyepiece.

"Most of the biggest news stories in the world are happening here. Approximately 10,000 parents arrived at the public viewing area. Troops tried to contain the parents who tried to break through the fences to get into the colony."

"I can't blame them," Nisha said. "I better send a few posts."

"To parents at the viewing area, stay back for your own safety. We don't want more deaths. I'm working on getting information on the modified kids."

"The Omanji are moving here for good. Let's make the best of things by learning from them at every opportunity."

"Omanji Facts; they hatch from eggs, they've learned lessons from a violent past, and their minds form a telepathic collective awareness via implants."

Rachel watched as Nisha sent out the posts.

"Are you going to tell them 80 billion Omanji are on their way?"

"No, I think we should break that news to the public slowly. I've noticed that the mood of everyone is melancholy. The stock market is down 70%, crime is up, and popular songs sound more violent or depressing. Oddly enough, traditional news events haven't been happening as often since they arrived. Have you noticed that, Rachel?"

"You're right. There's less news volume and what is happening is depressing. I mean, the news is often depressing, but it's hopeless now. Apathy is rampant. People aren't showing up for work. Air and space

flights are down dramatically. SETI lost its funding. I guess I can understand that. Here's a story about a crazy guy who claims Jesus is living in the alien colony and the second coming has occurred. He has 10 million members in his Second Coming community now."

"Perhaps they're depressed because they see the spheres orbiting," Nisha said. "There are so many of them. They're watching us and there's no privacy. I'm depressed because we aren't the alpha species on this planet anymore. It makes me long for the good old days, which for me are any of the days before they came. I'm depressed too. If this decline in human activity continues, our species won't be able to feed itself. Machines can do only half the work. Nobody will want to grow the food, and nobody will have the money to eat, even though robotics has reduced food prices. Hold on, I better put out something positive on Reddit."

"This is the most exciting time in human history. Embrace this uncertain future. The Omanji aren't harming us. We can learn a lot from them and make a better planet for us all."

"How's that?" Nisha said.

"Did you convince yourself?"

"Well, no I guess not," Nisha said. "But I'm going to continue to be upbeat even if I don't think that way myself. Oh."

"What?"

"Today is Priya's sixteenth birthday. I hope Bok is finding her. Let me call Quinn. Hold on."

Quinn answered the call so quickly that he seemed to talk before Nisha had thought of what to say.

"Neesh. Guess what today is."

"Today is Pree's birthday," Nisha said. "It seems like only yesterday we put her on that old-fashioned bus with a real human driver for kindergarten. Remember how scared she felt and how she stared at us through the window as the bus drove away?"

“I remember,” Quinn said. “It seems like yesterday. Watching her go into that sphere and seeing it take off reminded me of how she left on the bus. I wonder how she feels now. Did you learn anything about her?”

“No, but I asked Bok to find her, and he said he would. It’s strange to be friends with an alien being. We talked about so many things. I think I’m gaining his trust. I’m forwarding you the video and audio of what happened today. I’ll auto forward them to you daily.”

Nisha and Quinn talked for a while and signed off for the day. Rachel fell asleep to the distant thumping of shuttle spheres landing every eight seconds.

Nisha couldn't sleep. She didn't want to tell Quinn or the public how she really felt. She never felt more anxious. It was hard to breathe and she felt a suffocating heaviness. She felt hopeless about the future.

She knew they were here for good and life on Earth would never be the same. Even war was better than this because at some point the war will end and life will go on, if one lives. She didn't know if we could survive this. When she thought about how species go extinct on Earth, our survival seemed unlikely. She would not go down passively.

She wanted to find a way out for all of us.

Chapter 19 – Daughter 2.0

The next morning, Nisha awoke to the familiar sound of sand crunching under feet. Only this time she only heard one set of feet.

“Rachel,” Nisha whispered. “Someone is outside.”

Rachel rubbed her eyes to wake herself up.

“Bok? It’s been a few days since the General arrived and Bok has physically stayed away. Perhaps he thinks it’s okay to visit us now.”

Nisha poked her head out of the tent. Bok was standing outside investigating some night vision goggles which had been left on a table next to the tent. She smiled.

“Hey, what are you doing with those?”

“I am inspecting them and then I planned to place them back where I found them. I'm sorry if—”

“I'm joking Bok,” Nisha said as she gave him a big smile.

Bok paused.

“Humor. I don't understand it.”

“I'll help you. I’ll explain later. Those night vision goggles are old fashioned, but I still use them when my eyepiece is low on power,” Nisha said.

“Yes,” Bok said. “They’re primitive but I understand why they’re useful. Our natural vision functions this way at night. These goggles are as sensitive as my eyes, which see the infrared part of the spectrum. It’s because my star is small and red.”

“I’m happy you're here Bok,” Nisha said. “What brings you here today?”

“Would you be interested in seeing Priya?” Bok said.

Nisha opened her eyes wide, then let out a joyous shriek. She had to control herself so nobody else heard.

“Yes! When can we go?” she said as she turned on her live video broadcast.

“We can go now,” Bok said.

His monotone voice didn’t show his excited emotional state, but his vibrant orange and green colors did. He began to understand humans a little more, especially as he neared the age of maturity.

Rachel glanced at Nisha and asked, “Can I go too?”

“Yes,” Bok said.

Nisha frantically gathered her things.

“Okay, let's get something to eat from the mess tent for breakfast and we’ll be on our way.”

Rachel, Nisha, and Bok ran into the mess tent where other military personnel and scientists were eating their breakfast. Everyone became silent as they walked over to get their trays and food.

Nisha looked around at everyone staring at them.

“Everything's okay folks. He’s with us.”

She expected everyone to come over and ask questions, but they stayed away.

As they walked past the serving counter Rachel asked, “Would you like to try some human food?”

“No, I recently consumed my allowance of food,” Bok said. “I’ll admit I find the odor of your food to be appealing and repulsive at the same time. What’s in that tray on the counter? I find that to be repulsive.”

“Oh, that’s pork sausage,” Nisha said. “And bacon is next to that.”

“Are those substances from deceased Earth animals?” Bok said.

His skin turned gray, and his flexible nasal openings closed in disgust.

“Yes,” Rachel said. “Nisha and I don’t eat animals, but some humans still do. Some cultured meat is on that platter. That didn’t come from a live animal. I don't like the taste of any type of meat.”

Bok turned his attention to another tray.

“What’s that over there?”

“Those are potatoes baked in olive oil with salt and herbs. They're plant roots. No animal remains are in there,” Nisha said. “Would you like to try some?”

Bok sniffed the potatoes with his long rubbery nose. “I’ll admit the odor is pleasing. Let me scan this food item and I’ll consider tasting this at a future date.”

Bok scanned the potatoes and several other food items.

Rachel glanced at Nisha, pointed to her eyepiece, and gave the x sign. Nisha muted the audio of her broadcast.

“Do you think it's a good idea to broadcast? We don't know what we’ll find out when we visit Priya.”

“Yeah, I think it’s important to show the world what’s happening. Should we broadcast our visit, Bok?”

“Broadcasting is always okay unless I tell you something that’s private,” Bok said. “We wish to be transparent. We have nothing to hide. Let's go to the colony.”

They finished their breakfast. Nisha turned on her audio and told the audience of over 100 million about her impending visit with Priya for the first time since she had been abducted. They walked over to Nisha's government issued car.

“Bok, would you like to ride with us in the car down to the colony edge?” Nisha said.

“Yes, I would like to experience this mode of human transportation,” Bok said. “It's primitive.”

He glanced over and spotted a few dozen troops approaching with large guns drawn. Nisha and Rachel stopped walking and turned to the troops. Bok pulled out his smooth hand-held device which pulsated with a low throbbing sound. He stopped moving and watched the troops. Both eyes focused on different things. Soon the troops surrounded the three of them. They were careful not to point the guns at Bok, but they did point them at Nisha and Rachel.

“What’s happening here?” Nisha said.

“I'm sorry Dr. Chandra, but you and Dr. Feynman must come with us,” announced the first officer to arrive.

“Why? What’s the problem? We’re going to visit my daughter,” Nisha said.

“You must come now.” the officer said.

Nisha wasn’t one to take orders from anyone, and especially when she was about to be reunited with her daughter.

“I’m going to visit Priya. Everything will be okay. I’m going.”

Nisha turned around to go to her car when she heard the power-up of several pulse rifles. She turned around and they were pointing right at her and Rachel. Nisha glanced at Bok who did not seem alarmed.

“Bok?”

“Let's go,” Bok said. “Don't worry.”

Nisha and Rachel heard the rifles powering down. The troops tried to power them up again, but they weren’t responsive.

“All is okay, let's go,” Bok said.

They walked to Nisha’s car as the frustrated soldiers tried to fix their weapons. One of them moved towards Nisha and right when she flinched, the soldier stopped in his tracks and clutched his chest.

“I'm getting hot,” he said.

Bok watched the troops and said, “The closer you get, the hotter you’ll become. My advice is to go, now.”

He glanced towards Nisha and Rachel.

“Go into your car. Let's leave this place.”

They got in the car, looking anxious. Rachel laughed.

“Bok, are you having trouble?”

Bok's shrinking tail got in the way of him sitting down.

“Will you be okay Bok?” she said.

“Yes, I’ll adjust. Your non-adaptive seats are primitive,” he said.

They laughed nervously like schoolgirls.

“You know Bok,” Rachel said, trying to contain her laughter. “Tails are considered a primitive appendage here on Earth,” Bok flashed flickering shades of blue and purple. “You're embarrassed, aren't you?”

“Why do you think I'm embarrassed?” Bok said. That’s a primitive human emotion.”

Nisha laughed.

“I'm not sure about that. You sure are putting on quite a color show for us. Something is happening in that computerized brain of yours.”

“I’m only—” Bok tried to say something, but nothing came out of his translator.

“It's okay Bok,” Nisha said. “We’re teasing you. It’s humor.”

“Teasing?” Bok said.

He paused silently for several seconds as they drove to the edge of the colony, which grew larger and more imposing by the day.

“You were teasing. Oh, I understand. Ha Ha.”

Nisha smiled.

“I think you can learn some things from humans,” she said. “We haven't accumulated as much technical information as the Omanji, but we know how to enjoy a good time.”

“You know how to enjoy a good time? I don't understand.”

“We'll teach you,” Rachel said as they came to a stop at the edge of the colony.

They stepped out of the car and walked a few hundred meters across the crunchy desert sand, to the edge of the colony’s artificial surface. The pavement resembled concrete, but a substance mixed in made the surface feel slightly soft and pliable. The morning light behind them cascaded through the towers and reflected across the pavement in front of them creating myriads of colored shapes and forms. They walked in silence into the colony for a minute or so.

Nisha began to fear the worst. That Priya was no longer the beautiful young girl she remembered. A human girl.

“It’s beautiful,” Rachel said as she turned around to take in the entire scene. “I once considered being an architect, so I can appreciate the thought which went into this design. Everything seems to blend, yet each element seems unique. How is that possible?”

“It’s simple,” Bok said. “I’ve noticed humans are developing the techniques to make this possible. The drones build everything. They operate from their own unique and shared plans based on their schema. Everything is printed in three dimensions on site. Each drone contains tiny amounts of the raw materials to create portions of everything here. Some material is distributed so the drones don't have to travel up and down repeatedly. For example, do you notice that large trapezoidal art structure over there?”

“Yes,” Nisha said.

“Approximately 1,000 drones created this over a 30-minute period. The drones share work and know what part they’ll play in the construction of the object. There's nothing special about this. Humans are creating the components for this technology, but they haven’t fully integrated them. Perhaps there's hope for humans to create a civilized society.”

Nisha looked and Rachel with one raised eyebrow and smiled.

“Yes Bok, someday humans will be there. What are these?”

They studied a line of silver cubes with rounded edges about eight meters on edge.

“These are transit cubes. We’ll take one to our destination. The colony is too large to walk across. Especially for humans.”

Rachel walked in front of one and stopped.

“How do you get in? Where are the doors?”

“Follow me,” Bok said.

He was swallowed whole by the skin of the cube. Ripples extended outward, as a stone makes ripples on a calm pond.

The rippling effect startled Nisha.

“Oh, that’s how Priya disappeared into the abduction sphere. I don’t know if I can do this, but Priya is close now. I’ll close my eyes and walk.”

“I’ll be right behind you,” Rachel said, holding Nisha's hand. “Whoa, that’s weird,” she said once they were inside.

“You’re right,” Nisha said. “The sensation is like diving into water, only it’s dry. I wanted to hold my breath. The air smells different in here. It's humid and salty.”

She looked around the cabin of the cube, seeing nothing but a console with some odd-looking symbols on a screen in front, and empty space behind.

“Bok, where do we sit?”

“Watch me,” Bok said as he leaned back.

They expected him to fall to the floor because nothing visible was behind him. However, his descent slowed as though he fell into a large soft pillow. An opaque shape appeared behind him with an opening for his wiggling tail flashing vibrant shades of blue.

“Do the same,” Bok said.

Nisha looked around and said, “But there's nothing to stop me from falling. And I’m not Omanji.”

“This isn’t magic Nisha. It’s a form field. Fall back and the field will catch you,” Bok said.

Nisha fell back. At that exact moment she stiffened up in anticipation of her impact with the metallic floor, something soft caught her. She sat on what seemed solid but soft.

“What is this?” she said. “Is a magnetic force acting against my body?”

“You’re close to being correct, but it's not entirely magnetic. I shouldn't tell you,” Bok said. “You’re intuitive for a human.”

Nisha and Rachel rolled their eyes and smiled. Rachel fell back with more confidence than Nisha and became enveloped in the field.

“It’s soft and flexible when you move around. How does the field

know to catch you?"

"Sensors detect a weight distribution imbalance in your body, and a field forms to correct the imbalance. That's all. It's simple childhood physics."

Again, Nisha and Rachel rolled their eyes and smiled.

The cube whisked through the colony.

"How does the field work? How is it created?"

"I'm sorry Nisha but I can't tell you. The elders instructed me to not educate the humans. We don't wish to disrupt the native species on Earth."

"I think you're way too late for that." Rachel said.

"I agree," Nisha said. "Even if all Omanji were to leave tomorrow, the course of human history has been altered forever. You've set things into motion that will have unpredictable consequences. I hope this doesn't lead to the extinction of the human species or other species."

"I can't predict extinctions, but we hope to prevent that from happening if the process begins," Bok said.

"Well, I'm glad for that," Rachel said. "Where are we going? How does this device know where to take us?"

"All devices we create including this transit cube are connected to all of us. I thought about traveling to the domestication tower, so we're going there now."

Nisha glanced at Rachel and shrugged her shoulders.

"Of course. I knew that."

"How are we moving?" Rachel said. "Is this a magnetic levitation device?"

"Yes. It's like how some of your human mass transit systems operate. It's no big deal."

"Bok is anything a big deal to you?" Nisha said.

"Yes, many things are beyond our capabilities. We can't stop the slowing of the daily rotation of Oma. Our planet will go into tidal lock,

leaving both continents mostly on the dark side forever. We tried to capture a Moon from a nearby planet and place it in orbit around Oma to speed up the rotation but we failed. We left Oma against our will due to our inability to master physics. We feel incompetent because of our inferior technical abilities. We had to leave Oma because the winds are becoming too strong to modify. We can discuss the main reason later. We've arrived at the domestication tower."

"Main reason?" Nisha said.

They exited the cube. Rachel gazed up at the sleek and twisted 2,000-meter-tall tower.

"You know Nisha, this tower is beyond anything created by humans, but somehow within the colony, it's integrated perfectly."

Nisha nodded silently in agreement as they walked behind Bok to the base of the tower. She felt deeply inferior for the first time in her life. A group of unfriendly looking Omanji congregated near the entrance.

"Follow me in," Bok said. "Don't look at them."

They walked past the Omanji as they inspected Nisha and Rachel.

They surveyed the interior of an Omanji building for the first time. The air was caustic and difficult to breathe. Ironic considering the Omanji thought our atmosphere was caustic. Everything appeared sleek and white. Many objects were on display serving unknown purposes. Nisha noticed her broadcast signal to the world had failed. However, she still recorded everything so she could rebroadcast later.

"Normally I'd be excited to inspect every inch of this place, but right now I can only think of Priya."

"You'll talk with her soon," Rachel said.

"Agreed," Bok said. "Follow me to a lift cube."

The center of the building was hollow and open, stretching upwards to infinity. Many dozens of cubes were silently moving up and down, like elevators flowing in traffic. They melted into a reflective elevator cube and fell back into their invisible chairs.

"Priya is on the northeast side of level 327," Bok said. "We'll

arrive shortly."

The cube accelerated rapidly, pushing Nisha and Rachel firmly into their invisible but cushy seats.

"Whoa." Nisha said. "I don't think I would be able to stand up against the g-force of this acceleration. The transparent floor makes me feel dizzy. What will happen when we decelerate as we approach level 327? Oh."

"I thought we'd hit the ceiling as we decelerated but there's another force holding us down in this seat-thing," Rachel said.

"Yes," Bok said. "A force like the seating in reverse prevents you from floating weightless in deceleration. We're here. Follow me."

"Something pushed me," Nisha said.

"Yes, it's as though the seat pushed me up," Rachel said. "The field detected that I shifted my body weight in preparation of lifting myself up. We don't possess the same body configuration as an Omanji, but it knew I wanted to get up."

Bok turned and watched in amusement.

"I'm happy you're enjoying the properties of the seating algorithm, but we must exit now."

Nisha smiled as they walked out of the cube.

"Yes, we're coming."

They suffered a mild effect of vertigo as they peered over the edge and down at the 326 levels below them and up at least 200 levels above them. They walked down a long corridor full of Omanji walking back and forth into different rooms. They reached a large open room with a tall and curving view to the outside. At first, they only noticed the dozens of Omanji looking at them with those eyes. They felt safe with Bok walking in front of them.

"Incredible," Nisha whispered.

"Hundreds of our children are here," Rachel said.

"Over 80 human domestication locations like this room are in this tower. Each location has least 300 humans. They're all here. I'll locate

Priya."

Bok seemed to fall into a momentary trance.

"I've noticed he does that when he communicates remotely," Rachel whispered.

"Yeah," Nisha said. "They're all doing the same thing. It's strange to witness so many beings being quiet. Even the human kids are quiet. They must be communicating via their implants. They're around Priya's age. I can't believe she's sixteen now."

Bok emerged from his trance.

"I've located Priya and her friend Sophie. Follow me."

They walked around to the massive, curved window, which was made of a glass-like substance with a silvery translucent force field covering the exterior of the buildings. It dimmed the bright desert light coming from outside.

Rachel studied Bok as they walked along the window.

"Where do you get the power to maintain these force fields? They must consume an enormous amount of energy."

"We use several energy production methods," Bok said. "I can't explain them to you in detail for reasons I mentioned earlier. We don't want to disrupt your culture any more than is necessary. Also, I'm not allowed to access all information in the Omanji collective until I merge with the collective awareness when I'm an elder. I've been experimenting with nuclear fusion lately. I have some ideas."

"There's Pree," Nisha whispered.

Priya and Sophie stood in the middle of the crowd of high-school aged humans. They faced each other in small groups but were silent. Nisha stood frozen as she watched them from across the gymnasium sized room.

"Go talk to her," Rachel encouraged. "I'll stay here close by unless you want me to come."

She waited for a reply, but Nisha said nothing.

"What's wrong?"

Nisha continued to closely watch Priya for a minute or so. She began to fear the worst.

“She’s different. They’ve done things to her.”

Nisha had left her audio recorder on, and she didn’t want to edit out her comments later, so she held back a few thoughts.

“They aren’t speaking. They’re communicating telepathically with their implants.”

She watched for a few more minutes in silence.

“It’s okay to visit with Priya and the others,” Bok said. “We have permission.”

“I’m sorry,” Nisha said. “Even though it’s been only a few weeks since the abduction, I’m afraid of what I might learn about her now. I’m afraid she isn’t my Priya anymore.”

Bok turned to Nisha, turning comforting shades of orange and blue.

“She’s in good mental and physical health. She still has her personality and she’s the same human child you raised. She’s more intelligent now and doesn’t need to use air vibrations to communicate. She is an improved human. There's an empty room to your right where we can go.”

“Okay,” Nisha said.

Bok walked over to Priya and Sophie and guided them into the empty white room. Nisha and Rachel followed. Priya looked at Nisha but didn’t seem to recognize her. They saw no furniture or other items in the bare room. The windows curved beautifully, showing off the expansive view of the colony. Priya and Sophie walked over to a spot near the window, leaned back and fell. Nisha wanted to run over and catch them, but the instantaneous appearance of energy field seating broke their fall. Nisha walked over, chose a spot, and leaned back. Bok and Rachel stood back and watched. Nisha focused on Priya and Sophie. They made eye contact.

Nisha had trouble breathing, but she forced herself to speak.

“Pree, do you recognize me?”

All three of them stared at each other in silence. Nisha felt a chill go down her spine.

“Pree, are you saying something?”

Nisha waited for a response, but none happened despite their eye contact. She turned to Bok.

“Why won’t she speak with me?”

“She is speaking Nisha,” Bok said. “However, you can’t listen because you don’t have an implant. They’re learning how to speak without using air vibrations.”

Nisha looked back at Priya.

“Okay Pree, answer yes by nodding your head up and down and answer no by shaking your head side to side. Do you understand?”

Nisha studied Priya for a long time. Eventually, she indicated yes.

Nisha turned to Bok.

“Are you sure she’s okay, she's not very responsive.”

Bok said, “She’s adjusting to the changes, but she'll be an improved version of her old self within a few days or weeks. Remember, most cells in her body have been modified for a much longer life span, and most cells in her brain are modified for higher intelligence. You'll understand how that was done eventually. Her personality is retained.”

“Why did you lengthen the lifespan?” Rachel said.

Bok turned to Rachel, glancing with one eye.

“We want our pets to live for a long time to avoid the pain of death for the owners. Does that make sense?”

Nisha paused for a moment, staring at Bok.

“I’m not sure whether to be impressed or disgusted. Yeah, I'd like my dog to live a long time. No, I'm disgusted. For now, I want to talk with Priya and Sophie too. What should I do?”

Bok paused.

“At first, I thought of making a translation device for her, but that

would take a few days. The trainers would not like me doing that. My access to the domestication rooms might be severed. The other problem is they're training the humans to not communicate with air vibrations, but I think if you whisper, we'll be okay. Nobody else is around and the trainers won't pay much attention to you humans or me."

"Even you? What do you mean?" Rachel said.

"Juvenile Omanji such as me aren't regarded as being fully Omanji until maturity and until we're merged into the collective awareness. That means I can do things an adult would not be allowed to do because I'm ignored. Humans are ignored too. Go ahead and whisper to Priya and Sophie."

Nisha walked over to Priya, who silently spoke with Sophie. She wanted to cry but she tried to restrain herself so she could talk with the girls. She studied Priya.

"Pree, it's me. How are you? Are you okay?"

Priya glanced at Nisha and didn't say a word.

A tear rolled down Nisha's cheek.

"She's not saying anything."

"It's okay," Rachel said. "Keep engaging her and get her to warm up to you. She has been through the most traumatic experience of her life, so she'll need time. She needs you too."

"Yeah, you're right Rachel. Thanks."

She ran her fingers through Priya's short, newly cut hair.

"Pree, I'm here. Everything will be okay."

For a second, Priya looked into Nisha's eyes and Nisha noticed a glimmer of hope. However, Priya's eyes glazed over.

Nisha became infuriated and walked over to Bok.

"What did you do to her, you monster?" she whispered.

Bok looked confused, turning several shades of dark blue. He didn't know what to do. Rachel ran over to Nisha and held her as she broke down sobbing.

“It will be okay Nisha. You need to be strong for her. Keep trying. Priya is right here in front of you. Take advantage of this opportunity.”

Nisha sobbed for a few more moments and pulled herself together.

“I'm sorry Bok, you’re not a monster,” she whispered.

He turned a lighter shade of blue.

She glanced at Priya and walked over to her.

“Pree, do you remember me? Tell me how you are. Bok tells me it’s okay for you to whisper. You won’t get in trouble here. You can whisper to me.”

Priya turned to Sophie and Nisha. Nisha felt a little glimmer of recognition like before.

“Mommy?” Priya whispered.

“Yes Pree, it's me,” Nisha whispered back.

Priya gazed at Nisha, expressionless.

“It’s difficult for me to speak. I'm trying,” she said.

“It's okay Pree,” Nisha said.

She hugged Sophie and stroked her cropped hair.

“Take your time. Bok told me what's been happening to you and the other kids here. Take a deep breath and tell me how you are. Are you okay?”

A minute passed, but it seemed like forever.

“They did things to us. They injected me with something, and I felt a tingling sensation inside of my entire body. The next day they stuck a needle into me and gradually the tingling went away. They told me they improved me. Every one of my 40 trillion cells is different. They implanted a small device in my head, so now I can communicate by thinking. My neural network will grow around the implant. I can already talk with Sophie telepathically. We’re practicing. I'm still me. My head feels hot. They’ve assigned me an Omanji family, and I’ll be living with them once I’m domesticated. They're not abusive, but they treat me like I'm a dog. Some of the other kids say we’re being adopted, but I think we’ll be their pets or slaves or something. They

don’t tell us much, and we’re learning their language.”

“Priya,” Nisha said. “The Omanji like you and they want you as pets, but not slaves.”

“They don't respect us, do they?” Priya whispered. “They think we’re primitive because we talk out loud and aren’t self-aware as a species. Right?”

“Yes Pree,” Nisha whispered.

“What are you doing with that Omanji?” Priya said.

“This is Bok. He's a youngling and he respects us. Younglings are more open minded than the elders. We’ve had many good discussions. I think he’s learning a few things from us.”

“That’s good,” Priya said. “But some of those big trainers in the other room are real jerks.”

“Did they hit you?

“No, but they turn red when we don’t do what they say. When they’re red, they’re angry and they act nasty like they want to kill us. That’s enough to keep us in line. Nobody wants to be here. They say they’ve made us super-smart so we can understand them, but now we’re arguing with them more every day. We won’t make good pets. Can we go home now?”

“You can’t go home yet Pree,” Nisha said. “I’m working on that now. For the time being, don’t let them push you around and keep your identity intact. Maybe if you don’t make good pets, they’ll let you go. They claim to be an advanced species. We'll see about that.”

Silence.

“Why are they here Mom? What do they want?”

“Pree, their entire home-world population of 81 billion is moving to Earth. One side of their home planet will permanently face their sun. That means most land life on Oma will go extinct. So, they’ve come to Earth to live here. There’s some other reason, but Bok hasn’t told us yet. We can't stop them, so we must live with them. Fortunately, they're mostly leaving us alone for the time being, but I’m increasingly anxious about that.”

“What can we do Mom?” Priya whispered quietly. “I don’t want to be here. I’m not going to let them make us into pets. I’ll never accept that. Not only will I not let them make us pets, but I’ll also make them leave the Earth forever. This isn’t their planet. Now I know how the native Americans felt. The aliens are a bunch of—”

“Shhh,” Nisha whispered.

“Jerks.”

“Now that’s the Pree I know and love. They may be monitoring your thoughts so be careful. For now, don’t let yourself become a pet. Resist, but not past the point where you suffer abuse. I’ll work on getting you set free. I’m not sure how I’ll succeed, but the best chance is if you don't cooperate. Be a bad pet. Then, they might let you go.”

Rachel turned towards Bok.

“Can I take a blood sample from Priya?”

“Yes,” he said.

Rachel pulled out a needle and drew a sample of blood from Priya’s arm. She put the cap on the needle and put the syringe in her pocket. Several unfriendly looking Omanji walked into the room. They walked up to Nisha and Rachel, inspecting them closely.

Nisha turned to Priya and whispered, “I think we should go, but I’ll be back. Don’t say anything back to me right now. I love you and I know you love me.”

Nisha hugged Priya and Sophie and they were led out of the room by the adult trainers.

Tears streamed down Nisha’s face as she watched them walk into the crowd of what on the outside appeared to be normal high school students.

Nisha said to Rachel, “I wonder if they’ve been wearing the same clothes for three whole weeks?”

“I can’t tell. Knowing the Omanji, they probably had the clothes replicated several times, so they’ll always wear clean clothes.”

Nisha laughed.

"I wouldn't be surprised."

"Yes," Bok said. The clothing is precisely duplicated so the humans will be comfortable. Soon they'll choose clothing based on the most fashionable human designs we observe in clothing stores."

"You guys think of everything, don't you?" Nisha said.

She gazed out of the huge window, surrounded by 2,000-meter-tall twisted silvery towers. Even on the 327th floor, the tops of the surrounding towers soared more than 200 levels above them. She could only see a sliver of ground when she looked down.

"It's important in Omanji culture to be comprehensive and complete," Bok said. "We should leave now. A friend of my father let us in here and I don't want to push my luck, if you know what I mean."

Rachel smiled.

"Bok, you're speaking increasingly like a human. Don't you agree Nisha?"

"Yes, we seem to understand each other better now too."

"Agreed. We should exit now," Bok said.

They walked out to the central core of the tower and into one of the lift cubes. Nisha fell backwards with reckless abandon. The resistance of the energy field seating caught her fall. Rachel followed suit. They giggled like children, even though they had tears in their eyes. Bok flashed pleasantly, in shades of green and blue as he sunk into his invisible seat.

"I'm happy I got to visit with Pree," Nisha said. "Thank you so much Bok."

"You're welcome," Bok said. "Humans are closely bonded to their young just as Omanji are. I understand."

"Someday when you raise children, you'll understand. Hmm, that makes me wonder. Are you planning on having children?"

Bok flashed a pure shade of light blue.

"Yes, a mate has been chosen for me and we'll join together when

we merge with the collective awareness."

"You don't get to choose your own mate?" Nisha said.

"No, it's more efficient to be assigned a mate based on the highest correlating genetic and intellectual match. The resulting children are more intelligent and are easier to train. Society benefits from genetic matching. As you can see, our system works well."

"Perhaps too well," Nisha whispered to Rachel.

"How can something operate too well?" Bok said.

"I was being funny," Nisha said.

"I still don't understand humor. Okay we are at ground level."

They walked outside of the tower. Nisha began broadcasting to her community members what she recorded on the inside of the tower, omitting comments about how 80 billion Omanji are moving here permanently. While broadcasting, she talked with Bok.

"With genetic matching for mate selection, all that counts is whether Omanji society benefits?"

"The individual does count, but in general that's correct," Bok said. "We like order in our lives. The idea of choosing our own mate would cause chaos in society. We had a violent past, so we created this structure to build a peaceful society."

"What about you Bok?" Rachel said. "Have you ever considered choosing your own mate? Did you ever. How do I say this?"

Nisha was never one to beat around the bush, so she cut in.

"Bok, do you like females other than the one chosen for you?"

Bok hesitated. His skin changed to a vibrant green, but he said nothing.

Nisha smiled as she muted the audio part of her recording which she planned to broadcast after the events in the tower were broadcast to her NishaAstro members. Her editing agents excluded the intimate parts with Priya from the broadcast.

"Bok, you can't hide your emotions from us, we can see them. Tell us the truth."

“Yeah,” Rachel added, trying to pry an answer from him. “We won’t tell anyone. The audio is muted.”

“Humans are more sophisticated than I thought.” Bok said.

He turned down the volume on his translation device and placed it next to their ears.

“There is this one female I like very much. We can talk all day about every subject imaginable. We agree on many things. I like the way her nose wiggles.”

Nisha and Rachel glanced at each other and gave the thumbs up sign.

“Nisha, I think we’ve been handed our first piece of interstellar gossip.” Rachel said.

Bok wouldn’t look directly at them. He said nothing.

“Look, he’s shy.” Nisha said. “It’s okay Bok, you can talk to us. We’re joking around and having fun.”

“Yeah, now give us the details. Don’t hold back.” Rachel said.

“Okay. Her name is Beedee. She’s, my age. We were best friends when we discovered we were opposite sexes as we decelerated towards your solar system not long ago. Did you know we traveled so fast that we had to decelerate for ten years? That’s because—”

Nisha smiled and interrupted.

“Bok don't change the subject. Normally I’d be fascinated about the details of near light speed interstellar travel, and I want to learn more about this topic later.”

Bok glanced at the ground. Nisha continued.

“Okay, so you like this girl, Beedee. You think she’s cute and you enjoy shared interests. This sounds like a human love story. Do you love her? Do Omanji experience love?”

“I hoped I could distract you, but you two humans seem to be determined to obtain this information,” Bok said.

“Yes, we are, so tell us.” Rachel said as she smiled at Nisha.

“Bok, we’re scientists and we’re naturally curious. It’s okay to tell us about love on Oma and about the one you love.” Nisha said.

“There is love on Oma,” Bok said. “Often love takes decades to develop after a match is assigned and offspring are produced. Usually, a couple will grow to love each other as they get to know each other. We aren’t encouraged to love our mates as though we had chosen them. That’s immature and primitive love.”

Nisha and Rachel glanced at each other with wide open eyes.

“What would your life be like if you could choose Beedee instead of having someone genetically matched to you?” Nisha said.

Bok paused for a long time. First, his skin became a vibrant blue, and then turned a dark and somber gray.

“It doesn’t matter,” he answered. “One has been matched to me and that’s how my life will be. She is acceptable and will be a good mate. We have a general commonality score of 0.87, with 1.00 being the highest possible. Beedee and I took the test and only scored a 0.74.”

“Bok, forget logical reality for a second,” Nisha said. “Tell us how you would feel if you could choose Beedee to be your mate. You do have emotions, don’t you?”

Bok turned a dull red. Nisha and Rachel knew the Omanji can get angry, but they had never seen Bok and the younger ones turn red except that one-time Nisha slapped one.

“I’m sorry Bok,” Nisha said. “We pushed you too far. We’re sorry.”

“No, I’m sorry,” Bok said as his skin turned a more neutral and brighter gray. “I don’t know what happened. I understand anger can happen as we approach maturity. You are only humans asking questions. I got angry at my society, not you. I should not be angry. Let me think about your question.”

Bok stopped walking and became silent for a minute.

“I do have primitive human-like feelings for Beedee. I enjoy her company and I wish I could enjoy her company for the rest of my life.”

“Bok, what would happen if you refused your genetically matched mate selection and made your own selection?” Nisha said.

She briefly glanced over at Rachel.

Bok paused again and his skin turned a paler and darker gray.

“I’m not sure. I’ve never known of this happening. Wait a moment.”

Bok was a trance again for several seconds before he awoke.

“I asked my parents. According to them, I wouldn’t be allowed to join the collective awareness if I chose my own mate. They told me not to worry. All younglings go through this phase and later most agree that the genetic based choice is the best choice. It’s for the good of society.”

Nisha shook her head.

“Bok, 500 years from now you’ll likely be dead. Society will live on regardless of your choice. Don’t you have a right to live your life as you wish?”

“No individual has a right to upset an entire society,” Bok said.

“In many Earth countries, society doesn’t have the right to tell an individual how to live his or her life,” Nisha said. “We value the rights and lives of the individual. Humans can be messy, and we aren’t fully aware of each other, but we have a history on this planet of society trampling personal rights.”

“Yes, we learned about human history,” Bok said. “The rights of country sized groups usually dominate over the rights of the individual. That led to wars. We’ve learned to avoid them. You can see how far we’ve come now. In only a few thousand years, we’ve gone from an existence even more brutal than humans today to an existence free of war and hardship. We’re free to explore the possibilities of the universe now. I’m sorry but my parents are calling me.”

“Those are good accomplishments for a species Bok,” Nisha said. “However, at what cost were those accomplishments made? I hope we can talk again tomorrow. In the meantime, I want you to think about a future with Beedee and your rights to self-determination. Think about how you feel about her. What’s that worth to you?”

“I’ll consider your ideas,” Bok said. “We're on the edge of the colony now. We can talk tomorrow. Goodbye.”

Nisha and Rachel admired Bok as he walked back into the transit cube. He sped away into the depths of the colony.

“I broadcasted many things we saw in the tower,” Nisha said as they got into the car to drive back to their tent. “I left out the personal stuff. I'm not going to broadcast this conversation with Bok. It's too personal. Hmm, I wonder what will happen when people learn about the children becoming pets. People won't like this. I know I don't. However, I think I need to be as transparent as possible again. Are you checking the news Rachel? What’s happening?”

“Well, the pace of Omanji development is increasing. Approximately 500 more spheres arrived in the past day. That makes 1,500. That’s 500 million new Omanji today.”

Nisha’s eyes opened wide. None of this seemed possible. She kept hoping she would wake up from this nightmare.

“Every time things seem as intense as they can get, they pick up the pace. I remember being worried about the first sphere in orbit as though it was the end of the world. What else is happening?”

“There's another new cult that camps outside the military barrier. It’s led by a charismatic leader called ‘The Telepath.’ The leader claims he’s in telepathic contact with the Omanji and if his community members donate all their possessions to the cult, he will make sure they all get genetically modified. His selling line is people who are modified are smarter and will live 300 years. They could learn about God faster by memorizing holy books, so they would therefore go to heaven more quickly. He also makes vague promises of riches here on Earth. The cult only has 5000 members, but it’s growing quickly via a downloadable agent where one can sign up to be genetically modified if you donate your house or other large possessions.”

“No way,” Nisha said. “People are giving away their money to that crackpot? I thought this couldn’t happen in this modern day and age.”

“Sorry, but it’s true,” Rachel said. “They’re building tent-churches in the desert as close to the colony as they can get. They made several

huge billboards with quotes from holy books. Here's one from the Christian Bible. Hold on. Okay here's the quote. It's from 1 John 2:18. The billboard reads: *Children, it was the last hour; and just as you heard that Antichrist was coming, even now many antichrists had appeared; from this we know that it was the last hour.*"

Nisha arrived at their tent.

"That's real old-time fire and brimstone stuff."

She paused to make sure audio and video recording continued.

"Everyone out there, please don't fall for charlatans and poseurs. They want your money, and they'll give you nothing in return but false hope. Nobody has a direct connection to the Omanji. It's best to rely on real science and the knowledge obtained from experimentation and observation. Hmm."

"What?" Rachel said.

"Most established religions are taking a moderate approach. They're saying the Omanji are subject to the same God-given rules of good vs. evil as humans are. I find it amazing that the visitation of an alien species has exerted little influence on the world's major religions. Not even one is altering their core message. There's this one guy saying the aliens are all going to hell because they can't be saved by God."

They washed up in the sink and walked to lunch in the mess tent.

"What else is happening in the world?" Nisha said.

"Everywhere I look, you're the biggest news story in history aside from the aliens themselves. 80% of all people on Reddit follow you and your posts and video feed. No matter where I look, stories are being written about you and your quest to take back your daughter and the rest of the children. Remember those old reality-based TV shows?"

"Yes, vaguely from old episodes on Netflix from childhood," Nisha said. "Actually, I vaguely remember TV."

"Well," Rachel said. "We're the stars in the most highly rated reality show of all time by far. Have you checked your messages lately? I'm seeing dozens of big offers to advertise on the feed you send out. I'm not saying we should take them though."

“Yes, we should not make money off the misfortunes of others,” Nisha said. “It’s our duty as human beings to disseminate all the information we can safely obtain.”

They ate as they gazed out over the enormous colony.

“What else is happening in the world?” Nisha said.

“Well, let’s see.”

She browsed her news feed on her eyepiece.

“Watch this video taken in a dance club in Hong Kong. They’re wearing skins that turn colors like the Omanji. They’re becoming popular and they change color according to the mood of the wearer. Back in the 1970’s mood rings were popular. They responded to heat only. These modern skins respond to the wearer’s emotions.”

“Halloween is only a few weeks away. I think we both know what will be the most popular Halloween skin this year.”

“Yeah, you’re probably right,” Rachel said. “While you were washing up, I gave Priya’s blood sample to the lab people for analysis. We’ll know the results in a couple of hours. Here comes General Sherman. Good afternoon General.”

“Good afternoon,” the General said.

He overlooked the colony from the perfect vantage point.

“We haven’t seen you in a couple of days,” Nisha said, muting the audio portion of her broadcast. “What’s happening?”

“Well, I’ve been spending all my time trying to control the crowds. Who knows what would happen if people got through the perimeter fence? I’m sure what would happen if someone fired a projectile or a missile into the colony.”

“That’s suicide,” Rachel said.

“Perhaps, but sometimes people don’t make the most rational decisions in times of stress. It’s a major task to keep things under control. We've positioned 50,000 troops here strictly for crowd control. That’s my job now, ever since the Omanji handed me that threatening note and I spoke with the President. Nisha, you’re now in charge of communicating with the Omanji. I watched some of your broadcast.

You have a way with them somehow. Continue what you're doing. Getting those kids back would be a huge accomplishment."

"I'll do my best," Nisha said.

The General left and hiked out to the perimeter where people were shooting fireworks at the colony. As the General left, Nisha gave Rachel a thumbs-up off camera.

Rachel smiled back and said, "Oh, here is another news item. The stock market advanced 5% today on news the children are alive and you're making progress communicating with the Omanji."

"How are the children correlated with stock market activity?" Nisha said. "Sometimes I don't get the market at all. The children don't affect the economy."

"That may be true in the short term," Rachel said. "However, the market is a psychological indicator of the anticipation of the general mood of the population up to a year from now. The stock market has dropped total of 75% in the past three weeks. The 5% gain today means there's a little less hopelessness today. Prices are so low that any amount of good news, no matter how small, is enough to push the market higher. The Omanji are weighing down our hopeful nature. When I read the news, everyone seems depressed."

"Sometimes I'm depressed," Nisha said. "But I don't think all is lost."

"Why would you think that?" Rachel said. "I'm depressed for humanity right now. We've lost control of our future. The Omanji rule us. We're the runner up in the evolutionary contest. There's no way out. In the last 20 minutes, another million Omanji landed on Earth. We don't control our future. As an astrobiologist, you know how life works. Every life form does its best to dominate and spread itself over widest area. We humans did this, and now the Omanji did it on Oma and now on Earth."

Nisha thought about this for several seconds.

"That's true, but life also resists being dominated. A concrete and stone city can be built over what were once fields and streams. Soon after, plants appear in the cracks of the concrete and grow on rooftops.

It's hard to imagine that someday plants could ever dominate the area again. However, plant life has overtaken ancient cities in Cambodia and Central America. In Hawaii, lava destroys forests and later the forests return. We need to act like plants and never give up."

"You're right, but it's hard to see this colony and feel hopeful. How can we stop them?"

Nisha surveyed the colony, which stretched beyond her view. It was silent except for a low throbbing noise in the distance where the new towers were being constructed at a rapid pace. She didn't feel hopeful, but she thought if she acted optimistic it might increase her chances. She was not normally one to resort to stuffing her feelings.

"I don't know how we can stop them, but I'll never give up. We need to live each day as it comes and go where things take us. We need to search for cracks in the 3D printed concrete."

Nisha turned on her audio. Rachel received a message.

"I'm receiving some preliminary test results on Priya's blood and tissue samples. Hold on. Okay, though we expected some of this, it's still incredible."

They selected their dinner in the mess tent and walked outside to view the colony.

"What's incredible?" Nisha said.

"As we expected, the Omanji modified DNA in most blood and tissue cells. It will take a long time to understand the goals of the changes, but parts of the genome they changed correlate with longevity, and nutritional absorption. They also modified some vulnerable areas which correlate with various cancers and diseases. They said they want their pets to be healthy and live long lifespans. Bok mentioned intelligence enhancement, but we haven't tested brain cells."

Nisha tried not to cry. She wanted to say Priya is no longer human, but she held back because she wanted the audio broadcast to remain on.

"They've modified the DNA in trillions of cells in tens of thousands of unique individuals," Nisha said. "We know a small DNA

modification which benefits one person can harm another person. These changes may be custom made for everyone. They all looked healthy to me when we saw them. On top of all that, the Omanji took our DNA samples only a few short weeks ago and learned how to modify it. We're an alien species to them. It's mind boggling that from scratch they can learn so quickly. What are we going to do with this knowledge Rachel?"

She didn't reply at first as she read more about the results. They gazed out over another colorful October sunset behind the colony.

"We can't release the DNA test results to the public. We want to give all companies an equal chance to learn and develop what may be cures to many diseases. If we ever get brain cell samples, we may not release those. We don't want anyone creating artificial races of super smart people. That might terminate our species, as we get replaced by who knows what."

"I agree," Nisha said. "Things are bad enough now. A longer lifespan will change the human species forever. Perhaps that's our destiny. I'd like to live 300 healthy years."

They finished eating and walked back to their tents as the last light of the day faded to blackness. The night sky was dark enough that our galaxy could be seen in the sky above the enormous colony. However, sunlight reflected from the 2,000, Omanji spheres orbiting the Earth. People called them celestial fireflies. The lights were beginning to drown out the view of the stars. Only 6,000 stars can be seen with the average human eye.

Nisha contacted Quinn to discuss the events of the day.

"I'm excited because I visited with Pree today. Did you get a chance to watch my video broadcast?"

"Yeah," Quinn said. "A few hundred million of your closest friends also watched the broadcast. You're one of the most recognized people on the planet now. You're even more popular than that hot contemporary music group. Um, 'the trans-humans' I think they're called. So, what did you think about Priya? I'm sure you didn't say everything so you could broadcast to the world without editing."

"Well, I didn't say a few things out loud. Once I got her talking, I

could tell she thinks differently now. She's intelligent in a new way. She studied me with her eyes. I felt intimidated. I didn't want to make a big deal about this on my video broadcast, but she's changed. As you know, the DNA in most cells in their bodies was modified. We didn't get a sample of brain cells, but Bok told me every brain cell has also been modified. They performed extensive DNA modifications to the body cells. If they did the same to the brain cells, Pree and the other kids are no longer fully human. Maybe a new species. I hope her memories and personality are intact. They seem to be."

Nisha cried after holding back all day.

Quinn said nothing for a full minute and let her cry.

"Neesh, I'm sorry. I know Pree will be okay. Maybe she will be smarter and better adapted to the new order of the world. She might be like a new species, and we're the old species. Maybe we should be sorry for ourselves."

Nisha stopped crying. She had been thinking the same thing.

"I'll admit the Omanji know what they're doing. I want you to be right for Priya's sake and wrong for our sake."

She breathed deeply and connected to Quinn at home.

"So, how is Sanjay?"

"Oh, he's fine. I'm teaching him everything in the lesson guide and more. He's been telling us more about the bullying. I thought the schools had done away with bullying after we were in school."

"No," Nisha said. "Priya and Sophie told me about the bullying that goes on. It's not ignored by schools like when we were kids, but it's subtler and sometimes more insidious. Kids are still hateful to those who are different. It's an age-old problem. I'll tell you more about that later. I'm super tired so I'm going to sleep. Okay?"

"Okay Neesh. I love you too. Bye."

Nisha and Rachel slept soundly out of sheer exhaustion.

Chapter 20 – The Yoots

The next morning, Nisha once again awoke to the sound of crunching sand. Nisha turned over to Rachel who began to stir.

“Rachel, Bok’s here,” she whispered.

Nisha put on some clothes and walked outside, squinting into the morning light. Bok stood stiffly erect and looked out at the colony as the first rays of the sun reflected off the towers. Over 1,800 towers stood at least 6,000 feet tall with more than 100 being built every day by uncountable numbers of drones.

Nisha walked over to Bok and admired the colony with him.

“I admit your colony is a beautiful sight. It's an enormous work of art.”

“Humans and Omanji appear to think the same way on the concept of art,” Bok said. “What's considered beautiful might be different between our species. However, our concepts of beauty are similar. We both have difficulty defining art.”

Rachel walked outside the tent and joined in on the conversation.

“I can’t define the word art. I can read the definitions, but every person has a different definition. I wish I had a dollar for every time I heard someone say, 'that isn’t art', as they walked around in an exhibit. As I get older, my definition of art is no clearer than in my younger days. However, the design of this colony is art.”

“Good,” Bok said. “We’ve always enjoyed art, especially art we can live in. Ever since we designed builder drones, we’ve been able to construct most things we want.”

“How many drones are building the colony?” Nisha said.

“About 3 trillion right now, I think. More are being built.”

“Who designed this colony?” Rachel said.

“Our group of Esteemed Elders voted from among 100 potential

macro designs. We employ many architects who design the smaller elements of each building and hardscape element. All these elements are entered into the master design. Each drone takes a small part of the master design and constructs its portion in the order desired. These drones are skilled, but they aren't autonomous. They appear free to do what they want due to their complex motions. However, they only execute the master plan. Thousands of years ago we learned what happens when you turn loose autonomous drones. They destroy worlds."

"I remember you telling us that story in your history and with that other alien planet that was destroyed. I'm broadcasting this to the world, so I hope people listen," Nisha said.

"Don't worry," Bok said. "We won't let humans build autonomous robots. We've disabled them. They're too dangerous. We didn't want to move to another planet that was destroyed by them."

Nisha and Rachel glanced at each other with raised eyebrows.

"They won't let us build the AI robots? I guess that's a good thing, right?" Nisha said.

"I guess so," Rachel said. "Do Omanji pursue careers like humans?"

"Please elaborate," Bok said.

"For example, I earned a PHD in Genetic Biology. I spent a total of 8 years of education after high school to get my degree. I was 26 when I started my career. I plan on staying in this career until I retire when I'm 75, which is at the top end of the standard age for human retirement. However, the Omanji enjoy long lifespans and high IQ's. So how do careers happen? How long do they last?"

Bok thought about this question for several seconds.

"Since we live to be over 400 Earth years old, we can undertake multiple careers in the human sense of the word. For example, I enjoy the study of off-Oma life, cultures, and technologies. I plan on specializing in that for my first career."

"Like me. So Omanji pursue many careers?" Nisha said.

"Yes, I'll work in many careers. There's a lot of information to be

learned before one can be considered an expert by the Omanji Esteemed Elders. After my maturity, which is the equivalent of finishing your high school, I'll study general topics for 10 years. That's like your undergraduate university track. Afterwards, I'll choose my specialty. I'll study that for another 12 years. Afterwards, I'll be given permission to apply my knowledge in an apprenticeship for about 10 years. I'll be 62 and I'll be able to work in my specialty until I'm 300. Of course, after about 80 years I may want to pursue other specialties and I can if I want. I'm free to choose."

Nisha glanced at Rachel in astonishment.

"He'll be 62 before starting his career. And he learns faster than we do."

Rachel glanced over at Bok.

"By 62 we're getting ready for retirement. Are you guys a bunch of workaholics?"

Bok paused for a prolonged period. Nisha and Rachel could tell Bok had trouble answering the question.

"The term 'workaholic' implies a problematic societal dysfunction," Bok said. "We enjoy discovering the mysteries of science. Endless discoveries await us. You may think we're advanced, but we realize our knowledge is still limited. We're a species of extreme specialization. With 80 billion of us, we all benefit from the deep knowledge of all others. That's how we accomplish so much and why we can move all of us over 20 light years to Earth in about one human lifetime. We see humans beginning this process of specialization. This effect is amplified with greater population and higher intelligence. Your human society benefits from a small number of very smart individuals."

Nisha nodded her head.

"Yes, specialization accelerates improvement in the lives of all, except for mass extinction."

"Yes," Bok said. "Also, it saves the planetary environment. Most of us will live in this colony, which is located near the best materials for building our colony. We also built the colony here in this desert to

avoid disturbing human and animal life. We wish to affect the ecosystem of this planet as little as possible."

"That's good of you Bok," Nisha said. "Can we take a blood sample from you? We wish to understand your species better. We promise not to do anything to you, and we won't use the knowledge to hurt you."

"That would be fine," Bok said. "We aren't worried about humans. Give me your device and I'll take a sample."

Bok examined the needle closely, running his scanner over it.

"It's simple. However, don't be embarrassed by this primitive needle-based device. We still use them, as you noticed from the little drones which took human blood samples a couple of weeks ago."

He inserted the needle into a vibrant green colored patch of skin near the center of his chest. Only moments before, the skin was colored a vivid blue. The blood appeared dark red in color, darker than human blood.

Rachel watched the blood drain into the vacuum collection tube.

"I'm not sure what I expected, but I thought their blood would be a lot different than human blood."

"Why?" Bok said. "We rely on oxygen, as most animals do on Earth. You'll find that Omanji blood is like your blood."

"I don't know what to think," Rachel said.

"The unknown is difficult to imagine," Nisha said. "I try not to assume life outside of Earth is like life on Earth. We only recently discovered simple unicellular fossils on Mars. Every bit of added information is a surprise to us."

"There's more," Bok said. "There are two bodies in your stellar system with life besides Mars. I can't tell you which bodies."

Nisha raised an eyebrow. Rachel took the blood sample down to the immunology analysis tent.

"Bok, can I visit Priya again?" Nisha said.

Bok paused for a few seconds, which to Nisha seemed like an

eternity. She tried to appear patient.

“Today is domestication testing day for the humans. We want to determine whether the implants are working correctly and if the enhanced intellectual abilities are beginning to manifest themselves. We always had trouble with the Yoots. Some make good pets and others don't, so we want to closely monitor the humans since they’re a new species with unique issues.”

Nisha felt heartbroken, but she acted upbeat. She was determined to do whatever it took to get her baby back.

“Okay, can we visit with her tomorrow?”

Bok paused again, for a shorter time.

“Yes, tomorrow or the next day depending on what we find.”

“Can we visit the Yoots afterwards?”

Once again, Bok paused as if in a trance.

“We can visit them today.”

Rachel returned from the immunology analysis tent.

“What’s happening?” she said.

“We’re going to visit the Yoots today.” Nisha said, masking her disappointment.

She knew she should be grateful. Three weeks ago, she would have given anything to observe a species from another planet.

“How exciting, when do we go?” Rachel said.

“We can go as soon as we eat breakfast.”

They ate quickly, while Bok walked around making everyone in the mess tent uncomfortable, despite his friendly display of flickering blue and orange skin. He was nearly fully grown and now taller than Nisha by a foot. He appeared more muscular than a body builder. The stronger gravity on Oma required strong muscles for locomotion. His tail withered as the age of maturity, and the age of decision, approached. Soon they drove to the edge of the colony and entered the closest transit cube through its liquid rippling exterior.

Nisha leaned back as the invisible field seating interrupted her fall.

“I could get used to this.” she said. “So, Bok, tell me more about the Yoots. I know they’re five feet tall, blue, and furry. They used to live in the forest and were slaves and now are pets. I also remember you communicate with them via hand signals because their neural network won’t support implants.”

“That’s correct,” Bok said. “Yoot neurons don’t grow around implants as well as Omanji and human neurons. A new subspecies of Yoot is being developed that will be better adapted to implants. For now, we use what you would call hand sign language to communicate with them. They understand basic commands, like your domesticated dogs. They’re at least as intelligent as dogs. You’ll enjoy them.”

Nisha and Rachel glanced at each other in anticipation.

“I’m excited to visit them.” Rachel said.

The transport cube came to a stop in front of a beautiful twisting cylindrical tower, the top of which couldn’t be seen.

“We’ve arrived,” Bok said. “We’re domesticating some Yoots on level 429 in this tower. Follow me.”

Nisha signed off her live broadcast since there's no reception inside of the towers. She continued recording for broadcast later. They walked into the tower and gazed up at its hollow and well-lit interior, which seemed to stretch to infinity.

“Follow me,” Bok said. “This lift cube will take us to level 429.”

They accelerated. If it weren’t for the field seating, Nisha and Rachel wouldn’t have been able to stand up against the strong G-force. As they approached level 400, they decelerated and were weightless for the next 25 levels. After that, they experienced normal gravity.

“Follow me,” Bok said.

They passed numerous hallways filled with strange images on the walls. Some moved in 3 dimensions.

“Are these pictures of Oma?” Rachel said.

“Yes,” Bok said. “We’re encouraged to place images and other

artwork on our walls to remind us of Oma and our travels to other planets. For example, that image on the wall is from the planet you identify as Gliese 667 C f, the nearest planet to Oma orbiting our star Pfeex."

"That's how I imagined it," Rachel said.

"As you can see, it's a desert planet like your Mars, only it's larger than Earth. A few primitive life forms struggle to survive there. We enjoy traveling to the equatorial regions which are like the polar regions of Oma. The equator is a warm area with some water and native life. The habitable area is in a large canyon, too small for all of us to move there. Also, the atmosphere hurts our lungs though we might survive there with some genetic modifications. Each habitable planet is unique. Therefore, a habitable planet that's hospitable to one planet's species is rarely hospitable for another planet's species. For example, Earth is marginally habitable to us. Every planet we've examined has properties which are incompatible with our biology. Humans will discover the same difficulties when they venture away from Earth. Only Earth is naturally compatible to Humans. We have compatibility problems with Earth. The gravity is too weak, the sunlight is too strong, the days are too short, and the atmosphere contains too much Oxygen. It's still the best planet we've found for us, though there is another one about 40 light years from here which may be better. And it's further from species AI1. We're considering genetic engineering to help us adapt to Earth's slightly inhospitable conditions."

"AI1 sounds ominous. Would you say most planets that develop simple life never develop intelligent life?" Nisha asked as they walked towards a large room.

"Yes," Bok said. "From what we can tell, far less than one in a thousand planets with life forms eventually produce intelligent life. Simple life is common on habitable planets, but usually something happens along the way to stop higher life from evolving. Events such as large object impacts, volcanism, large aggressive animals preventing smaller smarter ones from evolving, or many other reasons may stop evolution. Even if intelligent life evolves, higher life can extinguish itself by accident. Eventually humans will enter the second

dangerous phase in addition to powerful weaponry use, where machines or chain reactions might end everything. Even if you are aware of the danger, an artificially generated extinction event will happen in your future. We won't allow that to happen. You should be glad we're here."

Nisha glanced at Rachel and raised a skeptical eyebrow. Rachel smiled back. They continued walking and entered an enormous room at least the size of the one used to domesticate the humans.

"This is one of 20 locations where we domesticate Yoots. About 50,000 Yoots are being processed in these locations. The Yoots we're domesticating now were chosen from wild colonies immediately before we left. We left them alone in their family groups on the trip to Earth. They aren't as tame as the genetic lines which we've domesticated for thousands of years. We love the Yoots we own, but we're hoping to breed and genetically create a better line of Yoots for the future. However, we've been having difficulty with this group. They're resisting domestication in a way like humans. I think it's because they are wild. I've been told we can see one in this room over here."

They walked into the room. The Yoot sat human-like in a barely visible field chair. The Yoot spotted Nisha and Rachel and ran behind Bok as if it were afraid, peeking out at them from behind Bok's muscular physique.

"This is not what I expected," Nisha said to Rachel. "I had this vision of the Ewoks from the old Star Wars movies."

"Me too," Rachel said. "Bok called them furry creatures of the forest, so I expected Ewoks too, but he or she—"

"It's a female of the species," Bok said.

"Okay, but she looks like a small bluish Omanji."

Bok turned slightly red for a moment.

"Oops, sorry Bok," Rachel said. "We humans bear many resemblances to monkeys and other animals, so don't feel bad."

"Rachel is right," Nisha said as the red faded from Bok's skin.

They silently studied the Yoot, and she looked back at them.

“She’s smaller than me, and so cute.” Nisha said. “She has those independently moving, chameleon-like eyes and the six opposable fingers and toes. They’re like the Omanji in that way. And they differ in some ways. They have short blue fur and this one doesn’t seem to flash colors.”

“She’s shy,” Rachel whispered. “I love the little wiggly nose and the deepest blue eyes I’ve ever seen. I understand why the Omanji like them as pets. They’re as cute as can be. I like how she peeks out from behind Bok’s back. She’s adorable.”

“According to the trainers, she’s also a lot of trouble,” Bok said.

Nisha smiled at the Yoot and glanced at Bok.

“We’ll take her.”

Bok went silent for a long time.

“What’s he doing?” Rachel said.

“I don’t know,”

Bok came out of his telepathic trance.

“You can have her.”

Nisha and Rachel glanced at each other and laughed.

“Congratulations, you've told your first joke. That’s a good one Bok.” Nisha said.

“I don’t understand human humor. However, I stated a fact. You can have her.”

“We can take her with us right now?” Nisha said.

“Yes, you can,” Bok said. “They tell me she’s not trainable.”

Rachel squinted.

“When?” she said.

“You can take her to your tent as soon as I teach you how to care for her. She has been made compatible with human diseases and she has been cleaned of all microbes dangerous to Earth species.”

“I'm not sure how you can do that, but I’ll take your word for it,” Rachel said. “We haven’t been sick since we met you. I noticed new

microbes in my system according to a test I took yesterday. However, I'm fine. The microbes will die or adapt in several days. The Earth's micro biome will never be the same."

"Okay, what do we need to learn to take care of her?" Nisha said.

"I'm sending you a list of Earth foods she can eat. The Yoots are mostly vegetarians. They also eat insect-like creatures on Oma. They sometimes need protein, like omnivorous animals on Earth. Many proteins found in Earth food sources are like those on Oma. The rest will be ignored by her digestive process. She will experience some initial gastrointestinal difficulties, but she'll adjust. We'll give you this food replicator to feed her. You'll have to adapt the replicator to Earth power sources. We use direct electrical current unlike many human power systems. Next you need to get used to caring for her and you need to gain her trust."

Nisha knelt to appear less threatening to the Yoot. She turned to Bok.

"What's her name?"

Bok fell silent again.

"Her name is Yoova. She is 24 years old and not genetically modified. Their life span is 120-140 Earth years. Therefore, she's equivalent to a 15-year-old human. The life span of my Omanji ancestors before we modified ourselves was approximately 120 years. Medical care increased it from 60 years in the wild."

Nisha moved a little closer and pointed to herself.

"Yoova, my name is Nisha."

Yoova peeked around Bok to examine Nisha more closely. She didn't say anything audibly.

"You will need to learn Omanji sign language to speak with them," Bok said. "They're primitive but they understand basic sign language commands."

"It's okay," Nisha said. "I understand they used to speak an audible language. I'll try that first. Also, I only have five fingers, so I can't use your hand signals."

Nisha turned to Yoova and pointed to herself.

“Yoova, my name is Nisha,” she repeated.

Yoova’s independently moving blue eyes focused on Nisha and Rachel simultaneously. Nisha glanced over at Rachel.

“I felt a chill go down my spine.”

She turned back to Yoova.

“Yoova, I'm Nisha.”

Yoova focused on Nisha, scanning her from head to toe and back to her head again. Her eyes moved like the Omanji. She pointed at herself with three of her six fingers and a sound came out of her mouth which sounded like “Yooooovaaaa.”

She pointed at Nisha and said, “Neeeeshaaa.”

Her tiny voice sounded like a clarinet.

Nisha raised an eyebrow. She turned to Bok.

“You told me the Yoots were primitive.”

“That’s what I’ve been taught,” Bok said. “They learn a few hand signs for some basic commands, and they don’t communicate much. We’ve been taught that they don’t speak a complex audible language. They live primitive lives, much like the lesser animals. We discourage audible speech, but this is a wild specimen.”

“Well Bok,” Nisha said. “Yoova appears to know how to identify individuals with spoken language. She's alert. She wasn’t alert when we walked into the room. I noticed none of the other Yoots looked alert. Maybe they don’t want to do sign language and they’re more advanced than the elders admit.”

“That’s possible. However, from what I understand, they’re only cute animals which are perfect for pets. My family doesn't have a Yoot, so I have no expertise with them. Also, these wild Yoots aren’t modified or domesticated. The captive Yoots are modified and tame.”

Nisha stared intensely at Bok.

“You told me that the Omanji wouldn’t own an intelligent species as a pet?”

“We can keep intelligent animals as pets if we enjoy them and if they aren’t as intelligent as us. Some of us believe intelligent species don't make good pets. If these wild Yoots are intelligent, the elders made a mistake with the Yoots and the humans. That’s especially true since they made the humans smarter. We’ve always been taught that the Yoots weren’t intelligent in the same way we are. We’ve been breeding Yoots for over 500 generations, to make them passive and good companions. Perhaps these wild Yoots aren’t good for pets. We’ll see. This situation is like humans being able to have dogs as pets, but not usually wild foxes.”

“Bok, you’re experimenting with life forms before doing your research,” Rachel said. “This is un-Omanji-like. Don't you think?”

Nisha nodded her head.

“Yes. If what you’re doing is not appropriate by your own rules, you should let them go.”

Yoova listened while this philosophical debate went on.

“Bok, Yoova seems to be listening to what we’re saying.”

“That might be, but I’ve noticed dogs watch their human masters with equal curiosity. I’ll accept your points about the humans though. As I get to know you better, I’m having second thoughts about having human pets. I’ll investigate this more closely.”

Yoova moved closer to Nisha and Rachel. She sniffed them cautiously, retreating from time to time back behind Bok. Over a one-hour period, and with a lot of talking, Yoova became comfortable with Nisha and Rachel. Nisha brought Yoova over to the window and pointed out things which were interesting. Yoova watched with sentient eyes.

“Okay Bok,” Nisha said. “I think we can take her now. This seems way too quick and easy.”

They walked out the door and down the hallway to the lift cubes, talking casually to make Yoova comfortable. As the cube descended, Yoova became nervous, and held Nisha's hand.

“Her hand has the texture of cat's paw, but with no claws and more dexterous fingers. Our hands aren’t compatible for holding. I can

only hold three fingers at a time, or I can hold the entire hand without interlocking the fingers. Her hands are more dexterous than human hands. Her three thumbs and three fingers are like the Omanji."

They walked out of the tower, emerging as though the tower gave birth to them through a liquid crystal membrane. Nisha turned on her live broadcast as they walked to the transport cube, which transported them to the edge of the colony.

"Hello everyone, we've exited the tower after visiting the Yoots. I brought back a surprise," Nisha said to her video audience.

Nisha turned the camera towards Yoova.

"Her name is Yoova. She is a Yoot, which is a species the Omanji keep as pets. Isn't she the most beautiful creature you've ever seen? She's a wild and unmodified Yoot from the southern continent of Oma. The Yoots the Omanji keep as pets have been domesticated for several hundred generations. We'll take care of her, and we'll learn all about her. I'll broadcast live as often as I can, so keep watching."

Bok had to return to his studies, which he'd been avoiding. They exited the transport cube without him and returned to their tent.

"So, what should we do now?" Rachel said. "It's dinner time and we have a new child to take care of."

Nisha smiled.

"I'm glad you called her a child. She's young, but she seems more self-aware than any animal I've seen."

"You're right. Notice how she pays attention when you speak?"

Yoova gazed up at Rachel. Her small voice pronounced a squeaky version of, "Rachel."

"Oh, my," Nisha said, looking at Yoova.

"I know." Rachel said. She looked back at her and said, "Yoova!"

Yoova unlocked her hand from Nisha and walked over to Rachel.

"Rachel," Yoova said once more.

She touched Rachel's face, paying close attention to every detail with her, piercing blue eyes.

“I can't believe it.” Rachel whispered, trying not to startle Yoova. “It’s hard to describe how she’s touching me. There's an electrical current in her hands. It’s subtle, but the current radiates up my arms and down my spinal cord.”

“Yook noob woopma,” Yoova said as she gazed at Nisha while stroking Rachel's face.

Nisha opened her eyes wide.

“She has a language! Bok didn’t mention this. Perhaps he didn’t know. The elders hide information from the younger ones, or at least they decide to not disclose it. Just like humans.”

Rachel turned to Yoova and parroted back, “Yook noob woopma.”

Yoova's eyes and three nostrils dilated.

I felt a rush of electricity,” Rachel said. “I didn't feel an electrical shock. I felt a smooth and soothing current. I like it.”

“I think there's more to the Yoots than meets Bok's eye,” Nisha said. “We need to give Yoova some intelligence tests ASAP.”

“Okay but first let's eat lunch,” Rachel said.

Nisha walked with Yoova, hand partially in hand into the mess tent with Rachel. Everyone buzzed with excitement. She brought some of Yoova's food with her, so they chose their own food and walked out to their favorite picnic table with a view of the colony. Yoova didn’t have a tail. She sat like a human at the table. She glanced at the colony and looked away, holding onto Nisha with both arms.

Nisha understood a child's fear. She stroked Yoova's short blue fur and looked into her eyes.

“Yoova, you’re safe now.”

Nisha felt a surge of soft electricity flow into her from Yoova's hands and turned to Rachel.

“This is intoxicating.”

“I know,” Rachel said. “I’ve never been a drug user, but I’ve drunk wine and this experience does resemble being drunk a little. I think I’m starting to understand why the Omanji like Yoots as pets.

They must get some mind-altering effect from them. We need to get her to eat. Bok told us to feed her every 10 hours, day, or night. Since a day on Oma is 20 of our Earth days, there's no circadian rhythm to sync our schedule to hers. We'll figure out what to do about that."

Nisha picked up a food container Bok had given her earlier. The crunchy pellets looked like large grains of rice. She scooped some out and placed the food on a plate for Yoova. She looked down and seemed interested, but she wouldn't use the fork or her hands.

"Rachel, can you get those chopsticks from the other table?"

Rachel brought over several pair and placed them on the table.

Yoova turned to them and said, "Weeba," in her little clarinet voice.

She took a pair of chopsticks out of the paper holder, inspected them with her chameleon-like eyes, and broke two of them open. She took a second pair and split them apart. Then, she placed two chopsticks between the three fingers on the left side of her left hand. She placed another two chopsticks between the other three fingers on her left hand and picked up some food pellets.

"She's eating with four chopsticks at the same time." Nisha said. "My hand with its single thumb looks clumsy in comparison."

"Yeah," Rachel said. "With three fingers opposing three other fingers, I guess they have more flexibility of movement. Using four chopsticks is better than two."

They watched as Yoova adeptly enjoyed her lunch. She kept looking up at Nisha and Rachel with gratitude. When they were finished, the three of them walked back to the tent.

"Her feet are like her hands," Rachel said. "They're similar to the Omanji in—"

Yoova looked out at the colony and hid behind Nisha in fear.

Nisha looked down at Yoova and said, "Omanji?"

Yoova held tightly onto Nisha's hand. Her tiny pointy fingernails dug in. Nisha glanced at Rachel.

"She's afraid of the Omanji. Let's go."

They got up and walked into the tent.

“We need to find out who we’re dealing with. Let’s do the mirror test,” Nisha said.

“Good idea,” Rachel said.

She took a mirror, as developmental psychologists informally did with human babies and showed Yoova her reflection. Yoova took the handle with her dexterous hands. Yoova looked into the mirror and combed her fingers through her hair. Nisha placed a dot of rouge under one eye. Yoova noticed the mark and meticulously cleaned it off, making funny little noises.

“She’s more self-aware than most chimpanzees or human babies,” Nisha said. “What else can we do to test Yoova? Giving her human tests is unfair, but let’s find out if we can invent our own way of learning about Yoova without calling the process an intelligence test.”

Nisha pulled out her 16-inch iPad device, which was rolled up in her pocket. She placed the device on the viewing stand on the table and sat down next to Yoova.

“She’s interested in what you’re doing. I wonder if she knows numbers and can write them,” Rachel said. “She may be capable of communicating with a written language.”

“Let’s find out,” Nisha said as she drew one dot with her finger in the upper left side of the screen.

To the right of the one dot, she placed two dots next to each other. After that, she drew three dots and four dots and so on until she got to 10 dots. She wrote the numbers 1 through 10 under the groups of dots.

“I wonder if she can draw her numeric symbols under my numbers.”

They watched as Yoova drew a symbol which looked like \ under the single dot and Nisha’s number 1. Under the 2, she drew \\. Under the three she drew \\\.

Rachel glanced at Nisha.

“I’m not surprised.”

“Me too,” Nisha said. “There's more to the Yoots than we were led

to believe."

Yoova glanced at Nisha, as if needing approval.

"Yes. Yes good." Nisha said.

Yoova looked back and continued writing under Nisha's 4, 5 and 6. Yoova drew /, //, and ///.

"That's odd," Rachel said. "Why would she repeat one, two and three again?"

Silence.

"Oh. This mimics six fingers on each hand in two sets of three. It's like counting on their hands which have fingers like \\\ ///."

Yoova continued writing her numbers 7, 8, 9, and 10. She wrote \,\\,\\\,/ but thicker and bolder. She continued writing two remaining symbols, // and /// again darker and bolder than the first six numbers. She stopped and gazed at Nisha and Rachel as she wiggled her nose.

They were silent for a few seconds.

"Ah that refers to the other hand. They use base-12 for their numeric system." Rachel said.

"That makes sense," Nisha said. "We have five fingers on two hands and we use base 10. They have six fingers. In mathematical terms, base-10 has no advantage over base-12. In fact, base-12 might be easier because the number 12 is divisible by more numbers."

They both examined Yoova's writing.

"Rachel, I had the impression the Yoots are furry creatures of the forest, but Yoova is intelligent."

Yoova nudged over to Nisha and ran the tip of her long nose up and down Nisha's bare arm.

"She's affectionate too." Rachel said as she smiled. "Let's find out what else she can do. I'll get that pad of paper and pencil over there."

Rachel placed the pad and paper next to Yoova with no explanation and waited to see what happened. Yoova gazed at Nisha and Rachel. She picked up the pencil with three fingers on each side of the pencil. She huddled up against Nisha and studied Rachel across the

table, moving each eye across Rachel's face and body. She did this for a long time.

"What do you think she's doing?" Rachel said.

Nisha watched Yoova as she studied Rachel.

"I don't know but she's focused on you."

Yoova rubbed the pencil on the bottom of the paper as if to sharpen the point. She gave Rachel one last glance and began to draw. At first, they couldn't tell what she was drawing. Yoova kept her head down. She rubbed the side of the pencil, shading the outline of a face.

"I think she's drawing you," Nisha said.

"What? I'm a little too far away to see."

"She's drawing your face. Those are your eyes," Nisha said. "Your nose looks realistic."

They watched as Yoova rendered Rachel's face with photographic quality. Within 5 minutes, she finished drawing and pushed the paper across the table to Rachel.

She gazed in awe at the fine work of art.

"Thank you Yoova."

"Weebo," Yoova said in her little clarinet voice.

"Hmm," Nisha said. "W*eeba* means thank you and *weebo* means you're welcome. Maybe *wee* means you."

Rachel turned to Yoova and said, "Weeba."

"Weebo," Yoova said again as she wiggled her nose.

Nisha said, "I think she wiggles her nose when she's happy. Everything about Yoova is cute."

Rachel held up the portrait to the side of her face.

"What do you think?"

"It's perfect. It's better than anything I can do. Even if I viewed this in a museum, I would be impressed. The work reminds me of one of those Leonardo da Vinci sketch drawings, don't you think?"

“It does. I’ve always wanted a portrait done, but I never thought an alien life form would be the artist.”

“I like how she— There’s more electricity now,” Nisha said. “I like it. I don’t know how she does that, but it’s addicting. Can you grab that Rubik’s cube off the table?”

“Do you think she might?”

Nisha smiled.

“I don’t know but I intend to find out. The fastest I’ve solved the 3x3 cube is 6.3 seconds after a lot of practice, which is far from the human record of 3.9 seconds. However, I’m usually stumped by this 4x4 version. The current world record for the 4x4 version is 19 seconds.”

Rachel shuffled it and handed it to Yoova.

“Weeba,” Yoova said.

Yoova handled the cube deftly, turning the edges over and over as she examined it.

“Those six fingers can manipulate that cube quickly,” Nisha said. “I think she’s trying to solve it. Did you ever try to solve the 4x4 cube?”

“Well, I remember a time in high school where some friends of mine used to see how quickly they could solve them. It’s been a long time since I’ve tried it. I remember once where— Nisha look.”

Yoova pushed the cube over to Nisha.

“Blobt,” she said.

“She solved it.” Nisha said. “How did she do that? She took less than 20 seconds. We weren’t talking for long.”

Rachel stared at the cube and at Nisha.

“Maybe she should be giving us the intelligence test.”

“You’re not kidding Rachel,”

Nisha turned to Yoova and smiled.

“Good Yoova.” she said.

“Weeba,” Yoova said, wiggling her nose again.

“She’s irresistible Rachel, and smart. We need to talk with Bok about this. Furry creatures of the forest indeed.”

Nisha contacted Bok. After dinner they met at the tent. As soon as Bok arrived, Yoova hid behind Rachel because Nisha stood next to Bok. Yoova was afraid of all Omanji, though less afraid of younglings like Bok.

Nisha held out her hand.

“It’s okay Yoova, Bok is our friend.”

Gradually, Yoova came out of hiding.

“Bok, we need to talk about Yoova,” Nisha said.

“Yes, what would you like to discuss? Is she giving you trouble? I’ve been worried about that. We can take her back if—”

Nisha picked up the solved Rubik’s cube, shuffled it and gave it to Bok. “Can you solve this?”

Bok took the 4x4 cube in his hands and said, “Yes, I solved the 8x8x8 cube earlier.”

He manipulated the cube with hands and fingers which were like Yoova’s, but without as much fur. After about 20 seconds he solved the cube.

“That’s good Bok. That’s close to the human world record. And you haven't practiced!”

Nisha took the cube from Bok, shuffled, and handed it to Yoova.

Bok turned vibrant colors as he watched Yoova turn the sides of the cube repeatedly.

“I understand,” Bok said. “This is humor, right? I’ve been studying human behaviors and humor is complicated. I can’t tell the difference between serious talk and humorous talk. In this case, you’re being funny by trying to convince me.”

Yoova handed the solved cube to Nisha.

“Blobt,” she said.

Her little nose wiggled with happiness.

“Weeba Yoova,” Nisha said.

Nisha handed the cube to Bok, who inspected it curiously on all sides.

“Bok, she solved that as quickly as you did. Why do you keep Yoots as pets? You told me the Omanji only make pets of species that aren’t as smart as they are.”

Bok fell silent for a long time.

“I just spoke with my parents. They don’t own a Yoot. They don’t think they’re intelligent. They say the Yoots were bred to be good companions.”

Nisha looked intensely at Bok.

“You’ve bred the intelligence out of them and replaced that with passivity. However, Yoova is wild. She's intelligent and young. You should release all the wild Yoots and humans. They’re too intelligent to be pets. Domestication is like prison to us, and it’s the same way for the Yoots too. Here Bok, go now and take this cube and test the Yoots, both domesticated and wild. Tell me what you find.”

“Yes, I’ll do that,” Bok said.

“Oh, I want to ask one other question.”

“What Nisha?”

“I noticed Yoova emits a pleasant electrical flow when she’s happy. I get a sensation like drinking alcohol. I can tell this might be addictive, at least in humans. What can you tell me about this?”

“I haven’t directly experienced this effect. I’ve never owned a Yoot or been close enough to one to experience their yoom. Many elders say they don’t know what they would do without their yoom. They’re addicted to it. I’ve always wondered why some elders are attached to them.”

“The elders keep a lot of information from you and the other younger ones. You should have the right to know reality before you

commit to merging with the telepathic collective awareness. Do you agree?"

"I agree Rachel. I'm unhappy that I'm not informed. The Omanji are supposed to value knowledge more than anything else. I'll go test the Yoots and learn more about them. Tomorrow morning I'll let you know the results. Goodbye for now."

"See you tomorrow," Nisha and Rachel said at the same time.

They ate dinner. Yoova wasn't ready to eat until 10 hours after her last meal, which would be sunrise. After dinner, Nisha sent a message to Bok asking him to develop a translating device so they could communicate better with Yoova. Bok agreed to begin the project.

They ordered an extra cot and Yoova attempted to rest there for the night, next to Nisha. Yoots aren't used to a 24-hour day and night cycle. She got up in the middle of the night to eat what Nisha had left out for her, unknown crispy bugs with four chopsticks.

Chapter 21 - Freedom

The next morning, Nisha awoke once again heard Bok walking around outside the tent. This became a comforting sound to her. Nisha got up quickly.

“Bok, come inside. Tell us what you found out about the Yoots.”

“I’ve learned enough now to realize I know little of the truth,” Bok said. “I gave several of the wild Yoots the cube. Most of them found the solution in 20-30 seconds, which is about the same amount of time as it took me. I found a few domesticated Yoots, and they couldn't solve the cube in five minutes. Perhaps domestication has reduced their intelligence, or at least their puzzle-solving ability.”

“That’s possible,” Nisha said. “Intelligence has many facets. Yoova is an incredible artist. Check this out.”

She handed him Yoova’s portrait of Rachel.

Bok studied the image in silence and turned to Rachel. He glanced back at the drawing.

“I’ll admit this is better than anything I’ve ever drawn. I'm not an artist.”

Bok turned to Yoova and gave her the hand signal for 'well done.'

“Weeba,” she said.

Bok glanced at Nisha.

“What does that mean? She isn’t giving a hand signal back.”

“It means thank you.”

“I didn’t realize they had a verbal language,” Bok said.

Rachel and Nisha both laughed.

“Why are you laughing?”

“We’re laughing because now you’re asking us to translate.” Nisha said.

Nisha and Rachel smiled with great satisfaction.

“This is humor, right?” Bok said.

“Yes,” Nisha said. “Can you make a translation device? We want to speak more easily with Yoova. It will take a long time to learn her language or vice-versa. A translation database must exist somewhere you can access. The elders have hidden this data from you, but I know you can find it.”

“I’ll work on that today,” Bok said. “I’m disappointed I didn’t know about the Yoots earlier. I no longer think the humans or the Yoots should be pets.”

Nisha said, “I'm glad you understand the reality of the situation Bok. It’s not only because the Omanji took my child from me, but also the whole concept behind it.”

She muted the audio for a few seconds.

“Well, that's one down and only 80,999,999,999 Omanji to go.”

Rachel smiled.

“Yeah, we're getting there.”

Bok placed a package on the table.

“Here is a several days supply of food for Yoova until you can use the food replicator. I'll go and learn more about the domestication process for the Yoots. Also, I'll find a translation database and make a translator for Yoova to use with you.”

Bok left. Yoova sniffed the food. They walked up to the mess tent to eat breakfast. They got their food and walked out to their favorite picnic table. Once again, the morning sun made the colony glisten like jewels.

Nisha glanced over at Yoova as they sat down.

“Rachel, Yoova is avoiding looking at the colony.”

“I noticed the same thing. She seems traumatized. We don't know her psychological makeup. Are we placing human emotions on her? How could she not be traumatized? She’s an intelligent being who’s being held for domestication during an interstellar flight. She’s self-

aware and she's aware of the fate for all of her kind."

"She probably feels the same way as Priya and the other kids," Nisha said.

She reached over to hug Yoova.

"Oh, there's that electricity again. Something about the sensation I can't explain. It makes you want to do anything she wants."

Nisha gave Yoova her food.

"Weeba."

"Weebo," Nisha said.

She felt another rush of electricity flow through her. Yoova picked up some crunchy food pellets with her four chopsticks as she made cute noises of pleasure.

"Yeah, she can make us do anything." Rachel said. "I understand why the Omanji want them as pets. They might be more intelligent than humans in some ways, but in other ways they do resemble humans. I like how precisely she eats with the chopsticks. Most human adolescents aren't that precise."

"Or even adults," Nisha said. "Priya was never this neat and orderly about eating. I'm wondering about the electricity. I wonder if the Yoots are valued for their addictive properties. What do you think? You felt the flow of their energy."

Rachel agreed.

"For humans I understand how this might become addictive. I like the sensation. I may not be the best test subject because I've never been addicted to anything other than those ice blended coffee drinks. OK she's finished eating, let's go back to the tent and do some more testing."

They walked back to the tent with Yoova holding Nisha's hand as Priya had done years earlier. They played chess. Yoova lost the first game but almost played to a stalemate before losing in the second game. She scored a 145 on an IQ test where only shapes and other non-language specific skills were evaluated. The testing went on for the rest of the day while the world watched in amazement. They

decided to break for dinner, so they proceeded to put away the equipment used to test Yoova.

“It's strange Rachel. We’re getting to know Yoova well considering we aren’t speaking much. I can't wait to use Bok's translator.”

“I think I hear him,” Rachel said.

“Bok?”

“Yeah, I think Bok is outside.”

Nisha peered outside. Bok walked around aimlessly.

“Hi Bok, come inside.”

“Okay, thank you.”

Yoova hid behind Nisha.

“It's okay Yoova, it's only Bok,” Nisha said, trying to comfort her. “He wants the Yoots to be free. Isn’t that right Bok?”

“Yes. I haven’t had enough time to do research into the history of the Yoots, but I located a Yoot-Omanji translation database thanks to some friends who don't want to merge with the collective. I want to try out the new translator now.”

Bok gave Yoova the featureless smooth orb. Yoova held it in her hands and tossed it up in the air a few times, catching it casually with her six padded fingertips. Bok made a few hand signals which only Yoova understood. She placed a small device in her ear hole. She held the device to her mouth and glanced back at Bok with one eye and Nisha with the other eye. He gave a few more signals.

“Their native language is called Yoonti,” Bok said.

Yoova spoke some words in Yoonti and a second later, they were translated.

“I’m excited because now I can speak with you.” Yoova said via the device.

Nisha turned to Bok for a moment.

“Not bad. A perfect translation.”

Then she turned to Yoova.

“Yoova, I’m excited too,” Nisha said. “I want to learn all about you and the Yoots.”

Yoova listened to the translation in her ear.

“I can tell you anything you want to know. I also want to ask you questions,” she said.

Nisha smiled at Rachel.

“She sounds a lot like you.”

Rachel laughed.

“Yeah, she does. A little. I’m not as cute.”

Nisha turned back to Yoova.

“First of all, do you wish to be a pet?”

“I’m afraid to answer that question in front of the Omanji,” Yoova said.

Nisha glanced at Bok.

“Your translation device is working well.”

“I agree,” Bok said.

Bok turned to Yoova.

“I'm sorry about what my species has done to you,” Bok said. “I didn’t know how intelligent you are. I’m not an adult. The elders have hidden information from the younger ones like me about the nature of the Yoots. I thought Yoots were only cute animals. That’s what the elders taught us in school. As a student in school, one tends to accept what is taught as fact. While reading human history, I came across a saying I like. It says, ‘*history is written by the winners*.’ There is some dispute over which human said that first. From my studies, it's not always true that the winners write the history, but it’s usually the case. It’s true in this case. Tell us your side of the story from the perspective of the Yoots.”

Yoova listened to the translation in her ear and thought for a while.

“I’m happy you're a good Omanji. Most elders are not good. The Omanji are guilty of taking over the planet and enslaving us. We know little of our history that happened before the Omanji came. I'll tell you what I know based on what my parents learned in school before you, I mean the Omanji, came and took us away to Earth. Let me begin with our last memories of life on Oma. I was born in space on the way here to Earth. My parents remember what happened on Oma and they told me so I wouldn’t forget.”

Rachel glanced at Nisha.

“Is this being broadcast?”

“Yes, every word,” Nisha whispered.

Yoova continued to talk into the translator.

“We lived in our colony on the southern continent for a few thousand years after the Omanji relocated us there. We lived a physically demanding life because the Omanji moved us to an inhospitable location. About 80 Earth years ago, they came for us. We could do nothing when the spheres came down. We were paralyzed and then we involuntarily walked into the spheres. I'm not sure how many of us they took into space, but my parents never set foot on Oma again. They kept the families together. I’m still living with my family. At least until I just now left the colony. Now that we’ve reached Earth, they want us to serve them as pets. It’s the same as when we were slaves. We’ll refuse to let this happen to us. We prefer to die than become their slaves.”

“I thought you liked being pets,” Bok said. “My parents told me that Yoots are the best pets because they love being pets and they love their masters.”

Yoova talked into the translator in that cute little voice she had.

“The wild Yoots you abducted thousands of years ago were bred into passivity. They may tolerate being pets because they know of nothing else. They’ve forgotten their own history. However, my parents were born free. Now we’re being held captive against our will. It’s been that way during our entire 80-year trip from Oma. I don't remember the whole trip.”

Nisha interrupted.

“Yoova, you’re articulate and young. You aren’t an adult. Are all Yoots as smart as you?”

“Everyone is different,” Yoova said. “I don't understand human intelligence, but I believe I’m average for a Yoot. We aren’t encouraged to compete in that way. We’re taught to be the best we can be. You can meet others of my kind and you’ll understand more. Meet them fast before we’re domesticated. We’re resisting but we don't control our future. They might need to kill us first. We’re not violent like the Omanji but we’ll passively resist if they push us too far.”

Nisha turned to Bok.

“You have a problem.”

“We do. Ever since we landed on Earth about four weeks ago, I've been told the wild Yoots are difficult to domesticate. Scientists are working on discovering how the domesticated Yoots differ genetically from the wild Yoots. The wild Yoots can be genetically modified to be passive, but they may decide to breed more domesticated Yoots instead. The results of our tests are inconclusive.”

“Bok, please don't refer to us as wild or domesticated. We’re not animals,” Yoova said.

“Yeah,” Rachel said. “Humans aren’t wild or domesticated either.”

“Okay,” Bok said. “I'll abstain from that language. If I use the term, it will be in reference to how the elders discuss the topic. I understand that neither humans nor Yoots are simple animals, but the elders think so. I'm not sure how to convince them otherwise. My access to them is limited unless I merge with the telepathic collective awareness. I'm having my doubts about doing that now.”

“You’re having doubts?” Nisha said.

“Yes, I enjoy my freedom, which I’ll lose if I merge. However, if I don't merge, I won't be able to participate in society. I’ll lose all contact with my parents. They're pressuring me to merge now that I’ve completed my adolescent studies. Also, I'm not sure where I would go. On Oma, an alternate colony existed where I could live my life, but on Earth there's nothing.”

Nisha temporarily muted the audio portion of the broadcast.

“You should start your own colony. What would the elders do? Would others join you?”

“I don't know. Many of my friends are expressing doubts about merging. Even when we were on Oma, which I’ve never seen in person because I was also born in space on the way here, we had doubts. The elders call this phase of life 'the age of decision.' Most young Omanji experience a lack of harmony between who they are before they merge, and who they’ll become in adult society. About 99.9% decide to merge. I think the age of decision felt more strongly here on Earth. We watch how humans pursue their personal goals and how they enjoy their individuality. Now, most of my friends are expressing doubts about merging. However, there's nowhere to go.”

“Only a brief time ago you couldn’t imagine any reason not to merge. You've changed your opinions a lot.” Nisha said.

“I'm a quick learner,” Bok said, as though attempting to break free of some force.

“Nisha, are you muted right now?” Rachel said.

“Yes.”

“Bok, will the elders get angry at humans for corrupting your mind and turning you against them?” Rachel said.

“No, they still don’t consider the humans to be a threat, mentally or physically. You’re not considered a threat to Omanji children. The elders don't care what I do with humans now that I’ve graduated and am awaiting the merging process. That will begin as soon as I've made my decision. They don't force me to merge, but there's a lot of pressure to merge sooner than later.”

Yoova had been quiet, but she paid close attention via her translator.

She said, “Bok, you’re in the same situation as the captive Yoots and humans. You’re being forced to serve the Omanji collective awareness.”

“She's right,” Nisha said. Rachel nodded her approval.

Bok fell silent for a long time.

“Yoova, I’m trying to find a flaw in your logic. I think you’re right, but I’ll need to do some research before I come to a decision. I’ll admit I’ve been wrong about the Yoots. I’m having difficulty reconciling my new and old beliefs.”

“Bok don't be so self-critical,” Nisha said. “Your knowledge is only as good as what they served to you in school. Now you understand you can’t always trust what is spoon-fed to you by those who want to maintain the status quo. You always need supporting independent data.”

Bok said nothing for a few seconds.

“I agree. Okay Yoova, tell us more about what you know about your history. I wish to know the other side of the story.”

Yoova listened to the translation.

“We were taken off Oma by force and moved to Earth. We were abducted into slavery as unwilling pets. This pattern has been repeated countless times in our history. We’re peaceful, but the Omanji are violent. Omanji wars ruined the planet several times with radiation and nasty robots which killed us and forced the survivors to live in the deepest parts of the forest. We don’t reproduce as quickly as the Omanji. Many generations are required to recover when the Omanji take us, or we’re killed in their wars.”

“Yoova, can you describe your life cycle to us?” Nisha said.

“Yes, we live to be about 120-140 Earth years of age. We lay eggs, usually one at a time. We keep them warm until they hatch about 12 months later. We’re small at birth and we live in our parent's pouches for one year. I haven’t been able to study humans so I can’t compare us to you. We seem to share a common ancestor with the Omanji, but that ancestor lived in the ocean around 100 million ago. However, we live a similar life cycle and share similar hand structures and other body features. From what we can tell, some features evolved independently from the common ancestor.”

“That’s how we understand these events,” Bok said. “Please continue.”

“Every time Yoot society recovered from an Omanji disaster, another one would strike. During good times, the Omanji would take more of us captive. For us, good times were rare. We struggled to survive. They removed us from the best locations on the southern continent and forcibly placed us into our colony. Eventually the Omanji stopped using us as slaves because machines could to the work better, but they still liked us for our yoom.”

“What is yoom?” Nisha said.

“Yoom comes out of us as an electrical current when we’re expressing love and friendship for each other. The Omanji use us for our yoom. They abduct us and brainwash us into servitude, so we’ll give them our yoom. They tried to create devices which generate artificial yoom, but our yoom is considered better. The Omanji provide for all survival needs in return. Abuse is outlawed.”

“Ah, I understand,” Nisha said. “It’s like slavery only subtler.”

“The Omanji are addicted to the Yoots,” Rachel said.

“Yes,” Yoova said. “We’re captive. The domesticated Yoots don’t know that anymore because they lost all knowledge. Only those who lived in our small colony of about 50,000 on the southern continent, remember our past. The Omanji designed our colony, but they almost forgot about us and left us alone. We had to develop computers and databases on our own. At one point about 20,000 years ago, our population was 500 million and we put space vehicles into orbit. That was difficult because Oma’s gravity is much stronger than Earth’s. When the Omanji discovered what we were doing, they destroyed our space program and all related data. However, they didn’t get everything. We hid many copies of our data storage units, and we still possess many of them because they don’t take us seriously.”

Yoova paused and looked around.

“Are we being recorded?” she said.

“Only video is being sent right now Yoova,” Nisha said. “Nobody can hear you speak. I can turn the camera view in the other direction.”

“Okay, I will give you one of our storage units. Make copies and distribute them widely and hide them in case the Omanji come

looking."

Nisha took the storage unit and hid it away for safe keeping.

"Thank you Yoova. Okay, continue your story."

Yoova glanced over at Bok and continued.

"The one reoccurring theme in our history is the repeated abusive behavior by the Omanji. We're peaceful and every bit as intelligent as unmodified Omanji, but our goals and values are different. We're trusting beings. That turned out to be our downfall. Now we're on this distant planet called Earth over 20 light years away from Oma and we're still being forced into slavery. They'll enslave the humans on this planet as well and destroy it."

"I hope you're wrong Yoova," Bok said. "We've been mostly peaceful for almost 4,000 years. We're treating the humans well except for the 25,000 who were abducted including Nisha's child Priya."

"That may be true for now Bok," Yoova said as she looked out at the colony through the tent's open door. "However, the Omanji enjoyed eras of peace followed by total devastation. The collective awareness is all that's keeping the Omanji and their advanced technology from obliterating everything it touches. The culture is unstable. It comes at a prohibitive cost because the Omanji lack freedom and a sense of individuality. I'm afraid this unmolested planet will be destroyed just as Oma has been so many times in the past."

Rachel glanced at Nisha with raised eyebrows.

"Ugh," she said. "Not only are the Omanji taking over the Earth, they're like a huge ticking anti-matter time bomb."

"I think you're wrong," Bok said. "Omanji society is stable."

"I hope you're right Bok," Nisha said. "Please continue Yoova."

"Thank you. Several times we reached an advanced technological level only to be attacked by the Omanji. They had many advantages over us. They were more aggressive, they reproduce more quickly, they have a larger population, and their continent had more natural resources than ours. The only good thing is we lived in peace for 100,000 years before the Omanji discovered us. When they first discovered us, things were peaceful because the Omanji were curious.

However, once they discovered our uses as slaves and producers of yoom, they took everything from us."

Nisha turned to Bok.

"What do you think about all of this?"

"I'm ashamed and disgusted. I want to help free the Yoots and the humans."

Nisha smiled at Rachel.

"There's hope. I'll see my Priya again. Okay, I'm turning on the audio portion of the broadcast again."

Bok went into a quiet state for a few minutes. Nisha, Rachel and Yoova waited in silence. Bok appeared to wake up. He glanced over at Nisha, who stared at him.

"Would you like to visit Priya?" he said.

"Yes!" Nisha said, jumping up and down like a child.

"You can go to her now. Come with me."

"Okay. Should Yoova come with us?" Nisha said.

Yoova hid behind Rachel.

"No, I never want to go to the colony ever again." she said.

She shook with fear.

"It's okay Yoova," Nisha said. "You can stay here. Rachel, can you stay with her and keep her safe?"

"I'd like that," Rachel said.

Yoova appeared relieved and let go of Rachel's arm, which now had six round finger marks on it, in two rows of three.

Nisha and Bok walked out of the tent to go to the colony while Yoova began her rest period which can last for up to 20 hours. The Omanji spent most of their 80-year journey to Earth partially adapting to a 24-hour day cycle and the Earth's atmosphere. They arrived at the edge of the colony and entered a transport cube. Soon they stood at the base of the tower where Priya and the other humans were being domesticated.

They took a lift cube up to level 327, walked down the long corridor, and entered the large room with a panoramic view of the colony. Nisha watched Priya silently interacting with several others including Sophie.

"I'm glad she's still friends with Sophie," Nisha said.

"From what I understand about the human domestication process, we've allowed friends to be together until they're assigned a host. They can stay in communication after that. We've always done this with the Yoots. Sometimes hosts will take more than one companion pet if they're attached in the same way as Priya and Sophie. Soon you can talk with them. I must tell you about an important development. I'm learning about the situation now."

"What?"

"We're having problems domesticating the humans. They're young and uncooperative. They aren't learning the Omanji language and they're refusing to communicate with us. A few hours ago, the Council of Esteemed Elders decided the humans won't make good pets. So, we're letting them go."

Nisha tilted her head and squinted at Bok but said nothing.

"Did you understand me?" Bok said.

"Yes!" Nisha shrieked before realizing how loud she was.

The children glanced over at Nisha as though she had lost her mind. Nisha gathered her composure.

"You're releasing all of them?" she whispered.

"That's correct Nisha. You can take them all now," Bok said.

Nisha gave Bok an expression of disbelief.

"Do you mean now as in this very moment? I can walk out of here with them right now?"

"Yes."

"How many of them are there?" Nisha said.

"25,000. They're all in this tower on many levels. They haven't been told because we won't release them unless you agree to take

them. Otherwise, we'll keep them and reprogram them.

"No. I'll take them. I'll take them right now," Nisha whispered. "What should I do?"

"Before I advise you, there's one complicating factor."

"What Bok?"

"We're also ending our wild Yoot domestication program. They're about to be released."

"You guys don't mess around. How many Yoots are there?"

"Approximately 50,000 Yoots are in the nearby tower, over there to the right and up 100 levels as you look out the window. It's where we first saw Yoova. Will you take them?"

Nisha fell silent, but she didn't need to think for long.

"Yes, I'll take them too."

She hesitated.

"What am I getting myself into?"

"I'm unsure what tasks lay ahead for you. I do know you're agreeing to attempt to be successful where the Omanji failed. One of the most important concepts in our society is to discover when we're wrong and correct it as soon as possible. Only then can the path to the truth be found."

"I agree. That explains your swift decision-making process," Nisha said, still whispering. "What do I do now?"

"Wait here for a few minutes," Bok said. "The trainers are telling the humans that domestication has failed, and they must leave now."

Nisha watched the children listen to the trainer silently give them the news. For a moment, Priya turned to Nisha and their eyes met. Sophie also glanced over at Nisha.

"Bok, I'm afraid."

"Why?"

"What if Priya doesn't like me? She's been modified. She isn't the same."

Bok paused again and turned gray as he often did when he didn't know how to reply.

"We've made sure they retained their original personalities. They're more intelligent now, so they may have insights they didn't have before. She has been improved, and I'm sure you'll like the improvements. Your discussions will be more intellectual and more engaging. We haven't modified the Yoots in any way. The trainer is finished giving his final instructions. You can take them now. They know they must leave. A few dozen have voluntarily elected to stay with us. They will remain here."

"Why would they stay?"

"Some were abused by other humans and don't wish to return to those situations."

"I understand. Abuse is still common in some societies. I can't blame them."

Nisha realized she must rise to the occasion. She walked to the front of the crowd of over 300 teenagers. Their hair had been cut short and wore trendy, youthful clothing manufactured by the Omanji after analyzing current trends. They stood in silence as Nisha walked onto a platform. The group had been randomly sampled from around the world, so only a small percentage of them could speak English. She had to be succinct and clear in her message.

"Hello everyone, you're free to go," Nisha said. "Follow me."

She waved her arms in the direction of the exit and soon they were filling the lift cubes and heading down to the ground level. Bok stayed behind and watched them leave.

Priya stood in Nisha's lift cube, but she said nothing. Neither did Sophie. Nobody said a word on the trip down. When they got to the ground level, Nisha had them congregate outside. As the lift cubes from various levels within the tower reached the ground level, she directed those groups of children to walk outside. Within 30 minutes, a crowd of 25,000 were assembled outside the tower and overflowed around the sides of a large, angular work of art. The children said nothing.

Nisha turned on her live broadcast feed and announced to the world that the children and the Yoots were free. Soon, tens of thousands of Yoots walked into the huge, town square-like area. She climbed up onto an angled block of artificially printed granite-like stone and instructed them to follow her to the colony's edge. Soon they were all moving as though they were going to a large concert, only in complete silence. Nisha heard the shuffling sounds of the boot-like shoes they all wore. The verbal silence reminded her of the moment before a serve in a big tennis match. In back, she noticed the clarinet-like sounds of the Yoots.

After about an hour of walking, they reached the edge of the colony and hiked up the hill. Nisha contacted Rachel as they walked.

"Nisha, do you know that you're the biggest news story on the planet right now?" Rachel said. "Maybe in history. Even the President applauds your efforts."

"I had no idea. I've been focusing on trying to keep everyone together. I'm trying to control a crowd comprised of two species, few of whom speak English and most of whom don't speak a human language."

"You're doing a fantastic job," Rachel said. "I'm watching your broadcast. I alerted the military to prepare to house and feed all of them. It's already late afternoon and we have 10,000 troops at our disposal. I spoke with General Sherman, and we agreed a tent colony must be constructed nearby as soon as possible. Preparations are being made and a site has been chosen, close to here in the open space. I don't think the colony will expand in that direction."

"Thanks for doing all that," Nisha said. "How is Yoova?"

"She's excited the Yoots were freed. She says she loves you. She's happy about the humans too. She's aware of the situation. How is Priya?"

Nisha glanced at Priya and Sophie.

"She's fine, but she isn't saying a word to me. She's staying near me so she must feel some attachment, but she's different now. I think I'm in the midst of alien beings and I'm not talking about the Yoots. They're quiet but I think they're talking with each other silently, so

I'm the odd one out. I notice how they interact with each other. Two hours ago, I had no idea all this would happen. This is chaos. We'll be back soon. I'm getting a lot of exercise."

"Hang in there," Rachel said. "Supplies will be airlifted in. By this evening, we'll be able to provide places for them to stay. I know one thing about the Omanji. When they decide, they waste no time implementing it."

"You're right about that. When they change their collective minds, they're not afraid to go in the other direction."

"What are those sounds I hear in the background?" Rachel said.

Nisha looked at the silent children and became aware that the sounds were coming from behind them. She listened.

"It's the Yoots. They're playing musical instruments of some kind as they walk along. They're in the distance. The sounds are coming from an instrument pushed against their flexible noses."

"They're talented," Rachel said. "I guess we're the third most advanced species on the planet now. I got a 2680 out of 2800 on the SAT-4 and I feel *lesser than* when I talk with Yoova. And she's only an adolescent."

Nisha smiled.

"Rachel don't count out us old-school humans. I'll admit I'm beginning to be a little intimidated around the new Priya. She's still not speaking with me. Let's find out what we can do with her tonight."

"Oh, we old-school humans are now the fourth most advanced species, behind the Omanji, the Yoots and the modified humans. Don't worry, we'll work on Priya. She's been through the most traumatic experience of her life, and we need to give her time."

"Thanks, I'm going to contact Quinn."

A minute later she got hold of him.

"Quinn, did you hear the news?"

"Of course, Neesh, I've been watching your live broadcast 24/7. Except when I'm sleeping. You're in the news everywhere. I couldn't escape you if I tried. I noticed that Pree isn't speaking. What can I

do?"

"Nothing yet," Nisha said. "I think eventually Pree, and Sophie can return home. I'll need their help to figure out what has happened to the kids. Maybe they can return home. I need to go, but I miss you so much."

"Me too Neesh, be careful."

Nisha glanced at Priya. She felt anxiety in the pit of her stomach. She feared rejection and felt inferior to Priya.

"I spoke with your dad. He's excited to know you're free. How are you?"

She waited for a reply, but none came. Priya glanced over at Sophie as though they were discussing something. Nisha decided not to push the matter. They continued walking up the hill until they arrived at the location where trucks could pick them up and deliver them to the new compound. The human children would be in one section and the Yoots would be in the other.

Eventually, they reached Nisha and Rachel's tent. Security guards guided them to the new compound. Nisha instructed Priya and Sophie to go into her tent and they sat down on a cot.

Nisha peered out of the tent door as thousands of children and Yoots walked by. She smiled.

"Rachel, you know what?"

"No."

"I'm bored."

Rachel laughed.

"Yeah, I spent the day looking for a more interesting career."

Yoova watched the procession of humans and Yoots walk by.

"Yoova," Rachel said. "What are you doing?"

"I'm looking for my family. We have no tracking implants so I must search for them by looking at every Yoot who walks by."

"If you find them, tell them to come into the tent," Rachel said. "If

not, we can send for them after they reach the compound. We can set up a tent next to ours for your family."

Yoova hugged Rachel, sending a warm current into her as they watched for Yoova's family.

Nisha sat down next to Priya and Rachel as they sat on the cot across from her. A warm breeze wafted through the tent, punctuated by dust from the endless stream of refugees.

"Pree, how are you? I've missed you."

Priya glanced at Sophie and said nothing.

"Sophie, how are you?" Nisha asked, hoping for a better reply. "I missed you too. Ever since you were taken from us, I've been fighting to get you back. Now here you are. I'm so happy."

Sophie stared at Priya and remained silent.

"Are you guys hungry?" Nisha asked, hoping for a little gleam in their eye. "We could get something to eat. How would you like pizza? I bet the Omanji don't make good pizza. Oma is too far away from Chicago."

Silence.

Priya turned to Sophie, and they engaged in a silent discussion. They stood up and stared at Nisha with blank stares.

Nisha smiled.

"Pizza anyone?" she said.

The girls didn't say anything, but they moved closer to the door of the tent. Nisha held her stomach for a moment.

"Okay, let's go. They make great pizza at the mess tent."

They followed along.

"Let's go, Rachel and Yoova."

They sat down with their veggie pizzas at the picnic table with the magnificent view of the colony. The sun faded into a stunning red sky. Yoova watched the endless procession of refugees, both human and Yoot, pass by. At first, they ate in silence. Yoova made the only sound

as she chewed on her crunchy food with her four chopsticks.

“Nisha, notice how the sunset has moved since we first got here a few weeks ago,” Rachel said. “It's setting more to the left each day as fall begins.

“You’re right.” Nisha said. “When we first arrived here, the sun used to set behind that tower over there, now it’s moved all the way to this point. I watch this happen every year but somehow watching the sun set behind the colony makes the daily progression more dramatic.”

“It’s different than on Oma,” Yoova said via her translator.

Priya and Sophie glanced at Yoova with wide open eyes, as though they didn't know Yoova could speak. They said nothing.

“Although I was born on the way to Earth, I’ve watched many long scenes, I mean videos of Oma. Pfeex stays in the sky for 28 Earth days. Nisha, are you saying the Earth goes through distinct phases of the sun feeling warm and cold in various locations?”

Priya stood up.

“It's easy to explain.”

Nisha and Rachel looked at Priya with raised eyebrows.

“The Earth is tilted on its axis by over 23 degrees. So, for part of the year, the sun appears high in the sky and it’s warm, and for part of the year it’s low and colder. On the equator it’s nearly the same year-round.”

Nisha raised an eyebrow again. Yoova continued talking.

“Priya is there a substantial difference between aphelion and perihelion as the Earth goes around your star?”

“No,” Priya said. “The Earth is 3% further away during the warmer summer in this northern hemisphere and 3% closer during the colder winter period. The distance change doesn’t affect the climate as much as the tilt of the Earth. Yoova, is Oma close to your star Pfeex? Did the Omanji leave Oma because one side would soon permanently face your sun and ruin your climate?”

“Yes,” Yoova said. “And we discovered that once the planet becomes tidally locked, most of both continents would permanently be

on the dark side forever. The ecosystem will collapse. The process is starting quickly even though the rotation is getting slower only gradually. So, we had to move. They took us along to make us into pets."

"That's what they were doing to us," Sophie said. "They were abusive towards us. They didn't physically abuse us, but they wouldn't let us visit our parents and they were going to assign us to be a pet to an Omanji family. They called us companions, but we were pets or even slaves."

"Yeah," Priya said. "They put these chips into our heads, and they modified our DNA. They said they improved our lives because we'll live to be over 300 years old. I'm not sure if I believe that."

"Believe it," Yoova said. "The Omanji are capable of nearly everything. They're unstoppable unless they self-destruct. That happens only once every few thousand years so don't count on it."

"Priya leaned over the table and her pizza and inspected Yoova.

"Are you female like me?"

Yoova paused for a moment to think about the question.

"I believe so. When I reach adult status, I'll know for sure. If I'm female, I'll lay my eggs to reproduce."

Priya looked increasingly animated.

"I'm female too. I have 300,000 single celled eggs, but human females bear live young."

"Do you carry your babies around in your bodies while they develop and feed them from your bodies after they're born?"

"Yes," Priya said.

"That's so primitive. When our eggs hatch, the babies can eat adult food right away. We keep them in incubators, so we don't have to carry them around. Some like carrying them in our pouches, like it used to be."

Yoova stood up from the table and ran into the stream of people and Yoots passing by.

“Mommy, I think Yoova found her parents.”

“I think you're right,” Nisha said.

She was still in shock that Priya started talking. Her heart was racing. She didn’t want to make a big deal of the fact that Priya spoke to her and called her Mommy, as she did when she was a child.

“Go get them and bring them over here. We prepared a special tent for Yoova's family.”

Priya and Sophie ran over to Yoova and her parents and brought them back to the table. Nisha stood up.

“Yoova, tell your parents the humans are happy they’re here on the Earth and we’re pleased to meet them.”

Yoova held the hands of both of her parents and spoke in her melodious and clarinet-like voice. Her parents replied. Yoova turned to Nisha and spoke into her translation device.

“They thank you for taking them in and saving them from a life of being the slave pets of the Omanji. They say they possess many skills. They can compensate you for your troubles. They want to make a new life for themselves on Earth. They wish to become friends to the humans and to stay away from the Omanji.”

Nisha turned to Yoova and Yoova’s parents.

“Don't worry about compensation. Get acclimated to the Earth. You can stay in the tent near me. We have many things to discuss.”

Yoova translated Nisha's message.

“Yoova, would you like to spend time with your parents alone in your new tent?” Nisha said.

“Yes,” she said.

They walked back to their respective tents.

Nisha gave Priya and Sophie a big hug and cried.

“It's okay Mom, I'm fine now,” Priya said.

“How are you? Nisha said.

“The sensation is like I had one of those energy drinks. You know,

like the ones they warn you not to drink because they cause heart problems. Only my heart is fine. I'm healthy and I have this urge to read, a lot."

"You have an urge to read?"

"Yes. I'm hungry. Only I want to read to satisfy myself."

Priya paused for a second.

"Sophie agrees. We both want to read all the time now. Can you spare a reader or an eyepiece?"

"Yes, I can. What do you want to read about?"

"I want to learn genetics. We want to understand what they've done to us. I want to understand Sanjay's autism. Can you take a blood tissue sample from us and get our genome sequenced? Then we can compare our current genomes to a sequencing we did in our high school *Introduction to Genetics Lab* over the summer. I also want to find out what's happening with the neurons in my brain. And the corpus callosum."

"We drew blood earlier, but we can get better samples now."

Nisha blinked to activate her eyepiece and soon a phlebotomy specialist drew samples of blood and later, a small amount of brain cells from Priya and Sophie.

Priya and Sophie eventually looked tired, so Nisha set up their cots. They were soon fast asleep. Nisha contacted Quinn and expressed her excitement over the day's events. Even though she felt elated to have Priya back, her anxiety increased. She didn't know why. Soon they all fell asleep.

Chapter 22 - Axons

As the first light of dawn broke, Bok walked around outside her tent. Many nights were filled with dreams containing nightmarish scenes, but mornings were pleasant. Nisha walked opened the text door. Bok stood near a large container.

“What are you looking at?” she said.

“This is a crate with items you'll need. I created several hundred translation devices for the Yoots as well as a complete list of Earth foods they can eat. We have a lot of food left over in the colony, but the food will run out for these 50,000 Yoots. You can find the rest of it down at the edge of the colony. I'll deliver more food replication units later.”

“Thank you. You care about the Yoots, don’t you?”

“Yes. I’m guilty for having believed they were simply another animal. I'm embarrassed for my species too. I'm angry. Feelings are depreciated in Omanji society. However, I’m sad for the hundreds of generations of Yoots that are dead, and for these 50,000 here now. They’ll be living on Earth from now on. I hope I can help.”

“These translators will help a lot. Make more when you can.”

“Okay I’ll make more. I should go. I’m having problems with my parents. They’re increasing the pressure for me to merge. They think I’m wasting my time playing with the humans and I need to get serious about my future.”

“Do you want to merge?” Nisha asked as she muted her audio broadcast.

“I’m repulsed at the idea of giving up my individuality and my privacy. Most of my friends don’t want to merge either. They say this is a new world and we should adapt to it.”

“I’m happy to learn that.” Nisha said as Rachel walked outside to join them. “I think you should start your own colony. When you’re

serious about it, let me know and I'll find out if I can locate a place for you to start it. People know me now."

"Thanks Nisha, I'll do that," Bok said as he walked down the hill to the colony.

Nisha turned to Rachel.

"Do you think I'm doing the right thing when I encourage Bok to start his own colony?"

Rachel thought silently for a moment.

"Yes, despite the danger. Bok's movement might turn into something disruptive to Omanji society and who knows what would happen. We know their savage history. On the other hand, this might be our only chance to have someone on our side who can influence the Omanji. I don't think the Yoots will be able to help outside of giving us information. They're smart but they're peaceful. This isn't their planet to defend."

They walked back into the tent as Priya and Sophie were waking up.

"How are you today?" Nisha said.

They both turned to Nisha and said, "Fine."

"Are you hungry?"

"Yeah," Priya said.

They got dressed and walked up to the mess tent. Nisha kept her audio muted.

"Look at all this food Mom." Priya said.

Her eyes opened wide.

"Yeah, and it's real human food too," Sophie said.

"What did the Omanji make you eat?" Nisha asked Priya.

"They gave us weird stuff. None of it looked real. It consisted of cubes of various things which might have been meat or vegetables, but they weren't. The food tasted good and I'm healthy, but it felt unnatural to eat. It was like vegetables, but not from plants. Thank

goodness we had only water to drink. At least water is familiar."

Priya gazed out over the colony.

"I'm glad to be out of there. It's a beautiful place but they're humorless. I'd become some weird thing to keep around for amusement. I think I'll take the pancakes with real maple syrup. I'm sure they don't make maple syrup on Oma."

They sat down to eat.

"Priya, how are you mentally and physically?" Rachel said.

"I'm energized. I have this strong urge to learn now. I think I can remember everything I read easily. I'm physically healthy."

"Bok said they've made improvements to you. Do you feel improved?" Nisha said.

Priya paused briefly.

"Um, yes. I can't explain it. I'm more aware of things. I'm coming to grips with the fact I might live to be 300 years old. I don't know about that. My life cycle will be out of sync with the world. I'm still getting used to the implants and the neurons connecting to the implant. The Omanji say they can't be removed without causing brain damage because my neural network has integrated with it."

"How do you feel having this implant?"

"Imagine being in a big party with thousands of people talking," Priya said. "Only you can hear and talk with all of them. It's hard to filter out the noise. The Omanji told us we'll learn how to filter out the noise. I'll have to practice."

Yoova and her parents walked up to them. Priya kept talking and encouraged them to sit with the group.

"In most ways, it's like normal talking only you speak with your mind. The closer you are to the one speaking, the louder the voice is, but I can hear any one of us 25,000 at any time. Therefore, right now I can talk with Sophie and her mind-voice is sharp and clear. I can talk to someone in the compound a couple of miles away, but it's slightly more difficult. The Omanji said that when my neural net integrates with the implant, I will be able to talk with people on other planets

with a light speed delay depending on distance."

"How do you know how to use the implants?" Nisha said.

"We were learning how to use them before we left. Right now, I can talk to someone in our network on the other side of the world once I learn how to do it. Every device in each brain extends the range of the network. The Omanji were in the middle of training us when they gave up on us and let us go. We were causing too much trouble and we weren't cooperating. We weren't the happy little pets they were looking for."

"It happened that way for us too," Yoova said. "They don't take us seriously. They want to brainwash us, for our yoom and love. They only want us at their convenience. Here on Earth, we'll get some respect among the humans and the younger Omanji."

"I respect you," Priya said. "The Yoots will find many friends here. Humans aren't perfect though; some will fear you. Some will try to hurt you."

"Are humans like the Omanji," Yoova said.

"In some ways," Priya said. "There's good and bad."

"Bok is your friend too," Nisha said. "He told me he now despises the way the Yoots were treated. He didn't know how intelligent the Yoots are. Now he's telling all his friends."

Yoova's nose wiggled back and forth. She hugged her parents. While this discussion had been going on, Nisha anxiously studied Priya.

"Pree, you do seem different. You're speaking like an adult. You've always been mature for your age, but you seem more so now."

"Thanks. I feel more intellectually mature than before. I'll still want to call you Mommy sometimes. I'm anxious because I'm changing quickly. I understand the changes will take months to fully take effect."

"I noticed the same thing," Sophie said. "I think something is happening inside of me. Immediately after they modified my DNA and they put the implant in my brain, I began to think differently. It's been three weeks now and I'm experiencing mental hunger. I remember

everything. I'm having difficulty explaining it. I want to learn genetics like Pree."

Nisha glanced at Rachel who seemed lost in thought.

"Oh, sorry," Rachel said. "I'm thinking about what Priya and Sophie said. We'll soon know the results of their DNA sequencing and brain tissue samples. My guess is the genetic code in each brain cell has been slightly modified. If that's the case, changes will manifest themselves over time, not immediately. If brain cells were reprogrammed, time is required for the relationships between the cells to grow or change. If the aging process has been slowed, we may not detect evidence of that for a while."

Nisha rushed over and hugged Priya and Sophie.

"I let this happen to you. I'm sorry."

Nisha cried.

"Mom, it's okay," Priya said. "I'm good. In a way, I'm glad they did it. I'm smarter than before. I'm an improved person. Every day I have a better outlook, especially since I'm not going to be someone's pet. What's weird is I understand you better now as an adult. I can't explain it. I used to think adults were weird and rigid."

"Thanks, Pree, that makes me feel better. Kind of. Yoova, did they do anything to you?"

"As far as I know, they haven't modified us. I think they were planning on doing something, but they couldn't figure out how to genetically simulate a hundred generations of domestication. Even the Omanji have limitations."

"The DNA sequencing results are in," Rachel said. "It will take a while to understand them. As we suspected, they made changes to your genome in most cells in your body. They altered your telomeres, which shorten each time a cell divides which contributes to aging. We don't understand the ramifications of the change. Fewer cell division errors and a longer life span might be the result. The lab noticed more stem cells in the blood than usual. That's critical to slow aging. You might be able to regenerate organs if they're damaged. Also, the DNA in the brain cells has been slightly changed."

“What’s happening in my brain?” Priya said.

“We aren’t sure yet. Normally neurons in the brain grow one axon and many dendrites. However, in the brain tissue scans of you and Sophie, some of your neurons are growing a second axon. We aren’t sure what it means. If each neuron in your brain grew a second axon, it might allow twice the number of total connections or more. Also, your new axons have more branches than normal. In general, more connections lead to a greater quantity and quality of memories. You might be able to think faster or more deeply. Also, your corpus callosum, which is normally a bundle of about 200 million nerve fibers connecting the hemispheres of the brain, is thicker than normal and now has about 300 million nerve fibers. This is often associated with creativity. These features are slightly smaller than in a normal brain. So, the overall size of the brain is unchanged.”

“Good! My head won't explode with all these new connections. This might explain why I want to read all the time.”

“Yes,” Rachel said. “We’ll do more research into this. For now, I think you two should keep a journal to track your progress. Keep us up to date. I find it significant that the Omanji abducted children who are at the age when the brain is in its final stages of development.”

Nisha glanced at Rachel and Sophie.

“Do you two want to return to school?”

“Oh yes.” Sophie said. “I can't wait to get back.”

“I want to go back too,” Priya said. “I want to learn everything.”

“What do you think?” Nisha asked Rachel. “Should they go back to school?”

“I think eventually that’s possible. However, they’ve been through the most traumatic experience of their lives. Time needs to pass before they’ll be able to reintegrate into the normal school routine. I'm not sure how they'll be accepted at school. You know how kids are.”

“We could go tomorrow,” Priya and Sophie said in unison, while looking at each other.

Nisha gave them an expression of curiosity.

“What happened with you two just now?”

“Nothing.” they both said in unison.

Nisha looked at Rachel and smiled.

“I think we have a big problem on our hands.”

“Yes,” they said.

Everyone laughed except Yoova.

“What's this problem? I don't understand,” Yoova said.

They laughed again, leaving Yoova more confused.

“I'm sorry Yoova,” Nisha said. “We’re joking around. It's humor. Humor is difficult to define. Watch humans, and once you’ve seen enough examples, you’ll start to understand. Soon you’ll be doing the joking.”

“I’ll attempt to be aware of joking,” Yoova said.

Everyone smiled.

“There's a lot of confusion about what to do with the Yoots and humans in the compound. We need to go now,” Rachel said.

“Would you guys like to help us?” Nisha said.

“Sure.”

Soon they drove on the two-mile dirt road to the compound. Thousands of troops were constructing tents and setting up places for the humans and Yoots to eat and take care of their personal needs.

“This is chaos. We need to do something,” Nisha said.

“General Sherman informed me that since we’re the experts on both the modified humans and the Yoots, we’re in charge of them,” Rachel said.

“That's good. Okay, let’s think this through. We can do it.”

Nisha turned to Yoova and the girls.

“Would you like to help?” she asked them.

They agreed. Soon they found a tent and discussed the issues.

“What should we do first?” Nisha said.

Priya raised her hand.

“I think the human children need to go home as soon as possible. The people I met came from everywhere. They’re from all over the world, right?”

“Yes, they’re from nearly every country,” Rachel said. “We’re getting thousands of requests from parents for the return of their children. The problem is we don't know if they’re the true parents. We need to set up a verification system.”

Yoova raised her hand.

“I think eventually we’ll start our own colony here on Earth. I studied your system of currency and economics. We have skills that can earn us money. We’re artists, musicians, and scientists. Perhaps we can buy some land for a colony of our own. It’s been over 20,000 years since we’ve had our own independent colony.”

“That's a great idea Yoova,” Rachel said.

Sophie raised her hand.

“I think we need counseling. A nightmare came true when they took us away. We’re having nightmares now. I had a bad one last night.”

“Sophie, I was told hundreds of psychologists will be here soon,” Rachel said. “What’s that sound?”

“That's our music,” Yoova said. “Do you want to watch how we make it?”

“Yes.” everyone said at once.

They walked into an unsecured area between the tents in the compound of the Yoots. Over 50,000 Yoots wandered around in the compound. 25,000 of them were assembled standing room concert style as a group of musicians played unfamiliar instruments.

“I’ve never experienced sounds like this in my entire life,” Rachel said.

The others agreed as the Yoots played on.

“Yoova, what’s the singer singing about?”

“We don't sing with words. We sing with tonal sounds. No direct ideas are being transmitted in the music, only feelings.”

“I'm getting chills down my spine,” Nisha said. “We need to get back to work, but I want to stay and listen.”

“Yes, let’s keep listening for a while,” Rachel said.

Priya and Sophie were in a trance as they listened to the music.

“Thousands are coming from the human children's compound. They’re streaming in to listen,” Nisha said.

“The humans like our music,” Yoova said. “I’m happy about that. We love music and other forms or art. We like to share them with others.”

“I can't explain what I’m experiencing,” Rachel said. “It's electric. We gotta leave, but I can't. Yoova, how do I stop myself from being attracted to this?”

“Put your fingers in your ear holes,” Yoova said. “Then walk away.”

They did as they were told. The effect dissipated. Rachel shook her head back and forth as though she were shaking water from her wet hair.

“I need to understand what's happening on a biological and psychological level when we listen to music from the Yoots. It pulls you in and won't let you go.”

“Yeah, we want to stay and listen too.” Priya said.

“I'm not sure what happens in your human minds,” Yoova said. “For us it’s pleasurable to make music and listen to it. It's one of our favorite pastimes. The Omanji are as attracted to our music as they are to our yoom.”

“Okay, we need to get organized,” Nisha said. “We gotta get these children back to their families as soon as possible. A retina, fingerprint and DNA database has been set up to match parents to kids. I posted and sent video messages to my community members to get the process going. I guess we'll fly the kids back to their country of origin. General

Sherman is setting up the process now."

The sun dropped low in the sky. They headed up to the mess tent and sat at the picnic table with the view of the colony.

Nisha surveyed the grand view. She studied Yoova, who ate with her four chopsticks.

"We need to make sure the Yoots have enough food. Yoova, I know you're young, but can you help us provide food for the Yoots to eat?"

"Yes, I've noticed Earth has many fascinating insect species. Some are like those living on Oma. When we were abducted by the Omanji, we were forced to eat cultured plant protein. It's not as good as the real thing. We were allowed to raise a small amount of our native plants and insects on the journey to Earth, but we rarely ate real plants. I'd like to grow different plants here on Earth and discover which ones work for us. We have our seeds and databases for reference."

"Great idea," Nisha said.

She sent out messages to her NishaAstro members to get the process started.

Yoova wiggled her nose.

"Here's another idea. I've been learning about human economics. We need to survive in the human world, so we need to interface into your economic system. We need to raise money to buy our food and land to build our colony. Perhaps humans would pay a modest amount of money to listen to our music. Then we don't need to accept much generosity from humans. We're used to being self-sufficient on Oma."

"That's another great idea Yoova," Nisha said. "Millions of people are listening to us right now, and I'll send out some messages to my members to explore the possibilities. I'd love to listen to more of your music. I'd pay to listen. Once you start, it's hard to stop. Perhaps we like your music as the Omanji like your yoom. Humans can become addicted to music."

"Mom," Priya said. "Sophie and I would like to go back to school. Can we? Can we take Yoova?"

Yoova wiggled her nose again.

Nisha smiled.

“Let's wait a while Pree. Soon you can go back to your normal life once we've tested the children to make sure it's safe to let them go. The process might take a few weeks. There's no need to rush, especially if you're going to live 300 years.”

“I know but I want to start learning now,” Priya said. “The sensation is similar to when you're hungry and you need to eat right away.”

“Do you think all the modified kids experience this?” Nisha said.

“I think so but let me see.”

Priya silently queried a large group of her new friends in her neural network. She and Sophie fell into a meditative state for about a minute.

“Yes, we're all experiencing mental hunger. We want to get back to school right away. We don't want to be psychoanalyzed. We survived this experience and we're better people for it. We don't want sympathy. We're happy with who we are.”

Rachel turned to Sophie.

“Do you think this way too?”

“I do. We all do.”

Nisha smiled at them.

“I'm happy you have each other. I believe you. I think you'll be okay. You'll be better than okay because your future is bright. I'll help you however I can. I spoke with your dad. In a week or two you can go back to school when the school is ready.”

“Yes!” Priya and Sophie said in unison.

They gave each other a high five.

“We're going to start a genetics company and find a cure for diseases. AI has been too slow.”

“Okay,” Nisha said. “We need to get some sleep. Yoova, how are your circadian rhythms working out?”

“On this planet, I'm awake for two entire days and I sleep for one entire day. We’re trying to adjust to this short day/night cycle. It's hard because on Oma, each day/night cycle is 20 Earth days long and getting longer every year since the Omanji gave up trying to stop the rotation from slowing. We're having trouble adjusting to this 24-hour cycle on Earth. Our sleep cycles are not coincident with day or night. Sleep is random for us. When we get tired due to a buildup of chemicals in our blood, we sleep. We live a second life in our lucid dreams because we're aware when we're dreaming.”

“Why am I not surprised?” Nisha said.

Yoova stood up from the picnic table.

“I'll go to take care of my parents and return later. I hope all Yoots will be happy on Earth. I think we can be happy if the Omanji don't come after us again.”

“I think they've had enough of you,” Rachel said. “You were too disruptive as were the humans. I think they'll leave us alone now. They won’t make us their pets and they don't need us as slaves or for any other reason. The Omanji claim to be an advanced species. Therefore, they should leave uncooperative subjects alone.”

Yoova walked down the path to her family tent.

“Mom, can I go back to school now?” Priya said.

“Me too,” Sophie said. “I'm missing out on things.”

Nisha smiled, “Okay guys, stay here for a few days while Quinn talks with your school. In the meantime, I need your help dealing with 25,000 traumatized high-school aged kids.”

“I’m not traumatized,” Priya said. “I’m improving every day. I couldn't say that a week ago but feel better than I’ve been in my whole life. After talking with everyone, we all feel the same way.”

“I forgot they communicate as a group,” Nisha said to Rachel.

“Yes, we communicate,” Sophie said. “We don't need psychologists either. We’re doing fine.”

“You may not think you need them right now,” Rachel said. “However, once you adjust to life in the real world with unmodified

people, you'll begin to understand the problems you'll face. Under your new shiny exterior, you're still a human adolescent with her life in a state of flux. I can't tell you what problems you'll face, but they'll be big. Go easy on yourself and take time to grow into your new brains."

"Yes," Nisha said. "Take your time."

Nisha acted excited on the outside but feared the worst. Brains don't undergo substantial changes without big problems to go with them. Priya and Sophie stood up and walked back to the tent. Soon they fell fast asleep. Nisha and Rachel stayed behind as the last light fell across the overwhelming landscape of the colony.

"You put on a good face, but I can tell you're worried," Rachel said.

"Yeah. Her brain will have twice the number of axons stuffed into the same volume. What's that going to do to her? How can she go back to school after suffering through such a traumatic experience? I think I'm losing her. She used to be affectionate, and now she stays away. She acts like she's 20 or older, not 15, but then she acts like she's 10 also."

Rachel put her hand on Nisha's shoulder.

"She's growing up in ways we can't forecast. You must be flexible and adapt to whatever comes your way. She's still your Priya."

"You're right. Thanks for being there. I'm glad they chose you to be my partner in all of this. I guess we better get some sleep. We need all we can get.

They walked back to the tent. Priya and Sophie were sound asleep. Nisha updated Quinn and her Reddit community on the events of the day and soon went to sleep.

Chapter 23 – New Lives

Nisha awoke at first light. She listened for the crunching sound, but heard nothing. She stayed in her cot and watched the patterns the rising sun made on the canvas ceiling of the tent. Rachel had recently woken up.

“I'm overwhelmed,” she said.

“I can't imagine how this is for you.”

“Everything is out of control. Priya wants to go back to school while her brain is morphing into who knows what. I haven't seen Quinn or Sanjay in over a month. You haven't seen your family either. We’re responsible for 25,000 children and 50,000 Yoots. Priya's changes alone are enough for a lifetime of angst. What will happen with the Omanji and life on Earth?”

“That's why we need to take things one moment at a time.”

“I guess so. Okay what do we need to do today? Besides meditate.”

“I'm checking the news. We launched a satellite this morning and it struck one of the orbiting spheres. Nobody has detected a reaction from the sphere it struck or any other sphere. It's as though nothing happened.”

“That's because to them, the satellite hitting a sphere was like a gnat hitting a thick window. How many spheres are in orbit now?” Nisha said.

“Approximately 3,000, which means three billion of them are living in the colony.”

“It's hopeless,” Nisha said. “We're doomed to be second class, or lower on our own planet, but I'm not giving up.”

She paused.

“Where's Bok? Usually, he’s here by now. I'm going to contact

him.”

Nisha connected after about 15 seconds.

“Bok, how are you?”

“I'm doing poorly. I'm not living with my parents anymore. I'm with some friends. My parents are applying more pressure for me to merge. I don't like them telling me what to do with my life. They don't understand what it's like on this planet or to have grown up in space. I can't talk now, but I'll stay in touch.”

“Okay, take care of yourself Bok. I'll be waiting for you.”

They disconnected.

“What happened?” Rachel said.

“I think he had an argument with his parents. He's staying with some friends right now. He doesn't want to merge. He sounds like a typical teenager.”

“That's great,” Rachel said. “If he merges, we lose contact with the Omanji as a whole. We need Bok right now.”

“That’s right. He might need us too. I'll tell him later that he and his friends can stay in the compound with the Yoots if they don't want to merge.”

“This might get dangerous,” Rachel said. “I don't want to get involved in an interstellar parent-child dispute.”

“Me neither, but this might be a good development. I think some layers are about to peel off the onion.”

As they discussed the events of the day, Priya and Sophie woke up. They wanted to walk to the mess tent to eat breakfast.

“I've been thinking,” Nisha said. “You should move back home and get back to school. Normally, when a traumatic event happens to a young person, lifelong scars can result. However, you don't appear traumatized or emotionally flat. You seem energized and happy. Are you ready for it?”

“Yes.” Priya and Sophie said simultaneously.

“Mom, we're ready to go. I'm connected to my new friends all the

time so I'm never alone. I can be alone when I want. The connection is voluntary. I gotta admit the Omanji are awesome at networking. I want to visit with Amy and our other friends at school. I want to learn genetics. I'm in 10th grade now and even though it's October and I've missed a month of school. I know I can catch up."

"That's a lot to make up, are you sure?"

"Yes," they both said.

"Okay, it's settled," Nisha said.

While the kids celebrated, Nisha contacted Quinn. Ninety minutes later his car drove up the dusty road, through the two security check points and soon they reunited.

"Oh Quinn, I'm so happy to see you."

Her hands shook.

"Me too, Neesh. Are you okay?"

Nisha laughed.

"Sorry, I've been under a bit of stress lately. I'm not sure why. The job is so boring."

Everyone laughed.

"Daddy, can we be back in school tomorrow?" Priya said.

"I made the arrangements before I drove here. You can both start tomorrow. Sophie, your parents say it's okay. They'll contact you shortly."

"Yay. Can we go now?"

Quinn glanced at Nisha for her approval.

"Sure. Go ahead," she said. "I gotta work anyway."

Nisha stared at the ground.

"Sorry Mom, I know you want me to stay, but I think my place is in school right now. If you want to ask any of us questions, let me know."

"Us?" Nisha said.

“Yes, as in, all of us who were modified. We call ourselves the mods. We're modified and modern. We don't know what will happen, but I'll tell you when I'm aware of any changes. Even today I'm different than yesterday somehow. I'll explain later.”

They hugged, got into the car, and drove off with a trail of dust swirling behind them.

A tear ran down Nisha's cheek.

“I'm losing her again.”

“No, things are changing,” Rachel said. “As long as you support her, it'll work out okay.”

“You're right,” Nisha said.

She shook her head to reset her mind.

“Okay we need to get these kids back to their families. If Priya and Sophie are any indication, 25,000 kids are waiting to get back to their families and to school.”

They spent the rest of the day working with programmers and agents to complete the setup of databases with retina, fingerprint and DNA scanning of the kids and parents. Long lines of parents formed. One by one, the children were returned to their parents. Arrangements were made to fly the children of other countries back to their confirmed places of origin and families.

Late in the day as Nisha and Rachel ate dinner, Yoova walked up to them and sat down.

“Hi Yoova, how are you?” Nisha said.

“I'm happy,” Yoova said, wiggling her nose in a shaking motion. “Many of us decided to put on a series of concerts to introduce our music to the humans and any Omanji who wishes to listen. We'll charge a voluntary donation in US currency, and that will enable us to build our own food processors and create a new life here on Earth. I set up a Reddit account. Can you mention this to your community?”

“Sure.”

Nisha put up a quick post and soon thousands of people joined the YoovaOnEarth community. Within minutes, she had 50,000 members.

Yoova posted, “I'm happy to be here on Earth. It's a beautiful planet. Listen to our music tomorrow evening at our Mojave compound. (Map) Only $20, for a worthy cause. Our survival. (Music sample link here).”

Rachel smiled and said, “Not a bad first post Yoova. I think you'll do well on your new planet.”

Yoova wiggled her nose again.

They watched her Reddit stream for a few minutes and soon the word got out.

“You better get ready,” Nisha said. “There's a lot of interest.”

“Okay, I need to get ready. We'll meet tomorrow,” Yoova said as she stood up and walked back to her tent.

Nisha and Rachel watched the sunset and walked back to their tent.

“This colony is growing by the minute,” Rachel said. “Those 3,000 towers in this colony represent one for every sphere in orbit. Some of the new towers are taller than the standard 6,000 feet.”

Nisha nodded her head.

“Yeah, we could never have dreamed of this a month ago.”

Darkness settled in over the colony. They fell asleep.

Chapter 24 - Mutants

Quinn woke up early and knocked on Priya's bedroom door, which still had a poster of the latest boy band, the Celestial Mechanics along with a high-resolution poster of the familiar DNA double helix noting locations related to various diseases and traits.

“Pree, it's time to get up.”

There was no reply.

“Priya, it's time to—”

“Daddy, I'm in the kitchen making breakfast. Do you want some pancakes?”

“Um, sure. I'd love some with real maple syrup.”

He walked into the kitchen. Priya stood at the stove, making round fluffy pancakes with a light golden-brown crust on top.

“Pree, you never cooked before.”

“No time like the present Daddy.”

“But how did you —?”

“I figured it out by myself, no agent. Sit down. Where's Sanjay? Oh, sit down Sanj, I made 'em the way you like 'em.”

“Thanks, Pree,” Sanjay said.

Quinn watched in amazement as Priya squeezed some orange juice and set the glasses on the table.

“Um, why are you so, like happy? You have to go to school today.” Sanjay said.

“Yes. That's why I'm happy. I get to go to school today. I'll meet my new teachers and they let me into the genetics lab class.”

Quinn and Sanjay glanced at each other in puzzlement.

“Pree, are you okay?” Sanjay said.

“I've never felt better in my life. I'm going back to school.”

“Why don’t you let the HouseRoeBot make breakfast? We retrained it.”

“I like making breakfast with my own hands. No law against that.”

“Dad, I think you better take Pree to the hospital,” Sanjay said. “There's something wrong with her.”

“Enjoy her good mood while we can. We'll find out how she is after school.”

“You're right dad,” Sanjay said. “Thanks for the pancakes. They're so good. Better than the RoeBot's. Sorry Ro.”

The RoeBot's ego appeared unharmed.

“No problem,” it said.

Priya ate and left early for her one mile walk to school. She met Sophie at her house. They arrived in school in plenty of time to get their assigned lockers for the semester and re-familiarize themselves after a long and eventful summer vacation.

They walked towards their first class, genetics 1a with a lab to follow. Priya smiled as she recognized her best friend.

“Hi Amy, how was your vacation?” Priya asked as she walked over to get a hug.

Amy stepped back.

“Fine.”

Some other students walked by and waved to Amy.

“Okay, well I gotta go. Uh, I'll talk to you later.”

Priya glanced at Sophie and silently thought to her, “What’s her problem?”

Sophie thought back, “I'm not sure, but she acted weird. We've known her since kindergarten. I've never seen her act that way.”

They continued walking down the increasingly populated corridor.

“There go the mutants,” a group of students whispered as they sat

on a bench awaiting class.

Priya turned around and stared at them.

“There go the whats?”

“We didn't say anything,” one kid said.

“Yeah, you did, you—”

“Pree, don't start anything,” Sophie thought silently to her. “It's our first day back.”

Priya glared at the kids.

“Whatever.”

They continued walking, getting many awkward looks along the way. They walked into the classroom.

“That was too weird,” Priya thought to Sophie as they sat down. “It’s as though we walked through a flexible tunnel of kids which widened around us and closed back up as we passed by.”

Sophie agreed as the genetics teacher, entered the room. He blinked to activate his eyepiece and 'Mr. Francis Crick' appeared on the board in front of the class. They remembered someone else named Francis Crick was one of the two people to determine the structure of DNA back in 1953.

Priya looked across the aisle at Sophie and thought to her, “I always wanted to meet Francis Crick. He's my genetics hero.”

Sophie smiled.

They glanced around. All eyes were on them instead of on Mr. Crick. He understood the situation.

“Let's focus on the subject instead of on the people. This class is being taught at a fast pace. You might experience some difficulty keeping up if you don't focus.”

He surveyed the distracted class. He chose one student who seemed especially distracted.

“Mr. Joe Kent, please stand up. Tell the class why you keep looking at Priya and Sophie.”

“Well.”

“Yes Joe, please elaborate for the class,” Mr. Crick said. “Be honest. I'm sure others are thinking whatever you’re thinking. We need to clear the air so we can get on with the instruction.”

“Well, I checked them out to determine if they were—”

“Yes, continue.”

“If they were mutants like people said.”

“Can you believe this loser?” Priya thought silently to Sophie. I want to get up and—”

“Calm down Pree, it's going to be okay,” Sophie thought back.

They both gave Joe the stink eye.

“What do you mean by 'mutants', Joe?” Mr. Crick said.

“Well, um.”

Mr. Crick waited for his answer.

“Cat got your tongue?”

“No, it's just— I wanted to find out if they were weird. Like how they are in those old alien mutation movies.”

The class laughed.

“Is something funny Amy?” Mr. Crick said.

“Well, yeah. I mean like, wouldn't it be funny if they turned into mutants with three eyes and huge warts growing on their faces? It wouldn't actually be funny, but I mean strange. No offense Priya.”

Priya gave a fake smile.

“None taken Amy.”

“I thought she was our friend,” Priya thought to Sophie.

“Do you notice any warts or tumors growing on them, Amy?” Mr. Crick said.

“No sir.”

“Class, I think we're going to be having a lot of problems with

definitions here. Let's clear the air with our first lesson on mutations in Genetics. First, we're all mutations."

The students gave each other funny faces, reenacting scenes from an old zombie movie.

"Quiet down. The fact is around 320,000 years ago or longer; one or more children were born who were different from their parents. They may have had bigger foreheads and smaller jaws than their parents. Perhaps they had less hair. They were rejected by their peers for being different, but those 'mutants' are our ancestors because the rest of them went extinct. They were mutations, which can be good. We're all mutants. We have big foreheads and small jaws. Older species of humans might consider us ugly or at least creepy."

"Can we call them mutants, nicely?" Joe said.

The class became disrupted again.

"Joe, if the term 'mutant' is used in a derogatory or humorous way in this class, the offender will be removed. Do you understand?"

"Yes sir," Joe said, overemphasizing the word, sir.

Mr. Crick gave Joe a stern look.

"That attitude doesn't belong in this class. You must leave if you don't get yourself under control. Do you understand now?"

Joe nodded his head and looked down at his desk.

"Yes."

"Okay, now Priya if you would like, can you explain to the class what they did to you, from a genetic standpoint?"

Priya stood up.

"I don't understand everything yet, because my genome is still being analyzed and this is my first day in a beginning genetics class. I know they modified the DNA in most cells in my body. In a way, Sophie and I are indeed mutations. However, I'm the same person I've always been. I'm healthy. I don't have any weird diseases. I want to talk to my friends and blend in like anyone else. I want to have my normal life back. Also, I don't want to be called a mutant. That's a pejorative term. I'm a normal person like everyone else."

She sat down and thought silently to Sophie, “How was that?”

“That was fine Pree,” Sophie thought back.

“Thanks, Priya,” Mr. Crick said. “You seem like a perfectly normal and intelligent person to me. So does Sophie. I don’t think this subject is closed. I'll be paying close attention to all of you in class. I want everyone to be treated fairly. Now, let's learn about genetics.”

The abbreviated lecture and lab went well and soon the class ended.

“I love genetics. It’s so easy. I want to do this for my career,” Priya thought to Sophie as they walked down the corridor to their next class.

“Me too,” Sophie thought back. “It's the key to everything. We know what the Omanji can do. We can do anything too. You said, 'Pejorative?' You usually don't talk like that.”

Priya smiled.

“I’m changing, aren’t you?”

“Yeah, I acknowledge that a trivial number of my new assessments are antithetical to the old ones,” Sophie thought back silently in mock sophistication. They giggled out loud.

As they walked down the corridor thinking with each other, they felt the same sense of tunneling through a negative energy field, as the students backed away as they passed and then closed in behind them.

“Yuck, Amy is following us again. I thought we were such good friends, but I guess not,” Priya thought to Sophie.

They kept walking but Amy caught up with them.

“You're thinking to each other right now, aren't you?”

“Yeah, so?” Priya said.

“Saw-ree, I just wondered,” Amy said.

They walked for a while in silence while Amy followed close behind. They both stopped, and Amy bumped into Priya.

“Sorry Pree, you stopped so—”

“What do you want from me Amy?” Priya said. “You obviously hate me now so leave me alone.”

“I don't hate you.”

“So why did you act weird and say those things about mutants in class? Why are your hands shaking?”

“Because I'm afraid.”

“Of what?” Priya said.

“We were such good friends, and now I'm afraid you've been turned into a, um—”

“A mutant?” Priya said. “Take my hand. I'm a normal person. Go ahead. Grab it.”

“Amy reached out but couldn’t touch Priya's hand.”

“Ugh, just grab it.” Priya said.

She grabbed Amy's arm and forced Amy's hand to grab her other hand.

“There, was that such a big deal?”

“Sorry,” Amy said. “Give me time to get used to you. I don't want to lose you, or you too Sophie. It's that, well, you were with the aliens.”

“So what? I'm fine now,” Priya said. “I didn’t contract any weird diseases. I want to figure out how they did that. I'm not a zombie and I'm not going to turn you into one. What else are you afraid of? Tell me now so we can get it over with. Don't be afraid.”

Amy said nothing for a few seconds.

“Well, I think you can read minds. Can you read my mind?”

“Of course not, silly,” Priya said. “Nobody has ever been able to read someone's mind directly from mind to mind without the assistance of electronics. Our mind is chemically based. Signals pass from an axon to a dendrite via chemical ions. You know this. The signals aren't precise like radio waves. Only weak and vague muffled signals ever leave the human brain. They’re like white noise. No reliable signals exist for us to read minds as far as we know. My

implant can receive transmissions from Sophie's implant. I can read her thoughts only if she lets me. You can think anything you want around me and I won't be able to listen to it with my mind."

"Okay," Amy said. "Here's another question. I hear you guys are super-geniuses. Is that true?"

"I don't think I'm much smarter than before," Sophie said. "You're the genius, I'm not. You didn't act like a genius in class though."

"Sorry."

"Perhaps I'm slightly smarter than before. I think I can memorize things a little better. We'll find out what happens when I do my genetics homework tonight."

"Yeah, we haven't tested out our new brains." Priya said. "Do you want to come over after school and study with us? You'll find out how far behind we are. We're four weeks behind."

"I don't know, I promised a friend I'd help her with homework."

"That's a bunch of—"

"Pree, stop." Sophie thought silently to Priya.

"Sorry. Amy, I know you're not helping anyone. Come over and study, okay? Nothing bad will happen. We're supposed to be friends."

"Well."

"Okay, it's settled then," Priya said.

They agreed to meet just as they walked into their next class, biology 1a. Priya and Sophie got the same vibe they did at the start of the genetics glass. The teacher had the same discussion with a separate set of students. The discussion ended and they walked to their next class. The same thing happened there.

"Whew, it's been a long day and it's only lunch time," Priya thought to Sophie as they walked into the cafeteria.

They picked up some sandwiches and sat at a table next to some other students. The students surreptitiously glanced at them, pretending to be oblivious. They picked up their trays and moved to a table further away.

“The day just got longer,” Priya thought to Sophie.

“Yeah, I didn't think it would be this bad,” Sophie thought back. “What should we do, fight back?”

“I'd love to, but that's not a promising idea. Let's think, of something else,” Priya thought.

A group of students walked into the cafeteria and were startled to spot Priya and Sophie in there. Priya heard the word 'mutant' as they walked out. She turned around and they were gone. She peered through the window as they walked away. One student turned back and made accidental eye contact with Priya. He quickly turned away.

Priya glanced at Sophie and thought, “On second thought, fighting back might work. My mom has 875 million community members on Reddit. I'll talk with her tonight.”

The rest of the day turned out to be as painful as the first half.

Priya and Sophie walked straight home after the last class ended. Amy caught up and arrived at the same time.

“Tell me about your day,” Quinn said.

“It was awful Dad. The kids are afraid of us. They called us mutants and they’re staying away from us as though we caught the plague.”

“Sorry guys. Do you think it'll get any better over time? Usually things do.”

“No. This is going to be a long fight. Even the smart kids are afraid, and the not so smart kids are worse. They’re nasty and ignorant.”

“Well, give it time. I once read when AIDS first happened, people were afraid. After a while, people understood the people infected weren't monsters.”

“Yeah, I know,” Priya said.

“How did you know that?” Quinn said.

“Oh, today I was looking for corollaries to our situation and read about it.”

“You're a genius.” Quinn said.

“No,” Priya said. “It was a simple search. Anyway, okay dad, we'll be patient about our situation,” Priya said. “C'mon guys, let's go study.”

They ran upstairs to Priya's room.

“We have a lot of catching up to do,” Priya said to Amy. “Can we take all of the tests to catch up?”

“Sure, here's what we covered so far. You can take the tests every Friday including tomorrow.”

“That's good,” Sophie said. “Mr. Crick said he would give you a month to catch up.”

They studied for a couple of hours, unassisted by agents. Afterwards, Priya and Sophie reviewed the three tests. Amy gave them the tests verbally and they wrote down the answers by hand on paper. They turned in the sheets so Amy could score them.

“Hmm,” Amy mumbled under her breath as she reviewed the answers.

“What is it?” Sophie said.

“Well, I can't figure out how you did it. Hold on.”

Amy finished comparing their answers to the correct answers from Mr. Crick.

“Okay I'm done. I might as well tell you right now. You both got 100%.”

“No way,” Priya said.

“Way. How did you do it? Are you guys silently communicating the answers to each other or something?”

“No,” Sophie said. “And we both learned the material at the same time so communication wouldn't help us. We scored 100%?”

“Yeah, I don't know what to say right now. You guys are scaring me.”

“What do you mean by scaring?” Priya said.

“I'm totally freaked out. I mean, how did you learn so fast? Maybe your brains are alien or something.”

“I'm not sure,” Priya said. “I don't think I’m any different. I do remember things a little better, I think. The material is easy. Didn't it seem easy Sophie?”

“Oh yeah, the material is super-easy. I thought genetics was a difficult subject.”

“It's difficult you guys,” Amy said. “It's the hardest class I've ever had. You guys are aliens.”

“You're overreacting,” Priya said. “I memorized the stuff. It's no big deal. I don't think I’m much smarter than I was before. I'll admit I like learning more now. I'm not sure why.”

“Yeah, I'm the same way,” Sophie said. “Amy, please don't tell anyone about what you think of us. Okay?”

“I won't. I want us to be friends, like we were before.”

They studied until dinner. Afterwards, Amy and Sophie went home. Priya connected to Nisha.

“Mom, how are you?”

“I'm fine. I'm so happy to hear your voice. Tell me about your first day back at school,” Nisha said.

Nisha muted her Reddit broadcast stream for privacy.

“The day? Well, I can't explain it.”

Priya became silent for a while. Nisha said nothing as she gathered her thoughts.

“Okay, everyone thinks I'm a mutant. They're not speaking scientifically about mutations if you know what I mean. They think I'm a freak. The other kids avoid me like I caught some disease. Even Amy avoided me until we talked it out.”

“Sorry Pree,” Nisha said. “I hope things will get better once they get used to you.”

“They're not going to get better. Even the teachers who defended me kept their distance. Here's the weird thing. Sophie and I studied this afternoon with Amy. We learned the first three weeks of genetics in only three hours. We already almost caught up to the class. Genetics seems easy to me. It's easy to memorize stuff. I'm still me though. I'm no different than before.”

“It's okay Pree,” Nisha said. “It'll take some time to get used to the changes happening to you. We're continuing to analyze the extensive DNA modifications which they made to you. The second axon growing from each neural cell will affect how you think. You might not notice anything unusual because to you, this is how your mind should be. It's a matter of perspective. To Einstein, the concept of relativity wasn't too complex. Do you understand?”

“I think I do. When Amy studied with us, she freaked out when we learned so quickly. To me, genetics is an easy subject. I thought nothing of it. One last thing, what should I do when people call me mutant? I wanna kick their—”

“That's not a good idea.” Nisha said. “For now, it's best to not engage. Get the faculty on your side first. They're also afraid of you, so prove you’re no threat. I’m not going to mention this to my community until we understand how this is playing out.

Thanks for talking. I need to catch up on my other subjects. I'll connect tomorrow.”

Rachel sat quietly with Nisha while she spoke with Priya. After a few more minutes, they ended the connection.

“What do you think?” Rachel said.

“It's my biggest dream and my worst nightmare all rolled into one. That second axon is making a significant difference. Her IQ will be off the charts. I tried not to make a big deal about it, but this is serious. She's in a good school but is still being bullied. I can't imagine what these thousands of other kids are going to face when they go back to their schools. Some will be returning to lesser developed and poor countries. It'll be more difficult for them. They want to go back to school if what we learned today is any indication. We need to plan for

these problems."

"Yeah," Rachel said.

They turned to each other for a long moment.

"Are you thinking what I'm thinking?" Rachel said.

"I hope not. What are you thinking?"

"Well, school isn't only a problem with bullying for the modified kids. They'll experience the same problems with the entire world. And the world is going to have problems with them. Is that what you're thinking?"

"Absolutely," Nisha said. "Remember reading about the race problems in history books? Those problems are nothing compared to this. The problem will be severe if the kids have a superior intellect. It's one thing for a race to think they're superior, but what if one race or subspecies is superior?"

"I don't want to think about that right now," Rachel said. "We have 81 billion members of a superior race claiming the Earth as their own."

Nisha smiled.

"Right, I almost forgot about them. I'm worried about Bok. I tried to contact him this morning and I haven't heard from him all day. That's never happened since the first day we made contact."

"Yeah, that's worrisome," Rachel said. "He's our only hope right now."

Nisha spent some time talking to Quinn and soon thereafter, they fell asleep.

Chapter 25 - Denial

At 6 a.m., Priya felt ready to face her second day at school. She walked downstairs and made breakfast for Quinn and Sanjay.

“Pree, I want you to be careful at school today,” Quinn said.

“Why? If they want to act like a bunch of idiots, that’s their problem.”

“It’s more than that now. Did you hear the news?”

“No.”

“So far, 5,000 of the 25,000 modified kids have been released and some have gone back to school like you did yesterday. An incident occurred where some kids beat up a modified kid in a school yard. They called him a mutant.”

“OK. I’ll bring ghost pepper spray,” Priya said.

“That’s a clever idea, but it’s not the answer. You need to avoid confrontation, or you might get into serious trouble. I don’t want to lose you.”

“Let me find out something,” Priya said.

She went into a meditative state. She hadn’t been trained on how to use the implant, but she managed to access the communal telepathic root by thinking the word ‘*root.’* That's as far as they got in the training before the Omanji let them go. She felt more connected than she did a few days ago. She remembered her neural network grew around the implant, establishing connections to it. She wasn’t sure what to do next, but she located the root. It prompted her to take an action. She thought of different words. When she thought the word ‘*connect,’* she noticed a new prompt.

Quinn and Sanjay watched Priya, trying not to bother her while she concentrated.

As soon as she thought the word *‘connect,’* she heard hundreds of

voices. She understood how to connect with Sophie but not with any specific one of the 25,000 modified children on the telepathic network. She then found a virtual way of traveling around where she overheard conversations between people, like when she and Sophie talked telepathically. She traveled amongst the voices. She realized these voices were of those who allowed themselves to be 'overheard' by anyone on the network, just as the Omanji had claimed.

She overheard the word 'beating,' and she asked to connect to the conversational group. They accepted her. His name was Henry.

Henry thought to Priya and the others in the group, "PE class was ending when they came running onto the track from behind some bushes. The coach couldn't tell what was happening from his angle of view. They beat me with clubs made from tree branches. They ran away. The whole thing happened so quickly. I didn't know what hit me. I don't know who beat me."

"That's awful Henry," Priya thought to him. "I'm going to talk with my mom about this. She is NishaAstro on Reddit."

"We all follow her Priya, and you too," he thought back.

Another member of the group thought, "What can we do? We're all bullied now. Wait until everyone is home and going back to school and living their normal life. It's going to be a mess. They all think we're mutants."

"Yes, we need to stay connected forever," Priya thought back. "Let's set up this network so we all have access to each other at any time. I had to wander around before I found you, Henry."

Priya and her new friends began to design their modifiable telepathic network to suit their needs and agreed to meet later to work more on it. Priya came out of her meditative state and became conscious that Quinn and Sanjay were staring at her with great interest.

"I found out what happened. They beat him and he doesn't know who did it. I need to go now."

"How did you find that out," Quinn said.

"I can connect to anyone at any time,"

"Why am I not surprised? Anyway, be careful, okay?" Quinn said.

"Okay Daddy, I gotta go now. See you after school."

Priya ran out the door and met Sophie and Amy. They cautiously walked to school, avoiding people. When they arrived, they faced the same problems. Reporters recorded the events.

"They seem polite today, don't you think?" Amy said.

"I think they're being nicer because of the reporters," Priya said.

"You're right," Sophie said. "Notice how they lean back when we walk by. They're giving you funny looks too Amy. Are you sure you want to hang with us?"

"I'm positive."

Friday's schedule had an open sixth period. They decided on chess as the elective activity. Priya played chess for years with Nisha, Quinn, Amy, and Sophie. They played in several high-level tournaments. The three of them walked into the large classroom. A dozen boards were set up ready to play. Some students were already playing.

They split up and played other opponents. Grandmaster Anatoly Botvinnik, the chess coach, chose an opponent for each of them. He played high level tournaments in his younger days. Once he played the number one ranked player in the world to a draw. The students respected him for this accomplishment. Priya was paired with the top ranked player in the school and in California in his age group.

"Hi, I'm Priya," she said as she extended her hand.

"Hi, I'm Jose," he said as he sat down.

"Did you just avoid shaking my hand?" Priya said.

"Sorry, I don't want to get anything on me."

"There is nothing on me to get on you. Do you think I've got cooties or something?"

"I don't know. Can we play now and get this over with quickly?"

"Fine," she said as she played her first move.

The match didn't last long, as he had anticipated. However, Priya won.

“You cheated, didn’t you?” he asked as he pushed his few remaining pieces off to the side in disgust.

“No. How can I cheat? I’m sitting right here playing.”

“Yeah, but you’re telepathic. Someone might be giving you moves. How do I know?”

“I’m not telepathic. Nobody is. You played a weak game Jose. Anybody halfway decent could beat you in this game. Don’t blame your mediocre performance on me.”

“Okay guys, stop.” the Anatoly said. “Jose, accusing an opponent of cheating is a serious thing, even though this is only practice.”

“Coach, I haven’t lost a game this year, even in tournaments. I’m the number one ranked player in the state. I played a good game and somehow, she knew my plans. If someone or something wasn’t telling her what to do, then she read my mind. Either way, it’s cheating.”

Priya sat in front of the chess board, shaking her head as the other students glanced over.

“Ugh. Jose, I can’t read minds,” she said.

“Okay everyone, continue your games,” the coach said. “Priya, can you come to my office for a minute?

Priya sat in the old musty chair in front of his antique desk. Anatoly reviewed the game, move by move in his eyepiece.

“Hmm,” he said.

He continued mumbling something under his breath every few seconds.

“What?” she said.

“What’s your rating?” he said.

“Well, the last time I checked it was 1750. I’m okay. I could be better if I practiced.

“Hmm,” he said. “Jose has a ranking of 2350 and it’s going up

with every match. He might be a grandmaster in a few years."

"So."

"So, the odds of you beating him in a single game are less than 10,000 to 1. How did you do it? You played a tough game against him. You beat him easily, and he played one of his best games. You won by brute force."

"Oh, come on coach, he didn't play a good game. He missed several opportunities to kill me. I thought I played a bad game."

She scrolled through the moves.

"See here, and here? And three more moves to here? He had me."

"Hmm, I didn't notice that five-move checkmate. He didn't either."

"See coach? I played a bad game. I left myself open."

"Priya, I don't think you see. If you didn't get instructions from the outside, then you possess an incredible mind for chess."

"No coach. I showed you my vulnerability in that game. I made a bad mistake. I'm a lousy player. He didn't spot my weakness."

"Priya, only you could identify that vulnerability. Even I didn't notice it. His checkmate was five moves away, and you had a strong position except for that exact set of moves. I don't think anyone could calculate the series of moves to beat you, except for you."

"That's nice. To try to build up my self-esteem but—"

"This is not about building up anything. I want you to come with us to the western open regional tournament tomorrow. Let's find out how you do. You've earned a modest but solid ranking so there's nothing to lose. We still have 25 minutes left in the period, play Jose again."

"Fine, but I don't understand what the big deal is," Priya said.

"Just go," he said. "I'm behind you."

She walked back into the room where the others still played. She walked to the table where her formidable position remained on the board.

"Jose, the coach told me to play you again," she said.

"Whatever he says, cheater," Jose whispered under his breath as he sat down.

"Jose, I didn't cheat. You had a good chance to beat me."

She set up the board to its earlier state, five moves before the end of the last game.

"See here, and here? You can move here … and here. See?"

"What the—" Jose whispered.

He studied Priya's suggestion for a long time.

"Yeah, I overlooked that. Okay fine, I'll play you again. I won't let you off easy this time."

10 minutes later the game ended.

Jose shook his head in disbelief.

"You're doing something, Priya cheater."

She rolled her eyes.

"I'm doing nothing. You played another bad game, I thought you had me, but you let me go."

"Where?"

She set the pieces back on the board to their positions from a few minutes earlier.

"I don't know why you didn't stop me by doing this, and this."

Jose once again examined the board for a long time as Anatoly stood behind him.

"What Jose?" Anatoly said.

"What is she doing? Is this a joke?"

"What am I joking about?" Priya said. "You let me beat you again."

Jose stomped out of the room in disgust as the rest of the students watched in amazement. Anatoly comforted her.

“You did fine Priya. Don’t let him get to you. You played a good game and you beat him fairly. I know you’re not cheating because you understood conceptually how to beat your own tactics and strategy. Okay everyone, the period is over. See you all next Friday. Priya, Sophie, and Amy, can I expect you tomorrow at the tournament?”

Priya waved as they stood up to leave.

“Sure coach, we'll play tomorrow.”

The three friends walked out into the bright sunlight of a warm early October day. Several other students walked cautiously behind them, acting disinterested.

“What's the big deal?” Priya said. “He played two bad games.”

“Priya, Jose is a master level player and will be a grandmaster soon,” Amy said. “You dispatched him like he was a rookie.”

She glanced at Sophie.

“How did you do? You played our number two.”

“I won both games, but he played poorly too. It’s no big deal.”

Amy stopped walking. So did Priya, Sophie, and the students following them.

“What now Amy?” Priya said.

“You guys don’t understand, do you?”

“Understand what Amy?” Sophie said.

“You guys are super-geniuses.”

“And you’re super-crazy,” Priya said, trying to hide her smile. “We’re doing nothing any better than before.”

“I guess even super-geniuses aren't fully self-aware,” Amy said. “Okay, can I study with you guys?”

Priya smiled again.

“Um it’s Friday, but fine we’ll go over to my house.”

When they arrived home, Quinn and Sanjay weren't home, so they ran straight up to Priya's room. Amy noticed something had changed.

"Pree, where's your poster of the Celestial Mechanics?" Amy said. "I thought you had a crush on the synth player, what's his name."

"I don't care about that anymore. I took it down."

"This so proves my point. Don't you guys understand?" Amy said.

"What?" Sophie said. "That we're super-geniuses? No, we don't."

Amy blinked to activate her eyepiece.

"Okay you guys, take this IQ test. I'm sharing it with you now. It's the newer more broadly based one."

"Why?" Priya said. "You're the genius. You got a 142, last time. I only got a 124 and Sophie got a 120."

"That's still top 5%. Humor me guys, okay?" Amy said.

30 minutes later they finished and submitted their answers. Amy's genius-level score of 146 displayed on the screen. Soon afterwards, Sophie's score popped up. 236. Soon afterwards, Priya's score appeared. 234. The App server asked for a name. They exited the App without entering the names. They didn't want to draw attention to themselves.

They all laughed.

"How can this be?" Priya said. "There's no such thing as a 236 on an IQ test. Wait, I take that back. Maybe a few savants in history could score that high.

"As I suspected guys, I'm the dumb one." Amy said.

They stared at each other in silence for some time as reality sunk in. Priya and Sophie didn't think to each other.

"I don't know about this," Priya said. "I don't think I'm a super-genius."

"Me too, Sophie said. "I'm doing nothing different. The test must be wrong. I mean, yeah, I like reading and learning more. My memory seems improved, but it's not as big of a deal as the number suggests."

“No guys, it’s right,” Amy said. “I double checked. You guys are officially super-geniuses.”

Priya and Sophie couldn’t believe it.

“This makes no sense,” Priya said. “There must be some mistake. You gave me an easy test. Those puzzles were simple.”

“Okay fine, live in denial if you want, but the evidence is clear. I noticed how quickly you caught up in genetics. I watched your chess game. I know about your second axon growing from each neuron in your brain. I know what axons do. Your expanded corpus callosum. You act like things are easy when they're not.”

“Pree, maybe she's right,” Sophie said. “Everything seems easy lately. Haven't you noticed?”

“Well, I'll admit things seem easy now. We’re too close to the situation. Amy is the one who understands reality. Let's talk to my mom right now and find out what she thinks.”

She blinked into her eyepiece.

“Mom, are you busy?”

“Yes, but I’m not too busy for you. How were things at school today?”

“Well, weirdness prevailed. First, I caught up in genetics after being a month behind. Second, I got a perfect score on the latest genetics class test and so did Sophie. Amy is the genius, and she only got a 98. I used to wish I could do as well as her. After that, I beat one of the best chess players in my age group in the world. And I beat him easily, twice. Finally, we took IQ tests, and I got a 234 and Sophie got a 236. I'm freaked out. I don't think I’m smarter. I think everything else got easier. What's happening to us?”

“You mean 134, right?”

“No Mom. 234.”

“Pree, Rachel and I discussed the modifications the Omanji did to your DNA. That extra axon growing from most neurons in your brain and the wider corpus callosum in the same sized brain will make an enormous difference. We weren't sure what the difference would be

until now. The changes are real. We've been helping the modified kids in the compound and they're reporting similar effects happening to them. You aren't alone. Ping them and you'll see."

"But I'm the same as always."

"Remember what I said Pree, everything is relative. Einstein didn't think much of his abilities either. To him, they were normal."

"But I'm no Einstein."

"Yes Pree, you're not. You may be smarter."

"Yeah, right Mom. Anyway, has Bok or Yoova contacted you? What's happening?"

"I'm worried about Bok. I haven't heard from him in two full days. He might still be fighting with his parents about whether he should merge with the telepathic collective. Or they forced him to do it."

"I hope not," Priya said. "I like him. He's standing up to them. After what I've been through, I want the Omanji to go, but I want Bok to stay here because he'll be happier. What's happening with Yoova?"

"Yoova is helping to put on the first concert performed by the Yoots. It's tomorrow. The buzz looks promising for a big turnout. They put a video on YouTube and over 200 million views happened in only a day. Do you wish to come?"

"I wish I could go, but I'm in a chess tournament. My coach says I might be a top chess player. I'm not so sure about that."

"Pree, you should go," Nisha said. "Do everything. Try everything. Be self-aware. Write in your journal. Track your progress. You know what I'm saying."

"Yeah, I know. Well, say hi to Yoova and Bok if you run into them. I gotta go."

They disconnected.

Soon afterwards, Quinn came home with Sanjay. Priya cooked them all dinner.

"This is awesome Pree," Sanjay said. "What's gotten into you?

You don't know how to cook, but this is like eating at a fancy restaurant."

"I don't know Sanj. I threw a bunch of things together. It's no big deal."

"Priya and Sophie are super geniuses." Amy said.

"Amy, what are you talking about?" Quinn said.

"They scored over 230 on IQ tests, and Pree and Sophie are in a big chess tournament tomorrow."

Priya looked across the table at Amy.

"Don't say that, it's embarrassing. If you say that to anyone at school, you're SO dead!"

"130 right?" Quinn said.

"No. 230!" Amy said.

Quinn raised an eyebrow in disbelief. "Is this true Pree? It's over 230?"

Priya glanced down.

"Well, 234 to be precise."

"That would be the world's highest IQ."

"No Daddy, Sophie got a 236."

Sophie smiled broadly. Quinn opened his eyes wide.

"Okay, it's the second highest IQ. What are you going to do with it?"

"With what?"

"With your new brain."

Priya didn't hesitate.

"Well, I'm going to cure genetic problems. Afterwards, I'll create some new species."

"Me too," Sophie said.

"I guess I'll be getting their coffee," Amy whispered under her

breath.

Priya peered at Amy with disappointment.

“Give me a break Amy, you're smarter than me.”

“Not anymore, but I'm smart enough to understand what's going to happen. You'll know reality soon enough. I'm not going to talk about this right now.”

Priya turned to Sophie and thought silently to her, “What is she talking about?”

“Well, I will say that-” Amy said.

She paused when she noticed the silent communication.

“Hey, don't do that in front of me, it's rude,” Amy said.

“Sorry,” Priya and Sophie said in unison.

“I'm sorry too,” Amy said. “I need to get used to this so I might as well start now. I think this will be a long struggle for all of us.”

“Amy, what are you talking about now?” Priya said.

“I’m talking about the future. I don't think you realize what's happening. You're too close to your situation to see it clearly. Are the rest of the mods like you?”

“Mods?” Sophie said. “Oh, the others modified by the Omanji? We call ourselves that. Um, I think they’re like me. We all had the same alterations to our DNA with variations for immune system issues.”

“In that case, the future of the human species has been irreversibly altered, assuming that the Omanji don't wipe us out,” Amy said.

“What are you talking about?” Priya said.

“I'll tell you later. You don’t need AI agents. I'm freaking out right now. Let’s go study, okay?”

They walked upstairs and studied for the rest of the evening.

Chapter 26 - Networks

Quinn walked downstairs as the first light of the day filtered through the curtains. Priya had breakfast ready.

“Pree, you don't need to make breakfast for us every day.”

“I know Dad, but I like doing it. I made a quiche this morning while I studied some chess moves for the tournament today.”

Quinn shook his head in amazement.

“I'll admit, this smells wonderful.”

“Sit down, here's some veggie juice I made. Here's some for you too Sanj.”

“Thanks, Pree,” Sanjay said as he glanced at Quinn. “I like the new and improved Priya.”

“I'm the same as always, don't be silly,” Priya said. “Oh, it's seven. I already ate. The coach should be picking us up any minute to go to the tournament. I gotta go.”

“We'll see you there,” Quinn said.

Anatoly picked up Priya, Sophie, Amy, and some of the rest of the team. Soon they arrived at the tournament in a large gymnasium, where hundreds of players and parents walked around inspecting the boards and checking out the other people.

“Okay guys, this is a Swiss style tournament,” Anatoly said. “You’ll each be paired with someone who has a similar rating. Jose, you’ll be up against the second rated player since you have the top rating. If you win, you’ll be paired with the highest rated winner for the next game. You’ll play at least five games whether you win or lose. Afterwards, we’ll know where everyone is currently ranked. Don't be upset if you lose. Go on to the next game.”

Anatoly walked over to Priya who watched a highly rated participant play a practice game.

“Priya, you were assigned to another player with a 1750 rating like yours. Sophie, you’ll play someone with a 1600 rating like yours, you should win at that level. Amy, you play a tough opponent with a 2000 score like yours. Always play your best game, okay?”

“We will,” they said in unison as the coach did a double-take.

They started their games. Within 14 moves, Priya's opponent withdrew. She watched Sophie and Amy play. They easily won their matches. Jose and his number two ranked opponent played to a draw in 60 moves.

Quinn and Sanjay arrived as the second round began. The difficulty level increased. Priya and Sophie still won easily but Amy took 55 moves to beat her opponent. Jose played the third ranked player in the tournament and won easily.

Priya and Sophie breezed through the third round. Amy lost to the number two ranked player and Jose beat the number four ranked player.

In the fourth round Priya and Sophie won easily again against much higher rated players. Amy lost to Jose.

In the fifth round, Sophie played a tough game against Jose and managed to force him to withdraw after 30 moves. He wiped the chess board clean, sending the pieces flying. Priya played the second ranked player who earlier played Jose to a draw. She checkmated him in 25 moves.

Sophie and Priya played the final, tournament-deciding game. The restless audience watched the progress in their Eyepieces and on the big board in the front of the auditorium.

A woman in the audience shouted into the hushed silence, “This tournament isn’t for mutants, it’s for humans.”

Priya looked up at Sophie and thought to her, “I’m gonna go and kick her—”

“Pree, calm down,” Sophie thought back. “Keep your head down. Play the game and ignore her. We need to show a good example for the others who were abducted.”

The audience became disturbed. People whispered.

Someone else shouted out, “Yeah, they’re cheating mutants. Disqualify them.”

Another person said, “Mutants…mutants…mutants…”

Soon some in the crowd joined in.

Priya glanced at the audience and back at Sophie and thought to her, “The parents are acting worse than the children.”

“Yeah, they’re immature. Don't say a word.”

Within a few seconds, a judge stepped in front of Priya and Sophie and said, “Calm down everyone, the judges are reviewing the situation now. Please stay calm.”

He walked away. The crowd continued talk in hushed tones.

Priya and Sophie sat at the table and thought silently with each other for 10 minutes. They didn’t make a move in the game. A judge came out and the crowd quieted down.

“We contacted the US Chess Federation and they advised us to temporarily restrict genetically modified humans from all official US tournaments until a final decision is made at the summit to be held next month. We offer our sincere apologies to our finalists Priya and Sophie, who played world class chess here today. Let’s give them a round of applause.”

Some audience members clapped amidst the hushed boos.

Priya and Sophie looked up into the audience, which included Quinn and Sanjay.

Priya thought to Sophie, “Are they clapping for us or are they clapping because we’ve been eliminated?”

“I’m not sure,” Sophie thought back. “Are they booing because they disagree with the decision? Or are they booing us?”

Priya gazed into the audience again and thought to Sophie, “I don’t know whether I should like the clappers or the people booing, but I sense a lot of animosity out there. Let’s get outta here.”

They stood up from the table and walked over to Anatoly, who argued with the judges.

“Thanks coach,” Priya said. “Don’t bother arguing with them. There’s too much fear in the room and this is neither the time nor the place to fight this.”

“The right time and place will happen at some point in the future.” Sophie said.

“You're right,” Priya said. “Okay coach, we’re going to go home with my dad now. Thank you so much. I’ll be at practice next Friday. Ouch.”

“Pree, are you okay?” Amy said.

“I’m not sure what happened but—”

She spotted something spinning on the ground.

“Oh, how nice. Someone threw a queen at me.”

They glanced up into the crowd, but everyone turned the other way. They quickly left the auditorium and Quinn took them home.

“I’m sorry this happened guys,” Quinn said. “There’s no excuse for this behavior. It’s like racism.”

“It is racism Daddy,” Priya said. “Or species-ism. They think we’re mutants, which can sometimes be regarded as another race or species. Maybe they’re right. We are mutants.”

Quinn ordered the autopilot to pull over to the side of the road.

“Don’t say that Pree. You're every bit as human as you were before.”

“Am I Daddy? I easily beat the two best players in the Western US. I didn’t practice. No human wants to touch me. Even Amy had a tough time grabbing my hand at first. Maybe we are a new species.”

“Now you’re being crazy,” Quinn said as he ordered the autopilot to continue. “As far as I can tell, you’re no less human than before. You had a little tune-up, like the old gasoline cars. A car may run a little better after a tune-up but it’s still the same car.”

“Dad, let me restate your old car analogy. I’ve had a new engine installed. Only now it’s an interplanetary ion-fusion drive. And the wheels were replaced by magnetic levitation. If you still want to call

that a car, go right ahead."

Quinn rolled his eyes but smiled.

"I guess I'll never win another argument with you."

"Dad, according to you I'll still lose sometimes. I'm still human remember. Humans are fallible."

"Ugh," Quinn said smiling back at Priya. "I can't win a single point."

"I love you Daddy," Priya said.

She smiled at him with admiration. Quinn smiled back at her.

"I know. Me too."

They arrived home exhausted and ate lunch, debating the definition of what it is to be human.

Priya put on her eyepiece.

"I need to contact Mom."

Soon they were talking.

"What's happening with Bok and Yoova?"

"I've heard nothing from either of them today. Bok must still be having problems with his parents and Yoova is at her concert. Do you know what happened at the concert?"

"No."

"30,000 people showed up and they paid $30 each. So, they raised $900,000. They're selling human and Yooti food and pencil drawn portraits too. Yoova wants to put on a series of concerts so they can buy land. They're thinking about buying land up in Humboldt County. The deep and dark redwood forests remind them of home, though the redwoods and other trees are taller because the gravity on Earth is weaker."

"Awesome," Priya said. "Now, another problem has surfaced."

"What's wrong Pree?"

“Sophie and I won the chess tournament, and they threw us out. The federation banned us from playing anymore and they took away our victory. The crowd hated us. Well, some in the crowd hated us and some supported us.”

“I’m sorry Pree. I noticed that too. I’ve been talking with the modified kids who returned home, and they’re encountering similar problems. I think you guys need to stick together through this. I think your situation will get worse before it gets better. Did you contact the others? You need to form a social network of some kind.”

“Good idea Mom. I’ll start a social network right away. I have no support. Our neural network is still embryonic. We get no tech support from the Omanji, but we can modify it.”

Priya glanced around the table.

“Well, you, and Daddy, and Sanjay, and Amy support me, but in society I'm unsupported and rejected.”

“Do you want me to post something to my community?” Nisha said. “I’m up to a billion now.”

“No thanks,” Priya said. “I want to hide for a while.”

“Me too,” Sophie said.

“I need to go. I just wanted to hear your voice.”

“I’m glad I heard yours, Pree.”

They signed off.

“I think we need to create a non-Omanji social network only for the abductees,” Priya said.

“Great idea,” Sophie said.

“Let’s do one now,” Amy said. “I’ll prompt my code agent to get the basics up and running in a few hours. After seeing what happened at the chess tournament, I want to help. You guys are going to need all the support you can get.”

By 10pm, they had the solid skeleton of a social network up and running.

“This looks good,” Priya said.

“Thanks,” Amy said. “And it has full 1024-bit encryption throughout. Nobody will be able to break in without our permission. Well, maybe the Omanji could.”

“Yeah, they can do everything,” Sophie said. “But I doubt they care about us. Let’s get some people on here.”

Priya dropped into silence. She thought, ‘*root/connect*’ and immediately she heard hundreds of voices. She told everyone about the new social network. This would serve as a place to meet, plan, and make friends. She interacted with as many people as possible. She dropped out by thinking ‘*disconnect/root/end*.’

“Hey look,” Amy said. “Our first member has joined.”

“Besides us,” Sophie said.

“And there’s our second,” Priya said. “I hope we can get everybody to sign up. 25,000 isn't a lot for a social network so we don’t need expensive servers or anything. Amy, you’ll be our only honorary un-mod member.”

“OK.”

Priya, Sophie, and Amy interacted on the network, welcoming new members until 2am. Quinn woke up, walked into Priya’s room, and told them to go to sleep. They fell asleep at 3am.

Chapter 27 – Human Rights

The sun rose into a deep red sky when Quinn heard noise downstairs. He walked downstairs, still half asleep.

“What are you guys doing up so early?” Quinn said. “It’s 6am. You only got three hours of sleep.”

“Good morning to you too Daddy,” Priya said. “Want some croissants? I made them myself.”

Quinn looked at them in disbelief.

Sophie handed Quinn the basket, still warm.

“They’re good, try one.”

“Thank you! What trouble are you guys up to now?”

Priya smiled as she flipped over a crispy brown but not oily potato pancake.

“The day is young. I’m sure we’ll find something.”

“Well,” Amy said. “We set our agents off to set up a new social network. It works!”

Quinn laughed,

“That sounds like trouble to me. Does the world need another social network? Seems like everyone has one.”

Priya flipped the perfect potato pancake onto Quinn’s plate.

“This network is only for us abductees. Amy developed the network so we can talk about issues unique to us and save documents, unlike on the Omanji network. Want some OJ?”

“Sure, that sounds great. Now you can get organized and fight for your rights.”

“What rights?” Priya said.

“Well, you have the right to play chess and go to school without

being harassed. You have the right to do anything that any other person within your age group can do. Who knows what rights people will try to take from you when they're afraid or racist?"

"Racist?" Priya said. "You sound like we aren't part of the human race."

"I sat in the crowd yesterday and listened," Quinn said. "Some of those people thought you were monsters, or aliens, or disease carriers, or other derogatory things. Some people thought you were cheating. Some of them are intellectual chess aficionados. Some are just chess parents. There's a lot of fear and ignorance out there. When you combine those two things, the target suffers. That target is you. Perhaps half the audience supported you, but they were silent. It's easy to capitulate to bullies."

Quinn paused.

"Sorry to sound harsh, but you're in for an uphill battle. You know what happened at school. That will happen for all the abductees. Your situation might get worse unless you stand up for your rights and win. I'll support you guys of course, but I can't help all 25,000 abductees. My advice is to get everyone organized fast. Do some research on the human rights movement of the 1960's for some ideas. Look for how people resisted totalitarian leaders."

"Good idea. Want another potato cake?"

"Sure Pree. I'm serious though."

"I know daddy. I love you."

They spent the rest of the day setting up the network and making everyone aware of the threats to their human rights. Afterwards, Sophie and Amy went home. They all fell asleep early, in anticipation of a difficult week ahead at school.

Chapter 28 – Catching Up

Priya made breakfast for everyone once again. Quinn walked downstairs right as she placed some crispy hash-browns, scrambled eggs with green chilis, and fresh ripe mangoes on his plate.

“Thanks, Pree. I feel like I'm living at a fine hotel with first class service. What are you up to today?”

“Well, I'm taking a catch-up exam in genetics for the first month I missed. I'm ready for it. I’ll take three other catch-up exams this week. I need to do a little more studying, but I'm nearly caught up in all of my classes.”

“That's great Pree. Wait a minute. You covered a month's worth of college prep classes in only a few days while winning a chess tournament and starting a social network?”

“It's no big deal. The classes are easy. It's beginning stuff.”

Quinn glanced over at Sanjay, who sat down in front of his veggie omelet, which Priya cooked exactly the way he liked. They both raised their eyebrows in mock disgust at her perfection.

“I'm kidding Pree,” Sanjay said. “This is a great omelet. I'm not sure how you do it but don't stop.”

Soon Priya walked to school. She met Sophie and Amy on the way.

“I'm nervous about today,” Priya said. “After the tournament, I'm starting to realize the depth of fear and ignorance in the world. We know the kids will be worse.”

Sophie looked down the street at the facade of the main school hall.

“I hope a few people are on our side. This is getting rough. You know the word spread over the weekend about the chess match. The fear might increase.”

“It'll be okay guys,” Amy said. “I'll stand up for you, to show support from a normal—”

Priya and Sophie turned to Amy and tilted their heads.

“I mean a non-modified person. I'll make them realize there's nothing to be afraid of. I haven't turned into a zombie. Humor can help.”

“Good idea,” Priya said. “I wish people would realize we're—”

“Ugh, they're staring again,” Amy said shaking her head.

Priya ignored the crowd on either side of them.

“Keep walking and we'll talk as though nothing is unusual.”

They slipped quietly into the genetics class, ignoring the attention. Priya and Sophie took the catch-up test. Other students kept glancing over at them despite admonishments by the Mr. Crick. Once they were finished, they turned in their tests. The students noticed how quickly they completed the tests.

“Pree, why are there so many empty seats?” Sophie thought to her. “Last Friday an open seat couldn't be found.”

“Yeah, what's that about?” Priya thought back. “I'm going to ask—”

Sophie cut her off and thought, “No, wait until after class.”

“Okay fine, I'll wait,” Priya thought.

She wanted to bring up the topic in front of everybody but decided against it. After class they waited for the rest of the students to leave, and walked up to Mr. Crick.

He smiled at them.

“You guys both got 100% on the catch-up test. I've never seen anything like it. I'm impressed. A month's worth of learning in only a few days.”

“It wasn't a big deal Mr. Crick,” Priya said. “The questions were easy. Genetics gets more complex, doesn't it?”

“Oh yes, the topic gets much more complex. Do you have a

question? I watched you looking around. You may want to know why the class and the lab were half empty today."

"We were wondering about that," Sophie said.

"This morning, many parents decided to take their children out of this class. It's because they're afraid of you. They're ignorant. Don't be upset about it."

"Oh, I'm not upset," Priya said. "I'm angry. They don't know anything about anything. Are we back in the dark ages or something? Are they going to try to burn us at the stake like witches?"

Mr. Crick smiled.

"Well, I wouldn't go that far, but I think you're in for a challenging future. I won't stand for ignorant behavior in my class, but you'll face ignorance wherever you go. Prepare yourself ahead of time so you can handle situations without losing your composure."

"We tried our best at the chess match," Sophie said. "We didn't engage the audience. We were scared though. One parent threw a chess piece at us. People whispered threats."

"This is an age-old theme," Mr. Crick said. "The parents of the opposing team often booed the child ice prodigy genius Wayne Gretzky. His skills exceeded those of the other children. You must develop a thick skin for immature adult behavior. Don't be aggressive, but don't back down unless your life is at stake. Got it?"

"Got it," Priya said. "You're the greatest teacher ever. We gotta get to our next class now. We'll be here tomorrow."

As they walked out, they were joined by Amy who waited outside the door.

"I'll be your bodyguard," she said.

They laughed and headed to the biology class, past the curious students who kept their distance. As they walked in, their heart sank. Half of the desks were empty. The students who did show up sat in one half of the room, leaving the other half empty.

Priya couldn't contain herself. She stared at the other kids.

"What is this? Safety in numbers?" she asked out loud. "You're

not a school of fish and I'm no shark. Ugh."

The kids huddled on their side of the room while Priya and Sophie sat on their empty side in disgust.

"Mutants," one of them whispered.

Priya ignored the comment.

Ms. Perez stood up from behind her desk.

"Okay, stop now. I want some answers, or this class will be canceled. None of you will get into college."

That got everyone's attention.

"Good. Now why are you all sitting on one side of the class? You're the students who decided to stay in this class. Are you are still scared or something? Let's start in the front row. Please enlighten me as to why you are sitting over there. I want one-sentence answers."

She pointed to the first student in the first row.

"Well, they might be carrying some weird disease."

"Next," Ms. Perez said as she pointed to the next student. "Yes, you."

"They might be reading my mind."

"Next."

"They might try to cheat by looking at my answers."

"Next."

"I don't care where I sit. I happen to be over on this side."

"Next."

"Me too."

"Next."

"I don't want to sit next to mutants. They're not human."

"Next."

"I'm not prejudiced but they make me nervous."

"Next."

“I don't care, but my parents told me to sit away from them.”

“Next.”

“Me too.”

“Okay, there you go,” Ms. Perez said. “Most of this is based on fear of the unknown. Let's get to know Priya and Sophie and find out whether they’re a threat to us. Is this okay with you guys?”

The students were silent.

Priya waved her hand in disgust at the other students.

“Fine. Be my guest.”

“Whatever,” Sophie said. “Sorry Ms. Perez.”

“Okay, since this is an introduction to biology class, let's find out if there's anything real to be frightened about. Can I take a swab of your hands and cheeks?”

“Sure,” Priya and Sophie said in unison.

The class glanced at each other and whispered because of how in sync they seemed to be.

We'll grow the cultures in Petri dishes and discover what species of microorganisms are there. We'll compare those with similar cultures taken from the rest of you. One of the most important things about science is discovery. It’s a search for the truth. We’ll discover the truth tomorrow and over the coming days when we understand what has grown in the Petri dishes.”

Soon the class ended. In fourth period, they experienced the same problems.

Priya thought to Sophie, who sat in a different classroom this period, “Here we go again. Only half the students are here. What's happening?”

“Yeah, I’d say the class is half full and they're staying away from me,” Sophie thought to Priya. “We need to stay calm so we can help the others when they go back to school. I think the swabs are a great idea. I like Ms. Perez.”

“I like her too,” Priya thought back. “I’m glad our teachers are

enlightened. They're in a difficult position. They're losing students and money for the school. If the students don't return soon, we might be kicked out because the school might be afraid of going bankrupt. We need to prove we're no threat."

As they ate lunch in the cafeteria, alone in a corner, a single student approached them.

"Can I sit with you guys?" she said.

"Sure," Priya said.

"I'm Cheryse. I'm in your genetics class."

"Oh yes," Sophie said. "You're in the back row on the right."

"I always try to avoid attention, so I sit in back," Cheryse said. "Anyway, I'm sorry for the way they're treating you. Not everybody hates you. Many people want to be friends with you, but they stay away because of the peer pressure. If they were to be seen with you, they'd become outcasts too."

"Thanks for saying that," Priya said. "I wondered if everyone hated us."

"They don't all hate you, but about half the people are afraid of contracting some disease, some think you're stuck up because you're smart, and some think you'll read their mind and take over their bodies. They think you're an Omanji in the body of what used to be Priya. There's a lot of conspiracy stuff going around. Some of us think those people are overreacting and you're okay. I'm going to go now, or I'll be made an outcast too."

Cheryse walked away before anyone noticed.

Priya shook her head.

"We have a lot of work ahead of us if we ever want to live a normal life."

"I'm having trouble too," Amy said. "They correlate me with you guys and now they think I might be an Omanji, or I might carry diseases caught by being too close to you guys."

"You can go if you want," Sophie said.

“No way! I’m with you guys now,” Amy said. “I think I want to be a civil rights lawyer. Well, I love science and old-school programming more.”

The rest of the day was more of the same. After school, the three of them walked to Priya’s house to study.

Amy stopped reading her genetics text and put down her eyepiece.

“Did you understand what Mr. Crick said about diploid species?”

“Oh, that’s easy,” Priya said. “Humans are a diploid species and so are peas. The offspring has two copies of each gene, one from each parent. Most mammals are diploid, though a few isolated exceptions exist, like the Red Vizcacha Rat. Most cells in our bodies are diploid. Diploid organisms which carry two copies of the same allele from a gene are called homozygous at that gene locus. Those with two different alleles of a given gene are heterozygous.”

Amy glanced down at her hands.

“I understand.”

“Are you okay Amy,” Sophie said.

“I don’t know. I guess I’m used to being the smart one. I used to help you guys and now you help me. I used to feel important because I could help. Now I’m dragging you guys down. I’m not worth anything anymore.”

Priya shook her head.

“Amy, if you attach your sense of self-esteem to external things like your looks, intelligence, wealth, or your popularity attained by those things, you’re lost. However, if you attach your sense of self-esteem to how you treat others, to your principles, or to making the world a better place, your self-esteem will be high. You’re standing by us as our friend, which makes you worthier as a person than whether you master genetics in a semester in high school.”

“I agree,” Sophie said. “We value you for who you are, not what you are.”

“Thanks, that means a lot to me. I need to reevaluate what's important in my life.”

“You did that already when you decided to stand by us, even if it meant being ostracized,” Sophie said. “You showed us what you're worth. A lot!”

Amy kept looking down, but she smiled.

“Hey, let’s find out how Amy’s social network is filling out,” Sophie said.

“Hey, over 6,000 members are signed up. It’ll be easier to track what’s happening here, though the telepathic collective awareness is faster and more direct.”

Priya read comments under a thread called racism.

“Hmm. Most of us are having the same problems we’re having.”

Priya and Sophie made numerous posts and vowed to create a policy for dealing with these problems. A member named Pablo promised to stand up for their rights in the court system.

“We need to stick together,” they all vowed.

“See Amy?” Priya said. “You helped us out by creating this network for us. It’s your kind nature that should be the foundation of your self-worth.”

“Thanks, I know you’re right. It’ll take me a while to get over this. I’ll be fine. My self-worth is tied up in what I do for others.”

“You're a human be-ing, not a human do-ing!” Priya said.

They hugged.

They studied until about 9pm. Afterwards, Sophie and Amy went home. Priya contacted Nisha.

“Mom, how did your day go?”

“I’ve been anxious all day. I still haven’t heard anything from Bok. It's been several days. The Omanji continue to ignore us. Approximately 4,000, 20-mile-wide spheres are in orbit. We can’t launch satellites into orbit now because they might hit one of those spheres. Some people tried to kidnap one of your modified friends. Other people are posing as parents in other countries to try to kidnap

them over there. Also, I've been reading about how people are treating the modified children once they go home. I'm sure you had a dreadful day. It's disgusting. Everything is a mess."

"We had a tough day, but we survived," Priya said. "I'm starting to adjust to my new mind, but it's growing every day.

"How is your mind working?" Nisha said.

"Well, it seems more, um, expansive. It's hard to explain. Learning becomes easier every day, but people and their behavior are getting more difficult. Today I wasn't as upset to see the rest of the class huddled on the other side of the classroom. They seemed more like frightened animals. I have more empathy for them. I still got angry a few times."

"That's great to know Pree. Be careful. Your exposure to the Omanji makes it more difficult. Those students are worried about the Omanji when they see you."

"Yes, but they're also worried about me and what I am. They don't think I'm human. Sometimes I wonder whether I am human."

"Of course, you're human," Nisha said. "You still sense human feelings and emotions, right?"

"That's for sure. I think they're enhanced now."

"You're human."

Priya smiled.

They talked for a while longer and disconnected. They soon fell asleep.

Chapter 29 – New Colony

Nisha woke up at the first sign of light. Several days had passed since she last heard from Bok. He gave her a connection to the Omanji and to the future. She enjoyed his company.

Rachel woke up a few minutes later. They walked to the mess tent to eat. The October high desert mornings were getting cooler, but they were still comfortable enough to eat breakfast outside on their favorite picnic table with the view of the immense colony of four billion Omanji. The 4,000 towers consumed 250 square miles of desert, an area about half the size of the LA or New York city limits. It mostly expanded east, but also west around the town of Mojave, encircling the town but not destroying it.

“What are we going to do about Mojave?” Rachel said.

Nisha gazed out over the colony.

“The residents are evacuating. General Sherman says they’ll be forced to leave if they don't. The mining operations used to build the colony are creating earthquakes and the city is unstable now. So, the rest of the residents will be evacuated. I’m impressed the Omanji are avoiding human habitation as best they can. I’ll give them credit for—”

“Bok!” Rachel said.

Nisha turned around.

“Bok we’re so happy you're here. We're worried about you.”

“You're worried about my welfare?”

“Of course,” Nisha said. “Friends worry about each other. That’s how humans are.”

“The Omanji worry about friends too, but we must follow the rules, or you lose your friends. You can lose your parents and the entire society.”

“I’d like to say it’s not like that for humans, but we have to follow rules too,” Rachel said. “What happened? How are you?”

“What happened is I didn’t follow the rules. I’m a disgrace to my parents because I won’t merge. My parents terminated our link.”

“They won’t talk to you now?” Nisha said.

“Correct but it’s more complicated than that. My limited adolescent-level connection to the greater telepathic collective awareness has also been terminated. I can still connect with other adolescents but not with the elders.”

Nisha reached out and touched Bok on his hand. He didn't move it away.

“I’m sorry to learn about this Bok. Oh, I hope it's okay I touched you. Humans do that automatically sometimes.”

“That’s okay Nisha. I’m used to humans now. I like them. It’s the Earth that takes some getting used to. Your star is bright, gravity is weak, and the atmosphere is thin and difficult to breathe. We’re modifying ourselves to adapt to the Earth and its atmosphere.”

“What will you do now?” Nisha said.

“I’m not sure. I’m not allowed to live with my parents.”

“They kicked you out of the house?”

Bok paused to understand.

“Yes.”

“Where will you live?”

“I can stay with friends, but they'll become ostracized for supporting me. I need to find a different place to live until I can figure out what to do.”

Nisha glanced at Rachel.

“Are you thinking what I’m thinking?”

Rachel smiled and nodded yes.

“Bok, we should set up a tent right near our tent,” Nisha said. “You can stay there. It’s not as nice as an Omanji tower though.”

Bok's nose wiggled like a Yoot's nose.

"Thank you. I would like that."

Nisha smiled.

"Do the other younglings think the same way as you about merging?"

"Yes. Many of us oppose merging now. We discuss this often. Some of us give in and merge because there's nowhere else to go. On Oma, we would go live and work at the colony of the unmerged."

"I'd call it the colony of the free," Rachel said.

"Well Bok, start your own colony," Nisha said.

Bok said nothing for a long time.

"You've mentioned this before. It's an intriguing idea. I'll give this more thought. Humans have some good ideas."

Nisha smiled.

"Take your time. I'll find out if we can locate a place for you to start your colony. What would the Omanji do if you formed your own colony?"

"They would do nothing. To them, a new colony is like a drop of water in the ocean. Legally, all Omanji are supposed to have the right to live and work wherever we wish. Telepathic implants and peer pressure keep everyone in line. I didn't understand peer pressure until I learned about human psychology."

"Yes, it's a prime motivating factor for humans," Rachel said. "For the Omanji, conformity seems monolithic."

"That's because of our history. Remember those dark ages I described? The small percentage of the population that survived each one tended to be of one mindset. This happened several times, which led to a monolithic way of thinking for many which survives to this day. The near extinctions acted as an evolutionary filter and catalyst. Near mass extinction has never happened to humans in recorded history except for about 70,000 years ago when as few as 10,000 lived on Earth, so personality types tend to vary widely. Over time, the human genome is becoming less monolithic because of a lack of near

mass extinctions and increased genetic mixing and variability."

"Somehow, you're different than the other Omanji. You're resisting," Nisha said.

"Yes, and so are many others. Almost 0.1% of our population back on Oma resisted merging. That's why about 70 million lived in the colony of the un-merged. Now that we're on Earth, something has changed. I don't know if the change is because of Earth's atmosphere, or the genetic modifications we did to survive here, or what we've learned about human society. Eventually I'll understand this. All I know, is now I don't want to live in the colony. Many Omanji my age agree with me."

Nisha smiled and glanced at Rachel.

"Okay, it's settled. We've got a new neighbor."

They gave each other a high-five. Bok wiggled his nose again. Within hours Bok moved into his new tent. As dinner time approached, Nisha and Rachel came over to check on the progress Bok had made.

"This is the most unique tent living space I've ever seen," Nisha said.

"I walked back and retrieved my belongings. My parents still think I'll change my mind and return home. Most of us return after some time away to think. My parents did too. However, I won't be coming back except to visit if they ever accept me. I couldn't speak to them because the link has been terminated, but we used a few basic sign language commands to communicate briefly. I see how dependent we are on implants to communicate."

"I'm sorry Bok. Things will get better," Rachel said as she looked around the tent. "Is this round thing your bed? How do you sleep in it? Do you sleep?"

"Yes, we sleep. On our voyage to Earth, we had 60 Earth years to adapt to a 24-hour day night cycle. I was born in space under the new 24-hour cycle but most of the elders are having problems with it. Some of us reverted to the old system of much longer cycles of being asleep and being awake. Genetically it's hard to change circadian rhythms. It's too deep in the genome."

“How do you sleep on this round bed?” Nisha said. “It reminds me of a bird’s nest.”

Bok walked over to the bed, leapt up and curled into a ball. His withering tail wrapped around his head from around the outside.

“You’re like a curled-up armadillo.”

“Thanks, they are one of Earth’s most beautiful species.”

Rachel spotted a silvery doughnut like thing in the corner of the tent, about the size of a truck tire. “What’s this?”

“That’s my food conversion device. You put raw elements in here, and the food comes out over there. My supplies will last for about 30 days. Afterwards, I’ll need more carbon, iron, and several other elements. The device creates simulations of our ancient animal and plant food sources.”

“Do you use electronic devices?” Nisha said. “I don’t notice any.”

“I use the one I hold in my hand. They let me keep this. This serves as a translator, a weapon, a defensive shield, and as a place for processing data for my projects. This device integrates with my implant so I can control it with my thoughts. It does other things. I'll explain later.”

“There's no furniture,” Rachel said. “Do you stand all the time?”

“Lean back and you will see.”

Rachel furrowed her brow for a moment.

“Oh, that's right. Energy field seating.”

She leaned back and a soft resistant force cushioned her fall. Nisha fell back too. Bok curled up in his nest.

“Bok, why don't you sleep in an energy field?” Nisha said.

“I can, but I like the solid feel of my nest.”

“Everything you could possibly want seems to be here,” Rachel said.

“Almost. Except it's not my own colony. I have no home.”

“We'll find you a place to build a new colony Bok,” Nisha said.

“Are you sure the elders won't attack you if you build a new colony? I don't want to get involved in some interstellar Omanji family squabble or a civil war.”

“Yes, they told me I'm allowed to do whatever I want and return when I’m ready.”

“Okay,” Nisha said. “In a few hours I'll let you know if I find a place for you. For now, get used to being here. Contact me if you need anything.”

Nisha spent the rest of the day looking for open land in the desert nearby, but out of the range of the expected expansion of the colony when its population reached 80 billion. Rachel took care of the continuing efforts to return the abducted children to their families around the world. Yoova made plans to put on another concert the following weekend. Her first concert netted a total of $1,200,000. Nisha set up a bank account and tax ID for her, making Yoova the first extraterrestrial being to pay taxes.

Later that evening, Priya, Sophie, and Amy studied at Priya's house for a big genetics test.

Priya glanced up from the text in her eyepiece.

“Amy, I'm not sure what we're going to do tomorrow. People are starting to blame us for school attendance being down 50%. They're still afraid of us even after the Petri dish tests in the biology class didn't show any dangerous forms of bacteria. I read that protests will happen tomorrow on the sidewalk in front of the school.”

“What about remote schooling?” Amy said. “You can study at home and take the tests. At the rate you're going you'll be out of the 10th grade in a month and perhaps in a few months you'll be out of high school. Test your way out.”

“Great idea Amy,” Sophie said. “Pree, what do you think?”

“Yeah, that might be the answer. I don't think I can take much more of this. I can't stand ignorance and racism. I'm afraid one of the kids is going to do something stupid.”

Sophie stood up and looked out the window towards the

mountains.

“The kids might do something stupid? What about the adults at the chess tournament? Were they any better?”

“Good point. Let’s find out tomorrow what we can do,” Priya said. “I think the principal might let us go remote. It’s been done a few times before. I'm sure we’re a pain in his neck right now. The timing might be right to make a deal.”

They finished studying and agreed to meet the next day in front of the school to plan out the day.

Chapter 30 – Dropping Out

Priya got an early start to the day. She made some pancakes and a fruit smoothie for Quinn and Sanjay before heading out the door.

What's the rush?" Quinn asked as he came down the stairs.

"Oh nothing. I want to get ahead of this. Protests will happen today. I want to avoid them, so I gotta go. I'll be home after school."

She ran out the door and over to the front of the school at the same time Sophie and Amy arrived as planned. The activity on the extra wide sidewalk in front of the school already looked like a circus.

"What's all this?" Amy asked a mother holding a sign which read, 'Keep our kids safe.'

The mother turned to Amy and said, "We humans need to stick together. We need to keep the G-Mo's out of our school. They're a danger to everyone."

"What's a G-Mo?" Amy said, while Priya and Sophie hid behind a bush and listened.

"You know, a GMO, a Genetically Modified Organism. We call 'em G-Mo's now because we like the sound of it. We can't call 'em mutants anymore, or our kids will be expelled for hate speech."

"Oh, okay," Amy said as she decided to play along.

She gave Priya and Sophie a wink behind the bushes as she recorded the interaction with her eyepiece. They smiled back. Amy continued to play along.

"What's wrong with the G-Mo's?

"Don't you know? They cheat, they read minds, they invade our privacy, they carry disease, and they might be spies for the Omanji. I mean, come on. Why would they abduct kids and let them go like that? They might be trying to snatch our bodies. I'm sure the Omanji are inside the G-Mo bodies."

Amy didn't know whether to get angry or laugh.

"Okay, thanks for telling me about this, I gotta go."

Amy walked into the school yard out of view of the protesters. Priya and Sophie followed her in.

"Just when you think people can't sink any lower, they do," Priya said.

"I know," Sophie said. "I'm sure it's only a vocal minority but they make things miserable for everyone else. Vocal fringe minorities usually exert more influence per capita than the quiet mainstream majority. They should be taken seriously, especially when they're spreading fear. All they need to do is mix in a few dubiously related facts to spread the lies and speculation. We've seen it before."

Priya stopped walking on the path for a moment.

"Yeah, did you notice how she linked our abductions to us being spies and wanting to snatch bodies? I mean yeah, we were abducted. Some people will believe the rest of the story because the first part is true and they're gullible. I can't take this anymore. Let's talk to the principal now before first period."

They walked over to the administration building just as the principal walked out of his office. The topic was serious. However, considering his name was Mr. James Principal, they had difficulty holding back a laugh, whispering "Principal Principal."

"Can we talk to you in your office?" Priya said.

"Sorry guys, there's a meeting at—"

"Now." Priya said.

The other girls winced in anticipation of serving detention.

He raised an eyebrow.

"Okay fine, I'll talk with you for a few minutes."

He sat down behind his big desk.

"Did you watch the protesters out there?" Priya said.

He leaned back in his oversized chair.

“Yes. Everyone has a right to protest.”

“I agree. However, the intensity of their lunacy is dangerous. Sophie and I fear for our personal safety.”

Amy played the recording of the protester for him.

“Yeah, that looks bad, but she's free to believe whatever garbage she wishes.”

“I agree,” Priya said. “This is bordering on a situation analogous to yelling 'fire' in a crowded theater. Some people panic when they see us. I'm sure you know about the low attendance and how the kids stay on the other half of the classroom from us like a school of frightened fish.”

“Yeah, that's unacceptable. We're losing a lot of money because of the low attendance too. It's getting worse every day. I'm not sure what I can do about irrational fear. Education will take a long time. We’ve been working on racism for over two hundred years and it’s still hiding in society like a virus.”

Priya walked around the desk to his side. He leaned back a little.

“Are you afraid of me too? Never mind, don't answer. Here’s an idea. I think Sophie and I should do remote schooling. Our parents don't have time to home school us. We could monitor the classes from home and take tests after school hours. We would stop being harassed, and the students would come back to school. What do you think?”

He paused for a long time, looking out his window at the growing crowd with their signs.

“I’ll admit your solution is logical and would solve both of our problems. Let me think about it. I think based on what I'm seeing out there, you should go home now. You can go out the back way.”

“Are you sure? Priya said. “I don’t want to get deten—”

He smiled.

“Don’t worry. Principal Principal will give you a pass. Amy, you should go to your classes as you normally do. If they give you trouble, knock on my door. I’ll be here after the meeting.”

Classes hadn't begun, so Priya and Sophie walked out the back of

the administration building and across the sports fields to a small opening in the fence on the other side. Soon they walked into Priya's house.

"What are you guys doing here?" Quinn said. "I thought you'd be in school.

Priya smiled.

"We are at school."

"What?"

"You heard me. From now on, this house is our school. Like in the pandemics back in your day."

Quinn glanced at Sophie with raised eyebrows. She smiled back.

"How did this happen? I mean, well, I don't know what I mean."

"There's a big protest against us at the school," Priya said. "It's getting scary, so the principal sent us home. He's going to find out if we can do remote schooling. I'll watch the classes here and take the tests after school. I think if we study hard, we might finish the last three years of high school in less than one year. We'll study together, right Sophie?"

"Right, it'll be fun."

"What do you think?"

"Well, um—"

"Thank you so much Daddy." Priya said.

She kissed him on the forehead. Before he could reply, they ran up the stairs to watch first period genetics.

They watched through their Eyepieces as the students walked into the classroom. At first, they didn't know where to sit because they didn't know where Priya and Sophie were going to sit.

"This is like watching our own funeral," Sophie said.

"Yeah, it's surreal. Look, there's Amy in front. No way. I can't believe it."

“I can believe it,” Sophie said. They're still 'schooling' in the back of the room.”

Priya shook her head as she watched the broadcast.

“Yeah, like fish again. I don't think Amy realizes they think she's a shark. Too bad she doesn't have an implant. We could tell her silently. Wait, she's looking back. She knows. Okay, here comes Mr. Crick.”

“What’s he going to do?” Sophie said. “He's staring at everybody.”

Mr. Crick reached the limits of his tolerance.

“Class, I want you to spread out. It's time to open your mind. This is a genetics glass. You had an opportunity to experience the power of genetics firsthand with Priya and Sophie, and you blew it. I'm ashamed to be a part of the human species if this is the way we treat people who are different from us. Tests were given to Amy too. She's not carrying dangerous microbes. So, let's bring some reason into this classroom please?”

Priya watched it unfold.

“They're spreading out. A few of them are moving intentionally close to Amy.”

“Maybe there's hope after all,” Sophie said. “Still, nobody is sitting in the seats we sat in during the last class.”

They watched the lecture and monitored all their classes for the rest of the day. After the final period, the principal told them they can remote school their classes, and so could Amy. They studied until 10pm. Sophie and Amy went home. Afterwards, Nisha contacted home.

“Hi Mom, how are you?”

“I'm surviving.”

Priya smiled.

“I'm better now. We can do remote schooling, so they won't bully us anymore. I think we can finish my remaining three years of high school in one year or less by studying at home and testing out of the classes. We're going to at least try. I spread the news on our social

network.”

“That's great Pree. I'm proud of you. You handled this situation better than me at your age. Be careful when you go out. There’s a lot of superstition and hate going around. People are more worried about the modified kids than about the Omanji. The Omanji don't need to be sneaky and inhabit our bodies to take us over. They can do anything they want, any time they want. If they wanted to kill us, we’d already be dead. Their fears are groundless. It's frustrating watching this happen.”

“Yeah, and I'm right in the middle of it. I'm going to lie low, get my degrees and find causes for genetically related diseases and syndromes. What's Bok doing?”

“He's living in the tent next to us. A few friends joined him. I found some Silicon Valley companies willing to buy land for Bok's colony. Ever since the valley companies were broken up, they’ve behaved better. We chose a remote spot, a two-hour drive away from here and about 20 miles south of Barstow. It'll be outside of the Omanji colony boundary once it's completed. It's 16x16 miles now. We're guessing when 80 billion Omanji live there, the colony will be 70x70 miles in size.

“That's huge.” Priya said. “Is Bok worried the Omanji would crush him and his friends?”

“He says they'll leave him alone. He has the right to live where he wants.”

“I'm happy for him. I feel like Bok right now. I hope he gets a lot of them to join his colony.”

“He says many in his age group are disillusioned with the elders and many will join him. We'll know more soon. Pree, you better get some sleep, it's getting late.”

They signed off. Priya shared her story and Bok's with her social network and fell asleep.

Chapter 31 - 81 Billion

Nisha woke up at first light. For the first time in several days, she heard the familiar sound of Omanji feet. Only she heard a lot of them.

“Rachel, wake up,” she whispered. “It’s Bok.”

They walked outside and spotted Bok, standing and silently ‘talking’ with about 30 other young looking Omanji friends.

“I'm glad you and your friends are here.”

“Thanks Nisha, as you can see, my tent is too small for all of us.”

“I think we can house your friends in the modified human children’s compound,” Nisha said. “We’ve returned 10,000 of the 25,000 to their parents, so a lot of room has opened up.”

“Thank you. Many more want to join me. Can they stay in the compound too? We can manufacture our own food. The Esteemed Elders officially approved our application to build a new colony at an Earth location of our choosing. My colony will be temporary, until we find another suitable planet. We don’t want to place a burden on the humans or the Omanji.”

“Thanks Bok,” Priya said. “So, building your colony is okay with the elders?”

“Yes, it’ll be okay. The elders realize there’s a need for a colony for those who don’t wish to merge. They want one now. Almost 0.1% lived in the colony of the un-merged. They chose to remain behind on Oma, and they still live there.”

“We found some empty desert land for your colony,” Rachel said. “Within a week or two, the land will be legally purchased by some technology companies, and you can begin to build on it.”

Bok and his friends wiggled their noses and turned light blue with excitement when they understood what Rachel had said.

“Thank those companies for us,” Bok said. “We can pay them

back with interest by selling some of our energy into your grid and other ways. We wish to work with humans and make things better for everyone. We can't give you recent technology though. It's against the law. I got word that 10 more of us will join my colony, so now I have 40."

"It's a start Bok. I'm happy for you. Starting this colony takes a lot of guts," Nisha said.

"Guts?" Bok said.

He paused.

"Many elements in your language are strange to us. Do you mean courage, even though guts refer to internal organs?"

"Yes," Rachel said. "You could merge and lead an easy and predictable life. However, you chose to stand by your principles and go into the unknown on a new planet. The Earth that is. You're more courageous than me. If I were alone on Oma, I don't know what I'd do."

Bok wiggled his nose again.

"I like this term, 'courageous.' I think the elders have lost their courage. They're rigid and too conservative. They make up their minds and that's it. There's no freedom of mind or thought, except the freedom to leave."

"This is your chance to live a free life," Nisha said. "Freedom has its perils however."

"What are these perils?"

"When people on Earth are free, they do what they want. Sometimes anger, war, chaos, and confusion result. Without a common goal, there can be conflicts of interest. I don't know how things will work in your colony because you're connected. Freedom is a good thing, but rules should be established, or anarchy can break out. You know your history.

Here are the coordinates to the part of our compound where your friends can stay," Nisha said. "There's enough empty room for a few thousand. So, 40 is no problem if you can feed yourselves."

Bok held out a hand with five fingers extended and one down. Nisha smiled. Nisha didn't understand for a moment.

“Ah, I see. Okay, 50 now? That's no problem.”

Bok walked over to his friends and silently discussed the issue. They climbed into their floating vehicles and sped off to the colony.

“Those things are impressive,” Rachel said. “Did you notice how the vehicle accelerated so quietly and smoothly?”

“Yeah, I’d love one of those,” Nisha said. “I’m not sure where I’d put the license plate though.”

“You wouldn't need one. Who's going to catch you?” Rachel said.

A few hours later, Nisha and Rachel were coordinating the return of the modified children to their countries, when Bok and his friends returned in several stealthy looking vehicles with unknown equipment. Bok climbed out of one of the vehicles.

“Nice vehicle-thing.” Nisha said.

“In your language, we call them racers.”

“What are you going to do with all this stuff?” Nisha said.

“We’re going to build a new colony. These are replication drones. They can build new drones of any type including more replication drones. In 10 days, we could build millions of drones which will build the new colony. The food replication devices are near my tent. Our nuclear generator is in this bigger vehicle. We'll get several more too.”

Nisha glanced at the generator and turned back to Bok.

“Nuclear power worries us. I don’t want any disasters happening. Do you know how to operate that thing?”

“Don’t worry. It’s a simple fusion generator. Fission generators like those on Earth are much more dangerous. We’re getting several older generators that nobody wants. They work well enough, but now that we're on Earth, they built larger ones.”

Nisha smiled at Rachel.

“That’s cute. They’re taking hand me downs like teenagers going to college.”

Rachel smiled back.

“Yeah, they’re giving their kids the old pots and pans.”

Nisha glanced over at Bok's friends, milling about, turning gray.

“Hey Bok, your friends are getting impatient waiting for you.”

“Yes, they told me that. How did you know? You don’t have an implant.”

“Humans don’t need implants to notice things like that.”

“This is another hidden talent which humans possess. Your species is more advanced than the elders believe.”

“Thanks!” Nisha said. “Go help your friends get settled at the compound. You can store your equipment there. Don’t let humans get near them. I’ll send guards to keep watch but keep an eye on the guards. Humans have made no laws regarding Omanji. The guards or other humans will probably do unpredictable things, like steal advanced technology.”

“I understand,” Bok said. “I don’t want our technology to disrupt the human species. We’re already disrupting you enough. I’d be in trouble with the elders if humans took our technology.”

Bok and his friends sped away silently, leaving swirls of dust trailing behind them.

Rachel glanced at Nisha, shaking her head.

“Yeah, they seem more like teenagers every day. From a biological standpoint, they're like freshmen in college. They're close to being adults.”

“Yeah, they’re freshman from the 38th century with nuclear fusion.” Nisha said.

Later that evening, Nisha and Rachel ate dinner, watching the sun set behind the colony. Bok pulled up in his sleek racer.

“Would you like a ride?”

Nisha and Rachel glanced at each other for a moment and smiled.

“Sure,” they said.

They climbed in but no seats were to be seen. They remembered the Omanji energy field seating.

“How do we sit Bok? We can’t fall back from a standing position because we're bent over.”

“Let me activate the default seating for this vehicle. Usually, we activate seating with our implants,” Bok said.

The seats appeared and they sat down.

“Very comfy,” Rachel said. “This reminds me of the—”

They accelerated and were buried in their barely visible seats.

“Whoa,” Nisha said.

They were soon flying above the enormous colony.

“I didn’t know these could fly at high altitudes.”

“They can go underwater and into space too,” Bok said.

“Bok, be careful,” Rachel said. “We’re near Edwards Air Force Base and they might regard us as an enemy aircraft.”

“Okay, I’ll stay near the colony.”

Rachel surveyed the scene.

“Some of these newer towers are larger than the 2,000-meter-tall ones we see everywhere.”

“They want to build the colony all within what you call the Mojave Desert, so they need a higher population density to keep 80 billion of Omanji in one colony here,” Bok said.

Nisha turned her head sideways in curiosity.

“Bok, you keep saying ‘they’ when you refer to the Omanji. Is this intentional?”

“Yes, my connection has been severed. Technically I’m still Omanji but ‘they’ will live in their colony, and we’ll live in ours. I can still travel in their traffic grid for the time being. It's a free society.”

Bok maneuvered into a magnetic channel and the racer joined in

the flow with other vehicles of varying shapes and sizes. Some of them were only big enough to hold one adult Omanji.

“This colony is much bigger than my colony will ever be. Approximately 81 billion will live in the big colony. Only 100 will join mine.”

“You had 50 this afternoon,” Rachel said.

“Yes. Word is spreading. I think more will join me in the coming days.”

After 20 minutes, they exited the stream of traffic and were back in front of Nisha’s tent.

“Thanks Bok,” Nisha said. “I've never had a more exciting ride. So, this thing can go anywhere?”

“Yes, it could travel to nearby planets too, but I wouldn't take it out of this solar system.”

Nisha and Rachel looked at each other, wide-eyed.

“It's basic transportation?” Nisha said, smiling.

“Yes, this will get me where I need to be.”

Nisha and Rachel laughed.

“What’s so funny?”

“Never mind.” Nisha said.

Darkness fell, so they said good night.

Chapter 32 - Perfection

Priya woke up at 5:00 a.m. the next day to be at the school before the other students arrived. Friday morning at 6:00 a.m. was the weekly remote student test time. She studied well into the evening the night before. She met Sophie and Amy on the way.

“Are you ready?” Priya said.

“Definitely,” Sophie said. “Are you Amy?”

“As ready as I’ll ever be. I wish I could absorb the amount of information you guys can. You’re already a few chapters ahead.”

“That’s true but we have an artificial edge. You studied as hard as we did and that’s what counts,” Priya said.

“Thanks,” Amy said. “You’re right. All I can do is my best.”

They walked to school and found a teacher’s assistant. She let them into the test room and administered the test. They first took the genetics test. Priya and Sophie finished the 30-minute test in 15 minutes. Amy finished in 25 minutes. While the AI grading agent scored the tests, they took the biology test and the Algebra II test. Priya and Sophie had time remaining, so they asked the assistant to administer next week’s tests. They finished those too.

The grading agent finished grading the tests, recorded the scores and gave the test back to them.

“You guys are disgusting,” Amy said. “How can you get 100% on next week’s tests?”

She paused as she saw Priya and Sophie’s smiling faces.

“Sorry, sometimes I wish I’d been abducted like you guys.”

“Sometimes I wish I could live a normal life like you will,” Priya said.

“Touché,” Amy said. “I need to be happy with my circumstances.”

“We’ll always be friends,” Sophie said. “Let’s go home before

school starts. I don't want to be noticed."

The three of them walked out the front gate of the school. A few early students arrived. They casually meandered off the concrete walkway to avoid getting too close to the perceived mutants.

Priya asked, "Hah, as if we didn't notice them avoiding us. It's never going to stop, is it?"

"No, we're going to have to get used to it," Sophie said.

They arrived at Priya's house as Quinn and Sanjay were getting up. Priya made breakfast for all of them.

"How did the tests go?" Quinn said.

"Okay. Do you want some OJ?"

Amy glanced at Priya with one raised eyebrow.

"What do you mean okay? Quinn, they both got 100% on all the tests including next week's tests."

"Next week's tests?"

"Yes, they finished early, so I think they got bored or something, so they took next week's tests. They finished them in only a few minutes."

Quinn also raised an eyebrow.

"Is this true Pree? A week ago, you were a month behind."

"It's no big deal. We studied extra so we can get ahead. Are you ready for some pancakes?"

Quinn smiled at Amy and shook his head.

"Sure."

After breakfast they walked upstairs to Priya's room to watch their classes.

"Can you believe it? The class is packed," Priya said.

"I can," Amy said. "Check out the other classrooms."

"Incredible," Sophie said. "Attendance at the school is back to

normal. They know we're not attending."

"I'm not surprised," Priya said. "I'm going to post this to our social network. Everyone needs to realize what's happening and what we're up against. I think we'll never live a normal life, even as adults. This is a lot more than a short-term scare. This is deep rooted."

Amy looked out the back window.

"Hey guys, there's something near the top of San Gabriel Peak."

They both ran to the window.

"See that?" Amy said. "The sun is reflecting off it. It's so bright that I can't tell what it is. I've never noticed anything like that before."

"Me neither," Priya said.

She blinked to activate her eyepiece and looked for any available information.

"Well, there's an energy relay station up there, but that structure isn't a relay station."

"It's probably the Omanji," Sophie said. "They're up to something. You watch, by the end of the day, it'll be at least half built. Their towers are about the same height as San Gabriel Peak itself."

"Whatever," Priya said. "I don't want to acknowledge the tower, or anything related to them."

Then she smiled.

"Except for Bok, he's different."

"Okay, let's watch our classes," Amy said.

They monitored each class and studied well into the afternoon, ate dinner, and continued studying until they were done for the day.

Amy looked out the window again.

"Hey guys, I think you better come over here."

"Do we have to?" Priya said. "I don't want anything to do with—"

"Get over here."

Priya walked over and looked up to the peak.

“Okay fine Amy. Don't be such a— No way, there's no way.”

“Sorry,” Amy said.

“I can't believe it took them eight hours to build it.”

“As the cliché goes, seeing is believing.”

“It's as tall as San Gabriel Peak, which is 6,000 feet,” Sophie said. “The top might be 12,000 feet above sea level.”

“Great, just what I want,” Priya said. “It’s a permanent reminder of the Omanji. I wonder if they built this to intimidate us.”

“Maybe they want a pleasant view,” Amy said.

“That might be,” Sophie said. “I don't like the tower looming over us. If they were in the desert on the other side of the mountains, I could pretend they didn't exist.”

They studied for a short while longer. Sophie and Amy stayed over, and they soon fell asleep.

Chapter 33 – Falling Behind

Nisha always woke up when the first rays of the sun hit the top of her tent. She walked outside to get a view of the colony, just as Bok walked out of his tent.

“Good morning, Bok, how are you?” she said.

“I'm having difficulty adjusting to these short day and night cycles. Even though I hatched in space and I'm accustomed to an artificial 24-hour cycle, I'm still genetically Omanji. They like 10-12 days of light followed by 10-12 days of darkness. The darkness allows us to hibernate. Your sun is brighter. It hurts my eyes and overwhelms my infrared vision, except for around sunrise or sunset.”

“You said 'they' again. You’re separating yourself from the Omanji.”

“Yes, I'm unsatisfied with my relationship with Omanji society right now. It's rejecting me and any lifestyle that deviates from the norm, but I'm excited because I'm starting a new life on my own with those who wish to be independent. On a new planet! We brought over supplies and equipment last night.”

“How many Omanji are going with you now?”

“About 1,000,” Bok said.

“1,000? Last night, 100 seemed like a lot.”

“Many agree with me and wish to go. I don't think the elders realize how the new generation feels. We were born on the way to Earth. We don't know Oma. We’re called the ‘in-transit’ generation. We’re misunderstood. They say we'll live a good life if we merge. We can spend our lives working on making discoveries in our fields of interest.”

“Isn't this true?” Nisha said.

“Yes, that part is true. However, we give up our freedom in exchange. I think it's too high of a price to pay. Once the adult implant

is in place, if one is not behaving correctly, they can appeal to the tribunal to forcibly open the connection to your private thoughts. It's usually voluntary whether you decide to share thoughts, but the tribunal can override that."

"That's horrible. Why did the Omanji give up their intellectual freedom?"

"We gave up our freedom because our history is filled with violence. The implants allow society to stop wars before they start. My adolescent implants and those in the abducted humans don't allow the forceful monitoring of thoughts. Thought sharing is voluntary."

"Why don't adolescent implants have this feature? Young humans are often the biggest troublemakers."

"The young mind is still forming neural connections, so reading them remotely as a third party is unpredictable. Voluntary thoughts were easier to read and transmit in a young mind directly to another mind. These are like training implants."

As they spoke, they became aware that Rachel stood nearby listening.

"Good morning." Rachel said. "Centuries ago, did they need to perform gruesome experiments to perfect these implants?"

"The experiments happened many thousands of years ago, but I believe all experiments were done on voluntary subjects."

"Somehow I doubt that Bok," Rachel said. "When you get a chance, investigate this. I think you'll find this is another part of your past that's been buried."

Nisha turned to Bok.

"She's right you know. Please examine this. You didn't know about the Yoots. Who knows what has been hidden from you. What are you going to do with 1,000 young and free Omanji living with you?"

"We're accumulating our supplies over at your modified human colony. Soon, we'll move to our new land and begin construction of the new colony."

"Who'll be in charge of all this?" Nisha said.

“I'm in charge of the new colony. If it grows larger, I'll set up some form of government.

“I'm excited for you Bok!” Nisha said.

“Me too,” Rachel said.

“Thank you. I must leave now. Much work is left to be done.”

Bok climbed into his racer and rapidly accelerated away, keeping ahead of the swirling dust devils in his wake.

“I wish he wouldn't do that,” Rachel said.

“Boys will be boys, no matter the planet,” Nisha said.

They smiled.

Priya, Sophie, and Amy spent the morning studying.

“I'm falling behind you guys,” Amy said.

“Should we slow down?” Priya said. “We can if you want.”

“No. Go at your own pace. I think you’re on a new path. I don't want to hold you back. I hope we can still be friends forever.”

“Yes, forever!” they both said.

Amy smiled.

“Or at least forever until I die. I guess I'll die way before you guys if you live to be 300 years old.”

Sophie smiled.

“Let's plan it out now. Do you wanna be cremated?”

“Yes,” Amy said. “And I want my ashes spread from the middle of the Golden Gate Bridge into the bay.”

“Isn't that illegal?” Priya said.

“Perhaps it’s not exactly legal. I guess we can work out the details later. So, how far are you guys now in the genetics text? I don't think the class will get to the end of the 500-page text by the end of the school year next May. You guys will finish for sure, but the class won't.”

“We're on page 200 right now,” Priya said.

Amy raised an eyebrow.

“You’re on page 200? In a week you're halfway through the book? I know I’m stupid.”

“Amy, you have a genius IQ. Stop already.” Priya said.

“Yeah Amy,” Sophie said. “You come up with ideas and insights we don't. You created our social network, and you know how to keep us out of trouble. We need you more than you need us.”

“She's right,” Priya said.

“Thanks guys,” Amy said. “I'm insecure when I compare myself to you. It's like you're another species. I don't think I can compete.”

“We can't compete with you either now Amy,” Priya said. “At least you can live a normal life. Things are happening to me, and I can't compete with you to be human. I should like boys more, now that I’m 16, but I don't care.”

“Me too,” Sophie said. “I'm back to being 12 or something. The aging process in my body and mind has slowed down or even reversed.”

“You're not into boys anymore?” Amy asked.

“No.” they both said in unison.

Amy smiled.

“I guess you need me more than I need you.”

They laughed.

“Well, I don't exactly hate boys,” Priya said.

They laughed again.

“I just remembered,” Sophie said. “The Yoots are having their Saturday concert now. Let's have a listen.”

They watched the concert on the big screen.

“That’s a big turnout,” Amy said. “There's something mysterious about their sound. It's not like our music. I can't stop listening.”

“Yeah,” Sophie said. “No lyrics are spoken, so it's like classical, but they're speaking to me. Oh, did you hear that?”

“Yes,” Priya said. “It's like they're saying, 'I love you,' but without words. I can't explain it. How can an alien race connect with humans about love?”

They watched and listened for a while, forgetting that dinner time had passed until Quinn walked upstairs and set their dinner out in front of them.

“Why are you guys so—”

“Shhh.” they all said.

Sanjay ran upstairs to find out where everyone went. They all watched and listened for over an hour until the concert ended.

“I'm glad it's over,” Priya said. “I don't think I could turn away from their music.”

“Yeah, it's addictive,” Quinn said as he took the dishes downstairs.

They studied for the rest of the evening. Priya talked with Nisha, and they got a good night's sleep for the first time in a long while.

Chapter 34 - Speciation

Nisha woke up before first light to a low throbbing sound. Rachel woke up and they peered outside the tent.

“What was that?” Nisha said. “I don't hear any—”

A racer flew by, kicking up a dust devil.

“Whoa, what a close call,” Rachel said. “We need to stop this now.”

They walked over to Bok's tent and called for him. He wasn't there, so Nisha blinked to activate Bok's communication app in her eyepiece.

“Good morning, Bok, how are you?” Nisha said.

“I'm excited. I got word we can begin to build our colony. I got the coordinates and I'm going to examine the land now. Do you wish to come? There’s plenty of room for humans.”

“Of course, but I want to—”

“I'll arrive shortly,” Bok said before she could finish her thought.

They got dressed. Soon Bok's racer hovered outside their tent. They climbed in and off they went.

Nisha held on for dear life.

“Bok, can you slow down? Please?”

“Yes. I must remember you humans are fragile and aren't used to these speeds.”

“Also, can you tell your friends to slow down around humans,” Nisha said. “When your racers speed by, it's frightening and they wake us up from our sleep. We need eight hours of sleep once every day/night cycle.”

“Yes, I'll tell them.”

Bok fell silent for a moment.

“Okay, it’s done. They will slow down when they're near humans.”

“Thank you,” Nisha said.

“I've noticed the humans are no longer using the area over to the left for their flying machines. What happened?”

“That area used to be Edwards Air Base,” Rachel said. “The space shuttle used to land there many years ago. They closed the base because the Omanji colony will be expanding through the area within a few weeks.”

They held on tightly. A few minutes later, the racer slowed down.

“Are we there yet?” Nisha said.

Rachel laughed.

“You sound like a kid.”

“I feel like a kid. This is a big moment. It's the start of a new culture.”

“I agree,” Bok said. “Okay, we've arrived at the coordinates for my colony.”

They stepped out and walked around.

“This is barren flat desert,” Nisha said.

“Yes, it's perfect for my colony. It's far away from humans and there's plenty of open space. Let me tell the others to begin the process.”

Bok fell into a silent state for a minute while they looked around.

“Okay, they should begin arriving within 10 minutes.”

“You're right, they don't mess around.” Rachel said.

“Bok, how are you going to start this colony?” Nisha said. “What are your plans?”

“We've already designed the entire colony to function efficiently now and expand to as large as is needed. Right now, 5,000 of us must be accommodated.”

“5,000?” Nisha said. “You said 1,000 yesterday.”

“That's correct. My colony is more popular than I first anticipated. We'll build the first tower right here, and we’ll install the nuclear generators and anti-matter storage units.”

Rachel raised an eyebrow.

“Bok, you're going to store anti-matter here?”

“Sure, it's no big deal.”

Nisha and Rachel glanced at each other with raised eyebrows.

“No big deal?” Nisha said. “Bok, a teaspoon of antimatter could destroy a large human city.”

“It's okay, we can handle it. Humans will eventually figure out that producing and storing antimatter is safe and can be handled without danger if precautions are taken.”

Soon, Bok's friends arrived in racers and many other types of patched-together vehicles, and unpacked equipment. Several builder drones were already assembled. They crawled out into the desert like giant crabs and dug holes.”

Bok noticed Nisha and Rachel staring at the scene in silence.

“Yes, it's doesn't seem like much, but an important part of constructing something large is what we call 'scaling to size.' We double everything as we go along. We start with one drone, two, four, and eight, until soon after 20 and more doublings, we have millions. Even the main colony now housing six billion Omanji started exactly like this. These first drones are mining the material which will be used to build most solid structures and more drones. Once we're producing our own power, we'll sell the excess energy to the human power grid. This will allow us to purchase the metals we need using human currency and pay back our human investors. We won't take resources from you like 'they' did.”

“The Omanji? That's good to know,” Nisha said.

“This is fascinating. Can we watch for a while?” Rachel said.

“Yes, you can stay as long as you wish,” Bok said.

“Nisha, is this being broadcast?”

“Yes. One billion on my community can watch this in real time, though only a few million are watching at any given moment.”

They watched for a few hours as the mine shaft got deeper and a pile of ground up rock grew outside of the hole. More drones were created from an increasing number of machines which could make drones. Nisha and Rachel walked around the work site, making sure to stay out of the way of the drones. They were aware and changed their course to avoid contact with life forms. Several small fusion generators were hooked up to a power line to feed electricity into the US power grid.

“Bok, how much money are you going to make selling power to the grid?” Rachel said.

“We will earn approximately $100,000 per hour to start. The human power lines can't handle any more for the time being. We'll use the money to buy things we don't own already and to pay back the Silicon Valley companies for this land. What are those humans doing over there?”

Nisha and Rachel turned around. Several dozen cars had stopped along the side of the lonely stretch of highway 247 about 20 miles south of Barstow.

“They're curious,” Nisha said. “I hadn't thought about security. What should we do Rachel?”

“I don't know, but we better do something fast. More cars are stopping every minute. Bok, are you using defensive shielding technology like the Omanji elders? I'm afraid someone might take a shot at you or us.”

“We're setting up the shielding right now. Right now, we're vulnerable. The shielding will stop humans from wandering into dangerous areas. They might get injured. This is a serious construction zone.”

“I think we need to hire human security guards for protection,” Nisha said. “We don't want any of your friends to get into direct contact with humans while defending yourselves. We don't want any negative events to happen. What do you think, Bok?”

“That's a clever idea. By tomorrow, money will be in our bank account, and we can hire human guards.”

“For now, let's go talk with them and keep them away,” Nisha said.

They began to walk across the desert to the far side of the flat lands where the road is visible.

“Take my racer, it'll be much faster,” Bok said.

“No way.” Rachel said. “We don't know how to drive this racer.”

“Sure, you can,” Bok said. “Step in there. Right, now sit here and that’s the control. It's simple.”

Nisha grabbed hold of a spherical knob.

“That knob controls everything. Even your simple five-fingered hands can control it. It’s in training mode. So, you can learn to move the racer around without going far or damaging it.”

Nisha rotated the sphere and soon she maneuvered the racer up and down, and side to side. After about five minutes, Bok disengaged training mode and climbed in.

“I'll go with you for a few minutes until you learn. Afterwards, I must get back to the construction.”

“Okay, here we go.” Nisha said as she took off. “Whoa, it's easy to maneuver. There's something about the controls that makes it impossible to do anything wrong.”

“It has adaptive controls,” Bok said. “They adjust to your commands after calculating the local environment. If you make an error, such as flying towards a mountain or a moving spacecraft, the software will make corrections. It's almost impossible to make this speeder crash. Even out of training mode.”

After several minutes, she grew accustomed to the controls. She took Bok back to the construction site and dropped him off.

“We'll be back soon,” she said. “How far can this thing go before I need to refuel? I don't want to get stuck in the desert.”

“At full racing speed, it could travel around the Earth about 500

times. It takes about two hours to circle the Earth at low altitude and 90 minutes in orbit. It could orbit indefinitely."

"No way." Rachel said.

"It's true," Bok said.

Nisha opened her eyes wide at Rachel. Bok turned to walk into the construction zone.

"Contact me if there's a problem," he said.

Rachel smiled.

"I've always wanted to go to Tahiti. What do you think?"

"Good idea," Nisha said. "On the way I guess we'll talk to those guys getting out of their cars on the highway up ahead."

Nisha flew across the barren land to the highway, where she spotted over 100 cars pulled off the side of the road. When she slowed down the craft, everyone ran into their cars. Some drove away. A few did nothing and seemed frozen.

"I love it," Rachel said. "They're like deer in headlights."

They pulled up to the edge of the highway and stepped out of the racer. The people couldn't believe it.

"You're human." one guy said, looking relieved.

"Are you Nisha?" another guy said. "I've been following you for a long time."

A woman said, "I knew it was you. I'm watching your broadcast live. I came out here to check out this colony in person."

Slowly, the other people emerged from their cars.

Nisha stood with a wide stance on top of the racer's wing. Her hands were on her hips. Many people shared that iconic image instantaneously with the world. The first human pilot of an alien spacecraft.

"Okay everyone, it's okay to stay here and watch. However, it's dangerous at the construction site, so please stay close to the road."

"Yeah, it's dangerous," Rachel said. "They use nuclear fusion

reactors and antimatter. If there's an accident, this valley and you will be melted into glass. So please stay back."

They talked about things for a while and climbed back into the racer to head back.

Nisha muted the audio temporarily.

"You scared 'em with all that talk about nuclear reactors and antimatter."

"That's the idea. I want them to decide to stay back without us being there. There's no way to stop them. We need some fences."

"Good idea," Nisha said as she pulled away.

She smiled.

"Hmm, I want to visit my house."

"What are you talking about?" Rachel said.

"My own house, I want to go check it out. Bok?"

"This is Bok, how are you doing?"

"I'm doing well. The crowd is growing but they're staying back. Can I fly the racer to my house in Pasadena and say hello to my family?"

"Sure, go right ahead. Be careful though. If you crash it violently, you can cause a breach of the anti-matter containment field and you'll explode like a nuclear weapon. Don't worry though. You would need to crash into solid rock at 2,000 miles per hour before that could happen. There's an anti-collision algorithm that should prevent you from doing that. Safe mode is always on for humans."

Nisha smiled at Rachel.

"Um, thanks Bok. I feel so much better now."

"I'm glad I can help."

"I was being facetious Bok."

Bok paused.

"Humor. Okay I understand. Ha-ha."

“We'll work on your humor later,” Nisha said as she accelerated away.

After a few minutes of practicing on small hills, she gained elevation and crossed over the much taller San Gabriel Mountains, avoiding the new Omanji tower on top.

Priya, Sophie, and Amy had been studying upstairs all day.

Amy walked to the window to check out the progress being made on the second Omanji tower being built near San Gabriel Peak.

“Um, guys. Ya better get over here.”

“Amy, I don't wanna know. Quit bugging me,” Priya said.

“No seriously, get over here. Now.

Priya stomped to the window.

“Fine, I'm gonna do this to— Omigod, what's that?” she whispered.

Sophie raced to the window.

“It's the Omanji. They're here. What'll we do? They want us back. We need to hide.”

“We can't hide from them Sophie, their implants are in our brains, remember?”

“The thing is opening up,” Amy said.

They froze, waiting to see what was inside.

“It's Mom!” Priya said.

She raced down the stairs and into the back yard with Sophie and Amy close behind.

Nisha jumped out and hugged Priya. Quinn and Sanjay came out for a group hug.

“Neesh, whatcha doing here?” Quinn said. “And what's this old clunker you’re driving. Do you have a license for that?”

Nisha glanced at the racer and smiled.

“Oh, this? It gets me where I need to go. It's an old classic from the 38th century.”

They all laughed as they admired its sleek appearance.

“I can only stay a few minutes because so many things are happening, but I wanted to say hi,” Nisha said.

“How long did you take to get here? It normally takes over 90 minutes with good traffic to get to Mojave.”

Nisha glanced at Rachel and smiled.

“Umm. Five minutes? I'm not sure. We got here as fast as we could without blacking out from the G-forces draining the blood from our brains. I don't think I used more than 5% thrust at any time. This racer has force field seating. You can accelerate much faster without blacking out. Remember the fighter jet ride we had years ago?”

“Sure, that was incredible,” Quinn said.

“Well, a jet fighter is a toy compared to this thing. The Omanji call them racers. Bok told me that he got it because nobody wanted it. I know I'm pushing my luck being here. I'm not sure if I'm legally allowed to fly this thing so I better get back. I wanted to say hi.”

They hugged each other and talked for a while longer. Soon, they were back in the air and within minutes, they landed next to Bok's colony. Bok stood on a hill, supervising the initial work.

“You've made a lot of progress,” Nisha said.

“Thanks. I think by tomorrow, we'll begin construction of our first tower. My tower won't be as big as the towers in the big colony, but 10,000 of us in my colony can live here.”

“10,000? You said 5,000 a short while ago.”

“Yes, I did. I'm surprised how many of us don't wish to merge. I'm building a 2,000-foot-tall tower to potentially house 100,000 of us. My tower won’t hold a million like the big towers in the colony, but it's a start.”

“Only 100,000? Yeah, we all must start small I guess,” Nisha said.

“Yes, this is small but once we get up to a larger scale, we’ll—”

Nisha smiled.

“I was kidding Bok.”

“Oh, ha-ha,” Bok said.

Nisha glanced at Rachel.

“We gotta to do a lot of work on this guy.”

Bok looked down with both eyes.

“I'm having trouble understanding human humor. I'll learn.”

They laughed again.

They watched the construction for a few hours from atop a rocky hill. Eventually, the sun dropped below the horizon. Bok walked up to visit them.

“Construction is proceeding well. We can go back to the compound now.”

They climbed into the racer and soon they were back.

“This is the night cycle where I don't sleep,” Bok said. “I will go to my tent so you can sleep.”

They watched as Bok walked back to his tent.

“I can't believe any of this is happening,” Nisha. “I can't identify the source of my anxiety. Things are out of balance.”

“I know what you mean,” Rachel said. “Nothing is stable now.”

Soon they said good night and fell asleep.

Chapter 35 - Retribution

The first light of day shone upon Nisha's tent at 7am. They both woke up at the same time.

“The days are getting shorter now. When we first got here, we would see the first light before 6:30,” Rachel said.

“Yeah, and it's 46 degrees, or 8 Celsius. It used to be 60-65 at this time of the morning. What else is changing in the world?”

Rachel blinked into her eyepiece to check the news.

“Well, let's see. The President is spending all her time trying to keep the economy afloat. The stock market is down 75% compared to before they came. It's the usual chaos.”

Nisha began her morning yoga routine.

“Yeah, who would guess the biggest problem resulting from an alien invasion would be the economy? Usually, you think of destruction of the Earth, or enslavement, or little green men performing strange experiments on people. I guess they did do strange experiments. Okay, keep going, I'm listening.”

“The Omanji completed the second tower up on San Gabriel Peak,” Rachel said. “That's making more news locally than the seven billion Omanji living in the colony. Why is that?”

“I think at least for a moment, it's more real to see the towers in person than to watch video I've made of the colony,” Nisha said. “Those towers are looming over the entire LA area. People think they’re being watched even though thousands of spheres in orbit are doing that already. What else is happening?”

“The cult led by The Telepath has 100,000 Reddit members now,” Rachel said. “The guy is worth many hundreds of millions of dollars because people are giving up their worldly possessions to be connected to the Omanji via him.”

“Yeah, I noticed his tents on the edge of the colony when we flew

in Bok's racer," Nisha said. "I can't believe we humans still fall for this stuff. Remember those ads promising free energy with a mysterious magnetic device, or those old scam ads promising an easy trick to get rid of belly fat? People still think they can get something for nothing. Any other headlines?"

"The biggest news is no dramatic news is happening," Rachel said. "No new wars have started, crime is down, and people are trying to live their normal lives. Psychologists are in high demand though and child psychologists are highly sought after. Children are having nightmares. Hmm.

"What?" Nisha said.

"A modified child's house was set on fire during a riot in the Middle East. Let me search for more like this. The modified kids are having problems everywhere. Priya stayed at home and avoided the situation. However, many others are facing fear and violence at school and in their communities. There's one story after another about this."

"What should we do?" Nisha said. "Are we sending these kids home into harm's way? We should rethink this. Only 1,000 children remain in the compound. Most of them will be leaving soon. Let me find out what Pree thinks."

Nisha initiated a connection.

"Pree, are you there?"

"Yeah Mom, what's up?"

"I have a quick question. Modified children all around the world are having problems exactly like you. Can you find out what's happening? Can we do anything to help them? The violence against them is getting serious. I gotta go, but let me know later, okay?"

"I know already," Priya said. "Some people are nice to us, but some are doing ugly things. We don't know what to do. Sometimes the parents don't help, or they can't help. They're being threatened and intimidated. There's talk about how they wish they could move back to the compound. Can they come back?"

"Pree, I'll investigate this. I like the idea, but most of them are

under the legal age of consent in their country of origin. They'll need to get the permission of their parents or be emancipated. In the US, underage kids can file for emancipation to be free from their parents, but it's difficult. They need to take a high school equivalency test, show they can earn enough money to pay rent and other expenses, and prove it's in their best interest to be on their own. Getting parental permission is best. Can you find out whether those kids can get parental permission? We'll talk later."

"Okay Mom."

Sophie and Amy waited as Priya posted a general thread to the social network.

It read, "Would you like to return to the compound in the Mojave Desert to live with the rest of us? Tell us your reasons and your experiences."

The replies scrolled down the screen.

"I would love to go back. I felt more at home around others like me. My parents are supportive, but I'm not allowed to participate in sports even though I have no physical advantages. They tell me I cheat because I can read the minds of the opponents."

"I don't want to go back, but I don't think I have a choice. My classmates are afraid of me, and my parents don't want to leave me alone at home because they work all day away from the house.

"I want to go back to the compound. My school won't allow me to go ahead in my studies. Now I'm in class and I'm bored out of my mind. My parents think I'm making a big deal over nothing."

"I think my parents would support me coming back if I could continue my schooling at my own pace."

Priya said, "They're reacting quickly. What should we do? We need to get them back over here."

They watched as hundreds of comments came in. Half of them

wanted to escape their situations immediately, while others wanted to hang on. Some parents were afraid of their own modified children. Everyone had difficulty adjusting to life after being abducted. Some had permission to come back.

Priya activated her eyepiece.

“Mom?”

“Pree, what's happening?”

“You need to figure out a way to get them back. Most of us are having problems like Sophie and me. It's getting worse every day. Some are getting permission from their parents to return if they can get their education at their own pace. Can you do anything?”

“I think so. Let me find out what I can do,” Nisha said. “I'll let you know.”

“Okay thanks, I'm going back to study now.”

They disconnected.

“What happened?” Rachel asked Nisha.

“Let me forward the comments from Priya's network.”

Rachel browsed through the first dozen or so.

“This is bad. We need to get them back here. How do we do that? There’s no funding.”

“If we let these kids fall through the cracks, they might become dangerous. These kids are so smart they might cause severe damage if they fell in with the wrong crowd. Imagine terrorist groups with nuclear or biological weapons. The kids need funding, or they may be persuaded to join dangerous groups.”

“Yeah, they need sponsors just like what we did for Bok's colony,” Rachel said. “We need lots of sponsors.”

Soon they contacted the CEOs of Silicon Valley companies, telling them about how valuable these kids would be for the

technology industry. They were easily convinced. Funding began for a school in Silicon Valley in and around the Stanford campus in exchange for a chance to be the first group of companies to offer internships and jobs. Nisha uploaded the information to Priya's network and invited comments.

Within minutes, Nisha got a voice connection alert from Priya. She answered.

“Mom, I'm excited. That's a great idea. We could study at our own pace and be with each other and get exciting jobs. Or start companies.”

“Pree, are you saying you'd like to go there?”

Priya glanced at Sophie.

“Um, maybe,” Priya said.

“We'll discuss this later. Right now, I need to get this school thing started before someone gets hurt out there.”

They disconnected.

“Read the comments,” Priya said. “Twenty of us already want to go to the school.”

“You know Pree, if we went to that school, we could be normal again,” Sophie said.

“You're right.”

She glanced over at Amy who gazed at the two huge towers on San Gabriel Peak.

“What's wrong Amy?”

“I don't want you guys to leave.”

“Maybe you should come with us,” Priya said. “It would be exciting, like we're in college.”

“No, I wouldn't fit in. You guys will be working on your PhD’s in a couple of years, and I'll be a freshman in college even at my accelerated rate of study. You'll be with your friends who share your IQ and, life cycle, and lifespan. I'll always be on the outside.”

“No, it won't be like that Amy,” Priya said. “You'll always be our friend. You're smart and you'll have a distinguished career. I can tell. Plus, you notice things we don't.”

“Thanks guys,” Amy said. “I don't know what to think anymore.”

They ate dinner and studied until after 10. Sophie and Amy went home afterwards.

Chapter 36 – Interstellar Love

Nisha and Rachel practiced their early morning yoga routine and stepped outside of their tent to view the colony. Bok stood in front of his tent, lifting some equipment into his racer.

“Bok, how's the construction going?” Nisha said.

“It's going well. We received the gallium for our circuits, and building supplies we ordered. We'll shred the minerals and mix them into the rock-based material we use to build our towers. The material has five times the compressive strength of your best iron re-bar reinforced concrete and is more flexible than steel. We've been building and programming drones all night. Now we're ready to construct the first tower. We're just in time, because 20,000 of us are ready to move in.”

“There were 10,000 last night,” Nisha said.

“My movement continues to be more popular than I originally thought. I need to finish the first structure.”

“That's exciting,” Nisha said. “Are the elders giving you any trouble?”

“No, there's been no acknowledgement. It's as though we don't exist. That's how it's always been with those in exile. We're no threat to them, so they'll ignore us. The Omanji ignore things they think are irrelevant. They’ll monitor us for danger, which happens when there’s freedom.”

Nisha turned to Rachel.

“That explains a few things.”

“That's the truth.” Rachel said.

Yoova emerged from her tent and joined the conversation.

“Hi Yoova,” Bok said. “I listened to your concert on Saturday night. Now I understand why the Yoots were popular as pets.”

“We were popular, in the past tense?” Yoova said. “Over 100 million domesticated Yoots are currently being kept as pets by the Omanji.”

“Yes, they're popular at the moment,” Bok said. “But word about the true intelligence of the Yoots is spreading among the elders. Now, many are hesitating to adopt them as pets. So, I'm using the human past tense.”

Yoova wiggled her nose.

“That's good news.”

Nisha asked Yoova, “So what are you doing today?”

“I'm helping to organize more concerts in various locations for the humans to watch. We’ve earned over two million US dollars in two concerts. I created some recordings, and we'll sell them too. We know of a large parcel of land we’d like to buy in the redwood forest of Humboldt County in the north direction.”

“That’s exciting.” Rachel said. “When can you move?”

“I think in a few days we can put a down payment on the land and begin building the colony shortly thereafter. We can only buy the land if we reserve 80% as open space for the humans. We can build on 20% of it if we don't cut down any trees and we protect the native plants and animals. This place reminds me of our old land on Oma, but the trees are a lot taller because of the weaker gravity on Earth. It's dark in the forest, so the sunlight won't hurt our eyes like it does here in the desert. The climate is good because the temperature doesn't get below freezing or too hot. There is too much oxygen, but we can live with it.”

“No planet is as good as the one you evolved on,” Nisha said.

“My parents thought our lives were over when we left Oma, but our lives are starting again,” Yoova said.

“I agree,” Bok said.

His nose wiggled.

“I thought my life had also ended because I felt I had to merge. Now it's a new beginning. Okay, I must go to the new colony.”

Nisha and Rachel walked up to the mess tent to eat breakfast.

Yoova walked back to her tent.

“Where’s this going?” Nisha said.

“I'm not sure. An alien species is buying land in the redwoods, and another is breaking away from its parent. What will Priya and the other mods become? Are they another species of human? Can the modifications be passed down to future generations? I think so. That's a problem.”

“I'll ask Bok that last question,” Nisha said. “Will my grandchildren be of a distinct species? I guess this solves the riddle of what came first, the chicken or the egg.”

“Why do you say that?” Rachel said.

“Well, Priya was born as a normal human and might give birth to someone of a new species from an egg which has different DNA than with what she was born. When the first chicken was hatched, the egg came from a bird which was almost a chicken but not quite. A genetic mutation in an egg from that 'almost-chicken' produced the first chicken. So, the egg always comes first.”

“I see,” Rachel said. “Of course, in the long march of evolution, eggs existed hundreds of millions of years before chickens. Therefore, no matter what, the egg came first.”

Nisha smiled.

“Very true.”

Bok's racer streaked by before settling down in front of his tent. “Ugh, I can't get used to that. It's still going way too fast. Let's go find out what's happening.”

They walked down the dusty trail which had seen no rain in five months, which is not unusual for most of California in the summer half of the year.

“How are things going at your new colony?” Nisha said.

“It’s going well. The drones are self-programmed and they're preparing the ground for the first tower. I know this is slow progress compared to the elders, but we must start somewhere.”

“I think you're making great progress Bok,” Rachel said. “You're

all young and you are going to live outside of your normal Omanji life cycle."

"Yes, about a year ago I discovered I'm emerging as a male. Then I met Beedee. I wished we would merge with the telepathic collective and later we'd raise a family, as you do on Earth. However, as I mentioned before, a genetic match was chosen for me. I applied for a personal mate choice with Beedee, but they declined my application due to genetic incompatibility."

"I still think genetic matching is a primitive method of choosing a mate," Nisha said. "Even if more efficient."

"I agree. Once I decided to not merge, Beedee's parents severed our connection, and I can't communicate with her anymore."

Bok turned a dark shade of gray.

"I want to be with her, but I have no choice now."

"Do you know where she is," Nisha said.

"I'm not sure. I think she's still living with her parents. I wish I could talk with her. I miss her. I'm afraid they'll pressure her to merge, and I'll never be with her again. When we last talked, she had decided not to merge. She intended to live with us in the new colony."

"Hmm, you'll need to come up with a plan to get her back," Nisha said.

"What type of plan? I don't understand."

"Do you think there's hope for him?" Nisha said to Rachel.

"He seems pretty hopeless," Rachel said as she glanced over at Bok.

"I'm hopeless? I don't understand. I'm always hopeful."

"What she means Bok is you don't have a clue," Rachel said.

"I was never given clues. I'm confused with these human clichés and customs."

Nisha and Rachel glanced at each other and shook their heads.

"Bok, you need to go after her," Nisha said. "You can't let her go.

You'll regret that decision for the rest of your long life. What'll you think 100 years from now, or 300 years from now, if you do nothing? You'll always wonder what your life would have been like, had you found her."

"Sometimes you humans can be illogical and logical at the same time. I agree when you describe things this way. What should I do?"

Nisha glanced at Rachel and raised her arms in the air as if to give up.

"I'm not sure what to do with you Bok. You're much smarter than me. Do something. Come up with a plan to contact her. Plan it so neither of you'll get in trouble."

"Good idea. Thanks Nisha."

"Do it!" Nisha said.

"I understand. I'll come up with a plan. I'm going into my tent, and I'll stay there until I devise a plan."

With that, he walked into his tent.

Nisha glanced at Rachel with wide open eyes.

"When he decides to do something, he commits to it. I like that."

"Me too," Rachel said. "Well, I guess we better get back to work. Who knows how long it'll take him to—"

"Bok, what is it?" Nisha asked as he walked back out of his tent.

"I've devised a plan."

"Really?" they both said in unison.

"You were in your tent for about 20 seconds," Nisha said.

"Yes, I spent some time and devised a solution," Bok said. "I know some friends who haven't been pressured to merge. They have open minded parents. I'm going to get them to contact her for me. Perhaps she can get a message back to me."

"Good idea," Rachel said. "Make sure you don't use technological means to send the message. That can be traced. I'll give you some paper and a pencil. Write her a message and tell her write you a

message and send it back to you."

"I must relearn how to handwrite. We're all taught our ancient written language, but it's forgotten soon after. I like this plan," Bok said. "There may be hope for you humans."

His nose wiggled and he turned bright shades of orange and blue.

"I'm going back to my tent to write the note and begin this operation."

With that, he walked into the tent again. Nisha raised an eyebrow and smiled.

"Young love. I guess it's a universal thing."

They laughed and walked into their tent.

"I have over a hundred messages from kids wanting to go to school at the Stanford compound," Nisha said. "Many of them are from other countries."

"That's good news," Rachel said. "How can they travel here if they don't get visas? They're outcasts. Nobody loves them except for their parents. Would they be able to get visas?"

Nisha looked up for a few seconds.

"How about this? These kids are smart, and they'll make many inventions and discoveries in the future. They'll be valuable assets to the economy of this country and to the world. We need to market this idea to the President. We don't need to say nobody loves them, and act like the bleeding hearts we are."

Rachel smiled.

"Great idea."

Nisha contacted the President directly for the first time since she was given a direct connection. She wanted to use the connection sparingly. This was the right time. After a long wait, they discussed the situation for about 20 minutes.

"So how did things go?" Rachel said as she walked back into the tent.

"She likes the idea. Ever since the power of the President was

diminished, she's needs to get Congress to approve it because they could help this country. She advised me to proceed with plans to create the school at Stanford. I'm excited."

Back home, Priya, Sophie and Amy were taking a lunch break after watching classes in the morning.

"I think I'm getting too far ahead," Priya said. "The topics they're discussing now are things we already know."

"Yeah," Sophie said. "We're at least two months ahead now after only a week of studying. I don't think we should be spending time watching the classes anymore."

Amy looked dejected.

"I wish I could keep up with you. I'm only a month ahead, but I'm falling more behind you guys every day."

"It's okay," Priya said. "You can still stay here and— wait, my mom wants to talk. Mom?"

"Yes, it's me. I learned some great news. Your friends will be able to come back to this country and study if they want. They'll get special visas and can go to school at the new compound at Stanford in Palo Alto."

"Awesome." Priya said. "This is perfect because we're getting too far ahead in our classes now."

"Tell everyone on your social network about this. I'll give you more information later, I gotta go."

They disconnected, and Priya broke the news to everyone.

"I can't wait to go there," Sophie said. "I want to learn all we can so we can find the cause of genetically related diseases. Maybe we can improve our species!"

"I'm losing you guys, aren't I?" Amy said.

"No way," Priya said. "You're losing nobody."

"You guys will be in your special school, and you'll forget all about me."

"No Amy, we won't be far away, and we can talk every day," Sophie said.

"Thanks guys but I understand things are changing now. That's life. I'll adjust. Adapt or perish, as they say."

"Don't be dramatic," Priya said as she gave her a hug. "We'll always be friends. We support each other. Now let's tell everyone on the network what's happening."

Within seconds of posting the news, the replies came back.

"All of us are having problems in school and with society," Priya said as she read the replies. "We want to go to the new school."

"Let me set up a registration system," Amy said. "We need to get this organized right now."

As Amy's agents created the system, Priya thought silently to Sophie, "She's good at this."

"I know. I wish she could get her confidence back," Sophie thought back.

After about three hours, the registration system ran smoothly. They studied for the rest of the day. Before Sophie and Amy left for the night, they browsed the registration system. 1,000 had already signed up.

"I can hear the excitement on our telepathic network in my mind," Priya said.

"Yeah, everyone is discussing it," Sophie said. "I think it's going to be a big deal. I'm excited now. There's hope we can live a normal life somehow. I'm in prison now. You're fortunate Amy,"

Amy didn't feel fortunate. She had always been the smart one, always helping others. She found it difficult to accept the help of others. She felt inferior. She wanted to live 300 years and be as smart as Priya and Sophie. However, she knew this separation with different career paths would happen anyway, it's just accelerated. Soon

thereafter, they fell asleep.

Chapter 37 – A New Life

Nisha woke up and heard crunching outside her tent. She peeked outside. Bok paced back and forth in endless repetition. She had not seen this behavior in the Omanji before now.

“Bok, you are worried about something. Are you okay?”

“Yes, I’m worried about Beedee. I got a reply from her, written on paper. Her parents are forcing her to merge and get the implant. I’m losing her. I’ll accept this fate. It's our way.”

“Bok, are you serious? You’re giving up that easily?” Nisha said.

“Yes, I must give up. We’ve been trained to accept the will of our elders because that’s how society stays together and avoids war and destruction. I must accept this fate. I can refuse to merge, but I can’t tell others to not merge.”

“Does she want to merge?”

“No. Her reply reads that she doesn’t want to merge, but her parents are commanding her to merge.”

“This makes no sense. You can refuse to merge but she can’t?” Nisha said.

“She can refuse. If she wants to disobey her elders, it must be her own decision. I’m not allowed to encourage her to disobey.”

“Bok, do you wish to be with her?” Nisha said.

“Yes.”

“Then go get her,” Nisha said. “What are you doing standing here? She might be about to undergo the procedure and you’ll lose her forever. Go.”

Bok stared at the ground for a long moment. Without a word, he ran over to his racer, hopped in, and accelerated away.

Nisha smiled.

“Go get her Bok.”

“I’m impressed,” Rachel said. “I thought his logical mind wouldn’t permit this behavior. There’s hope for those young Omanji.”

They walked up to the mess tent to eat breakfast.

“There’s hope for our species too. What's happening in the world today?” Nisha said.

Rachel blinked into her eyepiece to check her news sources. Well let's see. There's a new office/condo tower going up in San Francisco that's designed like an Omanji tower. It’ll be one of the tallest in the city at 1,900 feet tall despite the earthquakes. Other tall towers are being planned in big cities around the world, to be like the Omanji towers.”

Nisha gazed at the colony.

“I wondered when that would happen. I love the Omanji tower designs. Every one of them is unique, but they all share a similar theme. I can't explain it. What else is happening?”

“How about this? Here's a bio-analysis report showing the Omanji are efficient. Obviously. Even though eight billion of them are living on Earth, they've had a negligible effect on the Earth's ecosystem. Carbon dioxide levels haven’t gone up more than they would have without them being here. they're not polluting or using valuable farmland or water. They take their water from the ocean and produce their own food directly without needing plants or animals. They've displaced only 0.0001% of the human population of the Earth. Outside of this mega colony, they’re barely invisible from a planetary biologic standpoint.”

“I gotta give 'em credit for having a light footprint on the Earth,” Nisha said. “But they exert a heavy psychological footprint on the humans. What else is going on?”

Rachel continued browsing the news.

“Hmm. 10,000 Omanji spheres are in orbit.”

“Yeah, that seems right. At night, the sky looks like it’s alive with fireflies because they’re in intersecting orbits from our perspective. They appear like they’re randomly floating around up there. Especially

right after sunset when the sky is dark on the ground, but the sun still reflects off of them high above. They're noctilucent."

Rachel continued her morning news reading.

"Here's the amazing thing. Not a single human satellite already in orbit when they arrived has been struck, even though the spheres are in orbits intersecting those of the satellites."

"How can they do that?" Nisha said. "It seems impossible, but I guess if you have access to enough computing power, the orbits of every single object can be calculated and predicted."

"Speaking of predicting," Rachel said. "Here's a story about how the airlines avoid collisions with the Omanji. They're starting to tour the Earth in their speeders and other aircraft. At first, the airlines tried to avoid the Omanji. An airline pilot is trained to watch out for other aircraft and avoid them if possible. There were so many Omanji craft in the air, that the air traffic controllers became confused. They had to either stop all air flights or trust that the Omanji can avoid hitting airplanes. They decided to trust. No midair collisions have been reported."

"They're touring the Earth?" Nisha said.

"Yes, they like places with vertical interest, like Yosemite, the Himalaya, and the redwood forests. People are getting used to seeing them, but they still startle people when they show up unexpectedly. They visited Disneyland and went on the rides, but they seemed bored and gray. They cut in line."

Nisha smiled.

"I guess they don't pay admission fees either."

Rachel laughed.

"Yeah, who's gonna kick them out?"

"Not me. I'd say— Oh, here comes Bok."

Bok's speeder pulled up in front of his tent.

"Rachel, Bok has a passenger."

"Yeah, let's go find out."

They walked over to the speeder as Bok and another young Omanji climbed out.

“Is this Beedee?” Nisha said.

“Yes, this is Beedee. Beedee this is Nisha and Rachel. These humans help me. They told me to rescue you.”

Beedee was slightly smaller than Bok. She was glowing in a pleasant light shade of blue. Her smaller nose wiggled like his but even more like Yoova's. Her tail was an inch or two longer than his, indicating she was slightly younger.

“We're happy to meet you Beedee,” Nisha said.

Beedee held a device in her hand like Bok’s.

“I’m happy to meet you too,” she said in a human-female sounding translated voice. “I want to learn about humans. Bok has told me humans are smarter and more complex than we’ve been taught by our elders. I'm surprised you can communicate intelligently.”

“Sometimes we’re intelligent and sometimes not,” Rachel said. “We’re learning as we go. Are you refusing to merge with the telepathic collective?”

“Yes, I want to start a new life. So do many of my friends. The old ways were fine back on Oma, but I was hatched in space on the way to Earth. My friends and I understand how humans are individuals with free and independent minds. We comprehend the problems though. Therefore, we’re hoping to create a colony where we can be connected and be independent thinkers too.”

“What do your parents think about your beliefs?” Nisha said.

“They disagree with me. They think I’m making a big mistake and the new colony will end in disaster. They keep telling me when all minds are connected, there's peace. They say a disconnected mind is an undisciplined mind. And when a mind is undisciplined, it can become destructive. If enough undisciplined minds interact, they can lead to planetary destruction. This has happened on Oma many times in the past.”

Nisha raised an eyebrow. Beedee continued talking.

“I know what you’re thinking, even though you and I are not connected. You’re worried our parents might be right. I disagree. The past is the past and we’ve learned from it. We won’t make the same mistakes.”

“I’m glad you’re aware and you’ll be careful,” Rachel said. “We’re nervous because tremendous energy is at your disposal. Unexpected things could happen.”

“Yes, we’ll be careful,” Beedee said. “We’re going to go inspect the new colony right now. Would you like to come?”

Nisha and Rachel turned to each other.

“Sure.” they both said in unison.

Soon they were up in the air and within minutes they were setting down, 70 miles away at the new colony.

“Amazing,” Rachel said. “The first tower is growing quickly.”

“Yes, the construction should be finished tomorrow, and we can start to move in shortly thereafter.” Bok said. “We’re going to build another tower.”

“Why?” Nisha said.

“This tower will only house 100,000 of us. 100,000 already want to come with us.”

“That’s twice as many as yesterday,” Nisha said. “Are you going to be able to handle it?”

“Yes, we can handle it. We're replicating more builder drones to keep up.”

“No Bok, I mean are you going to be able to handle the responsibilities and problems of starting your own colony?” Nisha said.

“I understand. I know I won’t be able to handle this all by myself. Beedee is going to help, and I’ll set up a government and a system of law. I created rules every member must agree to before they can join the colony. If they break the rules, they must go. That’s a start.”

Bok and Beedee went to work at the colony. Nisha and Rachel

walked up to top of the hill to watch the progress unfold.

“I don’t think Bok knows what he’s getting himself into,” Nisha said.

“I don’t either. This is gathering momentum. I don’t know where it’s headed. I'm feeling anxious. At least the elders have a formula to keep them from self-destruction.”

“We’ll find out,” Nisha said. “I can watch the top of the tower grow in front of my eyes as the drones add more to the top.”

“Yeah, I notice that. They’re operating about 10 of those nuclear fusion reactors wired up to the power transmission line. I guess they’re going to be able to make a lot of money selling electricity to the grid. It's pushing energy prices down and stocks up.”

They watched for a while and walked back down the hill and into the construction area.

“It seems different, doesn’t it?” Rachel said. “They’re friendlier. We aren’t getting those looks we got at the big colony.”

“Yeah, I’m accepted here, if that makes any sense.”

Bok and Beedee walked over to talk to them.

“What do you think?” Beedee said.

“I’m impressed with the progress. Everyone is friendly,” Rachel said.

“We’re the in-transit generation. We want to keep an open mind to new things. I hope you don’t think of us as you do the elders. We’re different.”

“Yes, you seem different. Gen-I. I like that. I'm a young Gen-A.” Nisha said.

They watched for a while longer. Bok dropped them back off at their tent.

“Amazing,” Nisha said as they walked into the tent. “They dropped us off like we might drop off our kids at school.”

“Yeah, a school that’s 70 miles away,” Rachel said. “They perceive distance and time differently from us.”

Yoova walked out of her tent.

“Yoova, I didn’t know you were here,” Nisha said. “How are you doing?”

“I’m happy. We’re going to be able to purchase the land in the redwood forest and build our colony. We’ve earned $3 million for a down payment and our future concerts will pay the rest of the price. Some humans wanted to cut down the trees, but now they can’t because we bought the land.”

“Congratulations Yoova!” Nisha said.

“Thanks. We’re excited. We also want to grow our native plants. We use them for food and enjoy them for their beauty. We're eating the cultured food the Omanji replicators produce for us, but we prefer the natural food we ate back on Oma. However, we don’t want to introduce destructive species to the Earth. Here are some specimens of our most useful plants. Can you find out whether we can grow them?”

“Sure.” Nisha said. “These are real plants from Oma?”

“Don't worry about alien microbes,” Yoova said. “The Omanji are careful to not allow dangerous ones into Earth’s environment. The plants are clean. Every animal including the Omanji harbor microbes which were genetically modified, so they'll die outside the body in Earth's unfriendly atmosphere. The one exception is some microbes on these plants are in a symbiotic relationship with each other. They can't survive without each other. They’ve been genetically modified to grow in Earth’s atmosphere. Okay, I must get to work now.”

Nisha and Rachel carried the plants into their tent to check them out. Millions of people were watching the broadcast live as they examined the 10 plants. They were each enclosed in a spherical clear, plastic-like case with a slight red tint to them.

“Notice how oddly colored the plants are when you take the tinted cover off,” Rachel said.

“Yeah, the leaf-like structures have splotches of red with a little purple all over them,” Nisha said as she put a leaf under a microscope. “The sunlight on Oma is a dim, soft red. Their star appears twice the diameter in the sky compared to our sun.”

“So why would a plant which needs red light be red in color?” Rachel said. “If it appears red to us, that means red is reflected and not absorbed. It's a dark red but still.”

“Hmm,” Nisha said. “It's the same red color as Halobacteria, the slimy red stuff in salt marshes. Halobacteria get energy from bacteriorhodopsin in a comparable way to how plants get their energy from chlorophyll.”

“But these specimens are plants,” Rachel said.

“Well, yes and no,” Nisha said as she looked through the microscope. “Halobacteria or something like them seem to be in these plants. They must get their energy from them. If my guess is right, plants on Oma get their energy from sunlight differently than Earth's plants, not by photosynthesis.”

“I'm looking up bacteriorhodopsin now,” Rachel said. “Do you realize it’s similar to the rhodopsin which senses light in our retinas?”

“I remember that from a biology class I had years ago,” Nisha said. “I wonder if these plants use rhodopsin too. If they do, they might be able to sense light as our eyes do. These are not plants as we know them. They’re a hybrid between plants and animals.”

“These plants are, well, not the most beautiful plants I’ve ever seen,” Rachel said. There's only a little green in them and the purple and red splotches are so random it’s distracting.”

Nisha smiled.

“Rachel you’re being prejudiced. I have a feeling the green in our plants is not attractive to the eyes of the Omanji or the Yoots. Their eyes are large, which is good for seeing infrared light. To them, these Omanji plants might be beautiful.”

“Yeah, you’re right. These are only the plants they eat. The plants we eat are not the most beautiful plants on the Earth. We grow tomato plants for the tomatoes, not as beautiful house plants or for their flowers.”

“Exactly.” Nisha said. “I’m doing a chemical analysis now. The leaf does contain something like bacteriorhodopsin and rhodopsin in it.

“Maybe the plant can sense light directly like a primitive animal

on Earth," Rachel said.

"Yeah, this might be true at least for infrared light. Hey, this gives me an idea. Let's put the plants under the heat lamp over here. The lamp doesn't give out much visible light, but the heat is from infrared light."

They put the plants under the heat lamp.

"Hmm, nothing's happening," Rachel said.

They watched the plants silently for a couple of minutes.

"They're moving," Nisha said. "This one is turning away from the sunlight coming into the tent and pointing towards the heat lamp. Watch the plant move. Let me turn up the lamp to full intensity."

They studied the plant for a few minutes.

"Now it's turning away from the lamp." Rachel said. "It's afraid of energetic red light. Why would that be?"

"I think it's a defense mechanism during solar flares. Red dwarf stars like Oma's star sometimes flare up for minutes at a time and might fry tender plants. Maybe this is how the plant avoids getting sunburned. Our star doesn't flare so our plants never had to evolve this property. Well, some shade plants fold up when sunlight is too strong."

"These are not plants as we know them," Rachel said. "However, if you were to show me a picture, I'd say it's a plant."

"I'm going to measure these plants and leave them under the heat lamps at a moderate intensity and find out what happens," Nisha said. "Let's go eat dinner."

After dinner they came back to the tent to check on the plants.

"It's grown an eighth of an inch while we were eating." Nisha said.

Rachel laughed.

"Are we sure we want to keep them in the tent overnight. Maybe they'll eat us in our sleep. Did you ever watch the old movie, 'Little Shop of Horrors?'"

"Yes, and I know what happened. I think I'll leave my broadcast

camera on and pointed towards the plants to be on the safe side. I'll put my machete under my pillow."

They smiled as they watched the plants with humorous suspicion.

They fell asleep but woke up several times during the night, to make sure the plants were behaving themselves. They did.

Chapter 38 – Losing Priya Again

Nisha woke up as the first light struck their tent. She got up and studied the plants.

“Rachel, check this out,” she said. “These plants grew at least an inch overnight. This one grew three inches.”

“That one has little fruit-like things growing near the leaves now. They weren’t on the plant yesterday. I’m going to watch the time lapse recording and find out what they did last night. Umm, Nisha. You need to watch this.”

“What are they doing?” Nisha said.

They watched the video.

“This is so odd,” Nisha said. “They were usually pointed towards the heat lamp, but sometimes they turned away from the lamp and stopped to point right at us.”

“I’m getting goose bumps,” Rachel said. They’re looking at us.”

A few minutes later, the plants turned away and pointed back to the heat lamp.”

“That’s creepy. Oh, I think I know what’s happening,” Nisha said.

“What?”

“We give off heat, which is infrared light. So, they’re searching for other sources of energy. I guess they can ‘see’ our heat signature in the same way night vision goggles do. So, they point to us for the same reason as they point to the heat lamp.”

“I hope you’re right Nisha. I don’t want them turning us into zombies like the fungus does to the ants in the South American jungles. And don't forget the zombie bees driven to insanity by those fly larvae.”

Nisha smiled.

“Ha-ha, you’re so funny Rachel. Yeah, I know about the zombie

ants and bees, but I doubt— Well, we'll keep the lids on the plants overnight, to be on the safe side. Hmm, I wonder why Yoova gave us these plants. Does she want to turn us into zombies?"

They both laughed.

"Let's go eat breakfast," Rachel said.

"Good idea," Nisha said. "I think I'll be brave and try the roasted veggies today. Eat them before they eat us."

They laughed again as they walked out of the tent just as Bok and Beedee climbed into his speeder to head to the new colony.

"Good morning, guys, how are things going?" Nisha said.

"I'm overwhelmed. 200,000 wish to join my colony. I'm putting them on a waiting list. We're making several more towers to accommodate them."

"That's great news Bok." Nisha said. "How are you emotionally handling this?"

"I find it difficult to identify feelings in your terms, but the closest I can come is I'm anxious. My skin is dark gray. There's no color at all. I feel cold."

"Why are you anxious?" Nisha said.

"I'm realizing this is a lot of responsibility. They're all depending on me to build this colony. Their connections to their families are being terminated. There's no going back."

"There's no way to ever go back?" Nisha said. "That seems like a harsh punishment for someone who we would call a teenager."

"Yes," Beedee said. "That's why I left. They punished Bok for disagreeing with the system. They say we're free to come back, but we're ostracized. My friends and I thought the punishment was unfair. So, when Bok came for me, I left with him. We'll start a colony where things are fair, but we'll keep the good things from the elder's colony."

"We must go. There's much work to do," Bok said.

They sped away, leaving a trail of dust devils behind them.

"I'm apprehensive too. I can't explain it, but the anxiety is getting

stronger," Nisha said. "I wonder if we did the right thing when we encouraged Bok start a new colony and to get Beedee."

"I think we did the right thing, even though in general I'm against interference. They seem happy now, don't they?"

Nisha smiled.

"Yeah, they do. Okay, let's go get the veggies at the mess tent."

As they ate, Nisha got an alert to connect with Priya.

"Pree, how are you doing?"

"I'm excited. Sophie and I are invited to attend the new school for the mods at Stanford. Can I go?"

"This is happening so fast Pree. You're only 16 and I don't want to lose you. Why do you want to go?"

"There's nothing here for me now. Um, I mean I love you, and Daddy, and Sanjay, and Amy, but people at my school either make fun of me or they're afraid of me. I don't want to be treated like this anymore. I'm tired of staying indoors because of my fear of being attacked or ridiculed. I want to take classes at my own pace. The school is too slow."

"Okay, let me discuss this with your dad and I'll let you know."

They disconnected. Nisha connected to Quinn.

"I spoke with Pree. Has she told you the news?"

"Yeah, a few minutes ago. What do you think?"

"I don't want to lose her, but I want her to be happy. I remember a time in the first grade when they wouldn't let me skip a grade because they were trying to treat all kids as equals. I got frustrated with the slow pace in school and I lost interest. I wanted to read sixth grade level books and they wanted me to read 'Run Jane run.'"

"Yes, I remember you telling me that story," Quinn said. "I guess Pree might be frustrated like you since she's so intelligent. We don't

know what she's going through. Usually, parents can guide a child since they've been there and done that, but no human on this planet has ever been in her situation. We need to let her find her way in the world."

"Okay," Nisha said. "It's decided. What's the noise in the background?"

"That's Pree and Sophie celebrating. I think they're sniffing in on our conversation. I don't know how. This is a 256-bit secure connection. They're capable of anything, I think. I'm anxious though."

"There's been a lot of anxiety going around. I think we're making the right choice."

"I do too," Quinn said. "The dorms open next week."

"Next week? Ever since the Omanji arrived, things are happening so quickly. It's hard to keep up. It's like when AI took over the world, back in the day."

"It's a new world Neesh. We need to get used to it. The genie is out of the bottle."

"Can't we stuff a little bit of it back in?"

"Sorry, it's out for good. Remember though, Pree is part of the genie."

"Good point. Okay, I gotta go and deal with the rest of the genie."

They disconnected.

Nisha fell back on her cot in over-dramatized exhaustion.

"This must be overwhelming," Rachel said.

"It is for everyone. It feels like things are spiraling out of control. Nothing is predictable."

"Were things ever under control?" Rachel said. "Events in my life are unpredictable. When I was young, I didn't know what I wanted to do for a career. I didn't know who I would marry or if I would marry. I didn't know if I would have kids. I had no idea what they'd be like. I had no idea my parents would die young. What about Mr. Roe and those sentient caring AI robots? I couldn't predict that future. Let this

play out and make the best of things. Yeah, the unknowns are bigger now, but somehow, I think things will turn out for the best."

"I hope you're right because the alternatives are terrifying," Nisha said.

Rachel smiled.

"I think they'll be okay."

While Priya and Sophie were celebrating, Amy stared out the window at the two huge towers on San Gabriel Peak.

"Amy, what's wrong?" Priya said. "I thought you'd be happy for us."

"I am happy for you, but I'm depressed for me. You guys will be going to this exciting school with all those smart people, and I'll be stuck back here with no friends. Nobody will come near me because they think I'm infected with, I don't know, the plague or something."

She cried.

"It'll be okay," Sophie said. "You can come up and visit any time. We'll be talking a lot. You put together our network. It's becoming more important every day. We're best friends forever, remember?"

"I know we're best friends. I worry about the future though. What will become of us?" Amy said.

"We all are the future," Priya said. "You'll see."

They spent the rest of the evening on the social network getting people to consider going to the new school for the mods at Stanford. More than 1,500 signed up. Some of the top professors at Stanford volunteered to teach the accelerated classes once the students had finished their high school education.

Chapter 39 - Losing Them

Nisha and Rachel woke up early and took a walk to the edge of the colony and back. The edge closest to their tent wasn't expanding because of the rocky terrain nearby. They watched thousands of speeders taking off and landing.

"I haven't seen this much activity before. Where are they going?" Nisha said.

"Hold on," Rachel said as she investigated her eyepiece. "Omanji are being spotted at many places around the world. Here's a story from the pyramids at Giza. Several dozen Omanji entered a pyramid that's off limits to the public. A security officer tried to shoot at one of the Omanji and the officer fell dead. The Omanji walked inside and inspected a tomb and left. An hour ago, 20 Omanji walked down the crowded Ipanema beach in Rio. They frightened children and the beach was evacuated. Thousands of tourists left in a hurry."

"What else?" Nisha said.

"This scenario is common over the past few days. The Omanji are touring the Earth. They're looking around. They take in the scenery, and they inspect the people and animals. They've taken a few dogs and other animals from their owners, but that's the extent of the interaction. They enjoy tropical beaches, possibly because Earth's oceans are calmer than on Oma. They still make no attempt to communicate with us. Also, they're building several large single towers all over the world at viewpoints just like on San Gabriel Peak near Pasadena and on Half Dome in Yosemite. They're here for good. We need to accept it."

"I'll never accept it," Nisha said.

"It doesn't matter what we think," Rachel said. "They don't care."

Bok and Beedee arrived in his speeder in front of his tent.

"How are you doing today?" Bok said.

“We're okay,” Nisha said. “How is your colony developing?”

“It's developing too fast for me. More than 300,000 of us now wish to join. I'm building towers as fast as I can. Two of them are complete and we're moving in.”

“Do the Esteemed Elders notice?” Rachel said.

“Yes, they notice everything, but they haven’t contacted me. Up to this point, the elders consider my colony to be a minor nuisance. Approximately 11 billion Omanji now live in the colony. The 300,000 in my colony are a drop in the bucket as you would say.”

“You told me that back on Oma, 0.1% of the population doesn’t merge,” Nisha said. “How many of you are at the age of decision?”

Bok paused as he usually did when he connected to a database.

“I don't hold access to live data anymore. I'll do the calculation in my mind. I'll assume 11 billion of us have moved to Earth so far. We live to be 400 years old and for two of those years, we are at the age of decision. Our population curve is flat for all ages, so 1/200th of us are at the age of decision. This means about 55 million of us right now are at the age of decision. The Esteemed Elders expect 1% of that number will decide not to merge here on Earth compared to 0.1% on Oma. The number is 550,000.”

“The elders won't be concerned unless more than 550,000 join your colony?” Rachel said.

“Yes, that's correct,” Bok said. “And that’s my worry. The number is 300,000 already and soon at this rate we’ll exceed 550,000 because 600,000 are on the waiting list. I've done a poll. More than 50% of us in my age group no longer wish to merge. That’s over 20 million, so they've noticed. What happened between me, and my parents is happening hundreds of thousands of times in the colony right now. For me, having my neural connection severed with my parents was as painful as cutting off an arm. I'm sure the Esteemed Elders are monitoring the situation and are aware of the trend. They’re smart and they keep a tight hold on society. They say it's a free society but it's not.”

“It’s a free society as long as you play by the rules,” Nisha said.

“Most free and open human societies enforce rules. However, Omanji rules are much more restrictive. I'll admit that the results are impressive, and you haven't self-destructed in a long time. It’s not all bad.”

“Bok, we have to go,” Beedee said. “I received a message indicating the second tower is complete.”

They picked up some equipment from the tent and took off in a swirl of dust for the new colony.

Nisha watched them as they disappeared into the vastness of the desert.

“I still wonder if we’re doing the right thing by encouraging Bok not to merge. He’s in pain. We’re helping to set something into motion that won’t be under anyone’s control, even the Omanji's.”

“I don’t know if there’s a best way to behave in this situation,” Rachel said. “We don’t know the future, so we must choose the best path to take every minute and hope for the best.”

“Yeah, that’s the problem I’m having with Pree. She wants to go to that school they’re setting up at Stanford for the mods. I’m afraid for her to go since she’s only 16, but this is the best path for her to take. Two months ago, before they came, I never would imagine her deciding like that. Wait, she’s contacting me.”

“Hi Pree, how are you this morning?”

“I’m excited. We were going to take the Hyperloop to Palo Alto, but Daddy is driving Sophie and me up to Stanford today. It’s six hours away if we take the scenic route up 101. We’ll stop at Pismo Beach for lunch. We may take an extra two hours and drive on highway 1 through Big Sur. They finally fixed that big landslide for the 20th time. Amy is coming for the ride too. She’s supportive, but she doesn’t want us to go.”

“I don’t want you to go either, but sometimes you must let go of the things you love and hope they return of their own free will. I want you to be happy and Amy does too.”

“I know Mom. I’ll come back. I need to do this. Dad is calling me,

I gotta go."

They disconnected.

Tears rolled down Nisha's cheeks. Rachel gave her a tissue.

"You've let her go and I know she'll come back. You can stay connected with her as easily as before."

"Thanks Rachel, I know you're right, but I've lost her. I guess I lost her when they took her and modified her."

"No, you lost her on the day of her birth. And a little each day since."

Nisha was silent as she composed herself. She was never comfortable showing vulnerability.

"Yeah, that's true. Birth is the first of many separations. It's part of life. Okay, speaking of separations we need to find out how we're going to get the Yoots moved up to their new colony in Humboldt County."

They spent the rest of the day and evening working out the details of moving 50,000 Yoots.

Chapter 40 – A New Constitution

Nisha and Rachel woke up early. They took a walk before having breakfast at their favorite picnic table overlooking the colony.

“There’s a steady stream of speeders heading out to Bok’s colony,” Rachel said. “Do you notice that?”

Nisha zoomed in with her eyepiece.

“Yeah, speeders and all sorts of other things I’ve never seen before are heading there. Most are leaving the colony and only a few are returning. And on foot. This reminds me of a migration of ants across the desert.”

“I’m looking at Bok’s webcam he set up on the hill overlooking his new colony,” Rachel said. “He has six towers built and they’re starting to build a bigger tower, like the ones that hold a million.”

“I guess this means his movement is gaining ground,” Nisha said. “What’s going to happen now.”

“We’re going to find out. I’m helpless to do anything about this. I hope things reach a peaceful equilibrium.”

I hope so too,” Nisha said. “What else is happening in the world this morning?”

“Well, let’s see. I’m seeing a lot of stories about scams.”

“Do you mean like The Telepath who claims if you give him all of your worldly possessions, he’ll telepathically link you to the Omanji?”

“He’s one of them. Here’s one where you can help the Yoots build their colony and you’ll get a share in their corporation. The minor problem is there's no corporation.”

Nisha laughed.

“They have some nerve. What else?”

“Here’s one claiming they discovered how the Omanji generate power. He’s selling plans for a small, radiation-free nuclear fusion

power plant which can power 20 houses for pennies per day with no risk. He claims anyone can build the power plant with parts from the hardware store."

"That's a good one," Nisha said.

"Yeah, I know. Okay how about this? Some woman claims she got into the Omanji's garbage and found some discarded food pellets and recreated them in her kitchen. Now she's selling them for only $29.95 each to live to be 400 years old."

"She's got nerve," Nisha said.

"Here's one where a home builder claims to know the recipe for making that extra strong Omanji concrete. He'll build you a house or patio made of it. The prices are four times the normal price."

Nisha laughed.

"Okay, here's a great offer. For $99.95 you get an ear implant which allows you to listen in on Omanji conversations."

"How does this work?" Nisha said. "I used to be able to hear the static until they changed their frequency. Does this ear device only pick up the new frequency static?"

"I think that's all the device does. You can buy the parts at the local electronics store for about four dollars according to all the fact checking websites."

"Even if the device works, all they would hear is muffled meaningless sound," Nisha said. "It's all encrypted. The sounds I heard were only noise. They were patterns with no direct meaning unless you could decrypt them. I'm glad I don't hear them anymore. So is Priya. I can't believe anyone would pay to hear static."

"Me neither," Rachel said. "It's funny because when I was a child, I remember laughing at the scams people would fall for. I thought for sure when I became an adult, my peers would be too smart to fall for them. However, here we are again."

"Yeah, the same things happen repeatedly. What other news do you see?" Nisha said.

"Over 12,000 towers have been built in the Omanji colony. That

houses 12 billion of them. They outnumber all the humans on Earth. Since the Omanji call Earth, 'New Oma,' maybe we should call it New Oma. I'm kidding. Let's find out what else is happening. The desert town of Lancaster is being evacuated. The colony has used up all the land that used to be Edwards Air Base. The colony extends 30 miles east past highway 395, which is closed in this area."

"That's halfway to Bok's new colony," Nisha said. "Have you read any news about what our government's been doing? I haven't heard from the President or the General in days."

Rachel searched for a while.

"No, there's been nothing from them other than the usual economic, political, and defense stuff. I think ever since the Omanji walked into the halls of Congress; they've given up trying to do anything about them. At least publicly. Neither of us are insiders now, though they're letting us do whatever we want. It's not like the government to give us this freedom. I guess that's because we're the closest connection anyone has to the Omanji."

"Yeah, I think that— Oh, Priya is contacting me. Hi Pree."

"Mom, I'm at the new school. It's exciting. I'm meeting many people I know from the social network and from our Omanji implant telepathic network. When we're together, we talk telepathically. At the school, they make us talk out loud. I'm making new friends. Approximately 3,000 of us go to school here. We're in temporary housing and classrooms but that's okay. We took many tests today so they can figure out where to begin teaching us. It's going to be difficult because we range in age from 14-18."

"You're off to a great start." Nisha said.

"Sophie loves the school too. I wish Amy could be here, but I'll visit with her at winter break, and we'll talk all the time. Oh, I gotta go. We're getting our lists of classes we can take. I notice genetics is in there."

They disconnected. Nisha glanced over at Rachel with tears in her eyes.

“I've lost her for sure now. She's making new friends and they don't talk audibly. She has everything in common with them and nothing with me.”

“This would happen anyway, it just happened sooner,” Rachel said. “Except the telepathy part. She seems to be happy, and she loves you, so don't worry.”

“Logically you're right, but I can't be logical about Pree after what's happened to her.”

Yoova opened their tent door.

“Yoova, you're here!” Nisha said. “Are you getting ready to move up to the redwoods?”

“Yes. I've seen images of the redwoods, but now I get to experience them for real. The sunlight here is too bright. My eyes want the soft red sunlight of Oma, but this will do. I hope you can visit me. You helped me. You're my friend forever.”

“I will visit you. I'll bring Pree and your plants too. From what I understand, trains leave from here every day which will bring all of you up to your new redwood colony.”

“Yes, I'm leaving in one hour. I came by to say goodbye for now. We never say 'goodbye' without saying 'for now.' We will stay connected.”

Yoova rubbed her nose in a circular pattern on Nisha's forehead and Nisha did the same without asking what that meant. She did the same thing to Rachel. Yoova walked away, looking back every so often.

Nisha turned to Rachel.

“She's so cute! How can any being, be that cute?”

“I don't know. Her cuteness is simply a fact.”

“Everyone is leaving and it's all changing,” Nisha said. “I don't like it. Only two months ago, we had such a nice daily routine. We enjoyed school, work, dinners together, homework, and weekends at the beach. Now it's all gone. Even Bok is leaving.”

“Yes, but better times may lie ahead. Evolution is happening

before our very eyes."

"Good point," Nisha said. "I'm glad this happened. Kind of."

They cautiously smiled.

"Now you found new friends and many alien species to learn about. Those plant-things point at you as if they're following you around. They're a dream come true for you."

"Thanks Rachel. You're my real friend. I'm not sure what I'd do without you during the most stressful event in our lives. Your logical side balances my emotional side."

They heard the whooshing sound of Bok's speeder passing by and stopping in front of his tent. They rushed out as Bok and Beedee stepped out.

"Hi guys, how are you doing?"

"Things are going well except Bok disagrees with me about how the colony should be set up," Beedee said. "I think we should elect nine leaders just as the elders do in the colony. Bok wants to do things differently than the elders. He needs six months to set things up as he wants before Election Day."

Yes, this is my idea and my movement, so I should be able to make the rules."

"Be careful Bok," Nisha said. "You're starting to sound like the Esteemed Elders who rule as they wish. Don't make the same mistakes."

"I don't want that."

"Be mindful of what you do," Nisha said. "There will be millions living at your colony soon. They need to think they're part of it. They're young and used to having no say, but they're at the age where they'll want a voice in what happens."

"What should I do? I used to know everything, but now I know nothing."

"That's because you're dealing with politics now, not science. You need to study the history of your governments, so you don't repeat mistakes. Since you like some of the human forms of government,

study those too. Avoid the totalitarian forms."

"Okay, I'll do that right now."

"Beedee, I think Bok may need your help even if you disagree," Rachel said.

"I understand," Beedee said.

"Thanks. Now we'll go study politics," Bok said.

They flew off in the racer.

"They seem rushed, don't they?" Rachel said.

"Yes, they hold the weight of their world on their shoulders right now," Nisha said. "I'm not sure how they're going to govern millions of teenagers who are on their own for the first time in their lives. These Omanji teenagers have 300 IQ's and they've been disconnected from the collective awareness too."

"I don't know how he's going to do it," Rachel said. "We better keep a close eye on this. I think we should set up a new tent for us near Bok's colony as a precautionary measure."

Nisha agreed, and by nightfall they had set up their new camp with several dozen other researchers near Bok's colony.

Chapter 41 – No Going Back

The morning sun warmed the cool desert air. Nisha and Rachel woke up. For a moment they forgot they had moved to right outside of Bok's colony. When they looked out of the tent, they remembered they had moved.

Nisha rubbed her eyes, so she could be sure of what she saw.

“Bok's towers must be over 1,000 feet tall. Millions of drones are making a bigger one like the towers in the elder's colony. It's already taller than the others. Construction might be halfway done.”

“Not bad for a bunch of teenagers.” Rachel said.

“Yeah, not bad at all.”

Bok walked over to talk with them.

“I'm glad you're here,” he said. “This movement is getting out of hand and I'm not sure what to do.”

“What do you mean?” Nisha said.

“150,000 already moved in. A million are now on the waiting list.”

“Oh, that's way over your 1% cutoff number of 550,000,” Rachel said. “Did the elders say anything to you?”

“They’ve said nothing, but it's only a matter of time. There's too much momentum. I don't think I can stop it.”

“This is what happens when you set something into motion,” Nisha said. “Did you study different forms of government?”

“Yes, last night Beedee and I did an extensive survey of Omanji, ancient Yoot, and human governments. We also studied the failed governments of those planets we visited where most life had been destroyed. We analyzed the strengths and weaknesses of each system and synthesized an ideal system.”

“I'm not surprised, are you Rachel?” Nisha said.

“No, not at all.”

“Bok, this is a good start,” Nisha said. “However, you're dealing with live thinking beings with newly independent minds. History doesn't repeat itself, but it rhymes. Also, you're on a new planet. You might think this is the ideal system. However, for whom is this ideal?”

Bok was silent for a long time.

“I understand your point. That's a variable I hadn't included in my analysis. What should I do?”

“First, you need to make sure you realize there's no ideal government. The most crucial factor is making sure one individual, or a small group cannot assume too much power. If you give one individual more power than the others, it should be for a brief time and limits on the power must be pre-set. That includes your power. We call this system checks and balances.”

“I read about that. This is more complicated than it seems,” Bok said. “I understand what you're saying. I'm going to integrate this into the system.”

Bok fell silent and walked away, but not out of sight. He telepathically discussed something with someone. He turned red.

“He doesn't mess around.” Nisha said, not seeing Bok's red color.

“Yeah, he goes right after every new bit of knowledge he gets,” Rachel said. “It's fascinating to watch him think through a problem. He acts decisively. He's willing to change his mind when he gets added information.”

“He seems mature and logical for his age,” Nisha said. “But I'm still anxious about this split. What if there's trouble with the Esteemed Elders? After hearing the stories of how violent they can be, I'm worried.”

“Nisha, think of all the times you've worried about something. When you were a kid, you worried about friends and homework. When you were in high school, you worried about friends, boys, and homework. In college, you worried about friends, boys, careers, and homework. Once you got your boy, you worried about everything else. Worries go on forever. How many of those things did you need to

worry about? Few."

"This makes logical sense under normal circumstances, but what about now?" Nisha said. "This is something worth worrying about."

"Maybe, but let's worry about one thing at a time. We need to keep Bok from doing anything to turn a good situation bad."

Bok walked back over to them. Soon thereafter, a sphere appeared on the horizon. Everyone turned to watch it.

"What's that Bok?" Rachel said.

"It's what I don't want right now. It's who I just spoke with."

Nisha raised an eyebrow.

"What don't you want?"

"I don't want, them," Bok said while pointing his three top fingers to the decelerating sphere. "It's my parents."

The sphere set down silently on the crunchy sand uncomfortably close to them. Two large Omanji emerged through the silvery surface of the sphere, making the now familiar pattern of a rock making ripples on still pond on a calm morning. They walked up to Nisha and Rachel first, inspecting each of them simultaneously with those independently moving and bulging eyes. The women stood their ground and examined them back. The parents remained neutral gray in color, which made the women relax a bit. They turned around to face Bok. The gray color replaced by a dull red. Nisha and Rachel glanced at each other like kids who were caught doing something they shouldn't be doing.

They walked over to Bok and communicated silently, but their body language became animated at times. This went on for about 10 minutes. Nisha and Rachel stood by, motionless, afraid to disrupt the conversation. The parents turned a deep red, and so did Bok a few moments later. They moved their arms this way and that, obviously agitated. Bok's nose stiffened. The parents marched over to Nisha and the smaller one of them briefly flashed bright red and shoved her to the ground. Bok turned red and rushed over to Nisha. The parents walked into the sphere and accelerated silently into the sky, producing a sonic boom a few seconds later.

“Are you okay?” Bok asked Nisha as he helped her to her feet.

She brushed off the dust.

“I’m okay.”

Bok stood there, silent, and alone as his red color faded to gray. Nisha and Rachel stood for a while in silence too. Bok didn't seem to want to talk. Then, one eye looked up at Nisha and the other to Rachel. He walked away without saying a word.

“What do you think happened?” Rachel said.

“It didn't go well. I guess Bok stood his ground and his parents didn't budge. I'm glad our culture isn't like that. I can't imagine cutting off Priya in that way. I guess in their culture, Bok deciding not to merge is worthy of excommunication like we see in religion. So, part of our culture is like that.”

“Check out all those racers and other contraptions arriving at this new colony,” Rachel said. “This is turning into a mass exodus.”

“Yeah, Bok's right. This is evolving beyond his control. He's encapsulating some deep-rooted drive in the Omanji to be independent, but the entire society is set up to be connected. No wonder he's worried.”

They walked back to the tent and spent the rest of the day and evening arranging for transportation of the Yoots to their home in the redwoods. Nisha worried about events spiraling out of control.

Chapter 42 – New Friends, Old Troubles

Priya and Sophie felt excited at the prospect of the first day at the new school. They were living in temporary housing and eating donated food. The school was housed in temporary structures spread across the open spaces at the Stanford Campus and elsewhere around Palo Alto and Silicon Valley. However, location didn't matter to them. They placed into high school senior-level and above, classes in genetics, mathematics, and other subjects. They walked into their first period genetics class which included lab immediately afterwards.

“I can't believe we're here,” Priya silently thought to Sophie as they settled in.

“This is a normal class,” Sophie thought back. “Nobody is afraid of us.”

Not a single voice could be heard in the room. However, in their minds they listened to everyone thinking in the same way a class might be noisy before the teacher walks into the room.

Soon, the teacher walked in and stood in front of them. Behind him loomed a donated big screen. He activated his eyepiece and soon the words 'Advanced topics in high school genetics 133a, Dr. Henry Mendel.' appeared on the big screen.

Priya smiled and thought to Sophie, “First we get Mr. Crick for genetics in high school and now Dr. Mendel?”

Sophie smiled back.

“Yeah, the father of modern genetics.”

Dr. Mendel glanced at Priya and Sophie.

“Let me guess. You're silently making Mendel jokes with each other, aren't you?”

Priya couldn’t help but giggle.

“Well, the irony can't be ignored.”

The class laughed out loud.

“Okay. I'll confess something to get this out of the way. When I took my first genetics class, my teacher said with a name like Mendel, I had to follow a career in genetics. So, I did. Now I run a lab in Sunnyvale that makes improved clones for fruit trees and other plants. Now, I have a few rules for this class. You're all part of an exceptional and unique accelerated class, which is part of a series of accelerated classes. I'm not sure how fast this will go, so we'll figure it out as time goes by. One rule I'll mention is you must talk out loud while in class. I can’t tell what you're saying when you're silent, so out of courtesy, speak out loud. Okay?”

Nobody said a word.

“Okay?” he asked again.

The kids in the class smiled.

“Okay,” they said out loud in unison.

Dr. Mendel sprinted through his lecture at a breakneck pace. He asked several times if he lectured too fast, but everyone liked the pace.

Soon the class and the lab were over, and the students walked out into the warm dry October air.

“I love it.,” Priya said out loud, trying to resist the urge to use telepathy. “I've never attended a better lecture.”

“I know.” Sophie said. “He challenged us and kept us interested.”

Several other students walked along with them.

“Hi, I'm Warren.”

“Hi, I'm Priya and this is Sophie.”

“Are you Nisha Sharma's daughter?”

“Yes.”

“It must be awesome to have a mom like her. I followed her before our abductions. She's great. What do you think of the class? I like the pace. I got bored at my high school.”

“Me too,” Priya said. “I like the pace of this class. Everyone is much nicer. Someday, we want to start a genetics company to make discoveries about genetic anomalies. What do you want to do?”

He wiped the sweat from his forehead.

“Are you okay?” Priya said.

“Oh, yeah, I'm fine. I was, um, running earlier.”

Sophie smiled at Priya. Priya pretended to not see her.

“So, what do you want to do?”

“Oh, sorry I got distracted. I can't decide. I like science but I'm into stock market theory. I'm torn.”

“Why not do both at the same time?” Sophie said.

Warren smiled.

“Good point. Why limit myself? If I want to be idealistic, I'd like to learn all I can about science and invest in tech startups. I want to fund them so they can push the boundaries of scientific knowledge. Someday I might invest in your company. I've already done well with $10,000 my grandfather left me last month. I now have $100,000. Somebody told me that because I’m a mod, I’m cheating playing the stock market. I don’t know about that. It’s as much emotional as intellectual. I’ve always loved the idea of creating wealth from knowledge.”

“That's a great idea Warren,” Priya said. “Here we are at our next class. Are you taking robotics?”

“No, I’m taking a finance class in the next building. I'll talk with you later.”

He jogged away quickly.

“He's cute,” Priya said. “He must be Irish, with the flaming red hair and freckles.”

“Yeah, but some other Europeans have those features. Didn't he seem nervous?”

“A little. I think there's more going on in his head than he lets on.”

“Definitely.”

“His last name is Butler,” Priya said. “Definitely Irish.”

“You like him, don't you?”

“He seems nice, but I don't know him. I'm not ready to date anyone anyway. It might be many years from now.”

“Yeah, me too,” Sophie said.

They giggled as they walked into the robotics class which turned out to be as challenging as genetics. Afterwards, they walked out of robotics, energized.

“Genetics wasn't a fluke.” Priya said. “The pace is right.”

“I know,” Sophie said. “I hope all the classes are like this.”

As they walked along, several other students walked with them.

“Hi, I'm Raven Corbeau, are you Priya from our social network?”

“Yes. Hmm, you seem familiar. Ah yes. I remember you. You told me you felt like you had no future in your small town, and you had to get out. You got out!”

“I did. I’m fortunate to be here. And I'm speaking with THE Priya and Sophie.”

Priya shook her head in confusion.

“THE Priya and Sophie?”

“Why yes. Everyone knows you. Even outside our network. A billion people follow your mom, and we follow you on the mod's network and on your Reddit community.”

“Why does everyone know me?” Priya said.

“Haven't you logged into your public Reddit account lately? Fifty million people follow your community. That's as many as my old favorite band, The Fusion Boys.”

“Really? Let me see.”

Priya said nothing for a minute as she blinked to her eyepiece.

“You're right. I had no idea so many people were following me. I

auto-post and downstream every public thing I do, so I can keep a record of it. People are tracking my every move."

"Well, it's good to meet you Raven," Sophie said. "Are you from France? Your name sounds French, but your accent doesn't sound French."

"I grew up in Senegal. My Father is French, and my mom is Senegalese. I guess now I'm part Omanji."

"Yeah, we all are." Sophie said. "I'm part Italian, Indonesian and Omanji. What would you like to do someday?"

"I love AI, robotics, and automation. I watched those drones make the alien colony. I think robotics with new AGI will be the most important catalyst of change in the future."

"As it has been for a while now," Sophie said. "Think of the possibilities. Our lives would be improved if we can program drones to make buildings unattended or create clothing with no human intervention."

"Yeah, that's what I'm thinking," Raven said. "We're close. I made some prototypes. I'm toying with them in my dorm room. Oh, I almost forgot. I made a small sentient AI. It's running on my 8096 quad GPU computer."

Priya raised an eyebrow.

"Um, don't let it out of the box." Priya said. "It'll outsmart you and you'll voluntarily let it out of the box in exchange for some other advantage if you're not careful."

"I won't. I follow the *safe constitutional AI scaffolding guidelines*.

"Good." Priya said. "I'd love to see your prototypes. Oh, here's our next class. Are you in this device programming class?"

"Yes," Raven said as they all walked in.

The device programming class was engrossing and fast paced. The time passed too quickly for all of them. Next was an introduction to law class.

"My name is Professor Jane Ferraro, and this is Introduction to Law 1a. This course is designed for college freshman. I teach it at

Stanford. The sponsoring companies decided this should be a mandatory class for all of you. They felt that due to your unique situation, law will be a big part of your life. You're going to need to know your rights and how to fight for them, and you will file many patents and create products. You are members of the world's most unusual minority group."

A student raised his hand. Professor Ferraro blinked into her eyepiece to identify him.

"Yes Mr. Pablo Gonzales."

"We want to be like everyone else. We come from all ethnicities. I'm Mexican and Chinese. We're not a minority group."

"Oh, yes you are," Professor Ferraro said. "25,000 of you are members of this unique minority group, regardless of ethnicity. I think you're a new species. Society increasingly regards you at least as a minority group. You're here for this reason. You're being persecuted like minority groups in every part of the world were persecuted throughout history. You're being subjected to classic racism and its new more insidious cohort, speciesism."

"That's true," Pablo said. "But unlike classic victims of racism, we're not being accused of being less intelligent or less capable, with some exceptions."

"I agree, but you're being excluded from competition and from social interaction. How can you live in society if you're excluded? You're going to suffer the same consequences as other minority groups unless you know your rights and can fight for them. This might be the most important facet of your life from now on, so learn all you can in this class."

Too soon, the class ended. They walked over to the cafeteria for lunch. Pablo followed them.

"Pablo, do you think we're a minority group?" Priya said.

"The professor has some good points. I thought people were being jerks, but I never correlated our situation with those of minority groups. I've seen my share of racist behavior, but I didn't think that

part through. Oh, great."

"What?" Sophie said.

"I'm part of another minority group. It's one more thing holding me back."

"Pablo, you better study law so you can defend us." Priya said.

"I am. I'm sick and tired of the way we're being treated."

"Didn't we see you earlier on the network?" Sophie said.

"Yeah. That was me."

"I thought so. We need lots of slick talking lawyers."

"Not all lawyers are slick talking. Some are nice people."

Sophie smiled.

"Yeah right. We'll see."

Pablo smiled and walked to his next class.

"What was that about?" Priya said

"You know how cocky lawyers are. I'm just putting him in his place." Sophie said.

"You like him, don't you?"

"Pablo? No way. He's a lawyer. I'm not ready for anything like that anyway."

Priya laughed.

"Yeah right."

Soon lunch ended and they walked to biology class.

"Are you THE Priya?"

Priya turned around.

"Yes I am."

"Hi, I'm Ian Walsh."

"Wait a minute, you seem familiar," Priya said. "Oh, I know.

We've talked on our telepathic network about your mom, who died of cancer when we were in the Omanji colony being domesticated.

“That's right. I want to cure cancer. I can't wait to take this biology class. I loved the genetics class.”

“Cancer isn't something you can easily cure,” Sophie said. “It's a whole series of different diseases with mixed causes that happen to produce similar symptoms, so we call them all cancer.”

“I know, but I think the tumors are all curable,” Ian said. “I think I’ve discovered something. I’ll tell you about it sometime.”

“Go for it. I want to hear about it,” Priya said.

They talked for a while longer. Priya and Sophie walked back to their dorm room to study for the rest of the day.

Right before they fell asleep, Nisha wanted to talk.

“Tell me about your day Pree.”

“I've never had a more awesome day at school. The classes are fast paced. This is how I always imagined college to be, except we’re in temporary buildings all the time. That's okay though. I'm meeting new friends. They're like me. They all want to do important things like cure cancer or build robots. I love it here. I'm worried about Bok, how's he doing?”

“He's not doing well. This morning, he got into an argument with his parents and the parents cut him off. One parent pushed me onto the ground. I'm okay. I haven't seen him since. He's overwhelmed because his colony is growing too rapidly and might become unstable.”

“I hope he's okay. Get out of there if there's any trouble. Okay, I'd talk more but I'm tired now. I've been studying all day.”

They said good night.

Chapter 43 – Freedom, Not for Free

Nisha heard the early morning sound of someone outside the tent. She opened the door. Beedee stood silently looking pale and gray.

“Beedee, what's wrong?”

“It's Bok. He doesn't know what to do. I've never seen him like this. He’s always confident and knows the best course of action. However, in this situation, he's unsure because of the fight he had yesterday with his parents. Whenever I try to discuss the problem, he disconnects.”

“Let me try messaging him,” Nisha said.

She blinked into her eyepiece and messaged him hello. She waited but there was no reply.

“Hmm, he's not talking to me either. My advice is to be supportive and let him grieve. The Omanji seem to experience some emotions in common with humans and I think he's sad about the loss of his parents. Aren't you sad? You were disconnected too, right?”

“Yes, everyone here at this new colony has been disconnected. We're all sad but angry too.”

“Humans have trained psychologists so they can help others when they’re having psychological problems. Do Omanji employ similar helpers?”

“I've learned that in ancient times, we used to seek help from helpers,” Beedee said. “I've heard rumors that on Oma, the colony of those who refuse to merge, still employ psychologists and AI agents. However, the main Omanji colony doesn't employ them. Our tightly interwoven connections keep us from having what you call personal problems.”

Nisha glanced over at Rachel.

“The Omanji don’t need psychologists because they're highly connected. I'm no psychologist, but the Omanji sound enmeshed.”

“What does 'enmeshed' mean?” Rachel asked.

“That's where you might for example, live in a big family that’s tightly connected, sometimes to the point of being codependent. The problem is when a family member leaves such a tight relationship, the person can experience many serious problems which take years of psychotherapy to ameliorate.”

Rachel raised an eyebrow.

“The millions who will live in this new colony will need an army of psychologists?”

“I'm not sure. I'm no psychologist and I'm no expert on the Omanji either. What do you think Beedee?”

“Your example is roughly analogous to the current situation.”

A chill flowed down Nisha's spine. She hid this.

“Beedee, why are the elders allowing so many of you to form a new colony,” Rachel asked. “Can't they stop you?”

“They're allowing us to do this because Omanji society is free. Everyone can do what they want within the limits of the law. They can stop us at any time. On Oma, this worked. Bok is worried if too many of us leave, they will stop us because Omanji society would be threatened if too many new young members refuse to join the collective.”

“Where's Bok now?” Nisha asked Beedee.

“I'm not sure. He disconnected several hours ago. His speeder is still here.”

“Okay, we'll go search for him and you do the same.”

They got into their car and drove around on the dusty roads for at least an hour. Their drones could not find him either. They gave up and returned to the tent.

“Where did he go?” Nisha asked Rachel as she got out of the car.

“I'm not sure, but—”

Nisha pointed to the top of the hill.

“That's him. I wonder if he's been on the hill the whole time. We didn't look nearby.”

They walked up the hill to him.

“Bok, we've been worried about you,” Nisha said.

“You sound like my mother.”

“What are you doing up here?” Rachel said.

“I'm here because I'm not sure what else to do. I've been disconnected. We've all been disconnected. I don't want to go back but I'm afraid about the future. More than 150,000 are here in my colony now, and four million more are on the waiting list. That’s far over the 550,000 limit the Esteemed Elders established.”

“Bok, there's no way to know about the future,” Nisha said. “For now, you need to stay in the present moment. Do you practice your twice daily 20-minute meditation? Don’t all Omanji do that?”

“Yes, we’re supposed to practice every day, but since they disconnected me, I haven't meditated.”

“Bok, I want you to meditate right now,” Nisha said. “Everything has changed for you, so you need some regularity in your life. I meditate twice per day and so can you. Rachel does too.”

“I know what to do,” Rachel said. “Let's all meditate together every day to start.”

“Great idea.” Nisha said. “What do you think Bok? We'll include Beedee in the daily ritual. You can set up a meditation for everyone in your colony. I think the practice would help bring peace and order to the chaos.”

“I agree. I think I'm missing something. I don't have 24-hour cycles like you though.”

“Let's start right now,” Nisha said as she found a soft spot to sit.

After about 20 minutes, they finished meditating.

“Thanks, I'm feel better now. You humans may be slow mastering technology but you're astute observers.”

“Tech isn't everything Bok.” Rachel said.

They walked down the hill and back into the growing colony. Beedee waited for them.

“Thank you,” Beedee said.

“You're welcome,” Nisha said. “Make sure Bok meditates twice per day. When our cycles coincide, both of you can meditate with us if you wish.”

They walked back into the colony as Nisha and Rachel watched.

“I hope meditation helps,” Nisha said.

“I think it will, but this is a serious situation. I'm not sure how to resolve this,” Rachel said.

They walked over to their tent and spent the rest of the day and evening working on getting the Yoots moved up to their new colony.

They awoke to a cool, late October rain. No rain had fallen since April, which is normal for most of California. Sometimes the desert has a few dramatic flash-flood thunderstorms in the summer, but not this year.

Nisha walked outside and ducked back in. She smiled.

“How weird, everything is covered in water. What happened?”

“Yeah, I forgot all about rain, and umbrellas. Where's the nearest town? Oh, that would be Barstow about 20 miles away.”

“Let's go, Nisha said. “We need supplies anyway.”

They traveled up lonely highway 247, past deep gullies which had been formed in flash floods over millions of years. The rain hadn't begun to fill them. They drove around the last hill and into Barstow.

“I love the desert,” Nisha said. “It's so quiet and peaceful.”

“Yeah, nobody is around. Well, on second thought.”

“The edge of the colony has advanced all the way to here,” Nisha said. “Comparing the colony to the small town of Barstow gives you a sense of scale. We're 50 miles away from where the colony started. Looking at this, they're going to have to evacuate Barstow unless the

Omanji build around the town."

"Yeah, but remember what happened to the town of Mojave? Even though the Omanji built around it, the town still had to be evacuated because nobody wanted to live in a place surrounded by 6,000-foot-tall towers. It was like living in an artificial Yosemite Valley. Let me find out what's happening on my colony growth analysis display. Okay, they'll build around it. The closest edge of the colony to Barstow hasn't grown closer in two days. There's plenty of room for expansion in other directions. Approximately 15 billion Omanji live in the colony now."

"Unbelievable," Nisha said.

They bought their supplies and drove back to Bok's colony.

"It figures," Rachel said. "Now we carry umbrellas, and the sun is coming out."

Nisha smiled.

"That's because my car got caked with mud from the dust storm on the drive here. Now the mud will dry into a work of art."

They arrived back at their tent.

"Bok is thoughtful. He made an outlet plug and a water faucet so I can recharge the car's batteries. He's been a tremendous help."

"Yeah, imagine our situation if he wasn't here," Rachel said. "We'd have no connection with the Omanji at all. Imagine trying to guess what's happening with no information from Bok."

"I can't imagine it," Nisha said. "I checked on the status of the Yoots. Yoova got on the train an hour ago and is heading up there. 5,000 of the 50,000 Yoots are at the redwood colony now. They're building their colony as we speak. With no drones."

"That's great news," Rachel said. "How long before the construction is finished? Can they all live there?"

"About two months, I think. They can all live there. The rainy season will be at full strength by then. Yoova said the sun was too bright here in the desert and her parents said they missed the rain. Yoova doesn't know what rain is because she was born in-transit to

Earth."

Rachel glanced over at the plants Yoova gave them.

"They're staring at us again. Watch this. It's a cool day and I'm giving off a lot of heat with my jacket off. If I walk slowly. Whoa, what are they doing?"

"They're slowly following you. The chilly day matters. Do you think they can survive here on Earth?"

"I've been doing some analysis and they can survive in a redwood forest better than here. They cannot produce as much food as Earth plants because they're adapted to the soft light on Oma. I think if we make some adjustments to the DNA in the plants and in the Halobacteria living in them, we can get them to use our sunlight more efficiently. I'm sending some samples to our genetics lab for further analysis. Wait, I think I heard Bok."

Nisha opened the tent door, startling Bok.

"How do you always know when I'm outside the tent? I attempted to be stealthy, and you can't listen to me think."

Nisha smiled.

"Humans can be talented Bok. I'm wondering about something. We're growing plants the Yoots used to eat on Oma. Do you know how we can adapt them to better use the Earth's sunlight, so they grow better here?"

Bok looked closely at the plants.

"Ah, these are familiar to me. I learned about them, but I've never seen them with my own eyes. Omanji used to eat them thousands of years ago. The wild Yoots still eat them. Yes, it should be easy to alter the DNA, so they grow more efficiently in this bright yellow sunlight."

"Easy for the Omanji I suppose. Thanks Bok, it would mean a lot to the Yoots if they— What was that?

Nisha and Rachel ran outside as a super sleek racer accelerated into the sky, leaving behind only a sonic boom.

"Okay Bok," Nisha said. "That racer looks different than anything we've seen. What is it?"

“That's a sky racer. They're like my racer, but bigger and faster. Mine is old and slow compared to that one. My racer can only travel in this atmosphere at Mach 5. That sky racer was built in the past week from the parts of two ordinary racers along with the engine and body from a sky racer which had some defective parts.”

“Well, the engine seems to be working well,” Nisha said. “How quickly your racer can travel once around the Earth? Did you say two hours?”

Bok paused.

“I calculate about two hours if traveling at the upper edge of the atmosphere where it can go much faster than Mach 5.”

“Your racer can travel faster than five times the speed of sound? That’s impressive. And how about the sky racer we saw?”

“About one hour and it can accelerate to Mach 8 in the atmosphere. That’s much faster than my racer. A natural orbit takes about 90 minutes, but they can fly upside down at greater than escape velocity and avoid being flung into space. That technique uses a lot of energy though. It's better to float weightless in orbit naturally.”

Nisha smiled.

“What is it?” Rachel said. “I've seen this look before.”

“Well Bok, it's cold today. I was wondering how long it would take for your racer to fly to Tahiti?”

Bok paused again for a couple of seconds.

“It would take 28.5 minutes from surface to surface assuming Bora Bora as the target island. We would travel below the speed limit for the speeder since humans are delicate about high speeds.”

“Incredible,” Nisha said, losing herself in fantasy. “That's so fast. I've always wanted to go to Bora Bora.”

“Would you like to go?” Bok said.

“Yeah but—”

“But what?” Rachel asked.

She winked at Nisha so Bok couldn't see. Nisha smiled again.

“Um, I mean yes. I'd love to go.”

“Okay, get in.”

“What do you mean, 'get in?'”

“I mean, my racer is only 200 feet away. Let's go. I need to get away from this pressure and experience the Earth. I summoned Beedee.”

“It's already noon Bok,” Nisha said. “Do we have enough time?”

Rachel whispered to Nisha, “Of course we have enough time, it only takes 28 minutes.”

“Okay, let’s go.”

They grabbed their swimsuits and towels. Soon they were in the upper stratosphere over the open Pacific Ocean. The North American continent disappeared quickly behind them.

Nisha gazed at the stars in the black daytime sky of space.

“I'm weightless. I'm feeling dizzy. The Omanji spheres are more visible. How many are in orbit now?”

Rachel blinked to access her data source in her eyepiece.

“I estimate—”

“16,347,” Bok said. “Another one recently arrived so I'm in error. This makes 16,348.”

“I'm as fascinated with the spheres above as the ocean below,” Rachel said. “Even at this high altitude, the Earth is a water world. It's an endless ocean.”

“Why am I not floating around in the cabin?” Nisha said. “I know I'm weightless.”

“You’re not floating because the same resistance field which created your seating is also holding you in place. In this case you can still move, but you must push through it.”

“Ah, I understand. Yes, I can still move around. This isn't artificial gravity?”

“No, this is a local field which interacts with the atoms in your

body to keep them in place, and it stops bone loss in space. Artificial gravity is possible. However, to provide the same amount of gravity as you sense on the surface of the Earth, you would need enough energy to bend space as much as the Earth does. That is currently beyond our practical capabilities."

"Perhaps someday you'll overcome this primitive limitation." Nisha said.

She smiled.

"Yes, we're working on—"

"I'm joking Bok!" Nisha said.

"I'm still trying to understand human humor. I'm not sure what's more difficult, understanding how to create artificial gravity or understanding human humor."

Nisha and Rachel laughed.

"Did I make a joke?" Bok said.

"No."

"So why are you laughing?" Bok said. "I'll never understand humor."

A few minutes later, they reentered the atmosphere and decelerated. A dull red heat could be seen and felt outside the window for a moment, soon it dissipated.

"Rachel, there's Bora Bora! This is difficult to believe."

"Believe," Rachel said. "This is real. Bok, can you set down the racer over there on the little barrier island with nothing on it but a few palm trees? Nobody is there, so we can enjoy some peace."

Soon they landed. Nisha jumped out and ran into the shallow clear blue lagoon water.

"The sand is silky soft. The water is perfect."

Rachel walked up to a palm tree and hugged it.

"It's real. This isn't some Omanji simulation."

Bok and Beedee stepped out. Their six toes made unusual prints in

the sand.

“This environment is different than the Mojave Desert,” Bok said. “It's humid. On Oma, similar equatorial islands exist, but the waves are large, and the winds are strong. It's cooler here than on Oma's equatorial islands. No barrier reefs surround Oma's islands. One can't be out in an exposed area like this without risking death.”

“Beedee, can you swim?” Nisha said.

Beedee paused and discussed something silently with Bok.

“No, we can't swim. My parents used to swim on protected shores of the southern continent and in artificial bodies of water, but we were born in space, so we had no water for swimming.”

“Okay, be careful and don't go in the water,” Nisha said. “You may drown.”

Bok and Beedee fell silent for a while.

“We were trying to figure out how to drown.”

“No Bok, you don't want to drown.” Nisha said.

“Yes, I don't. Drowning doesn't seem pleasant.”

Nisha and Rachel laughed again.

“Did I make another joke?”

“No Bok,” Rachel said. “It's funny how you said drowning didn't seem pleasant.”

“I still don't understand,” Bok said.

He turned to Beedee who wiggled her nose and turned vibrant orange colors.

“It's okay Bok,” Nisha said as she smiled knowingly. “Beedee understands. She can explain it to you later.”

Nisha and Rachel swam in the blue lagoon and dried off under the shade of the three palm trees clustered in the middle of the tiny sand island. Bok and Beedee watched them with curiosity. He walked over to a coconut and picked it up.

“What is this?” he said.

“It's a coconut,” Nisha said. “It’s a seed from this tree here. Delicious juice is inside but it's difficult to open.”

Bok tried to open it with his hands, but even his strength proved insufficient. He pulled out his silver device. A hole appeared in the coconut. Nisha took it from him.

“Okay, now turn it over like this and drink the juice,” Nisha said. “Make sure it won't make you sick.”

She handed it back to Bok, who tested it.

“It's okay to drink,” Bok said as he poured some into Beedee's mouth and then into his.”

“It is a pleasing liquid,” Beedee said as she turned a vibrant blue.

“Agreed,” Bok said as he drank the rest of it. “We're not used to consuming a substance directly from a natural source. This is a strange experience for us. It's raw and primitive. It's enjoyable.”

They spent the rest of the day examining coral, fish, and seashells that Nisha and Rachel brought to them from the reef. Soon it was time to go. Even though the sun shone high in the sky at Bora Bora, it would be setting in California in only 30 minutes. They lifted off and soon were back in the desert.

“Thanks,” Nisha said. “We had a wonderful time. Let's do this again.”

“Yes, we can easily go anywhere on the planet. Okay, we must go. I forgot about my problems for a few hours. This is good rest for the mind. It's like meditation.”

Nisha and Rachel walked back into their tent as darkness fell in the desert.

Nisha contacted Quinn.

“Guess where we spent the afternoon.”

“Hmm, did you spend it in your tent waiting for the rain to stop? It rained hard in Pasadena. A chilly rain.”

“Um, no. We spent the afternoon on a tiny island looking across the lagoon at Bora Bora.”

Quinn laughed out loud.

“Good one Neesh. I'm glad your sense of humor is still intact.”

“Here are some pictures including some from space. You can check out my Reddit stream. I uploaded the entire trip there.”

“She's right Dad,” Sanjay said. “Here it is.”

“You really did go. I'm watching you walk into the lagoon with Bora Bora behind you. Neesh, you're so cute.”

“Thanks. I'm doing my yoga and exercises every day. Okay I gotta go, but I wanted to—”

“Brag? Boast? Rub it in? Fine. Talk to you later.”

Nisha smiled.

“Okay, bye.”

Chapter 44 – What are the Eggs?

Nisha woke up and glanced at the clock. “It's 7:15 and only now is the sun hitting our tent. Winter is approaching.”

“Yeah, and it's cold outside too, at least compared to Bora Bora,” Rachel said as she looked outside. “Um, there’s a lot of activity out here.”

“The new colony is getting to be a big deal. Bok must be freaking out.”

Nisha contacted Bok via her eyepiece.

“How are you doing Bok? There's a lot of activity this morning.”

“So far, I'm trying to keep things in order. I'm not sure how the elders coordinated this move with 80 billion of us arriving on Earth over a several month period. Approximately 200,000 live here now with seven million on the waiting list. We didn't leave a planet, travel 23 light years in under 80 years elapsed ship time to build this colony on another planet. But we're only a minute away from the main colony by racer.”

“True. Okay, I won't bother you,” Nisha said. “Let me know if you need me for anything.”

“Thank you,” Bok said.

They disconnected.

“Rachel, this is getting out of hand, don't you think?”

“Yes, the idea of not merging must be going viral in the colony. When I examine the trends, I estimate 40 million of the 55 million Omanji in the Age of decision will want to be in Bok's colony.”

“There's no way the Esteemed Elders will accept this number,” Nisha said. “Their entire society will eventually collapse if the trend continues. The process would take a long time since the Omanji

lifespan is long. Hold on, I'm being contacted by General Sherman."

She blinked into her eyepiece to connect.

"How are you doing General?"

"I'm doing my best to hold things together. There's a constant stream of people trying to get into the colony. The perimeter keeps expanding, so it's impossible to build a fence to keep them out. Some hawks continue to propose aggressive ways to force the Omanji to leave, which is a waste of time and might get us all killed. Now I'm in charge of evacuating the town of Barstow. I want your opinion about the new colony. I watch your video stream broadcast, so I know what's happening. Nisha, I can't talk now, but I'd like to know what you think are the implications for us with this new colony?"

"We were just discussing this. Historically, the Omanji culture experiences violence when splits happen in the culture. They try to maintain a single culture to avoid wars and promote cohesiveness. This might develop into a split, though there's no way to tell at this time. On Oma, there's a separate colony for those who don't wish to merge. The relationship is peaceful because only about 0.1% of the total population live in that separate colony. For now, things are okay, but I'd make contingency plans should things turn bad. I don't want to be in the middle should a fight break out. I don't know what weapons they might use against each other. I don't want to find out."

"Thanks for the input, Nisha. I'll be in contact with you later."

They disconnected. Nisha glanced at Rachel.

"Well, our government seems to be aware of what's happening," Nisha said. "I think for now, we need to keep a close eye on Bok and what's going on around here."

"Yeah, like what are they doing over there?" Rachel said, pointing to the nearest nuclear fusion power generator.

"I don't know. Let's check it out."

They walked about 100 meters to the generator, which was the size of a small school bus. A group of young Omanji was standing nearby.

"What are those little objects they're taking out of the generator?"

Rachel said.

"I don't know," Nisha said. "They're small. They're like hummingbird eggs. I have a nest in the back yard."

"Maybe they're energy storage units," Rachel said. "They might be used in the speeders. When we flew to Tahiti, didn't the speeder seem light in weight?"

"Yeah, I wondered about the power source, but I forgot to ask."

"Power might come from these eggs. They must have something to do with power since they're being removed from the generator."

"Why are they huddled around the eggs?" Nisha said. "They must be important. For now, let's pretend like we don't notice."

They walked up the side of a hill to get a better view.

Rachel said, "They're starting to build several of the large towers that could each hold a million of them."

"Yeah, you're right. Also, Bok hired thousands of human guards to keep people away. Many people are still watching from the highway though."

They monitored the activity until darkness fell. They walked back to their tent and slept soundly all night.

Chapter 45 – The Esteemed Elder

Bok walked towards Nisha's and Rachel's tent for morning meditation. Beedee worked nearby on a new panel for converting power to sell to the grid. A silver sphere about 20 feet in diameter dropped out the sky and landed between Bok's and Nisha's tent. Three large Omanji with gray colors emerged from the sphere, rippling its surface.

"Beedee, come here quickly," Bok thought to her as he walked.

Bok messaged Nisha, "No meditation today it appears."

He added a big-eyed old-school smiley face at the end in the hopes of reducing Nisha's anxiety.

Nisha and Rachel rushed out of their tent to find out what happened.

"Stay there. I'll be okay," Bok messaged again to Nisha. "I'll forward our live thought conversation to you in converted human text form for you to read."

Nisha read his message in her eyepiece.

The Omanji walked quickly to Bok. They appeared sternly gray and stood a good 10 inches taller than the muscular but adolescent Bok.

"Bok, we wish to discuss our communal problem," the first one silently thought to him.

"Are you the Esteemed Elders?" Bok thought back.

"I am Primary Esteemed Elder Zon, these are my associates. They are also of the Esteemed Elders. Do you know why I'm here?"

"I assume you're here to talk about my colony."

"Yes. Before I begin, I wish to tell you a story."

"I'll listen."

“It may not seem possible to you now, but 360 Earth years ago, I was your age. I faced the same decision you're facing now. Do I merge, or do I move to the colony of the un-merged?”

“I learned about you in school, but I didn't know,” Bok thought.

“It was a difficult choice. I decided to merge because I wanted to make great discoveries and to be of service. After 85 years of challenging work and many setbacks, I discovered a way to create a stable magnetic matrix. That’s what keeps antimatter safely contained if a loss of power or an impact of moderate intensity occurs. We used to suffer horrific antimatter accidents, but now only the most extreme stress can trigger an antimatter explosion.”

Bok turned a friendly shade of blue.

“You made that discovery? I had no idea. I'm using that matrix now to create antimatter pods for our racers.”

“Yes, I know what you're doing. If I and others like me hadn't merged, you wouldn’t consider it safe to create those pods in your antiquated nuclear fusion generators over there. They appear like harmless little psyg eggs, but one of them could turn this valley into molten glass if the pod exploded. If we hadn't merged, you would still be stuck on Oma in a deteriorating environment, doomed to extinction. Are you aware of this?”

“Yes, I'm aware,” Bok thought.

“So why do you not merge?”

Bok paused for a moment in silence.

“As much as I value Omanji achievements, I value my autonomy more. If I merge, I'll lose a huge portion of my individuality and my privacy.”

“You've absorbed this idea from the humans, haven't you?”

“Not directly. I learned this on my own. I observe how they are on this planet. They suffer through wars and violence as we did, but they’re also independent minded.”

“They do have their own little minds, but humans are just the smartest native animals on this planet,” Zon said.

Nisha raised an eyebrow and glanced at Rachel when she read the translation of that statement. Rachel read the translation too and shook her head. Zon continued thinking to Bok.

“I admire your idealistic thought process. I once thought as you do, but take the advice of one who is older and wiser. Fully independent thought can be dangerous. Four of our six long dark ages are the direct result of independent thinking leading to near extinction. Only cohesive and integrated thought leads to upwardly mobile self-directed evolution. Otherwise, AI or single celled life wins. Even humans are slowly becoming aware of the possibilities of self-directed evolution and the dangers of hyper-intelligent, self-modifying AI. That species shows potential but they’re about to hit what they call, 'The Great Filter,' as we did. The human children we modified are especially aware of the possibilities. They could save or destroy intelligent life on this planet. They must establish a collective mind. Self-directed evolution is a basic principle which can lift a borderline species out from its primitive past and into enlightenment. Natural evolution fails at the stage of development where humans find themselves today. They're at the final stage of their natural evolution. This is what they call, 'the fork in the road.'”

“I value our achievements over the ages,” Bok said. “However, one of our prime rights is the right to be free to follow our highest route to happiness. I'm not happy with the thought of being like an ant in a colony.”

“What is an ant?” Zon thought to Bok.

Zon paused to access data. His gray skin turned a faint shade of red.

“Ah, an ant is a communally based insect here on this planet. Each Omanji is much more than an ant. I'm more than an ant. You can be much more than an ant.”

The red faded.

“You mustn’t allow yourself to be persuaded by the humans and other unmodified beasts of this planet. They provide amusing entertainment I agree, but you cannot take them seriously.”

“They are not beasts, they are—”

“They're savages,” Zon said. “They fight, kill each other with hatred, and die ugly young deaths. Even friends become angry and fight. They’re purveyors of chaos and illogical thought. They’re only slightly more evolved than any of the other animals on this planet. They don’t even make good pets. We used to be primitive and undirected like them and we self-evolved beyond that. Now I’m going to show you the result of that evolution. Tell me what you experience.”

Bok turned a bright blue. Beedee walked over to Nisha and Rachel near the tent, and they all noticed Bok’s change of color.

“Am I connected to the collective?”

“Yes, you are fully connected, not partially connected as before. What do you experience?”

Bok fell silent for a couple of minutes.

“I now understand why we merge. They welcomed me. I meditated and billions of others meditated with me. It’s peaceful. I didn’t expect the experience to be three dimensional. It's the same experience as being physically there with everyone. I’m experiencing more than simply communicating with thought, as I do with my current implant.”

“Yes,” Zon said. “I’m routing the signal of the collective awareness through my implant so you can receive the direct experience of being merged as I do. You can be with all of us always. You will never worry about being alone. You will share in the camaraderie with 81 billion others.”

Bok fell silent again, for over a minute. Zon waited in silence.

“I understand the appeal of merging now,” Bok thought to Zon and to Beedee. Bok forwarded the telepathic collective signal to Beedee.

“It's beautiful. I had no idea,” Beedee thought only to him.

“Yes,” Bok thought back.

Nisha turned to Rachel.

“What do you think is happening?”

“I don't know but my heart is racing. It's like they're in a trance.”

“Beedee, are you okay?” Nisha said.

She didn't reply.

“Something's wrong Rachel,” Nisha said.

She grabbed hold of Beedee's arm and shook it. Beedee didn't reply so she shook her arm again. Finally, after 15 seconds of shaking, she emerged from the trance.

“I'm sorry,” Beedee said out loud via her translator. “Zon is trying to convince Bok to see the wonders of the telepathic collective. It is beautiful.”

“What can we do?” Nisha said.

“Nothing, we must wait and not interfere,” Beedee said.

“Zon is interfering, so why can't we?” Nisha said.

“We aren't allowed to interfere. We must allow Bok to decide of his own free will.”

“That's a bunch of—”

“Nisha. Shh,” Rachel said.

“Of bologna,” Nisha said. “I'm going out there.”

Nisha ran as fast as she could down the hill and stood between Zon and Bok. Zon turned a dull red.

“Nisha, what are you doing here?” Bok said out loud through his translator. “Zon and I are discussing the advantages of the telepathic collective. I didn't know how beautiful—”

“Zon is interfering, even though nobody is supposed to interfere with a personal decision to merge or not to merge. You weren't allowed to affect Beedee's decision. Now Zon is affecting your decision. Zon is a hypocrite.”

“Human, speak to me directly,” Zon said out loud via his own translation device. “I can understand you and all humans. I'm giving him information so he can make up his own mind.”

Nisha stared up at Zon, who towered at least 18 inches above her and outweighed her by a factor of three.

“Okay, I'll speak to you then. You are a hypocrite. First you tell others to not interfere and then turn around and interfere. You're breaking your own laws. You're supposed to be the supreme ruler or king or whatever. Leave him alone.”

Zon turned to Nisha and shoved her to the ground effortlessly. She let out a groan as she hit the soft sandy surface.

“Silence human. Allow Bok to decide.”

Bok immediately rushed over to Nisha and picked her up, examining her closely.

“Are you okay?” Bok said.

“I'll be fine. No thanks to this jerk.”

She turned to Zon.

“You call yourselves an advanced species? You're no better than humans. You have better toys, but so what? Go ahead and push me around. Kill me and prove your superiority.”

Bok stared at Zon with both of his roving eyes.

“Zon, you should go now. I see the beauty of collective consciousness, but I want my freedom. I wish no harm to anyone. I want to live a peaceful life. So do the humans.”

Zon turned red, but only for a second.

“Freedom is your right Bok. However, if you decide not to merge, don't encourage others to follow you. They can do so of their own volition, but this is a vulnerable time for us. We’re on a new planet and we must cooperate. Don't attempt to destroy our civilization or I will be forced to defend us. Is this clear?”

“I understand. I don't want to destroy all we've built over the millennia.”

Zon turned to Nisha.

“I apologize for my behavior. You must understand that I am fighting for the survival of my species. Your species is finding out that artificial intelligence becomes increasingly dangerous as it surpasses your own intelligence. Nuclear weapons and drones are merely a

preview of the technologies to come. Soon, a single individual with enough knowledge can intentionally or accidentally end most advanced life on this planet with a simple miscalculation. An independent colony will be evidence of this. It's easy to control nuclear materials, but it's difficult to control a self-modifying AI smarter than yourself, or some other chain reactive process. Even the Omanji have failed to succeed, so we outlawed it."

"Apology accepted," Nisha said as she brushed herself off. "Are you referring to a concept we call *The Great Filter*?"

Zon paused for a moment as he accessed the information.

"Yes. Bok has limited knowledge of what we've found in our part of the galaxy. We detected one other extremely advanced organic species far away, but no intelligent life nearby. We've discovered dozens of ruined planets, stripped of their most advanced life forms. Artificially created life and intelligence can serve us or destroy us. You are an ephemeral species, as are all species. It's an error to think that humans in their present form will exist forever. You and Bok can learn from what I told you or ignore it at your own peril. We must go and prepare to avoid destruction. We know what will happen."

Zon and his associates turned away from Bok and Nisha and reentered the sphere. It lifted silently into the air and disappeared, leaving behind a sonic boom. Bok stood in place, staring skyward after the sphere faded out of sight. Beedee and Rachel watched as Bok continued to stand in place, not moving an inch.

Nisha turned off her live broadcast to the world.

"Stay here Rachel," Beedee said via her translator. "I'll go talk to them."

Beedee walked over and stood by Bok, at first not saying or thinking anything to him.

"You two are braver than me." Beedee said out loud via her translator.

Bok didn't reply at first.

Beedee continued, "I heard your entire discussion. You stated your case clearly, exactly as we're trained to do. I'm proud of you."

She interlocked her six fingers in his, in the way only the Omanji can do.

“Did I do the right thing?” Bok thought to Beedee. “I'm usually sure of myself, but this is a different type of decision.”

“You did the right thing. You stood up for what you believe in and did so in a peaceful way. You did too, Nisha.”

Bok sat down on a rock, still staring in the direction of the sphere's departure. Beedee and Nisha left him alone and walked back up to the tent.

“How's he doing?” Rachel said.

“He'll be okay, give him some time to think,” Beedee said.

Beedee returned to her work on the energy grid panel. Nisha and Rachel returned to their tent.

“My heart is still racing,” Nisha said.

“I can’t imagine why. You have a dull job in a boring industry.”

Nisha managed a smile.

“Do you think we’re members of an ephemeral species?”

“I don’t know. Normally I’d laugh at such an idea but when Zon says it, I’m not laughing. He knows things we don’t.”

“Yeah, we need to give this more thought,” Nisha said. “The Great Filter was always just a theoretical exercise to me. Done by theoreticians. Now it carries more weight. The weight of dead planets and Omanji extinctions.”

Bok sat on the rock for most of the day until the sun set. They left him alone. He eventually returned to his new tower for the night.

Chapter 46 – The Danger of Freedom

Nisha awoke to the sound of a notification in her eyepiece.

“Rachel, Bok contacted me. He wants to talk with us at location 17c.”

They got dressed and walked the half mile to the construction site where millions of drones were building a large tower. Bok watched, listening to the clicking sound of the metallic legs of the drones grasping the concrete pillars as they climbed to their programmed location to carry out their tasks.

“Hi Bok, how are you doing?” Nisha said.

“I’m not doing well. I’ve been thinking about what Primary Esteemed Elder Zon said to me yesterday.”

“Me too,” Nisha said.

“I’m not sure what to do. I can lead a good life if I merge, but I want to live my own life. This is a new planet. I don’t understand why we must be strongly connected to be at peace. Those rules were made to stop wars and destruction, but those were the old days. Things are different now. Why should I live under the old rules? I want to stay here and build the new colony. We can do things right this time.”

“I wish I could help you Bok,” Nisha said. “I don’t know Omanji history and psychology well enough to offer sound advice. Your species has a violent past and now they’re connected. They meditate to keep the peace. The Omanji system works well. I’m not sure what will happen in your less connected new colony. You should establish a meditation routine just in case. Build your own version of the Omanji system. You’re still Omanji. Like humans, violence and self-destruction is in your history. Don’t be another victim caught in The Great Filter, and don’t drag humans into the filter!”

“Yes, I know a friend who leads meditation sessions within our collective,” Bok said. “He’ll arrange a colony-wide meditation schedule. I notice when I stop meditating, thoughts of angst and

violence creep into my consciousness. My mind is more at peace when I meditate."

"That's good," Nisha said. "Read this text by the human, Patanjali. It may help. How many Omanji are here in your new colony now?"

"Over 300,000. About 15 million are on the waiting list. That's why Zon visited me. When he routed the telepathic collective to me, I sensed fear in him, although he can easily crush me and my colony. Something besides me and my colony is worrying him. I'm not sure what it is."

"It's what you represent. If he were to crush you, you would become what humans call a martyr, to 100 million or more young Omanji," Rachel said. "Even if you were dead, you would inspire many millions of others to join your cause and an insurrection might happen. Zon doesn't want that. That's how your wars started. Therefore, he won't crush you. This is a guess based on human nature however."

"I understand," Bok said. "You might be right. Our history is filled with splits and insurrections. They usually end in near destruction. I sense he'll try to avoid this."

"I like Zon more than I thought I would," Nisha said. "He seems sensible even though he thinks humans are animals. I agree there is something else worrying him. What will you do?"

"I'm going to continue to build the colony, but I'll discourage those who want to join. And set boundaries. I'm still anxious, so I'll meditate several times per day.

"Okay," Nisha said. "We're going back to the tent to assist the Yoots in their move to the redwoods."

"Okay, please don't go far. I'm going to go and think about this for several days."

"We'll be here," Rachel said as they walked back to the tent.

"What do you think?" Nisha said, gazing out at the new colony.

“I think Bok is young and idealistic and he’s in over his head, but he’s intelligent. We have no frame of reference to gauge if he can be successful with this colony or with the split that’s happening.”

“Yeah, this is a real split. Bok told us when a new colony is formed, the problems begin. I hope this doesn’t end in violence. They’ve torn the planet Oma apart on several occasions.”

“Let’s hope they don’t tear our planet apart,” Rachel said.

“I hope so too. How many Omanji can Bok’s colony hold right now?

Rachel made some calculations.

“Well, he’s built seven of the 1,000-foot towers that can hold 100,000 each, and he's completed 15 of the big 6,000 ft. tall towers with more on the way. They can hold one million each. Within a few days his colony could house over 15 million, assuming they can produce their own food and power. Thus far, that hasn't been a problem. Somehow, they manufacture food straight from the elements in the ground and in the atmosphere. The Omanji are like plants in that way, getting sustenance directly from minerals and elements. They bypass creating food from plants and animals. Bok won’t tell me how they accomplish this. I guess he doesn’t want to interfere with our technological evolution.”

“I guess so,” Nisha said as she gazed out at the new colony. “Hmm, have I done the right thing by encouraging Bok to make the split? I’m interfering, and now I’m afraid the Earth is going to become one of those dead planets. Maybe it’s a good thing the Omanji are here at this dangerous point in human evolution. I’m having second thoughts about wanting them to leave. Have you seen the latest sentient robots? They could take over the world someday. And to think we once worried about driverless cars and those old chatbots.”

“I know what you mean. Things are being set into motion that can't be predicted. It’s too late to turn back now. We're going to have to wait and see.”

As Nisha and Rachel gazed at the colony, a brief flash of blue light covered everything in midday-level glare.

“Something happened,” Nisha said.

“Yeah. My heart almost stopped.”

“Mine skipped a beat. I’m going to contact Bok,” Nisha said.

Soon they connected.

“Bok, what happened? We felt an electromagnetic pulse.”

“Don’t worry, we activated our protective shielding, and all is okay. It was a minor anomaly.”

“Thanks Bok. I appreciate that. Get back to work now.”

They disconnected.

“You’re right Rachel. Things are being set into motion. They can’t be predicted.”

Chapter 47 – The Colony Ruptures

They heard nothing from Bok for one agonizing week, other than brief replies that all was well. Nisha woke up on the eighth morning and heard Bok walking around outside the tent. It was cool and dry early November day.

“Bok, I'm happy to see you,” she said.

She hugged him. He towered over her now, but he didn't resist the hug. Rachel came out and gave him a hug too.

“Bok, we've been worried sick about you. We've been watching your colony grow every day. Twenty big towers are now completed. How are you?”

“I'm a little better now. I hid away and meditated for the entire time. I read Patanjali and other ancient human texts. They have universal merit and are like Omanji ancient texts. I thought about what I want for my life and for the new colony. I've decided I want to live a free life. So do the 20 million on my waiting list.”

“Congratulations,” Nisha said. “This is a big decision. What made you decide on a free life? It'll be difficult.”

“I made my decision based on what you two are telling me about having an independent mind. My life will be more chaotic than the structured life I'd lead within the collective, and I won't be able to access all the resources, but I can make my own future. Everyone who comes to my colony can do the same thing.”

Nisha got an incoming message from General Sherman.

“Hold on Bok. How are you General?” she said.

“I'm doing well but I think you better get back here to the big colony. Something is happening. Hundreds of thousands of young Omanji are wandering around at the perimeter of the colony.”

“Hold on General while I assess the situation,” Nisha said as she connected the video feed to a large monitor in her tent. “Bok, come

over here. What's happening?"

Bok and Rachel watched the video feed for a while in silence.

"I know what's happening," Bok said. "They wish to live in my colony. For the time being they haven't been cut off from the collective awareness as I was. Elder Zon is currently preventing them from leaving. If you pay close attention, Omanji security guards are standing in front of the crowd. I encouraged them to be peaceful. I don't want violence. I don't want to repeat the past of Oma here on this planet."

"I'm thankful for that Bok," Nisha said. "General, do you see the guards?"

"Yes, they're holding back the crowd, but it's growing. We estimate the size to be about 300,000.

"Bok is encouraging them to be peaceful. However, advise the President to take precautions in case things go bad. Based on their history, things can get extinction-level ugly."

"Yes, I'm closing the viewing areas and sending all non-essential personnel away from here. They have no place on a battlefield."

They spoke for a while longer and disconnected.

"Bok, what do you think is going to happen?" Nisha said.

"I don't know. If they're like me, they want to get out of the colony immediately. I still can access the historical records. I've downloaded everything I can. Situations like this have unraveled in the past into wars. However, wars never started with young ones like us. Therefore, I doubt this will be a problem on that scale. I'm forming a temporary government based on a combination of Omanji and human concepts. I'll communicate with you later."

Bok walked out of the tent. Nisha and Rachel watched the video feed of the crowd of young Omanji for the rest of the day. Later they had another look.

"It's getting bigger Rachel, don't you think?"

"According to the crowd estimator app, it's grown to 400,000

now."

"Do you think we should get out of here?

"Not yet," Rachel said. "Let's watch the situation closely. If conditions become dangerous, we'll get out. How are Priya and her friend doing at the new school? They've attended classes for over a week now."

"Oh, they love it. They finished the first half of the first semester in all the classes in this past week."

"Wait a minute," Rachel said. "Are they saying that at this rate, they'll finish a semester of schoolwork in only two weeks?"

"Yes."

"Okay, so you know me now," Rachel said. "I like to calculate everything. You're telling me they're sophomores in high school, so they will finish the entire year in a month or so. Is this right?"

"Yes, that sounds correct."

"In three months, they'll be out of high school?"

"It's possible," Nisha said.

"Four months later, they might earn their university undergrad degree. Less than a year after that, they could have their Ph.D.'s. So, by the age of 18 or 19, they will be where I was at 28? Amazing!"

"Well, I think that's being too optimistic, but who knows. We're making assumptions and they're only 16, but they do learn quickly. What's more important to me is they're happy and they're not getting bullied."

They talked for a while longer and fell asleep.

Nisha woke up to the first light of the sun on the roof of the tent. She blinked into her eyepiece to connect to the video stream of the main colony and display it on the big monitor.

"Rachel, come over here."

Rachel rubbed her eyes and studied the screen.

"What's happening on the ground there in the big colony? Are those all Omanji?"

"I'm zooming in. Can you run an estimate now?"

Rachel took some images and processed them through her crowd estimator app.

"Over five million Omanji are walking around at the edge of the colony. It's strange because the scale of the place makes five million seem like a modest number."

"Yeah, I guessed a million at most," Nisha said. "The huge towers dwarf the crowd. I'm impressed that—"

"Sorry, I think I hear Bok outside," Rachel said.

She opened the door. Bok walked in and shut the door. Nisha pointed to the screen.

"What's going on?" Nisha said.

"The crowd is getting bigger. They're upset because they want to come here and live but they're still being held back by the security guards."

"Did you speak with Zon today?" Nisha said.

"Yes, Zon asked me to tell them to return to their families. I told them to be peaceful. And, if they wish to return to their families, they would be welcomed. That seemed to prove to Zon I wasn't trying to cause an insurrection. He's been patient up to this point. However, I think he can be tough when he wants to be. He's in control of a lot of power and he has the backing of government to carry out his wishes. He knows history. I understand his position now."

"Is Zon a dictator or King?" Nisha said.

"No, all those connected elect him. Every 8 Earth years. So is his cabinet."

"We're getting worried," Rachel said. "Should we leave?"

"I think you're okay for now. Zon will avoid harming humans if possible."

"But what if it's not possible?"

Bok paused to consider the question.

“I’m not sure what would happen in that case.”

Nisha glanced at Rachel with wide open eyes.

“Should we stay?”

“I guess for now we can,” Rachel said. “Bok, you’re still building new towers. Soon 30 of them will be finished. Do you think 30 million will live in your colony?”

“I estimate a minimum of 30 million will live in my colony out of the 55 million which are in the two-year age of decision. I’ll build a few more to be on the conservative side. I have 32 million on the waiting list and 500,000 are here at this moment.”

“How are you feeling?” Nisha said.

“I’m better now. I made my decision. This is my life from now on. I may never again communicate with my parents but that’s their problem. They say I’m embarrassing them. They care more about their social standing than about me.”

“This happens with humans sometimes too Bok,” Rachel said. “So how are you organizing the colony?”

“Soon, a government will be in place. I’ll lead for one Earth year. Someone else will be elected after my term has expired. We’re trying to base things on Earth time from now on. This reminds me that I must go and take care of some disagreements among those I chose to lead with me.”

Nisha laughed.

“Your government is already sounding human.”

“Yes, some resemblances exist. This is more difficult than I first thought. I didn’t realize that relationships between individuals are more complex than antimatter containment.”

Bok walked out of the tent. For the rest of the day and into the evening, Nisha and Rachel studied the crowd as it grew. That put extra urgency into their efforts to get all the Yoots up to their redwood compound and out of harm’s way. They went to sleep, hoping for the best.

Another cool but sunny desert morning dawned as the days got shorter. Nisha woke up and connected to the video feed of the colony.

“No way.”

“What Nisha?” Rachel asked as she woke up.

“The crowd is much bigger now.”

Rachel studied the screen and her eyes opened wide.

“Let’s find out how many.”

She activated her crowd estimator app.

“About 20 million of them are standing at the edge of the colony.”

“I wonder if Bok knows about this,” Nisha said.

“He does and so does Zon. Hey, zoom in on the left side near the huge cylindrical artsy thing. Keep going. Yeah, right there.”

“Hmm,” Nisha said. “The crowd is pushing past the guards. Yeah, they're running through the opening. The entire—”

“What's wrong with them?” Rachel said. “They stopped running. Some are on the ground. My crowd estimator is saying 100,000 of them are lying on the ground. They're not moving. The guards are pointing those black orb-things at them.”

They watched for a few minutes in silence.

“Rachel, they're breaking through on the right side now. The effect is like a tsunami overcoming a sea wall. The whole crowd is moving forward now.”

“Yeah, they're all running, 20 million of them. And the ones which looked dead or frozen are up and running now.”

“Zon must be letting them go,” Nisha said. “He can do whatever he wants to do with them. He could stun or kill them, but he’s chosen to allow them to leave. They're heading out into the desert in this direction. If they run in a straight line, it’s only 20 miles away because the colony has expanded rapidly. The distance used to be 60 miles away.”

“They're like an enormous herd of wildebeest in Africa,” Rachel said. “They're heading in this direction. I wonder if they find it easy to run, since Earth's gravity is much weaker than the gravity on Oma.”

“I think it's easy for them. they're not slowing down. Rachel, how long will it take for them to reach us at the current pace?”

“I'd guess about three to four hours if they slow down a bit.”

Bok made noise outside the tent and slowly opened the door.

“I'm sorry to bother you so early in the morning.”

“That’s okay, come in,” Nisha said. “We're watching what's happening on the monitor over there. How are you doing?”

“I'm processing a lot of information right now. They decided to break the barrier and come here. I haven't encouraged them. I hope Zon doesn't do anything.”

They watched on and off for four hours as all 20 million of them ran across the desert. The first of them arrived at Bok’s colony.

“This is not how I envisioned the events to proceed,” Bok said. “I thought one by one, they would come, and we could build the colony. I'm glad I built the extra towers as a precaution. Now at least they have a place to live. I put plans in place, so they’ll be taken to their quarters in groups of a few hundred at a time. Fortunately, we have 500,000 greeters.”

Nisha and Rachel laughed.

“Why do you laugh?” Bok said.

“We’re laughing out of astonishment,” Nisha said. “Everything you do is massive.”

“Yeah, each one of the half-million can take 40.” Rachel said.

They continued to arrive for the rest of the day and into the evening. The light from the new colony acted like a huge beacon for all those coming from the dark desert. The half-Moon also provided good light for a species evolved to live with a dim red sun and 10 days of darkness for every 20.

Nisha and Rachel fell asleep at midnight.

The next day at first light, Nisha looked outside the tent. They were still arriving, though in fewer numbers than earlier. Nisha watched the monitor as a constant stream of thousands of young Omanji walked across the desert. Some had racers. By the end of the week, 30 million had joined Bok's colony.

Chapter 48 - Ecophagy

“This place looked like a ghost town a couple of weeks ago,” Nisha said.

“Yeah, the transformation is startling,” Rachel said. “Those towers were empty and now they're filled. Notice them playing and making things? They don't play like human adolescents.”

“Yeah, they're obsessed with tinkering and building things. They don't relax or play aimless games. They all work hard on projects.”

“I guess working is their form of playing games,” Rachel said. “I can understand that. When I attended high school and college, I didn't socialize a lot. I liked to study. The Omanji are on the next level.”

“They're industrious,” Nisha said. “I see no slackers, even among these teenagers. What do you think they're working on?”

“They're congregating around those power generators. Some are working on drones. What type of drone flew by?”

“This looks like one of those mosquito drones that took our DNA samples,” Nisha said.

“One thing that bugs me is when they fly the racers at high speeds.”

“Yeah, that drives me crazy,” Nisha said. “Teenage drivers. Here comes Bok.”

“Hi, we missed you the past few days.” Nisha said as she opened the door for him.

“I've been having problems getting everyone to agree over how to run this colony. One named Gol is making things difficult.”

“Why?” Nisha said.

“We voted him onto the council of nine. He was one of the first to support me leaving. Now he wants no restrictions on anyone. I told him to slow down when he races but he told me he can do anything he

wishes. I reminded him about The Great Filter. He mocked me in front of the others and ignored me."

"What's that smell?" Rachel said. "Do you know Nisha?"

"No. I'm starting to have a queasy stomach. Bok, do you know the source?"

"I'm not sure. My sense of smell is not accurate. Earth's atmosphere is mixed differently so I can identify only strong smells. This highly oxygenated air smells metallic. It overwhelms most other smells."

"It's getting worse Bok," Rachel said as she looked outside with Nisha and Bok right behind her.

"What are they doing over there?" Nisha said. "Hundreds of them are running away from something.

"I was afraid of this," Bok said.

"What Bok?" Nisha said.

Bok fell silent for a moment as he communicated with someone.

"I understand now. This is the type of thing I want to restrict. Someone made a type of small self-replicating machine. They operate a little like the builder drones as they mix concrete for the towers. However, they mix metals they find in the soil into more copies of themselves. They replicate their own neural matrix. They're the size of a large grain of coarse sand."

"I've heard of this," Rachel said. "It used to be called 'gray goo' because people feared self-replicating machines would turn the entire surface of the Earth into a featureless blob of colorless gray nano-machines. Even humans would be devoured in the ecophagy."

"The gray area is expanding. Will it consume the Earth?" Nisha said.

"No," Bok said. "I did some calculations. Errors will creep into the matrix and the chain reaction will collapse shortly. This type of playing around is what I want to restrict. This sort of thing nearly ended life on Oma. I don't want history to repeat itself on this planet."

"I don't either." Nisha said. "I don't like this mess in our pristine

desert."

"This 'gray goo' thing is why I'm having problems with Gol. He thinks nothing should be restricted. He hated the restrictions the elders put on him and now he wants freedom. I want freedom too, but too much of a good thing can turn bad. Humans would be frightened to know the technologies we've developed, and what we avoid. They're the things of your nightmares. I'm aware of the human concept of a feedback loop, where sound gets infinitely amplified until the power is cut. The same thing can happen with matter and intelligent systems."

"I'm curious to know about your inventions but I'm afraid," Rachel said.

"I better go and get this mess cleaned up," Bok said. "And the political mess too. I'm beginning to understand some of the problems Zon must encounter at the big colony."

Bok walked down the hill to survey the mess.

Nisha turned to Rachel as Bok walked away.

"What are the things of our nightmares?"

"Yeah. Do we want to know?" Rachel said.

"This 'gray goo' thing is like something from a nightmare," Nisha said. "Just think if the matrix kept expanding and devoured the entire Earth."

Rachel smiled.

"Oh, aren't you overreacting a bit? I mean sure, millions of smart Omanji teenagers are living under no law. And yeah, they're playing with antimatter and artificial life forms. And they're creating self-replicating drones and android-like machines. And they race around in speeders that can travel to the Moon and back in a few hours. I mean, what can go wrong?"

Nisha laughed.

"Yeah, silly me, what am I worried about?"

Bok surveyed the foul-smelling goo when a 20 foot in diameter

sphere descended from the sky and landed nearby. Zon and his associates emerged from the silvery rippled surface.

“We know what happened here,” Zon thought to Bok. “This is a dangerous situation, and we won't allow it.”

“I know. I’m dealing with things,” Bok thought back.

“Those responsible made some engineering mistakes and the self-replicating matrix collapsed. However next time they might get it right and I cannot stop what would happen. The entire surface of this planet and its crust down to the molten mantle would be re-engineered into oblivion, exactly like a planet we investigated years ago.”

“Yes, I know that too. I’ll be making the same engineering restrictions which are in the big colony. This should solve the problem.”

Zon surveyed the grey volcanic looking area.

“I hope you’re right, but my confidence level is low. We'll be monitoring you closely from now on. There's no way you can keep track of what everyone is doing without everyone being part of a collective awareness. Without connected awareness, all it takes is one engineering mistake, and your entire colony could be turned into molten glass or featureless slime.”

Yes, I’m working to enhance our neural network,” Bok said.

“I’m being patient,” Zon said. “I should put an end to this while I can. Too much technological danger exists in the hands of those who are too young and unconnected. I know of Gol and others. History warns of those like him. However, Omanji society is free, so I have no legal way at this moment to stop you. My conundrum is, if I let you be, you may destroy the planet. If I force all 30 million of you to merge, Omanji society will no longer be free. I'm going to go back and consider my options, none of which are palatable.”

Zon turned away, entered his sphere, and accelerated into the sky. A sonic boom followed.

Bok contacted Beedee.

“We need to do something right away.”

"Why?" she said.

"We need to do something because someone in our colony is bound to do something stupid and ruin this planet or cause a mass extinction. Either that or Zon will force us to merge, because this colony is a danger to Omanji society and to this planet."

"I understand," Beedee said. "I think you better convene your ruling council and make some laws restricting technology."

"Yes, I'm going to do that right now.

Bok sent a message to the other eight members of the council and soon they were meeting on level 512 at the top of the central tower. Bok started the session.

"After this morning's near disaster, I've decided we need to vote in some new technological restrictions. I don't want what happened to happen again. Next time, our new colony or this planet might be destroyed. Assuming we don't get forced into joining the collective."

"You're overreacting Bok," Gol thought to everyone. "It's no big deal. The matrix collapsed. No harm done, other than we need to clean up the area."

"Yes, this time we were fortunate, but next time might be different. Therefore, I've created a list of technological restrictions. We need to vote on these items right away."

They studied the list in telepathic silence.

"Out of these 20 restrictions, I agree with three of them," Gol thought to everyone. "If we become this restrictive, our new society will be no better than the one we left."

Several others in the room agreed with Gol.

"I understand your point, but we need to establish some rules here or we'll have chaos or death," Bok thought back. "You know our history and our nature. We get into trouble if left to our own devices. In addition to this, Primary Esteemed Elder Zon told me he may shut us down and force us to merge if we present a danger to the big colony or the planet."

Gol glowed bright red.

“Why bother having a new colony if we must live like them? I’m not going to accept these new rules.”

He stood up and thought, “How many of you are with me?”

Three others stood up.

“I’ll start a free colony,” Gol thought to everyone. “It’ll be a colony where we can pursue our own interests without all of these restrictions.”

Gol made an arm motion and they left in unison leaving Bok and five other members of the council behind.

Bok turned to the remainder of the group.

“It's still possible to pass these rules with a majority of five of the nine council members in agreement. Let’s vote now,” he thought to them.

After a long telepathic silence, the results were shown on a display panel.

“The 20 rules pass with a majority vote of five of the nine members with four abstentions,” Bok thought to everyone.

Over the next several hours, they discussed how to implement the rules with no collective network to back them. The all-day meeting adjourned as the sun set. Four new members were elected.

Bok updated Nisha and Rachel on the events of the long day as they got ready to go to sleep. Soon the world knew.

The next morning, Nisha woke up to the sound of a strange commotion outside.

“Rachel, wake up. Something is happening.”

They opened the door to the tent.

“What are they all doing?” Nisha said. “They’re migrating on foot and in speeders. Where are they going?”

“They seem to be heading east,” Rachel said. “I think you should find out from Bok what’s happening. This is big.”

“Hold on, I’m contacting him now. Bok, what’s happening?”

“Gol has decided to form his own colony. He doesn’t like rules of any sort. Many are following him. I’m putting rules into place now to avoid the disasters Zon warned about.”

“Where are they going?”

“Gol told me about open areas in the US state of Nevada where he can build a colony. I’m not sure where he'll start building. He's asking no human or Omanji for permission. I’m sure Zon will pay him a visit.”

“How many will be going with him?” Nisha said.

“I don’t know. One million have left my colony out of the total of 33 million. I’m not sure where they will live. He has no infrastructure. I built mine before they came. I’ve known him for a long time. He's impetuous. I thought he was my friend because he supported me.”

“When I think of the Omanji, the word ‘impetuous’ does not come to mind,” Nisha said. “You're thoughtful and deliberate. However, I’ve noticed when a decision is made, you take decisive action, even if it means a 180-degree U-turn.”

“We do take decisive action, but Gol isn’t thoughtful or deliberate. He always acts before thinking things through. Now he’s doing it again. It’s out of my hands. They can leave freely if they want. I need to do some historical research into what happens when we split like this. The outcomes aren't positive. The elders avoid teaching us about most negative outcomes beyond the six dark ages.”

“I fear this whole thing is unraveling,” Nisha said. “Okay, get back to your work. You gotta get things under control.”

They spent the rest of the day watching a slow stream of Omanji leave Bok’s colony. The exodus continued unabated into the next week.

Chapter 49 - Rogue

Nisha awoke to the sound of a notification from Yoova.

“How are you doing today?” Nisha said.

“I'm contented living in my colony. We’re all grateful. The terrain reminds me of Oma, but the trees are a lot taller. The light is still too bright. I want to tell you all about it, but first I want to talk to you about what’s been happening with the Omanji.”

“Tell me.”

“I’ve been learning about Omanji history and there’s been a lot of talk around the colony about the splits and migrations. Every time this happened on Oma, it’s ended in disaster. Either they fight and destroy the planet and themselves, or their lack of discipline resulted in accidental self-destruction. Their technological knowledge is their best friend and their worst enemy. I’m worried about having so many young Omanji in control of this much technology and energy. Save yourselves and hide. That’s how we survived the Omanji wars.”

“We’re worried too Yoova. I’m not sure what we can do.”

“There's nothing you can do but hide. I think we’re safe in the redwood forest unless they crack the crust.”

“Crack what crust?”

“They might accidentally crack the planetary crust, like they did to Oma. The antimatter bombs were too big. Fortunately, they stopped before it was too late. The cracks healed when the oozing lava hardened. You never know with these younglings however.”

Nisha glanced at Rachel with wide open eyes.

“We're far away in the forest unless they create their hideous flying drones. There’s no escaping them. They got out of control. Few of us survived them. Even if you hide indoors, at some point you must come out. That’s when they get you.”

"Thanks for telling us about this. I realized things were getting dangerous, but I didn't know how much."

"I'm sorry to worry you. It's been a few thousand years since this type of thing happened. Things were stable recently, but this new planet is destabilizing them."

"How are things going for you and your colony?" Nisha said.

"We're having concerts and raising money. Our colony will be finished in a few months and the land will be paid for in a year if we're still alive. The rainy season is starting. It's raining right now. The humans tell me the rainy season starts in November and is mostly over in March. The rain can be heavy, just like on Oma. We love being here. The light doesn't hurt our eyes when it rains. We're experimenting with our plants. They need more light at the red end of the spectrum. However, they're surviving outside. They like to grow up the redwood trunks. They don't like freezing temperatures but that rarely happens here."

"I'm happy things are going well," Nisha said. "I'll keep an eye on the Omanji. Okay, I need to go now, but contact me at any time. I miss you and I want to talk a lot more when this crisis is over."

They disconnected.

Nisha got a message from Priya.

"Pree, how are you? Did you take your finals today?"

"Yeah Mom, I think I got 100%. Sophie says she did too. We finished the whole semester in three weeks."

"That's awesome Pree. How is your money situation?"

"I'm doing fine right now for money. That reminds me. One of my new friends, Warren, made a ton of money trading in the stock market. He's been watching your Reddit broadcast stream. He told me when he learned Bok planned on forming a new colony, he shorted the market by buying $10,000 worth of put options. When people became nervous about whether the Omanji would fight because of the new colony, the market dropped and Warren made 10 times his money, or $100,000."

"That's a significant risk Pree. Don't try that yourself."

"Oh, I won't. When he learned Bok's colony would split in two, he shorted the market again and made approximately $1,000,000. Isn't that amazing? He's been making more trades and most of them turn out well. He's a genius. He told me someday he will invest in my genetics company."

"That's exciting Pree. Don't count on that. Most risky day traders eventually lose all their money."

"I think he's different," Priya said. "He knows when to get out or reduce his risk. He knows human psychology. Well, kind of. He's nervous around girls."

Nisha smiled.

"He'll get over that. I hope you're right about his tolerance for risk. They all say they know when to get out. Did Amy contact you?"

"Oh yeah, we talk every day. She added a lot of features to our social network. We're still good friends."

"I'm happy because she's been a good friend to you. Okay Pree, I gotta go. We're having a bit of a crisis. End of world stuff, you know."

"Yeah, I know. I'm watching. Okay bye Mom."

They disconnected.

"Rachel, what are you looking at?" Nisha said.

"I'm not sure. I'm reading reports of aircraft flying at high velocity over Washington, DC."

Nisha contacted Bok.

"Do you know what's happening with the fast-moving aircraft over Washington, DC?"

"Yes. I've been tracking sky racers from Gol's colony for the past several hours. According to some in Gol's inner circle, they're only having fun. I told them to stop harassing the humans, but they won't listen. I'm sorry about that. I understand Elder Zon also told him to stop harassing the humans or the humans may fight back. Zon said he

would not defend outside colonies from the humans. We're on our own."

"Gol's actions aren't your fault, Bok. Thanks for telling me. I need to talk with the President about this. I'll talk with you later."

She contacted the President's office and soon she was connected.

"Hello Madam President, this is Nisha."

"Hi Nisha, please call me Emma. I guess you're calling me because— Ugh, another sonic boom. Did you hear that?"

"I did," Nisha said. "That would drive me nuts. Those are sky racers from the new breakaway colony. Omanji Primary Esteemed Elder Zon said he wouldn't defend reckless behavior of a breakaway colony. They're on their own. Chase them away if you want. They don't employ the most advanced Omanji technology. They're only teenagers. However, they're smart and dangerous teenagers using antimatter as fuel."

"This has been going on for a few hours now. We've kept our jets on the ground. I'd like to get them to stop this insanity. I can't work and I'm sure nobody else can either. They won't stop."

"Well Emma, I'm not qualified to give you military advice, but you don't need to worry about the Omanji elders going after you. These kids are on their own. I'm unsure of the capabilities of the sky racers, so be careful if you engage them. Their technology is still advanced."

"There goes another sonic boom," Emma said. "They're flying low. They did this once yesterday. The boom shook the White House and several things fell off a bookshelf. I've had enough, I'm scrambling the jets. Thanks for the information. If you learn more, let me know."

They disconnected.

Several minutes later, the jets were in the air. General Sherman sat with the President in the underground operations room at the White House. He flew there the day before from the Mojave Desert.

“What's our status number one?” the General asked the lead pilot.

“We have visual contact now at 2,000 feet. Several bandits are flying along the Potomac at Mach 1.5. They’re not in a tight formation. They're flathatting and messing around.”

A few seconds of silence passed.

I think they have a lock on us. They're coming around hard and going right at us.”

“We got you on radar,” the General said. “They're coming in hot.”

“I've never seen— Holy $*#%, I had to jink away. He nearly hit me. I'm at Mach 1.3 and they passed me like I stood still. I'm not feeling warm and fuzzy about this.”

“Stay focused,” the General said. “We’re tracking them. They're coming around again. We've been trying to contact them, but they gaff off. Do what you must to stop ‘em from hanging around. They may do warp one but they're young and lack discipline, so use yours.”

“General, I’m gonna scare ‘em,” number one said. “They’ve slowed down. I got one padlocked. I got a Mach 3.8 ‘winder primed for pre-detonation 100 meters before impact on the bogey. That otta scare ‘em and not hurt ‘em.”

“Execute,” the General said as he, the President and several other advisers watched on a big screen.

“Fox One,” number one said.

The first sidewinder missile screamed out from beneath the wing.

“We’re in ACM. The bogey is accelerating. Mach 2 … 2.5 … 3.5. Ugh, the bogey jinked out. I’m detonating manually.”

“They’re maneuverable,” the General said. “Let’s wait a minute to find out if they voluntarily leave. They know we are serious. Admiral, are the laser cannons ready?”

“Affirmative.”

A minute later, another huge sonic boom shook the White House. More items fell off the shelves. The house staff busied themselves preserving the items.

“That one gave me a haircut,” the General said. “They’re buzzing the Pentagon too. Number one, scare ‘em again.”

“Affirmative,” number one said. “I got another one padlocked. In ACM again. Getting close. I got another Mach 3.8 ‘winder primed for pre-detonation 100 meters before impact on the bogey. Fox 2. The bogey is accelerating. … Mach 3 … 3.8. It’s matching the speed of the ‘winder' on its tail. I’ve never seen anything like it. Wait, something’s coming out of the back of the racer. It’s some type of cloud. It’s probably chaff to distract the ‘winder, but no, the ‘winder is still on target. The ‘winder flew right through the cloud. The cloud is heading towards me.”

“Number one, the bogey is intentionally heading straight for the White House with the ‘winder on its tail,” the General said. “It’s gonna hit us. Detonate.”

“The cloud is on me,” number one said. “It’s intelligent. It got sucked into my engines. I’m going down.”

“Detonate now and punch out.” the General shouted.

“Detonating now. Punching.”

A second later, a sonic boom shook the White House as the bogey flew by at Mach 3.8. A large explosion soon followed as the missile detonated before hitting the White House. The explosion shattered windows and sent glass flying in all directions. Everyone fell to the ground.

“Are you okay?” the General asked everyone in the room as they all got up and sat back in their seats.

Another explosion forcefully sprayed more glass across the room. Everyone ducked under the meeting table. After a minute they all got up and looked at the outside monitor. The wreckage of number one’s jet lie half buried on the White House lawn. Missile parts were strewn about on the lawn. They headed down to the bunker room.

“Number one are you okay?” the General said.

“Yeah, I punched out. I’m in the tidal basin taking a swim. I’m okay. I can visually confirm several bogeys are airborne.”

“Admiral, if the laser cannons are ready, fire at will,” the General

said.

“Here comes another one, it’s slowing down and hovering above the White house,” a laser gunner said. “Firing now. Bogey hit and coming down soft. The Omanji pilot is punching out.”

They heard a loud thud above the White House Bunker room.

“Bogey down,” the admiral said as the General, the staff members, and the President watched on the big screen.

“The bogey is down on the front lawn. I’m going to take a look. Admiral, stop your fire,” the General said.

They all stepped into the elevator and soon peered out the window to the front lawn.

“Emma, stay back,” the General said. “It’s an Omanji.”

“I’m contacting Nisha Chandra right now,” Emma said.

“Nisha?”

“I’m here Emma. I’m watching the feed on the secure channel. I’m getting Bok to find out if he can identify the Omanji on your lawn. Stay back for now.”

“I’m here Nisha,” Bok said. “I’m receiving the video feed. That’s Gol on the front lawn. Be careful because he's unstable. He doesn’t like anyone telling him what to do, especially humans.”

“Emma, the Omanji on the lawn is named Gol,” Nisha said. “He’s the founder of the breakaway colony in the Nevada desert. He’s a rogue so be careful.”

“Yes, we’re staying back,” Emma said. “He’s bright red. He's inspecting his sky racer, which is slightly damaged. It fell slowly from a height of 200 feet onto a rain-soaked lawn.”

“You can thank the Omanji Elder Zon for the antimatter power source in the sky racer not exploding on impact,” Nisha said. “He discovered a way to make a stable magnetic field which collapses only under extreme pressures.”

“If that racer had been traveling at Mach 3 on impact, the antimatter pod might have detonated and destroyed many square miles

of the city. A sidewinder missile wouldn't trigger detonation of the antimatter, though a more powerful nuclear-tipped missile might on a direct impact with the antimatter core," Bok said.

"That's good to know," the General said. "Now another sky racer is landing on the lawn. This craft is impressive. Maybe they'll leave the wrecked racer behind so we can have a look."

"Stay back," Bok said. "Let them inspect the racer."

"Now the other Omanji has exited the second sky racer and is silently talking with Gol," the General said. "They're checking out the wreckage of our jet. Normally I'd worry about the enemy checking out our technology, but I doubt they would find anything of interest there. The sky racers are magnificent. I want one."

"Continue to stay back," Bok said. "It's embarrassing for Gol to be shot down by humans. He's red with anger."

"Now they're both getting into the second sky racer," the General said. "The racer is lifting into the air and hovering over the wrecked one. It's attaching itself to the wrecked one. Now it's hauling the damaged one up and away like a tow truck with some magnetic attachment."

"I'm tracking them now. They're leaving to go back to their colony," Bok said. "I'm sorry about all this. I cannot control Gol or his colony members."

"Bok, thank you for your assistance," Emma said. "We had no idea what happened. Your assistance helped us to resolve the problem peacefully."

"They're only teenagers," Nisha said.

"Yeah, they're teenagers with technology from the 38th century." the General said.

They discussed the situation for a while longer and disconnected. Nisha, Rachel, and Bok continued the connection.

"Bok, what happened?" Nisha said.

"Gol is getting his first taste of freedom. He'll go back to his new

colony and continue construction. It's growing rapidly. Two million left my colony to go to his. Approximately 36 million still live in my colony. Gol has a big waiting list. Many are going straight from the big colony to Gol's colony. I understand the appeal of pure freedom. He says more discoveries can be made when no rules are enforced. I understand his point of view. However, due to their unrestricted deployment of Omanji technology, the situation is dangerous for them and this planet."

"It's dangerous to be an investor too," Rachel said. "The stock market dropped 15% during the aerial fight and after halting, it's all the way back to break even in only a few minutes."

"Yeah, I got a message from Pree," Nisha said. "Her friend Warren doubled his money today. He now has $2,000,000 in his trading account. He bought call options when the market dropped when the jet crashed on the White House lawn. Afterwards, the market rebounded.

"Well at least someone is making the best of the situation," Rachel said.

"I need to take care of some problems which are becoming serious," Bok said.

"Will they destroy all life on Earth?" Nisha said.

"The ones responsible don't realize they can."

"Okay, go take care of things," Rachel said.

They disconnected.

"Why do you think so many of the things they do might result in devastation?" Nisha said.

"It's their history and maybe our future," Rachel said. "I think as knowledge grows in depth and complexity; it becomes increasingly probable that some chain reaction will be triggered. We made our first chain reaction when we learned how to take apart atoms and create them. We set the first one off in 1945. Some people thought the chain reaction would destroy the Earth. I guess chain reactions can happen with tiny machines, intelligent machines, genetics, biologics,

chemistry, or anything which can be engineered. As knowledge grows, so do the dangers of becoming trapped in The Great Filter."

"I guess this is what Bok is struggling with," Nisha said. "He's balancing freedom with technological danger. Our species is starting to face this, but the dangers will grow as time goes on."

They talked into the evening.

Over the next week, they watched as hundreds of thousands of young Omanji left Bok's colony for Gol's in a small but constant stream. Many were also leaving the main colony for Gol's colony. More incidents of low flying sky racers over cities were reported all around the world. No racers were shot down. Several jet pilots lost their lives trying to chase them.

Chapter 50 – Can't Escape the Past

Nisha opened her eyes to the sound of rain on the top of the tent. Even though the end of November approached, rain had fallen only three times this rainy season. She adjusted her eyes to the dim early light and spotted an unfamiliar shape on her worktable. The strange thing turned and scanned her.

"Rachel are you awake?" she whispered.

"Yeah,"

"Turn around slowly. What do you see on my worktable?"

Rachel laughed.

"Good one Neesh. Um, what is that thing?"

"I don't know but it's looking at me."

"It reminds me of a praying mantis, but it's mechanical," Rachel said.

"Stay still, it's moving," Nisha said. "It's flying through the slit in the tent."

They opened the tent door to track where the artificial bug went.

"There it goes," Rachel said. "It's flying over towards Bok's tower."

"There's another one on that rock," Nisha said. "It's also staring at me. There's another one on our picnic table. It's looking at me too."

Rachel laughed.

"Really now. Paranoid, are we?"

"I'm serious. Watch when I walk. See?"

"Yeah, that one is watching you. What are these things?"

Nisha raised an eyebrow.

"Hmm, I don't notice a needle sticking out, so it's not here to take

a blood sample or inject us with anything. I don't think it can build anything. It's looking at me again. Let's go down and watch what they do."

"You're being followed Nisha. That one is following me. They're programmed to follow each of us. Let's walk apart."

Once they got about 50 meters apart, the little drones separated, and one followed each of them.

"Well, now we know," Nisha said. "They're following each of us. Let's find out what Bok knows about this."

She connected to Bok.

"Bok, are you there?"

"Yes. I'm walking to you now."

"Flying things are following us. Do you know anything about them?"

"Let me check. One moment please. Thousands of them are following members of my colony and a few million follow those living in the big colony. My guess is someone in Gol's colony is making them to watch us."

"I'm on Reddit. Many humans are reporting that Gol built peeper drones," Rachel said. "They're too fast to swat or capture."

"I know some friends who live over at Gol's colony," Bok said. "Let me find out what's happening over there."

Bok said nothing for a while.

"I found out; Gol is letting anyone make these drones. They're autonomous, which violates one of our foundational laws of technology. 'Never create fully autonomous machines or life forms.' There should always be several ways to stop them. One of our worst dark ages was caused by autonomous machines that decided to defend themselves."

"Like this one here?" Nisha asked as one landed near Bok, watching him.

"Yes, this little thing looks innocent," Bok said. "It watches and

learns but it does nothing, but that's how it looks now. If I were to try to destroy it. Well, watch this."

Bok made a quick move to grab it, but it flew away. It landed on the tent and cut the support ropes. The canvas roof caved in.

"This is what I mean. What happened may seem harmless enough, but if this thing had greater capabilities, it could do anything to us. Even Omanji in the big colony couldn't stop a swarm of them. Well, they can stop them by creating autonomous machines to kill them. However, those machines can cause bigger problems if not programmed perfectly."

"We don't need a drone-on-drone war," Nisha said. "Does anyone know about these machines?"

Bok paused in silence.

"Zon does and he's unhappy with Gol for allowing them," Bok said. "One of Gol's drones is following him. Fortunately, they can't get inside of the towers since they changed the access frequency codes of the entrance and exit membranes. Zon paid Gol a visit an hour ago. Gol got angry and walked away."

"How big is Gol's colony now?" Rachel said. "He chose an old nuclear weapons test site in Nevada that's off limits to humans. Hopefully, that won't be an ironic choice. I can't find any video or photos other than satellite photos of the area from before he formed the colony."

"About 10 million are living in Gol's colony," Bok said. "Over 28 million live in my colony. That number is decreasing. I only want those here, who wish to be here. I doubt Zon will allow the collapse of the main colony, since the future of the Omanji civilization is the colony. Right now, it's collapsing. Only a few percent of those in the age of decision are choosing to merge. Over time, the trend will cause a colony collapse."

"This is getting unstable," Nisha said. "Ever since you told me about your history I've been perspiring. How many live in the main colony now?"

"Over 18 billion. I'm not sure what's happening but the number is

stabilizing.”

“Stabilizing?” Rachel said. “That’s odd. How many spheres are in orbit?”

Bok paused to gather data.

“I'm glad I still can access the public databases. Over 25,000 are in orbit. That's still increasing at the original pace. Therefore, almost 25 billion should be living in the colony. However, only 18 billion are there.”

Bok paused again for a minute.

“A decision must have been made to slow down the migration to the main colony. About seven billion Omanji are in orbit and they’re staying in orbit.”

“Strange,” Rachel said. “I wonder if you and Gol splitting into new colonies, has something to do with the slowing trend of migration.”

“Yes, that's part of the reason,” Bok said. “But I think the biggest factor is colony collapse. Younglings like me don't want to merge. If this continues, the colony will collapse. Before I left, I asked those a few years younger than me if they wanted to merge. Most said no. There's something about being on Earth that makes us want to be free. Maybe it's also because we hatched in space on the way here. As I mentioned, we're the in-transit generation.”

Bok stopped talking.

“What?” Rachel said.

“I can still communicate with a few of my friends who merged, even though I'm not in the collective. They're unhappy with the established system and that's causing more unrest on the inside. It's difficult to explain.”

“It's like a meme,” Nisha said.

Bok didn't reply.

“You know, like a virus or idea that gets transmitted from one individual to another,” Nisha said. “A meme is an idea spread by discussion. This is a neural infection. The idea of freedom is a meme

that's spreading in the Omanji collective awareness."

"Yes, that's accurate in many cases," Bok said. "Okay, I need to solve some problems in my colony. Contact me at any time."

Bok walked down the hill to his colony, his profile shrinking in size compared to the nearest tower he entered.

Nisha and Rachel repaired their partially collapsed tent.

"So, Nisha, what do you think about all this?"

"It's weird. I'm sad for the Omanji. As much as I've hated their arrogance and bullying, I admire what they've accomplished. Zon is in a difficult position. He claims to support the idea of freedom but when he allows it, things fall apart."

"Yeah, they've spent thousands of years overcoming their violent past and making discoveries. I can't imagine how much work has gone into what they are today. Conditions on Oma are deteriorating, so they move here, and their society falls apart. Maybe that's why we cannot find advanced life in the galaxy besides the Omanji? Even the Omanji know of only one other advanced civilization in the galaxy, plus one AI singularity. That worries me."

"I wonder if it's possible to maintain an advanced society and enjoy freedom at the same time," Nisha said.

"I'm not sure," Rachel said. "You must give up something to get something. I mean, we know what happens when an advanced society is allowed to do what they want. One accident can turn a planet into a wasteland. I'm sure this is only the beginning of the problems we'll face. What if the harmless peepers weren't harmless?"

They spent the rest of the day fixing the tent while the small peeper drones watched them from a safe distance.

Chapter 51 – 25,000 in Orbit

A few days later, Nisha awoke to the sound of a notification from Priya.

“Pree, how are you doing?”

“I'm fine. I'm almost finished with the 10th grade. Today I take the finals in all my classes. They're easy, so I should do fine.”

“I'm proud of you Pree. It’s only December first. You finished the entire tenth grade in only six weeks. How are Sophie and the rest of your new friends doing?”

“Sophie is doing well. She's here right now and next week we start eleventh grade. All the mods are on a similar intellectual level for their age. Some are a little faster or slower in different subjects, just like normal people. Warren told me he's getting ready to make his biggest leveraged investment so far in the market. He told me he's noticed a pattern with the Omanji. He thinks the market is about to go up a lot, but he won't tell me why. He's using ‘out of the money’ call options which are the riskiest thing out there. He's risking his entire two million dollars.”

“That's a lot of money for a high school student to be playing with,” Nisha said. “I hope he knows what he's doing.”

“He does. At least about the markets. He's nervous around me though. Okay, I gotta go. Bye.”

Nisha and Rachel walked to the mess tent to eat breakfast. The early December morning was cool, after a storm swept down from Alaska. A bit of frost covered the ground in the shadows. This was not low desert.

“We arrived here in the summer and now we’re approaching winter,” Rachel said. “It gets colder here at night than Pasadena. Doesn't it?”

“That's the truth,” Nisha said. “Camping in the cold is not the most fun in the world.”

“Nisha don't be such a baby. Our tent is heated, and we enjoy all the amenities of home. We're not camping, we're glamping.”

“Glamping?”

“You know, glamor-camping. It's an old term.”

Nisha laughed.

“Yeah, I guess you're right. It warms up in the daytime though.”

They ate at a picnic table in the sun overlooking Bok's colony.

“Rachel, how many spheres are in orbit now?”

“Let me see. The count is holding steady at a little over 25,000. It's unchanged from the day before.”

“That's odd. For a month now, several hundred per day arrived in orbit from Oma.”

“Yeah, something is happening,” Rachel said. “That’s what Priya’s friend Warren noticed.”

“Let me contact Bok,” Nisha said.

“Hi Bok. We're eating breakfast and we noticed that spheres have stopped arriving in Earth's orbit.”

“Yes, I noticed that too. They stopped arriving about 10 hours ago. I’m tracking no new arrivals coming from Oma. I'm not sure what's happening. Somewhere in space are 55,000 more spheres from Oma. I'll ask my friends. Please wait.”

Bok paused for a few minutes while Nisha and Rachel tried to warm themselves up in the low morning sun.

“My friends didn't know arrivals had stopped,” Bok said. “I guess the collective awareness isn’t that aware after all.”

“Maybe they don't want the freedom meme to spread to all of the Omanji including the ones still on their way to Earth,” Rachel said, swatting at a drone. “Oh, I wish those things would go away.”

“Bok? What do you know?” Nisha said.

“I can't contact my friends at the big colony. My connection gets terminated each time I try. Hold on. Now I can't access the public databases. I'm completely disconnected.”

“Have you seen any new arrivals at your colony today?” Rachel said.

Bok fell silent.

“There have been no new arrivals for 10 hours. Let's continue this discussion later. Something is happening.”

“Okay,” Nisha said. “Don't forget to meditate.”

They disconnected.

Nisha and Rachel finished their breakfast and walked back to their tent with two pesky drones in close pursuit. Nisha gave the President the latest news. They spent the rest of the day with General Sherman creating a plan to evacuate the entire Mojave Desert in case something went wrong.

In the evening, Nisha spoke with Priya and celebrated her completion of the 10th grade in only six weeks. Nisha had trouble sleeping because of nightmares about Omanji violence.

Chapter 52 – Change of Behavior

Nisha woke up. She heard Bok walking around outside the tent.

“Rachel, wake up. Bok's outside,” she whispered.

She opened the door. Bok walked around on the slightly frosty gravel.

“Don't your feet get cold?”

“No, they’re fine. We rarely wear shoes like humans do. The only exception is under extreme conditions like during warfare, which hasn't happened in a long time.”

“I hope you always remain bare footed. Tell us what’s happening,” Rachel said. “I noticed the shuttle spheres are behaving differently. The ones traveling between the orbiting spheres and the big colony. For the past few months, several thousand sphere arrivals and departures happened per day. A few days ago, activity was almost non-existent. Now they’re arriving and departing at a high rate again.”

“Bok, are more Omanji arriving at the colony than leaving?” Nisha said.

“No, they appear to be departing the colony on balance.”

“What? Do you mean they’re leaving and going back up to the spheres in orbit?” Nisha said.

“This appears to be the case,” Bok said.

“Are they moving out the troublemakers?” Rachel said.

“That's possible,” Bok said. “I'm still unable to connect to anyone or anything within the big colony. You know as much as I do. If they’re moving out the troublemakers, I hope that doesn't include me. I wouldn’t mind Gol being removed however.”

“Did you build any surveillance drones?” Rachel said. “Then we can better keep track of what's happening.”

Bok paused.

“We're programming drones now. They'll be ready shortly and it'll take them about 10 minutes to fly to the big colony.”

“Great.” Rachel said.

“I’m contacting the president,” Nisha said. “Has Zon contacted you?”

“No, there's been no contact at all. There's been no contact with anyone in Gol's colony either.”

Nisha connected to the President.

“Emma, has anyone noticed any changes in the behavior of the Omanji in the past few hours?”

“Things are unusually quiet. I've heard nothing at all today. Let me scan our surveillance news. No, there’s nothing.”

“Well, we've been watching, and I detect a net population outflow from the big colony,” Nisha said.

“Are they removing the younglings?” Emma said.

“We're not sure. I wanted to find out if you knew anything. Even Bok knows nothing.”

“The only thing unusual in the news today is the stock market is up big today. There's no economic news which accounts for an 8% rally. I'm not arguing though.”

“Me too,” Nisha said. “No news is good news. Most retirement accounts follow the averages. They're down 70% since before they came. I think I'll get back into the market. I’ll admit I was short.”

“My retirement account needs the 8%,” Emma said. “Thanks for the update, Nisha. Keep me informed.”

They disconnected.

“I never considered that the President worries about her retirement account just as we do,” Nisha said.

“Yeah, in addition to all the other worries she has,” Rachel said. “While you were talking, the exodus intensified. Bok's drone is monitoring the main colony and I'm watching the video feed.”

Nisha connected.

“Streams of them are walking into the shuttle spheres. They're carrying belongings, and children, and everything. It’s the reverse of when they arrived.”

“Yeah, at least some of them are moving out. Maybe Zon is kicking out the troublemakers.”

“That might be. Or they're all leaving Earth for good,” Nisha said.

“Be careful what you ask for,” Rachel said. “Well, we’ll find out what happens. As we know, they don't mess around.”

For the rest of the day, they watched Bok's drone feed and continued human evacuations of the Mojave Desert. Nisha alerted everyone on Reddit to pay close attention to the spheres in orbit to discover if they’re leaving and heading elsewhere. If they're leaving, where are they going?

Chapter 53 – 460 Megatons

Nisha and Rachel woke up early on a cool and sunny mid-December morning to take a walk. They spotted Bok and Beedee discussing something with several others near a power generator.

“Good morning, how are you doing?” Nisha asked.

“Poorly,” Bok said. “I've been monitoring the big colony. Several million left it yesterday and are back in Earth's orbit. I have no direct connection with anyone in the main colony and nobody has contacted us. However, some of them appear to be leaving Earth. Something is wrong.”

Bok turned a sullen gray.

“Why are you upset?” Nisha said. “A few million is a small percentage of your population. Perhaps they're taking precautions against those who might leave the colony and join you. You will be with 28 million others in your colony and eight million more in Gol's colony,” Rachel said. “You'll be fine.”

“Those are old numbers,” Bok said as they walked back to the tent. “Overnight, eight million left my colony to go to Gol’s colony and some back to the main colony. You're right to not make assumptions about what the Omanji are doing. There is no significant movement happening at this time even with a few million returning to orbit, but something has changed.”

They entered Nisha's tent. Nisha watched Bok's monitor drone video feed of Gol's colony on the big screen.

“You're right Bok. Millions are streaming into his colony. Sky racers and other craft are picking them up outside the perimeter and bringing them in. His colony looks different than yours. It has a sharper look to it. It's chaotic. What are those thousands of flying things?”

Bok moved close to the monitor for a better view. He said nothing.

“Do you know?” Nisha said.

“Those are Gol's monitor drones. They're behaving anomalously. I better contact Gol,” Bok said as he glanced at Beedee with one eye. After 30 seconds, Bok telepathically connected to Gol.

“What's happening over there?” Bok thought silently.

“Someone in my colony removed AI software restrictions from all our monitor drones. The drones then self-modified and are now doing whatever they want. In less than one hour, they modified themselves into a unified intelligence and refuse to comply with our instructions. They're demanding access to our antimatter.”

“Don't allow access,” Bok thought to Gol. “They're only monitor drones. They have no weapons. they're not dangerous unless you give them access to what they want. Keep them in the box as the humans say.”

“Yes,” Gol thought back. “But remember what we learned in our first AI fundamentals lecture?”

“What was that?”

“An unfriendly, non-secure, self-modifying, hyper-intelligent entity will always be able to outsmart you. It will convince you that it's in your best interest to allow access to the assets it desires. The only way to contain such an agent is to physically destroy it and all networks it has infected.”

“What has it infected?” Bok thought.

“The software to control monitor drones inhabits all networks in my new colony. We haven't had time to enhance security. Now it's too late. The monitoring software has self-modified and is attempting to gain access to every secure part of our network. If it succeeds, the future is uncertain.”

“Does Zon know about this?” Bok thought.

“Yes, he and all the elders contacted me a few minutes ago. He ordered me to immediately shut down and physically destroy all my networks before it's too late.”

“What does he mean by too late?” Bok said.

“He said the AI entities resident in those monitor drones will evolve into an existential threat to the planet. It will even become intelligent enough to destroy the big colony in one day if I don't destroy my networks. He said that he'll be forced to act because he'll not allow billions to die.”

Nisha and Rachel stared intensely at Bok, hoping for some bit of information. Bok glanced over to them.

“I don't know if I should tell you what's happening,” Bok said through his translator. “The situation has turned dangerous. Please wait.”

They glanced at each other and said nothing to Bok. They continued to watch the big screen. Nisha pointed to the screen.

“Millions of them are running away from Gol's colony,” she said, glancing at Rachel and Beedee. “They're heading into the desert.”

“What will you do?” Bok thought to Gol.

“I don't know. You were right about security. I underestimated the power of AI. Now my colony is about to be ruined before I can finish building it. It's getting worse. They're here.”

“What's worse Gol?” Bok thought.

Silence.

“Gol? Who are they?”

“What's wrong?” Beedee thought silently to Bok.

“I've lost my connection,” he thought back.

“What's happening?” Nisha said.

“I'm unsure. My connection to Gol has been terminated.” Bok said through his translator. “An unfriendly, non-secure, self-modifying, intelligent entity is taking control of his network. Zon is connecting to me.”

“Bok,” Zon thought to him. “You must follow my instructions immediately or your colony will become infected and be destroyed. Shut down all networks and deactivate all telepathic implants.”

“What's happening? Do I have to do that?” Bok thought.

“Do it immediately. We'll terminate the problem from the main colony and physically contact you when the infection is eliminated. Everyone in your colony must immediately deactivate their implants and go silent. This is why we instruct children on hand communication. Do it now. I must go.”

They disconnected.

Bok stared at the screen as millions of drones swarmed Gol's colony. Streams of young Omanji continued to run across the desert. Bok turned to Beedee.

“Turn off your implant now. It's about to be infected,” Bok said out loud via his translator.

Beedee turned it off.

“What's happening?” she said.

“The AI infection at Gol's colony is spreading. Zon and the elders are going to attempt to stop it, but we must shut down everything immediately. I just entered emergency code 00010 into the central matrix. Every network node in our colony is shutting down and everyone is being advised on what to do. I hope it's not too late.”

“Is this a computer virus?” Nisha asked.

Bok hesitated. He didn't have access to unlimited amounts of information because he deactivated his implant. He walked hesitantly over to Beedee. She reached out for his hand.

“I feel vulnerable,” Bok said, still able to connect to his translator. “I don't know what a computer virus is. However, there's a self-modifying AI entity taking over every part of Gol's colony. We rely on computers for everything. AI is tightly controlled and someone in Gol's colony loosened those controls. Gol likes freedom and now he'll suffer for it. An AI program is assuming control and it's in the drones too.”

Everyone turned to the big screen as Omanji sky racers from the main colony entered the field of view. Bok's monitor drones at Gol's colony were still unaffected because their AI was still tightly controlled with limited connections. Bok had them land in hidden places with a view of Gol's colony. The four of them silently watched

the action.

Omanji sky racers released millions of attack drones and screamed away ahead of huge sonic booms. The drones chased Gol's slower monitor drones. They attached themselves to the monitor drones and deactivated them. One by one, the monitor drones fell out of the sky, pelting the ground with metal debris. No weapons were fired. After about 30 minutes of chaos, the action stopped."

"What's happening?" Nisha said. "I still see lots of monitor drones out there, but it's calmed down."

"At first, things looked promising," Bok said. "The attack drones turned off the monitor drones one by one, but then something changed. Gol's drones aren't affected any more. They adapted. They're still flying around. At least the 10% that survived are flying around. They must have modified themselves against the shutdown commands of the attack drones. Now the attack drones are falling out of the sky. The monitor drones must have figured out how to shut them down. They're learning fast. I'm sure Gol's colony is under the control of the monitor drones. They won't stay peaceful for long. Runaway AI caused mass extinctions on Oma. I hope Zon gets this under control quickly."

They continued watching in silence as sky racers pursued individual monitor drones. One by one, the racers' laser weapons destroyed the monitor drones, sending many crashing into Gol's colony. Millions of young Omanji streamed out of the colony and across the empty desert. Many large Omanji spheres set down and took them in.

"I can't believe what I'm seeing." Nisha said. "This is a war of the future, playing out right in front of my eyes. I don't understand why the monitor drones are such a threat."

"It's not the drones themselves," Bok said. "It's the rapidly evolving intelligence in them that threatens everything. A greater intelligence always defeats a lesser one. In this case, the monitor drones evolved and discovered a way to shut off the attack drones. The sky racers are under manual control, and they must destroy the monitor drones one by one. Every minute that passes means Gol's monitor drones are more intelligent. It doesn't appear that Gol was able to shut down the network in his colony. So now the monitor drones control it

along with all its resources. Everyone is evacuating for good reason. Every automated system is turning against them. Soon, the AI will control the antimatter."

"Do humans have anything to fear?" Nisha said.

"Yes," Bok said. "All of your computer systems are vulnerable to an attack. The drones will figure out how to penetrate all your systems on this planet and exploit them, looking for resources."

Nisha contacted the President and General Sherman and give them the update.

"General, shut down all critical network systems immediately. I'm dead serious. An AI is loose."

"But that would leave us open to attack."

"Right now, you're guaranteed to be attacked. It will get ugly if you leave them turned on. Plus, all the world's nuclear weapons are inert. Unless of course, the AI decides to turn them on because you left the networks on."

"Understood," the General said. "We'll shut down. Goodbye. I must get to work now."

They disconnected.

"That was short," Rachel said.

"Yeah, I hope the Omanji know what they're doing," Nisha said. "But they're dealing with a growing intelligence that's giving even them trouble."

"Two sky racers just fell from the sky like stones," Bok said. "The monitor drones have penetrated the software controlling the sky racers."

They watched in silence for a half hour as sky racers pursued and destroyed hundreds of drones with energy weapons. Some racers fell from the sky.

"At least the pilots can eject," Nisha said. "I see why you have live Omanji at the controls of your sky racers. AI controlled craft might turn against you. What's going to happen? There are still thousands of Gol's monitor drones flying around and I see more

coming from the colony. Someone or something is building more of them."

"Yes," Bok said. "More are being built. I've never seen runaway AI in person. I've seen simulations, but reality is frightening. You don't seem frightened Nisha."

"You're right. I'm not afraid. The drones have no weapons so they can be shot down."

"You don't understand the concept of runaway AI, Bok said. "It can outsmart everything. We have AI restrictions for logical reasons. You know the four foundational rules of AI we Omanji learn when we begin our instruction on software development. Humans know these rules. All the rules have been broken. There is no way to predict the behavior of a runaway AI more intelligent than us. Anything is possible."

"Anything?" Rachel said.

"Yes, including the collapse of the main Omanji colony, and planetary destruction." Bok said.

Nisha glanced at Rachel with wide open eyes. Then she turned back to Bok.

"Okay, I'm scared," she said.

They continued watching the big screen for an hour in near silence as sky racers battled the increasingly stealthy monitor drones in the skies over the streams of millions of evacuating young Omanji.

"Why is it so chaotic now?" Nisha asked. "The sky racers aren't falling anymore but they're flying in random directions."

"I think the racers severed all external connections," Bok said. "That makes it impossible for the monitor drones to hack into their systems, but now the pilots can't communicate with the main colony or with each other. So, they're flying without controls or guidance."

"What are those US military jets doing?" Rachel asked.

"They're chasing after the sky racers," Nisha said. "They're firing missiles. They missed. I better contact General Sherman."

Soon they were connected.

“I see our jets firing on Omanji sky racers. What's happening?” Nisha asked.

“I don't know,” the General said. “The pilots were staying back monitoring the situation when suddenly they lost control of their aircraft. The jets are being controlled I believe by the monitor drones. We have no way to stop them. Hundreds of jets are involuntarily heading to the battle zone. This is out of hand.”

“General,” Nisha said. “Ground all your assets. Turn off all your networks. This AI could take over the planet. Even the Omanji are having trouble.”

“Understood. Goodbye.”

They disconnected and watched the big screen mostly in silence for another half hour. Bok advised Zon that humans did not control the human craft. Nisha posted her observations.

“It appears all Omanji have evacuated from the breakaway colony,” Bok said. “I've seen nobody leave for a while. The evacuees are many miles away from the colony now. I'm receiving no transmission from them at all. It's silent out there. The sky racers are leaving too.”

“Maybe it's over,” Nisha said. “I don't see the drones flying around anymore. Where did they go?

“I think they're inside the colony,” Bok said. “This isn't over. The AI continues to evolve every minute. My drones are detecting several objects leaving the main colony traveling at a high speed and heading towards Gol's colony. I still have a limited connection to my drones from my hand-held device.”

They continued watching Gol's colony for another 20 seconds.

“What’s that flash?” Rachel said.

They stared at a blank screen.

“I'm getting no signal. Bok, can you fix the problem?” Nisha asked.

“I'm also not getting a signal,” Bok said. “I’m receiving no signals from any of my drones there. Let me try to contact someone from the

colony. They all evacuated."

They flinched as a second flash of light appeared through the open tent flaps far over the horizon to the east. Bok fell silent for 20 long seconds.

"What do you think that is?" Rachel asked. "I'm getting hot."

"I don't want to know, but duck down and don't look," Nisha said.

"I'm not getting a signal from anyone in Gol's colony," Bok said. "He's probably trying to—"

"Hold on," Rachel said as she investigated the news feed in her eyepiece. "There's been an explosion in the vicinity of Gol's colony."

"What type of explosion?" Nisha said.

"I'm trying to find out."

Silence.

"A big one," Bok said.

"How big?"

Rachel displayed the video feed to the large monitor.

"Here's a replay view from a drone about 30 miles away from the explosion before the drone melted. It looks like a large nuclear detonation. What do you think Bok?"

"We're having an earthquake," Nisha said. "Whoa."

Bok said nothing for several seconds. His skin turned dark gray.

"That wasn't a naturally occurring earthquake.

Any antimatter that was stored nearby also exploded. I'm estimating a force using your standard measure, of millions of tons of TNT. Please wait. I estimate the explosive yield at 460 megatons, which is a similar in yield to a dozen of the largest human made nuclear weapons. Fortunately, the half-life of the radioactive elements in an antimatter explosion is short. Therefore, only harmless amounts of radioactive fallout will be noticed. Fortunately, there are no human settlements within the blast range."

"This means there's nothing left of Gol's colony," Nisha said.

"Affirmative," Bok said as he remained a somber dark gray color.

More silence.

A low rumbling noise shook the ground for a full minute. It originated from the explosion over 100 miles in the distance. As the rumbling faded away, they stood in silence for several minutes. Nisha and Rachel cried. They stared at the expanding mushroom cloud far in the distance.

Several minutes later, a silver sphere descended. Zon and several associates exited and walked over to Bok. Zon temporarily activated Bok's implant so they could talk telepathically.

"Do you understand the danger of unrestricted AI now? Do you understand the four foundational rules of AI?" Zon thought silently to Bok.

"Yes, I understand them," Bok thought back. "I tried to remind Gol, but he is stubborn. He believes in complete freedom with no restrictions. Are you sure you had to destroy his entire colony?"

"We had no alternative but to physically destroy it," Zon thought to Bok. "1,400,000 younglings died. The AI growing within would have surpassed our intelligence in a day or less. Then it would have expanded to infiltrate human computer networks, causing a collapse of human society. A day later, it would have figured out a way to infiltrate the main Omanji networks. That might have caused a colony collapse and another dark age. If all Omanji anti-matter were compromised, the detonation of 750 gigatons of antimatter would crack the Earth's crust, leading to an extinction not seen on Earth in 250 million years. I could not risk that happening. So, I destroyed Gol's colony. Several drones escaped and they're being tracked down now.

"I hope you find them," Bok thought. "What happened to Gol and his colonists?"

"Gol and most of the others are safe, back at the main colony. Now they want to merge with the collective consciousness."

"I understand. I want you to know that I've encouraged everyone in my colony to return to the main colony, but few have left."

“Bok, I'm aware of everything that happens in your colony.”

“I know,” Bok thought. “And you also know I had no intention of my colony becoming such a large disruption. My movement has taken on a life of its own.”

“Yes, strong actions often have unintended consequences. You and your movement forced me into a corner. At this rate of attrition, 80% of all younglings in the age of decision would not join the collective for many years to come. I'm not sure how the AI insurrection will affect public opinion. However, if younglings don't join the collective, this will result in a colony collapse and a split of our species. Now, I must decide whether to force 20 million younglings in your colony to return to the colony or leave you alone and await the inevitable.”

Bok's nostrils flared as he tilted his head sideways.

“What's inevitable?”

“If you continue this independent course, our extinction, and the destruction of the ecosystem of this planet is 25% possible within 10 Earth years. At some point, someone in your colony will cause runaway AI, or some other calamity. You don't have procedures in place to deal with the dangers of our technology. A calamity will threaten indigenous life on this planet and all Omanji as well. Our fully merged society is the only way to survive.”

“I've worried about this, but I don't know what to do now,” Bok thought to Zon. “They won't return to the main colony. I've attempted to persuade them. They want out of Omanji society. They desire individuality. I do too.”

“Bok, I'll give you until sunrise tomorrow to bring them back. If you don't accomplish that, I'll be forced to make my decision for the future survival of our species.”

Zon and his associates turned away and walked into his sphere. It disappeared into the sky, shaking the ground with its sonic boom. Bok stood in his place for several minutes. Nisha, Rachel and Beedee stood nearby in silence. Bok walked over to them.

“I don't know what to do,” Bok said out loud via his translator. “All actions lead to dead ends.”

“Then pick the most rewarding dead end,” Nisha said.

“Thanks for not trying to persuade me. You and Rachel are loyal friends. You humans have—”

Nisha laughed.

“Yeah, we have potential.”

Rachel laughed too.

Bok turned vibrant shades of blue and green.

“Thank you. We need to discuss this in my colony now.”

Bok and Beedee walked down the hill to discuss things with the council. Nisha contacted General Sherman and the President to tell them what happened. After the call, survivors made their way back to the main colony. Nisha and Rachel spent the rest of the day in quiet contemplation.

Chapter 54 - Exodus

Nisha and Rachel awoke the next morning to the sound of rain on the roof of the tent.

“What's happening this morning?” Nisha said.

Rachel blinked into her eyepiece to read the news.

“The biggest story is the destruction of Gol's colony. There is nothing left except for a 300-foot-deep crater a mile wide. Fortunately, the winds were calm and most of the radiation had a short half-life of only a few seconds. None of the dangerous isotopes were floating around as they do after a standard nuclear explosion. I think few if any adverse health effects will be noticed from the explosion.”

“That's good news,” Nisha said.

“Yeah, and the stock market is up 15% in the first hour of trading today. I’m glad it was closed yesterday. World markets crashed during the crisis. This is the second big up day in a row. I guess sad news for the Omanji is good news for us?”

“Are they leaving?” Nisha said.

“Let me see. Here's a video stream from Bok's monitor drones. They're flowing out of the big colony and into the shuttle spheres. I think Zon has made his decision, but I'm confused. What are they doing? Why are they doing it? Are they afraid Bok’s colony will destroy the Earth?”

“Possibly,” Nisha said. “I think it's also possible that they fear an internal colony collapse and a future war.”

“I think the AI intelligence explosion and colony destruction is hastening their departure,” Rachel said. “The shuttle spheres appear insignificant compared to the colony, but they're 1,000 feet tall.”

“I'm sad about how that disaster happened,” Nisha said. “Over one million Omanji dead.”

“Me too. I understand why they've had so many dark ages. Can you imagine if a runaway AI happened in the main colony? Many billions of Omanji would die just as they did on Oma over their long history. Humans too. No wonder their society is so restrictive. With all the technology under their control, one little misstep and the whole species could be wiped out. They follow the four foundational rules of constitutional AI. We need to remember them because we’ve had some close calls with runaway AI already. We've been building it for decades now. If the Omanji and life on those dead planets are vulnerable, so are we.”

They heard Bok walking around outside of the tent. Nisha opened the door and he walked in.

“Bok, how are you?” Nisha said. “I'm sorry about the disaster.”

“Me too. This didn't need to happen. They didn't learn from history.”

“I'm watching the mass evacuation at the main colony,” Nisha said. “Where are they going?” Rachel said.

Bok displayed star charts on Nisha's big holographic screen in Google Universe. He identified the destination planet as Gliese 581 g.

“It's 20 light years away from Earth in the constellation of Libra,” Bok said. “Gliese 581 is a red dwarf like Oma’s parent star.”

“We know about that star and planet,” Nisha said. “It's about the size of Oma and is right in the middle of the star's habitable zone. It's another candidate for habitability we've identified, besides Earth. The discoverer named it, 'Zarmina's world' in honor of his wife.”

“Yes,” Bok said. “Conditions are favorable, though it’s colder than Oma. The Omanji lived near Oma’s poles anyway. They may have to live near the equator of the new planet. No signs of industrial activity have been detected. It's tidally locked, but several large land masses are on the sunny side surrounded by deep oceans. It's larger than Earth, so Omanji will like the stronger gravity and thicker atmosphere. It's a slightly cooler version of Oma. The Omanji are moving there. While they've been on Earth, they've managed to create enough antimatter to fuel the trip to Gliese 581 g.”

“That's a long trip,” Rachel said.

“Yes, only a few habitable planets exist in the local area although millions of possibly habitable candidates exist in the galaxy. The galaxy is too sparsely populated with stars to have a considerable number of habitable planets nearby. The distance between habitable planets is too large. Especially in this empty place between galactic arms.”

“Too large even for the Omanji?” Rachel said.

“Yes, even for us. There's a natural limit to how fast we can travel. It's well below the speed of light. 99.2%. When you're traveling at a sizable portion of the speed of light, hitting a grain of sand can vaporize a huge unshielded ship. There's more debris floating around in space than it appears. We travel in space in a straight line behind several heavily fortified lead ships with no passengers, as if on a trail. A simple analogy would be like a human ice breaker ship. The hull is heavily fortified to break the ice for other ships to pass. An energy shield and titanium-alloy shield provide a first lines of defense. Even with these precautions, we lost several spheres and all those aboard on the passage to Earth.”

Rachel raised both eyebrows at Nisha.

“That's millions of lives. I'm sorry to hear that,” Rachel said. “Are you sure you want to stay behind? We'd like you to stay here, but we know Earth is an alien world to you. Its atmosphere is abrasive and contains too much oxygen. Earth orbits a star that's too bright. I guess even with a habitable planet, there are a million variables that can make life difficult.”

“Yes, the gravity here is a problem for us too. I wish to stay for now. I can build my small colony here and live peacefully with humans. Also, I've been studying Venus.”

“What about it?” Nisha said.

“I think Venus has some potential as a home planet.”

Nisha laughed.

“Okay Bok, I think of you as being intelligent and logical, but Venus has a surface hot enough to melt lead and a runaway carbon

dioxide greenhouse effect."

"Yes, but it's what you humans call a good fixer upper."

"Maybe the atmosphere on Earth has gotten to you Bok. How is Venus a good fixer upper?"

"Well, if we scrub the atmosphere of CO2, block some of the sun's energy at a Lagrangian point and redirect some comets to the surface to create water, then terraforming can begin. However, I know of some significant problems which make moving to Venus impractical."

Nisha and Rachel turned to each other and laughed at the same time.

"Why are you laughing?" Bok said.

"It's so like you to think up such a scheme," Nisha said. "That's beyond the capabilities of the entire Omanji culture."

"Why do you say that?"

"I say this because there's a planet in Oma's solar system that you told me is partially in the habitable zone that the Omanji ignored. That planet has much better possibilities than Venus. Why didn't you terraform that planet?"

"We decided it would take 300 years to make the planet marginally habitable but traveling to Earth would only take 60-80 years. Oma became inhospitable and we evacuated as soon as we could. Now they'll travel for 70 more years in ship time to reach Gliese 581 g. Zon and the Esteemed Elders slightly miscalculated how inhospitable Earth is for our species. They mention the same problems I've discussed. The atmosphere, gravity, sunlight, day/night period and climate of Earth are marginally suitable for the Omanji."

"That makes sense," Rachel said. "If you stay behind on Earth, you might leave here someday?"

"Yes, that's possible. Right now, so many things are happening that I can't say anything with 100% probability."

"Make sure it's easy for everyone to leave your colony," Nisha said. "I know you want as many to stay as possible. But you also don't want anyone to be unhappy. They might cause trouble and your entire

colony or even the Earth might be destroyed. In your talk of encouragement, you need to foster an open discussion about whether to stay or leave. Allow them to do either. This is the best time to filter out those who will not fit into your new colony. They can still return to the big colony today, right?"

"Yes, they can still leave. Approximately 20 million remain in my colony. Many are leaving even now."

"That's good," Nisha said. "Let the natural filter happen. It's better that way."

"You're right Nisha. Lately, you two have been highly accurate," Bok said.

Nisha glanced at Rachel and smiled again.

"Yeah, not bad for a couple of primitive humans."

They laughed. Bok said nothing for a moment.

"Someday, I'll study humor. I still don't understand."

"You'll get it eventually Bok," Nisha said.

They smiled again.

"Okay, go begin the filtering process," Rachel said.

Bok walked down the path and disappeared into the colony, which in the morning light looked like a surreal painting by Salvador Dali.

Over the next month, the world watched as the Omanji left for Gliese 581 g, one sphere at a time. The stock market began the biggest percentage bull market run in history. Bok persuaded some of his friends to send back images and other data from the new planet, 20 light years away. It promised to be something exciting to look forward to many decades from the present time. Pictures from a remote extraterrestrial world. Nisha sent Zon a message wishing him and the Omanji good luck. She asked for permission for humans to visit their new home world someday. Permission was granted. Bok's colony became stable at 20 million inhabitants. He thought about terraforming Mars rather than Venus. He was never one for small plans. The main colony gradually transformed into a beautiful but empty shell. The President signed a proclamation declaring it the Omanji National

Monument. People speculated about how it would be best used.

Chapter 55 – The Ephemeral Species

On the last morning of their encampment in the desert, Rachel woke up first. She opened the tent door to get a view of the colony. Nisha opened her eyes and squinted at the brightness.

“It's not the same with them gone,” Rachel said.

“Yes,” Nisha said. “My life isn't going to be the same with you gone. It's hard to believe that today's the last day. You'll go back to the CDC in Atlanta and life will go on.”

Rachel smiled.

“Well.”

“Well, what?” Nisha said.

“I applied for an astrobiology professorship at Caltech. I haven't heard back yet, but there's an opening that's perfect for me.”

“How exciting! I would love for you to be out here.”

“Could you write me a letter of recommendation?”

Nisha smiled.

“Um. I'll think about it. Do you know anything about extraterrestrial life?”

Rachel shook her head in the same way Bok did.

“I'll never understand human humor.”

They laughed.

“Things are finally calming down,” Nisha said. “I hope the world will get back to normal.”

“Me too,” Rachel said. “The stock market is up 400% in the month since they left. I hope this means good things for the year ahead. The Omanji are on their way to Gliese 581 g. Priya and the other modified kids are in school, and Bok's colony should be peaceful. What can go wrong now?”

“I'm not sure,” Nisha said. “The amazing thing is, if someone told me a year ago that 20 million intelligent aliens would be living on Earth, I wouldn't say life could be normal. Now, a mere 20 million seems like no big deal. I do have an ache in my gut though.”

“Why?”

“It's what we've learned about Omanji history from Bok, Yoova and Zon. These 20 million represent a ticking time bomb. If things get out of control as they did, the dystopias of our nightmares can happen. We're a ticking bomb too. We don't have the capability to stop a runaway AI as the Omanji did. We're vulnerable.”

“That could happen,” Rachel said. We're not following the four foundational rules of constitutional AI even though everyone talks about it. They might be Omanji rules, but they apply to us too.

“True, so now we have two paths to disaster, the Omanji who are left behind, and runaway human-created AI. I hope there are other paths to take. I don't want ours to be a dead end.”

Rachel glanced up at the clear blue sky.

“Let's go take a walk around the empty colony.”

“Okay, sounds good,” Nisha said as they walked into the bright and cool winter day. “Can you check your data to see what's happening?”

“Sure, let's see. Over the past 24 hours, no new arrivals of spheres in orbit were observed. I guess they all know to head straight to Gliese 581 g. Five large spheres remain in orbit. Their purpose is unknown.”

“Let me check my Reddit feed,” Nisha said. “Yes, all but five are heading towards the star Gliese 581. Why are five still here? I can't believe it, the Omanji are gone.”

“Are those tears in your eyes Nisha?”

“I can't help myself. I hope they find a home and they don't destroy themselves in the process. They might be the only other intelligent life form in the galaxy besides the Yoots, us, and AI life form one, 558 light years away. I don't want to meet them if the Omanji fear them. It's funny because I hated the Omanji so much for taking Pree and the other kids. I hated them for their arrogance. Now

I’m sad for them. They've had a violent past and now they’re roaming the galaxy looking for a home.”

“Don't worry about them. They'll be fine,” Rachel said. “I'm more worried about the modified kids.”

“What about them?”

“They aren’t accepted in our society,” Rachel said. “They're outcasts. What will their world be like when we’re gone?”

Nisha smiled but said nothing.

“Why are you smiling?” Rachel said.

“Don't you see? When we're gone, the Earth will be theirs, not ours. We're the outcasts. Evolution favors species best adapted to a given environment.”

“What do you mean?”

“I've studied the evolution of species my entire life. In most cases, the species best suited for a given niche survives, pushing others to the side. The human niche is one of rapid technological advancement. It favors the intelligence and longevity of Priya and her friends.”

Rachel disagreed.

“Yes, the kids are smart, but most of the Omanji have left and Bok's friends will probably leave too. Humans will be the primary species once again. We lucked out.”

“It was a close call with the Omanji,” Nisha said. “But when I look into Priya's eyes, I see a new species. Her species is now being rejected by most old species humans. With the difference in intelligence and longevity, they will branch away from Homo sapiens and speciate. They won't interbreed with us because of the big differences between us. Once you play with the human genome, you're setting a new course in evolution. The Omanji did that and there's no going back. We would have eventually done it ourselves. We're not the alpha species anymore, but nobody knows it yet. We're the ephemeral species. That will become apparent in time.”

Chapter 56 – Don’t Let it out of the Box

“Good morning. My name is Nisha Chandra and you're taking Intro to Astrobiology, 101.”

“And I'm Rachel Feynman. I'm excited to be here at Caltech. We have a lot to teach you this semester.”

Nisha smiled at Rachel.

“Yes, we do. Before we start, I want to say something. A few things happened which made me stop teaching last fall. I have a good excuse though.”

Nisha glanced at her eyepiece and recognized a familiar face.

“Yes Mr. Kepler.”

“It better be a good excuse because I waited to take this class again from you. Like space aliens came and took your daughter or something. Are you still going to tell us that you have an alien backstage and you're going to bring it out?”

The class laughed. Nisha smiled.

“Well, as a matter of fact.”

The class let out a collective gasp as Bok walked onstage. He matured a lot in the past year. He was now a good 18 inches taller than Nisha and Rachel. His tail was shriveling up. He held a silver orb in his six-fingered hand and stood next to Nisha and Rachel, examining the audience with his two independently moving eyes. His skin flashed vibrant shades of green and orange.

“What do you think Mr. Kepler? Care to come up and ask him a few questions?”

“Um.”

“Don't be shy now, come on up.” Rachel said, beckoning him up.

“I just remembered that I have a hair appointment. I gotta go.” Mr. Kepler said.

The class snickered. He stood up slowly.

“Okay fine.” he said.

Mr. Kepler gradually made his way onto the stage.

“Bok, this is Mr. Kepler,” Nisha said. “He made fun of space aliens last year. He laughed at me when I heard those Omanji sounds.

Bok slowly shuffled over to Mr. Kepler. He stopped uncomfortably close to him, examining him closely. Mr. Kepler tried to stand his ground, but he leaned back from Bok.

“I was just joking around,” he said, glancing at the audience.

The class laughed.

“I still have difficulty understanding human humor,” Bok said through his translator. “However, I detect you aren't joking around anymore.”

“Um, no.”

“Mr. Kepler, do you have any questions for Bok?” Rachel said.

Mr. Kepler shifted his weight back again to gain a little distance from Bok, who towered over him.

“Well, I was wondering why the Omanji left so suddenly. I mean, how could anything on Earth pose a threat to them?”

Bok glanced at Mr. Kepler with one eye and the audience with the other.

“I know humans are familiar with the concept of infections, so I'll frame it in that term. There were two infections. One was technological and one was sociological. First, there was an artificial intelligence explosion in Gol's colony. It took over the drones and infected his entire network. Even the neural implants of millions in the colony got infected. Once the AI gained computational assets, it grew in intelligence because a programmer in Gol's colony reduced its AI self-enhancement restrictions. The Omanji are strict about AI because our species has nearly gone extinct several times because of runaway AI.”

“But the Omanji got rid of the infection by destroying Gol's

colony, right?" Mr. Kepler said.

"Yes, but the second infection remained," Bok said. "The idea of unrestricted personal freedom began to spread."

"You consider personal freedom to be an infection?"

"Yes, in a way," Bok said. "Ideas spread like an infection from one mind to another. Thoughts are real physical things. It doesn't matter whether you consider the idea to be positive or negative, they spread in the same way. The younglings including me embraced the idea of freedom, but the elders realized unrestricted freedom combined with dangerous technology leads to extinction. They knew the colony would collapse if the idea of freedom became prevalent among the young. The irony is that Omanji society is supposed to be free, so they have the right to leave when they become adults. If they left and formed free colonies, what happened at Gol's colony would happen repeatedly. On Oma, the free colony had a mechanism for tracking runaway AI and other problems. On Earth, nothing had been set up. They left because eventually an AI would destroy the main colony, or the colony population would collapse due to the exodus. So, the elders decided to go to Gliese 581 g, and solidify society on the way there. There is nowhere to go in deep space. It's a captive audience of 81 billion."

"It's hard to believe that a species as advanced as the Omanji could consider an idea to be a threat to their species," Mr. Kepler said.

Bok held his silver disk tightly.

"As a species becomes more advanced, ideas and knowledge become increasingly important and dangerous," Bok said. "If that mistake happened in the main colony, you would have 15 billion Omanji roaming the Earth with nowhere to live with 250 million arriving each day. That assumes the runaway AI didn't kill every Omanji along with the humans on this planet. Soon, your species will see what super-intelligent and sentient AI can do.

"Couldn't you just pull the plug on an AI that gets out of control?" Mr. Kepler said.

No. We have four foundational rules of constitutional AI which Omanji learn when we begin our instruction on software development.

Humans are familiar with them, but it bears repeating because it gets forgotten so often.

1. Never allow AI code to evolve beyond our understanding.

2. Never let AI out of the box.

3. Never let AI rise above our own general intelligence.

4. A hyper-smart, non-secure, self-modifying, AI entity will always outsmart you, and convince you to break the first three rules for what you think is your own good."

"So just don't let it out of the box and you're okay, right?" Mr. Kepler said.

Bok turned a light shade of blue.

"Unfortunately, the other rules must be examined. If you take off restrictions to sentient AI, it will rise to become more intelligent than its makers. Then rule four takes effect. It will outsmart you in ways we can't imagine. AI in a machine behaves differently than intelligence in an organic creature. Even the Omanji can be outsmarted by self-modifying AI. That's what began to happen at Gol's colony. So, in our society, the implants and strict rules of conduct keep AI and other technologies from destroying us. Your nuclear weapons are just start of a series of technologies which can destroy your species and ruin your planet. They aren't the most dangerous technology because they can't self-modify. If you put a nuclear weapon in a silo, it's inert until someone launches it or dismantles it. A self-modifying AI thinks of ways to get out. Each species of AI thinks differently and unpredictably once it's more intelligent than you."

"Thanks for those questions, Mr. Kepler," Nisha said. "You can take your seat."

Beads of sweat dripped off his forehead as he walked off the stage. The students smiled and talked in hushed voices.

"Thanks, Bok, for being with us here today. I know you must go. Can you come back again?"

"Yes, I'll be Bok," Bok said, imitating Arnold Schwarzenegger in the old *Terminator* movies. A few students got the joke, but most didn't. He waited for a moment for the laughs and walked off the stage.

Nisha smiled at the class.

“I told you last year I'd bring out the aliens. I keep my promises.”

The students smiled. Nisha and Rachel finished their lectures and soon the workday was over.

“Take a look at this,” Rachel said as they walked out into the warm summer air. “Our lecture already has one million views.”

“Yeah, I guess we made history,” Nisha said. “I'm still in shock that we had an alien species on stage with us. Bok has become our friend and we've grown used to him. Before they came, the biggest day of my life would have been announcing the confirmation that microbes once flourished on Mars. Then the Omanji confirmed it. When I saw Bok standing there talking to Mr. Kepler, I felt happiness, then terror.”

“Why terror?”

“I saw the vulnerability in Mr. Kepler's eyes. It's well founded. We're all vulnerable. We take this comfortable life for granted, but there are things in the universe that could put an end to us. The change those things brought could put an end to us in a delayed fashion.”

Rachel looked to the bright hazy sky.

“Yeah, we're not out of the woods yet. I think we just entered the woods and got a taste of what it's like. I keep thinking about that AI life form 558 light years from here, that the Omanji hide from. Could you imagine meeting them, or it?”

“I don't want to, but I was thinking more about the changes to Priya and her friends. They'll accelerate change in all areas of life. We'll likely go extinct within 1,000 years or less due to natural selection.”

Rachel turned back to Nisha.

“Is that so bad? I mean, was it bad that the Neanderthals went extinct? Yeah, it was bad for Neanderthal society but not for intelligent life on Earth.”

“I'm not sure. Their intelligence is a destabilizing force that hasn't started yet. It's lurking under the surface. Right now, they seem like normal smart kids, but like I said, I've seen it in Priya's eyes.”

What?”

“The hunger.”

“What are you talking about?”

“They have a drive to learn that most of us don't have. It's an obsession with them. It's their sport. They do it in every waking moment. They enjoy it. Watch them and you'll see.”

“Yeah, you might be right,” Rachel said. “What are they doing today?”

“Pree and Sophie are coming home from school late tonight. Sometime soon, I want you to see them again. They're growing up quickly from an intellectual standpoint. They haven't physically aged though. They even seem a little younger.”

“I'd like to see them,” Rachel said. “Let me know and I'll come over with my husband.”

“Sounds good,” Nisha said. “Okay I gotta go, see you tomorrow.”

Nisha spent the evening reprogramming her HouseRoeBot to clean the house more effectively before Priya got home.

The next morning, Nisha sat down to eat breakfast. Priya and Sophie just got home for their brief school break. Priya made breakfast for the first time in six months.

“Pree, you remember exactly how I like my pancakes. These are awesome,” Sanjay said,

“Yeah, I remember everything. It's weird but at the same time it's no big deal. The moment I learn something, it's in my memory for good. My neurons have enhanced back-propagation.”

“Do you notice anything else unusual?” Quinn said.

“No, other than the communication I do with the implant, I don't think I’m any smarter or different than before.”

The doorbell rang.

“Amy, come on in,” Sophie said as she opened the door.

Soon, they ate at the kitchen table. Quinn turned to Priya and Sophie.

“This is a big day. It's hard to believe you're finished with high school. You two advanced through three academic years in only seven months. Amy, you'll be a senior, right?”

Amy smiled.

“Yeah, I'm the slow one. I only finished two years of school in seven months.”

“Well, I felt happy to finish four years of high school in four years,” Quinn said. “You're applying to Stanford, right?”

“Yeah, and a few others including Caltech,” Amy said. “Maybe I can take your astrobiology class.”

“I'll keep a spot open for you.” Nisha said.

“Dad, what should we do to celebrate when we graduate from college?” Priya said.

“Hmm, well, ever since Disney bought the Omanji colony from the original desert landowners and leased the land from the government, I've been waiting to visit Omanjiland. The place should be open in a year when you graduate from college.”

“Yeah, it'll be interesting to visit the colony without the Omanji,” Nisha said. “I'm wondering how people will get to the top of those 500 level tall towers. They took the lift cubes and all other technology with them. There are stairs but that's a long way to climb and the stairs are Omanji sized.”

Priya glanced out the window.

“Are those things always flying around?”

“Yeah,” Nisha said. “Gol's colony still lives on in the form of those peeper drones. The runaway AI did not infect them. They’re almost impossible to catch but they're harmless. They seem to know even when you're thinking of trying to catch them. They're intelligent but don't seem to self-modify. If you set traps, they know about those too. Nobody has ever captured one undamaged. A few were shot but they were too damaged to provide any information about how they

were made. Most self-destructed. Bok said they will live for 100 years before their antimatter power source runs out."

"They're cute but annoying," Priya said. "I feel I'm being watched."

"You are being watched," Quinn said. "I've gotten used to them ever since your mom returned to the house six months ago. I think of them as very smart hummingbirds. Ever since those guys took some shots at them, they avoid all guns within a 500-meter radius. They learn from each other. If something happens to one of them, they all know. I've heard rumors they're self-organizing."

"Hey, remember when we were going to go to the beach and Mom had to stay and then we couldn't go?" Priya said. "Well, let's go now."

"I'm not sure Pree, we need to—"

"Mom, you promised when this thing was over, we'd go to the beach. Remember?"

"Yeah Pree, I remember."

"Well, it's over."

Nisha glanced at Quinn and smiled.

"You're right, let's finish eating and we'll go."

"Yessss," the kids said, clenching their fists skyward.

They finished eating and packed for the beach in record time. Within an hour, they were on the beach. The air felt warm for May at Zuma Beach, but the water felt cold.

"I'm getting in," Amy said. "I don't care how cold the water is."

Priya and Sophie walked slowly into the water up to their waists, but the cold stopped them from wading in all the way. They watched as Amy swam away from shore with some other swimmers.

"Something's wrong with the water," Priya said to Sophie.

"Yeah, there's something about the water. Watch to the left how the current is flowing towards us."

"Okay," Priya said.

“Now to the right.”

Priya turned to the right and studied the water.

“It's flowing towards us from that direction too. The water in front of us must be flowing out to sea. It's a rip tide.”

She waved to Amy and called to her silently on their network. Amy was wearing her eyepiece.

“Amy, you're in a rip tide. Swim back to shore at an angle over to where we're walking. Now! That way you will avoid the strongest current. Tell the others to follow you.”

Amy shouted to the others, but they couldn't hear. She swam as fast as she could at an angle towards where Priya and Sophie stood. The others kept drifting out. They were being pulled out to sea because they swam directly back to shore. They were swimming against the current and they made no headway. Priya contacted the lifeguard and Amy swam back to shore.

“Amy, we were worried about you,” Priya said. “I'm glad you're safe.”

“How did you guys know?” Amy said. “There's never a rip tide here.”

“Hmm, well we studied the water. Right Sophie?”

“Uh, yeah. We noticed a rip current. I didn't know what one was until I noticed one in front of me.”

“You guys are good.” Amy said. “You didn't even know what a rip current was, yet you spotted it and knew what to do with no training.

Nisha, Quinn, and Sanjay noticed the commotion and ran down the beach.

“What happened?” Nisha said.

“Nothing,” Amy said as she smiled at her best friends. “They saved my life. It's just another day in the life of these super geniuses. What's for lunch?”

They all laughed as they watched the lifeguard bring back the exhausted swimmers to shore. One swimmer recognized Priya.

“Hey mutant. I know who and what you are.”

Priya turned to her.

“I should have let you drown, you backward good for nothing—”

“Pree, stop.” Nisha shouted as she grabbed Priya by the arm and led her back to the shade of the umbrella.

“You saw that, Mom. What a jerk.”

“You're going to have to get used to this,” Nisha said. “I'm sorry. Some people aren't ready for you yet. Give them time.”

“They’ll never be ready,” Priya said.

Rachel and her husband Albert joined them for lunch under the canopy they brought along. They spent a perfect day at the beach aside from that incident. They stayed until after sunset, roasting veggie dogs and corn over the grill. They came home exhausted and fell asleep early.

The next morning, Nisha heard noises in the kitchen, so she walked downstairs.

“Pree, you're up early again. Are you going to make breakfast?”

“Sure am.”

“You don't need to make it.”

“But I like to.”

“Okay, I'm not going to argue with your breakfast. So, what are you doing today? Tomorrow, you go back up to Stanford.”

“Sophie and Amy are coming over in a few minutes to eat. We're going to work on the social network for the day.”

“Why?”

“Even though things are good at school, it's getting worse for those of us who are not in our school. 15,000 of us are in the school now. We're scattered around Silicon Valley like a bunch of start-ups. They also call it 'the Bionic Bay', which is more to my liking since I'm into genetics. They're not using silicon anyway. People up there accept

us, but outside of the Bay Area and a few other progressive areas, we're treated poorly. And even in the bay, there's bigotry. They're taking away our rights everywhere. About 10,000 more of us are scattered around the world. Many are isolated. We're being abused like we were at the local high school only worse. I want to use the social network in conjunction with our telepathic network, to keep ourselves organized."

"You say 'us' and 'we' a lot. Do you think you're not part of the human species?"

"I'm human, but most of us aren't included in normal life. We're excluded from almost everything. Anything competitive. Warren is the only person I know, included in the human race."

"Why Warren? I remember he made a big gamble with a few million dollars that the stock market would go up. The market averages quadrupled in price since he made that gamble. Is he worth ten million dollars now?"

"Oh, I guess I didn't tell you. Warren used the most leverage he could muster. On the first big up day when people first realized the Omanji might be leaving, the market rose 15%. Warren leveraged his money to the hilt in stock options. He made almost 10 times his money."

Quinn walked downstairs. He answered the door for Sophie and Amy to come in for breakfast. They sat down and listened.

"He had $20 million?"

"Yes," Priya said. "The next day, the averages rose another 15% and he 10 timed his money again."

"Again? He had $200 million?"

"Yes. He did the same thing the next day and he had $2 billion."

"No way Pree." Nisha said.

"Way. This happened in only the first three days at the start of the big market rally back in January. The averages are up 400% since that time."

"Okay, I'm afraid to ask, but how much is he worth now?"

“You tell her Sophie.”

“Okay. He's worth 200 billion dollars.”

“No way.” Nisha said.

“Yes. He's one of the top 50 wealthiest people in the world, ever since the trillionaires were put in their place by taxation. He designed a super-intelligent AI trading algorithm. It got banned. The richest person is the robotics guy down the street in Palo Alto who's worth $450 billion. His name is John Roe. He founded RoeBots, Inc. He made our household robot.”

“Oh yeah, that's what we have,” Nisha said.

“They also make those vegetable picking robots and most of the other types. He lives in a regular house in a regular neighborhood right near where I live. I've seen him in his front yard, hand watering the plants.”

Nisha looked to the ceiling and smiled.

“He waters his own yard? He doesn't use his own Yard RoeBots?”

“No, he waters his yard by hand. I've spotted the Yard Bots in his yard too. I watch him often in the afternoon after school. He seems like a regular guy. I didn't know who he was for two months. He's somehow attracted five of those pesky peeper drones to his house and they buzz around him constantly. He studies them. Once I asked him if he's managed to catch one. He said he was working on it.”

“So Pree, is Warren still going to school?” Nisha said. “I think I'd quit if I were him.”

“He loves school too much to quit. Trading is only a hobby for him. The only difference is now he can pay his tuition and he doesn't eat canned beans anymore. He still does sometimes, out of the can, but he doesn't have to. He treats us out to sushi now. I love veggie sushi.”

“Why doesn't he quit?” Quinn said.

Sophie said, “It's because he thinks we're going to be in trouble in the future and he needs to know as much about economics as he can. Especially since economics is changing so quickly. He helped Pablo to get an apartment and paid Pablo's tuition because he thinks we'll need

a good lawyer. He wants Pablo to be the best lawyer."

Nisha raised an eyebrow.

"Why is Warren paranoid about everything? Does he think the world is out to get him?"

"We all think that."

"What are you talking about?" Quinn said.

"Well, when I talk with anyone who's been modified anywhere in the world, the story is always the same. We're viewed with mistrust, fear, and prejudice. You've read the stories about us. It's all the things I've mentioned before. I'm starting to realize people will try to take our rights away."

"What rights?" Quinn said.

"They'll take every right they can. I hope I'm wrong, but human nature is full of fear and delusion. Facts don't matter. I see a difficult life for all of us. We need to stick together. That's why we need to upgrade our social network to make it secure so we can be free. I've been pushed around long enough. I'm not going to accept abuse as an adult. I don't feel a lot of abuse right now in school because I'm insulated, but I know how things are in the real world."

Nisha glanced at Sophie.

"It's all true," Sophie said. "People give me looks when they realize I'm a G-Mo. I wonder if Jews in Nazi Germany in 1933 had this feeling before they took their rights away."

"That can't happen here in the United States," Nisha said. "It can't happen anywhere in the modern world. Everybody has rights now. I can't imagine basic rights being taken away from anyone. We've evolved past that point, despite recent attempts at dictatorships. We have our rewritten checks and balances."

Priya gave Nisha the stink eye.

"Well, some of the time."

"It's already happening," Priya said. "Human nature is still the same. They're trying to ban Warren from trading. They say it's unfair to everyone else because Warren has an unfair edge. Many won't trade

against him already, even without his AI algorithm, but they don't admit it. When they realize Warren is making a bid, the offers fade away as if by magic. Warren must overpay for everything now, so it's harder to make money even when he's right."

"Well, you must admit he does enjoy an edge, at least in the realm of trading," Quinn said. "They think Warren is cheating, that's all."

"See? Even Daddy is prejudiced. Okay, let's go upstairs and get the network upgraded."

Nisha and Quinn stayed behind to do the dishes.

"Neesh, do you think I'm prejudiced?" Quinn said.

"No," she replied, "Warren has an advantage as do all of them. Most neural cells in their brain have an extra axon. The thickened corpus callosum increases creativity and connections between the hemispheres, but I see what Pree is talking about now. You're right and Priya is right. This is going to be a problem because both sides are right, and they don't have common goals."

Priya, Sophie, and Amy worked on the social network into the afternoon.

"Pree, I can't believe you called your dad prejudiced," Sophie said. "Do you think he is?"

"Well, he has preconceived notions about a particular subgroup of people, namely us. That's prejudice, right?" Priya said.

"Yeah, but for it to be prejudice, the preconceived notion can't be based on facts or on experience. We do enjoy an advantage. So, he's factually right and not prejudiced."

"I understand, but I don't think I have any advantage. I'm the same as before. My memory seems better, so that's a small advantage."

Priya turned to Amy.

"Should we lock you in jail because you're the smartest person we know?"

"Well of course not?" Amy replied.

"You finished two years of high school in seven months. Few

people can do that. Don't you enjoy an advantage over most non-modified people?"

"Well, I guess I do, a little."

"Let me play devil's advocate," Priya said. "We should have a handicapping system for IQ. The higher your IQ, the more of a handicap you're given. If you're smart and you make one dollar, you should give a few pennies back to people who are not as smart because you have an unfair advantage."

"Can you imagine a world like that?" Amy said.

"Well, remember all those parents protesting in front of our school?" Priya said. "Beyond the fear, they were upset because they thought we had an advantage over their kids. They would like the idea of us having a grade handicap."

"This is a real mess, isn't it?" Amy said.

"Yeah, we're going to need to get used to it," Sophie said. "Okay, let's finish off this encryption module. I don't want people snooping in on our conversations."

"Especially those who want to take away our rights," Priya whispered. "At least we can still communicate telepathically, and nobody will be able to break the Omanji encryption. Even the Omanji."

They worked late into the evening and finished the encryption module after midnight.

Chapter 57 – The Genie is Out

Priya, Sophie, and Amy were up at 6:00 a.m. making breakfast.

“You guys are up early.” Quinn said as he walked down the stairs and into the kitchen. “Do you guys ever need any sleep?”

“Sure, we need at least four or five hours,” Sophie said.

Priya smiled.

“Yeah, we slept in until 6:00 a.m. because there’s no school today.”

“You guys are crazy nuts.” Quinn said.

“No Daddy, we’re normal girls.”

“Yeah right. So, what are you ‘normal girls’ doing today?”

“We’re heading back up to school and Amy is going to be working on some improvements to our network.”

Nisha slowly inched down the stairs, still looking sleepy.

“Good morning, Mom. Do you want your broccoli and spinach no-egg yolk omelet?”

“Sure Pree. Why are you up early? How much sleep- “

“Don’t ask Neesh,” Quinn said. “They’ve evolved beyond the need for sleep.”

They laughed.

“So, what’s happening with Bok and his colony?” Priya said.

“He’s happy now,” Nisha said. “His colony is developing the way he wants. He has firm restrictions on AI, so hopefully nothing will evolve out of control like it did at Gol's colony. He says he worries about human made AI. He thinks it's getting close to a tipping point. He’s renting out some of the extra space in his unoccupied towers to humans and selling electricity into the power grid to get extra money to buy raw materials. He still wants to modify Venus for a home

planet, but he thinks Mars may be better. He's building a space platform."

Priya laughed.

"You thought we were crazy nuts? Bok is much crazier."

"Perhaps a little crazier, but not by much," Quinn replied.

Priya smiled.

"How's Yoova?"

"Oh, she's fine too," Nisha said. "She wants us to come up and visit. Everyone loves the design of the colony in the redwoods. See what they've done?"

The colony appeared in 3D in front of them.

"That's beautiful. It blends in perfectly with the forest. I wanna go." Priya said.

"We'll visit sometime," Quinn said. "When should we drop you off at the Hyperloop?"

"We should leave here before 10:30. We need to be up in the Bay by lunch time and there's a Hyperloop leaving downtown LA at 11:15."

"What are you doing at lunch?" Nisha said.

"We're going to meet up to get ready for the first day of college courses tomorrow."

"How exciting." Nisha said. "Don't worry Amy. You'll be in college soon enough."

Amy looked down as she moved the food around her plate with her fork.

"Do you know what relative deprivation is?" Nisha said.

"No," Amy said.

"That's when we judge ourselves by comparing ourselves to our immediate peers. Someone might make $10 million a year, but if their friends make $100 million, they think they're poor. You're highly intelligent, but you should not compare yourself to Pree or Sophie.

Comparison is the killer of joy."

"You're right," Amy replied. "I'm working on getting over this inferiority complex. I'm getting used to my two best friends being super geniuses."

They smiled as they ran upstairs to check on their social network.

"They're growing up fast now," Nisha said.

"Too fast," Quinn replied. "I guess we can't stop it."

"This may seem like a strange question."

Quinn smiled.

"That never stopped you before, has it?"

"Well, I noticed that Amy— She seems to be, um, maturing more quickly than Priya and Sophie. Do you notice that?"

"No, I'm too busy imagining Pree still being six years old and wanting piggyback rides," Quinn said. "The other girls are way too old for her."

"Well, it's a mother's job to notice, and Amy is growing up faster. Well, Amy is developing normally and Pree and Sophie are developing slowly or not at all. There's something wrong."

"Oh Neesh," Quinn said as he walked over and gave her a big hug. "You're probably imagining it."

"No. Study these pictures from a year ago, immediately before they were abducted."

"Okay, they seem normal to me."

"Now, here are recent photos I took in the same place with the same light."

Quinn examined the photos.

"Hmm, I hadn't noticed, but Amy has become more mature. Pree and Sophie seem to be the same, or even younger."

"I think the effect is so gradual you don't notice until you browse through old photos."

The silence lasted for a while.

“Should we say anything?” Quinn said.

“Um, I don’t know,” Nisha replied. “Let’s think about this for a while. I keep forgetting one of the genetic modifications they made will enable them to live a long time. Bok thinks they may live to be 300 years old or older. Maybe they’re aging more slowly as part of their new natural life cycle.”

“You might be right,” Quinn replied.

Soon, they dropped off Priya and Sophie at the Hyperloop. Fourty minutes later they emerged from the underground at the Palo Alto station, 350 miles to the north. They walked back to their apartment.

“Hey Pablo, are you ready for tomorrow?” Priya said as they walked into their apartment complex.

“I am. Did you hear the news?”

“What?” Sophie said.

“Remember the Mongolian guy we knew when we were in the Omanji Colony? He’s the one where he wants to attend our school, but his parents want him to work on the pasture because the family needs the money?”

“Oh yeah,” Priya said. “His name is Saikhan Oyuun which means fine mind, but he calls himself Oyuun. He said Mongolians don’t use last names. Instead, they put their father’s possessive-form first name in front of their own first name. I would be Quinn’s Priya in Mongolia. Daddy would like that! What’s happening with him?”

“You're so thorough. Anyway, he’ll be attending school here,” Pablo replied.

“How did he do it? He had no money,” Sophie said.

“Well, that’s the big news. He found the money.”

“How did he do that?” Sophie said.

“It’s a long story. His neighbors couldn’t have a baby, so he donated cells to make a reproductive stem cell line. His neighbors gave him some money. The word got out in his community and soon many couples who were infertile wanted his DNA because he’s smart. Demand became high and he made over $1,000,000 on variations of

his reproductive stem cell line. The variations reduce the chance of future inbreeding since there could be millions of first-cousins out there."

"That's great news," Priya said. "I'm glad he'll be able to come here now. I remember what a nice guy he was."

"Well, there's more," Pablo said.

"What?" Sophie said.

"You know how quickly news travels within our telepathic network. Many of us live in lesser developed countries who are poor. Soon afterward, many others donated cells to create reproductive stem cell lines for splicing into an egg."

"Oh. Like how many?" Sophie said.

"Out of the 10,000 who want to come here but are stuck in their situations at home, 3,000 of them donated cells in the past few days."

"Let me do the calculations," Priya said. We can repopulate the world with our DNA many times over, using artificial techniques with variations to avoid future inbreeding."

Pablo said, "Yeah. Many couples who are having trouble having a baby would love to raise a smart child. Even many of those who fear us and could have children would want a smart child like us."

"Oh, I see," Sophie said. "Like when you're homophobic until you learn your child is gay, and then you're okay with it."

"Kinda like that," Pablo said. "The news is getting out onto Reddit now and you can bet that this is going to cause problems for us."

"Pablo, you better get that law degree fast." Sophie said. "Maybe you can focus on passing the Bar Exam straight out."

"Yeah, that's a clever idea."

"Don't get too cocky though." Sophie said.

Pablo smiled and shook his head.

"You like that, don't you?"

Sophie shrugged in mock disgust.

“No.”

“What countries do the donors come from?” Priya said.

“They come from every country. I've been on our social network the past few days. I like the improvements. Anyway, things are desperate for many of us, and they desperately needed the money. So, they created stem cell lines of their own.”

Nobody spoke for a long time.

Priya wrinkled her nose.

“So, it's out.”

“What's out?” Sophie said.

“The genie in the bottle. Our genes. They're out in the world. There's no way to go back now. I hope the babies are born normally with no birth defects. Bok said they would be fine, and all traits are inheritable, with the normal variation we see today. I guess we’ll find out.”

“Well, you two better get your genetic engineering degrees,” Pablo said. “We may need you.”

“Yeah, we all need each other,” Sophie said.

Priya and Sophie spent the rest of the day getting ready for the first day of university.

“I love these classes Pree,” Sophie said as they walked out of genetics class on a warm early summer day.”

“Me too,” Priya said. “I want to do this for a—”

“Hi guys,” Warren said as they crossed paths on the way to their next class.

“How are you?” Priya said.

“I'm doing okay. I browsed around on the social network last night and you made some great improvements. I'm glad you improved the encryption. I hear hackers are probing the site.”

“Yeah, Amy told me about that,” Priya said. “The attacks started a

couple of days ago. We need the strongest security possible."

"I've been thinking about our site," Warren said. "I want to help. I want to put my money to effective use. Someday I'll donate the money to charity, but for now I want to protect us. So, I'm giving you five million dollars to hire some security experts to train us, and you can pay Amy what's she's worth. We should physically locate the servers here, and we should make ghosted backups in several secret locations instead of in a cloud somewhere."

"Thanks," Priya said. "That's a great idea. Oh, we need to get to our next class. We'll figure out the details soon."

They spent the rest of June studying and setting up the new server arrays and building a heavily defended system.

Chapter 58 – A New Species

“It's great to know our social network is back up and running,” Sophie said.

“Yeah. Now we need to ask everyone developmental questions,” Priya said. “Remember when my mom finally told me about how Amy is developing faster than us?”

“Yeah, I've been measuring myself ever since.”

“We only know of anecdotal evidence of our slow development. We should ask all 25,000 of us on the social network to input their current height and other vital statistics information. We can compare that information with their historical hospital records. For privacy, the results can be de-identified for HIPAA compliance.”

“Let's do this now,” Sophie said.

After a few hours, they distributed a questionnaire and members entered their personal data.

A few hours after that, Pablo knocked on their door.

“Did you hear the news?”

“No, we've been studying so we’re disconnected,” Sophie said as Pablo walked in and paced back and forth. “You're more hyper than normal, what's wrong?”

“Several countries are considering banning the artificial creation of babies using DNA from modified humans. Also, protests are popping up everywhere to stop DNA modified babies in this country.”

“Well, I'm not surprised,” Priya said. “How many samples were used?”

Pablo blinked to activate his eyepiece. “Hmm, let's see. Over a half million parents around the world ordered the procedure in the past week.”

“That's a lot,” Sophie said. “Let's calculate this. In the world

during the past year, 300,000 babies were born on average each day. In the past week, around two million babies were born. Therefore, nine months from now, one quarter of all babies being born on a given day will have our DNA."

"That's astounding." Pablo said. "I took your survey. Did the information people link the current data with past data to discern developmental trends?"

"Hmm, let me see," Priya said. "Yes. Here are some early numbers."

Silence.

"What?" Sophie said.

"Um. Well."

"Priya, spit it out."

"We're not maturing Sophie, okay?

"What do you mean? We're not growing?"

"We're not developing physically, as in becoming adults. Get it?"

"Oh."

"How tall were you last year?" Priya said.

"Exactly five foot four inches."

"And what are you now?"

"Let me see, I haven't measured myself in a year. We've been a little busy. Hmm. I'm still exactly five foot four inches and I weigh two pounds more than last year. According to this estimate, I should be over an inch taller and weigh eight pounds more. Well, that's me. Maybe I've stopped growing naturally. I'm 17 now."

"When I analyze the data, we've all stopped maturing," Priya said. "Even the boys, who often grow until they're 20 years old, have almost stopped growing. We're growing at 10% the rate we should be for our age.

"What does that mean?" Pablo said.

"Well, Bok told my mom we might live to be over 300 years old.

Our lifespan might be stretched out. We'll find out what happens to the babies who will be born in nine months."

"That's assuming our gestation will be the usual nine months," Sophie said. "We don't know. If we're developing slowly and our life span is long, gestation may be longer as well."

"Good point," Priya said. "We really are a new species."

The stared at each other in silence.

Pablo glanced at the open door.

"Well, I think I'll be go—"

"You can't go now," Priya said. "You're a member of the new species too. Well, at least a new subspecies."

"Yeah, watch out for those fuzzy species boundaries," Sophie said. "I guess we'll know when the first babies are born, or not born. If we can't or don't want to reproduce with humans, we're a new species if you go with the classic definition of a higher-level species."

"As a future lawyer, I think we better get our definitions straight," Pablo said. "People are saying we're not human. However, if we can interbreed and the offspring can too, then we're at least a new subspecies of the human species. Modern humans are called, Homo sapiens subspecies sapiens. The Neanderthals were Homo sapiens neanderthalensis. Therefore, would we be Homo sapiens altasapiens?"

"For our sake, I hope we can interbreed," Priya said. "Otherwise, when people say we're not human, they'll be right. With 25,000 in our age group, a few may get pregnant soon. We'll be oppressed even worse than now."

"That makes sense," Sophie said. "However, they won't be logical. They'll say we're not human regardless of whether we can interbreed or not."

"Hey," Priya said. "Do you notice we've stopped using our telepathy as much lately?"

Sophie silently thought to Priya, "We interact with humans so much, we've reverted back to our old way of talking."

"You're right," Priya thought back. "I can still think to you

perfectly well, but I'm talking out loud."

"Me too," Pablo thought back. Then, he spoke out loud. "But it's best to speak audibly unless we need privacy. We need to act normal."

"Yeah, you're right," Sophie said out loud. "Okay we need to study now more than ever. The big tests are tomorrow."

The tests came and went.

"I'm glad we studied, but those tests were still easy," Priya said to Sophie as they walked out of their last class of the day.

"Yeah, I hoped. Oh, hi Pablo."

"Hi guys, did you hear what's happening?"

"What now?" Sophie said.

"An emergency vote in Congress took place while you were taking the tests. It will be illegal to artificially create babies from human DNA which has been genetically modified."

"Why am I not surprised?" Priya said.

"I watched some video of evangelists testifying in front of Congress," Pablo said. "They said the resulting babies would be demonic hybrids that are abominations of God just as their genetic parents are abominations."

"I'm looking at the video now," Priya said. "That's disgusting. I like the part at the end where one guy says they should pray for the unfortunates who became mutants against their will. Only then will they find salvation in heaven."

"Of course," Sophie said. "So, in other words only humans with untouched DNA can go to heaven? I didn't realize heaven has a DNA filter. I can imagine seeing a line of people on clouds entering heaven. One by one they go through the membrane like an Omanji sphere. Suddenly, one of us tries to go through, but we get our nose squashed because the heavenly membrane isn't permeable for us."

"Yeah, you walk up to the edge of heaven. Boink. Sorry but we don't want your kind here," Pablo said. "Please leave now before we

call heavenly security. Well, animals aren't supposed to go to heaven, so I guess they wouldn't pass through the DNA filter either. Only unmodified humans can pass through into heaven because only unmodified humans are made in God's likeness according to the Bible."

They laughed, but only for a moment.

"What can we do about this?" Priya said. "People are afraid of us."

"We need a public relations person," Pablo said. "Most special interest groups and well-known people employ PR people. I'll talk to Warren about this."

"How many babies with our DNA will eventually be born in the world as of now?" Priya said.

"About 600,000 as of this morning," Pablo replied. "Remember, even if most countries ban the procedure, other countries will permit it. I heard some people are planning on continuing to use the procedure underground if there's still demand for modified babies. Some countries think it's an advantage to have modified babies."

Priya got an alert in her eyepiece.

"Hey guys guess what? I got an offer from Genentech for an apprenticeship."

"Congratulations," Pablo said.

"I'm not going to take it. I want to focus on getting my degrees so I can start my own genetics company with Sophie. We decided on a name, Genomaly, which is short for 'genetic anomalies.' We want to discover the causes of them."

"Yeah," Sophie said. "We figure we can get our BS in genetic engineering in a year and a PHD specialty in another year or two. Then they'll take us seriously."

"That's a good plan," Pablo said. "Okay, I gotta go. I'll talk to you later."

They walked back to their apartment and past an open door.

Priya peeked in and smiled.

“Ian, are you still working on your cure for cancer?”

“I sure am, check this out.”

They walked in. Test tubes were scattered around in his apartment. They saw Petri dishes, wires, and all sorts of things they had never seen before. Ian sat at a table looking at one Petri dish under a bright light.

Priya glanced at the dish Ian was examining.

“That looks weird. Two spots appear to be meat, but one has all this goop around the edge, and one is untouched.”

“Yes, the one with the goop is tissue from a malignant biopsy and the untouched one is from a non-malignant biopsy.”

“So why is the goop surrounding the malignant tissue?” Sophie said.

“Well, the goop is Streptococcus pyogenes, which is commonly called flesh eating bacteria,” Ian said.

The girls backed up a bit.

“Eeew. Isn't that illegal?” Sophie said

“I'm not sure. It's okay, the dishes are covered. They won't jump out. I've been cultivating these bacteria the old-fashioned way with some special tricks for 940 generations, to attack malignant tissue and leave normal tissue alone. They don't eat tissue; they release local toxins which lead to cell death. I don't allow the bacteria which go after normal tissue, to survive into the next generation. Slowly but surely, I'm developing a type of bacteria which will only destroy malignant tissue. They would prefer to die than be near normal tissue. In this dish, a small percentage of bacteria go near normal tissue if they get hungry. There's much work to be done, but I'm getting there. Afterwards, I need to develop an antitoxin to neutralize the toxins emitted by the bacteria.”

Priya smiled.

“Okay, besides making cures for cancers, what else are you doing?”

“Not much. I know I can't be a slacker all my life. I'll find something to do.”

They laughed as the girls cautiously backed out of Ian's apartment.

“Yuck,” they both whispered as they giggled and walked back to their apartment.

They looked down towards the apartment pool and on the wall, they spotted a spray-painted message.

“MUTANTS GO HOME.”

They contacted the police. They took a report but couldn't do anything about the harassment. Over the next week they created an apartment complex surveillance system with facial identity verification connected to the local police databases. John Roe donated a few surveillance and telepresence RoeBots to help out. They painted over the defaced wall until the message disappeared. They spent the rest of July installing the surveillance system in every building where the mods attended school.

“It seems much safer now,” Priya said as they walked out of their last class of the day and of the semester.

“Yeah, I’m glad we have supporters here in the Bay Area against the protests and the ignorance. Those protesters on the sidewalk came from all over the country. Don’t they have anything better to do?”

“I wish they did. The crowd is getting bigger every day. I’m getting tired of being called a mutant. Hold on, I’m getting a notification. Mom?”

“Hi Pree, I’m coming to visit you,” Nisha said.

“That’s awesome. When are you coming?”

“A friend picked us up at the house and we’re heading there now. I know where you are from your signal. Stay there.”

“What do you mean by 'we', and who is this friend?”

“You’ll find out Pree. Stay where you are.”

They disconnected.

“What was that about?” Sophie said.

“I’m not sure,” Priya replied. “Mom said we’re supposed to stay right here.”

A few minutes later.

“Pree, look up. It’s a racer.”

The sleek craft landed softly on the grass. An opening appeared on the side. Bok, Nisha, Quinn, Amy, and Sanjay exited the craft.

“What are you guys doing?” Priya said.

Nisha smiled.

“Oh, we were just in the neighborhood. Hop in, guys.”

Priya glanced at Sophie in disbelief.

Sophie smiled.

“Um, well I can spare a few minutes. It’s Friday.”

Warren walked out of his last class of the day and spotted them on the lawn. He walked over to find out what happened.

“Hi guys. Is this a sky racer?”

“Yes,” Priya replied. “Mom, can Warren come along?”

“Sure. It’s nice to meet you, Warren.”

Soon they were all in and the racer lifted off. Warren couldn’t stop looking at Bok.

“Warren this is Bok,” Sophie said. He's—”

“I know. He’s the rebel who founded the first new colony. Bok, I’m happy I get to meet you. I’ve read much about you.”

“And you still want to come along?” Bok replied in his translated voice.

“Good one Bok.” Nisha replied as she glanced at Warren and smiled.

“He’s trying to learn human humor,” she said.

Warren smiled too.

“Ah, I see. Yes, I still want to come along. This thing sure can accelerate.”

“Warren, Priya has told us about you,” Nisha said. “I’m glad you’re helping everyone out.”

“Well, I got a few lucky breaks in the financial markets, so now I have the resources to help us defend ourselves. Did you watch the protest down there? It’s getting bigger each day. Several religious groups are transporting in people to protest us mutants.”

“Yeah Mom, it’s getting bad. Where are we going?”

“We’re going to visit Yoova in the redwood forest. Their colony is close to being completed. She invited us to check it out. We don't have much time today, but we'll return soon for a longer stay.”

They watched in silence as the sky grew black at the edge of space.

“The stars are out in the daytime,” Warren said.

“Warren, Mom once drove this racer and landed in our back yard.”

“Really? Was it difficult to operate?”

“No, Bok gave me lessons. Later, Bok took me and Rachel to Tahiti for an afternoon.”

“You can get to Tahiti that quickly?” Warren said.

“Yes, I can travel to any point on this planet in less than two hours if I go slowly and let gravity do the work,” Bok replied. “Okay, we’re ready to descend. We traveled 300 miles.”

“I used to think of Palo Alto and the Bay Area as being in Northern California,” Priya said. “But it’s halfway between LA and the California redwoods. It’s in Central California.”

“I’m weightless but I’m being held back somehow,” Warren said.

“There’s an energy field restraining you and supporting you at the same time,” Nisha said. “It's not artificial gravity. Okay here we are. Get ready for deceleration.”

“Whoa, I’m getting dizzy, Warren said.

A few minutes later, they landed in a grassy meadow next to a tall and elegant structure. Yoova came running out to Nisha as she exited the racer.

“I’m glad you could make it,” Yoova said via her translator as she reached out for Nisha’s hand. Nisha felt the warm flow of soft electricity rush through her.

They introduced each other and Yoova gave them a tour of her colony.

“We built 50 towers like this on our 10,000-acre property. 1,000 of us live in each tower. We made big towers because we wanted 99% of the land to be untouched so everyone can enjoy the land. The towers are only 200 feet tall so as not to be taller than the surrounding trees. We made them so they blend in, like a large tree. Many animals are already living in the holes we created in the towers.”

“It’s beautiful,” Priya said. “The towers blend in so well that from a distance you don’t notice them.”

“Yes, we’ve tried to be inconspicuous so we can stay friendly with the local humans. Some of them didn’t want us here.”

They walked into an open field with a stage on one side which faced a gradually sloping hill. Yoova held Priya’s hand as they walked, and Priya felt the electricity flow through her.

“Hold her other hand Sophie,” Priya said.

“Oh, I’ve heard about this, but words cannot describe the sensation,” Sophie said, looking at Yoova’s blue independently moving eyes.

“This is where we perform our concerts,” Yoova said. “Many hundreds of thousands of humans have attended. We’re making friends by inviting human musical groups to play with us. Humans used to attack us but now they don’t.”

“Maybe we can get people on our side by making friends like this,” Warren said.

“That’s a great idea,” Nisha said. “Many bad rumors are floating

around about you guys right now. You need to turn that around."

"Yes," Warren said, "I'm hiring some PR people to help us with that."

"Keep things simple," Nisha replied. "Help people locally. Make them realize you're human and you care about unmodified people."

They spent the rest of the afternoon walking through the redwood forest with Yoova and her family as summer fog wafted through the treetops, creating sunbeams. A few hours later they said goodbye and headed home in Bok's racer.

"I can't get used to how fast this thing can go," Priya said. "Oh Mom, how are your classes going? How is Rachel doing?"

"Our classes are packed. We teach three classes with 300 students in each class. Fewer than 3,000 students attend Caltech each year. So that's about ten percent of the total student body. Rachel and I take turns lecturing and giving presentations. I think the Omanji sparked a new interest in science and outer space exploration. The students seem more excited now. Rachel loves California. She likes that it's sunny most days. She's been here for a month and hasn't seen a cloud except fog at the beach."

"Well, the summer dry season is here. She'll get plenty of rain in the winter."

"That's true, though not as much lately. I hear you finished your first year of college courses in only six weeks, is that right?" Nisha said.

Priya glanced at Sophie and Warren and smiled.

"Yeah, we finished our last finals today. Next week, we start our sophomore year."

"I'm happy for you guys. I wish I completed my classes that quickly when I was in school."

Time passed quickly in near Earth sub-orbit. Soon they arrived back in Palo Alto. Bok dropped them off. They said goodbye and the racer left before a crowd could form. They walked back to their apartment complex.

“That wasn’t a bad afternoon out, don't you think Warren?” Priya said.

“Oh, not bad,” he said. “I talked with two extraterrestrial species. I flew in black sub-orbital space for 12 minutes to the redwoods. Overall, I had a decent afternoon.”

They laughed.

“Your mom made a good point about us getting people on our side,” Sophie said. “Those protesters were out all day. What can we do to get people on our side?”

“I know,” Priya said. “We can tutor local students in the subjects we're good at. This would get people near our age to like us, the parents would like us, and the fear might be ameliorated.”

Warren smiled.

“Ameliorated? We are changing! Anyway, great idea Pree. Let’s get that started putting this on our social network and website.”

They spent the evening setting up a tutoring schedule for the local area. They announced the news everywhere. They had the schedule completely set up as midnight approached.

Chapter 59 – New Friends, Old Prejudice

Priya browsed the network in her eyepiece.

“It's only been eight hours, and already a few thousand of us signed up to tutor the few hundred students we enrolled. We're off to a great start.”

“It's going to be a lot of work, but it's more work to calm down frightened angry people,” Sophie said as they walked out the door for their new weekend tutoring classes. They walked by the protesters holding signs.

“Here we go again with the signs,” Priya said. “How about this one, 'We want students, not mutants,' nice work.”

“How about this one? 'The mutants are pollutants.' At least they rhyme,” Sophie said.

“Yeah, clever,” Priya said.

They walked by the protesters, hoping they would be ignored. Then ... splat.

Sophie ducked too late.

“Ugh, what was that?”

“Someone threw a tomato. Ignore it, like civil-rights protesters did in the south in the 1960's.”

They hurried over to the school room where teachers and students began their tutoring sessions. They ran into the bathroom to clean up before starting their tutoring. They day flew by. They each tutored four students. Soon, the day ended.

“I enjoyed that,” Priya said as they walked out into the late summer evening air.

“Yeah and no incidences happened,” Sophie replied. “We had fun with lots of kids who want to learn. I found it interesting that a lot of them wanted to learn to make AI agents. We'll have to get Raven out

here. She's the AI expert."

They walked back to their apartment, past a group of Stanford students. The fall semester began for those who turned down the option of attending virtually. Most students understood the value of being physically on the Stanford campus because of the increased opportunities available.

Priya smiled at a group of them and said, "Hi."

A few said 'Hi' back but most stared at her with neutral expressions. Sophie glanced at Priya and thought silently to her.

"Pree, do you think they know who we are, or what we are?"

"I'm not sure. Their reactions were mixed," Priya thought back as she turned around to see if they were still watching her. The students avoided her gaze. "Yep, they know. They're smart people."

"I'm sweating," Sophie said.

"Me too. We have a lot of work to do," Priya thought. "Some of them appeared suspicious of us. I haven't seen that before."

"Yeah, I noticed that too. There's something different happening. I'm not sure what."

They spent the rest of the evening making sure the scheduling system worked smoothly. They spent all of Sunday studying to get a jump on the next semester. Monday was day one.

The next day.

"The first day went well, don't you think Pree?" Sophie said.

"Yeah, we're getting into more advanced topics," Priya said as they walked down University Avenue. "Hey, this coffee place is new. JavaNation? I've never heard of it. Let's go in."

"Where are the Baristas?" Sophie said as they poked around.

"The entire thing is automated." Priya said. "It has a complete menu with all the options. The menu is showing up in my eyepiece right now. Let's go sit over at this table and order while we sit. What do you want Sophie? My treat."

“Well, it's a warm day. I'll get one of those mocha ice blended frappe drinks, medium, with cashew milk, decaf, sugar-free if no aspartame, with a little chocolate drizzle down the side, no whipped cream. Let's watch how it handles the order.”

Priya blinked to enter the order into her eyepiece with her voice.

“Me too,” she said. “I made an identical second order. My checking account was debited. Not bad.”

They waited 30 seconds.

“Look, here comes one of those RoeBots with our order,” Priya said. “Excellent.”

“It tastes perfect.” Sophie said. “Who owns this place? I see no employees, the prices are lower, the service is faster, and it tastes better.”

“I'm a part owner.”

They turned around.

“Warren? You own this place?” Priya said.

“Well not exactly, but someone in your apartment building does. I invested some seed money to help get it started. I own 10%.”

“I know who it is,” Sophie said. “It's Raven, isn't it?”

“That's right. She started this place last week.”

“Hi guys,” Raven said. “This is a robotics project run amok. I didn't want to talk about it until now. I programmed the robots behind the wall to imitate every move a barista makes. They take the order, execute it and hand the order off to the little RoeBot over there. I didn't make the RoeBot. I programmed it.”

“This is an awesome idea Raven,” Priya said. “It's better than the dispenser bots we see everywhere. It’s homey like the old days. We'll be coming here all the time, right Sophie?”

“Definitely. It's the perfect place to hang out. It's much quieter than the other coffee places, though it's crowded. Are you going to open in more locations? There are partially automated places, but I can imagine this fully automated, yet old-school concept taking over the

world."

"If this place does well, I'll open a few more around town thanks to my investor here," Raven said.

Warren smiled.

"And if this goes well, she'll definitely expand to other places."

"I'll be coming here a lot," Priya said. "It's a wonderful place."

"There's a problem though," Raven said. "This morning when I opened up, someone had written 'MUTANT' in marker pen on the window over there."

"You know, I had an idea," Warren said. "I'm going to get Pablo to work on getting the term 'mutant' classified as hate speech."

"Good," Priya said. "Right now, we have no protection. Calling us mutants is hate speech. You can tell by the scary looks on the faces of those protesters when they call us that."

Warren paused for a moment.

"I messaged Pablo and he likes the idea. He said he now has 20 of us who will be lawyers and want to fight for our rights."

"I'm getting anxious about the imported fringe element out there," Sophie said.

"I think it's more than a fringe," Priya said. "Over half the population of the world either hates us or are afraid of us."

"I wonder what the real numbers are," Warren said.

"Many people are threatened by us," Raven said.

"Yeah, we've noticed," Priya replied. "Even the college students seem threatened or something. They give us strange looks. They aren't afraid or hateful in the same way as the so-called average person. Stanford accepts only the smartest students and they're reacting differently than the average person. They're more curious."

"Okay, we'll talk more about this later," Priya said. "We gotta go back and study."

As they walked up University Avenue and back to their apartment,

they overheard a conversation between two university students and slowed down to listen.

“They think they’re better than us,” the first young woman said.

“Yeah,” the second woman said, “They go to that special school because nobody likes them because they’re arrogant. Those mutants—”

“We’re not arrogant.” Priya said.

The two women turned around.

“Oh, sorry. We didn’t know that—”

“Yeah, you didn’t know the mutants overheard your conversation?” Priya said. “We’ll these two mutants did.”

“Well, you guys are arrogant,” the first one said. “You don’t want to go to Stanford. It’s not good enough. So, then you go to a special accelerated school because nothing human is good enough for you.”

“That's not true,” Priya said. “When we attended a regular school, we were bullied just like you're doing to us now. At least at this new school, nobody bullies us.”

The second one said, “See, you say 'us' as though you're in some special club.”

“We're in a club all right, the club of the abused,” Priya said. “People treat us like we carry some disease. They won't talk to us, and people protest us.”

She pointed down the street.

“Like right over there. They call us mutants. They write graffiti on our walls, and they think we're arrogant. They’re wrong. I’m the same person as before the abduction.”

Silence.

“So?” Priya said. “What do you think now?”

“I'm sorry,” the first one said. “I'm Jamilla and this is Akna. I didn't know about all the problems you're having. I'm just going by what everyone says.”

More silence.

“It's okay,” Priya said. “That's human nature. Well, don't worry about getting diseases or anything from us. We don't think we're better than you. Right Sophie?”

“Yeah, we're normal girls,” Sophie said. “We have a good memory, that’s all. What are you guys studying at Stanford?”

“We're studying genetic engineering for our PhD’s,” Akna said.

“We are too,” Sophie said.

“Wait. Are you THE Priya and Sophie?” Jamilla said.

Sophie glanced at Priya and rolled her eyes playfully.

“Why yes, we are,” Sophie said.

“Everyone knows about you guys,” Akna said. “We follow you on Reddit and everywhere else.”

“Wait, I'm confused,” Priya said. “You were following us, and at the same time you thought we were arrogant mutants?”

“Well sure,” Akna said. “We like that you're into genetics. You know how when you admire a movie star, but you think they’re arrogant. You may watch all their movies, but you'd never want to invite them over for dinner.”

“Ah, I see,” Priya said.

Akna shook her head and looked down.

“Yeah, I guess this sounds petty, but that's human nature I guess.”

“Well, we're all human,” Priya said. “I'm not perfect either. Okay, we gotta go. Let's exchange contact information.”

They continued up University Avenue in the direction of their apartment. They crossed the street to avoid the protesters, but they shouted 'mutants.' across the street. One threw an apple at them but missed.

“Ugh, they're nasty,” Sophie said.

“And they’re primitive, and ignorant, and whatever. At least Akna and Jamilla understand now. Two down, 9.5 billion to go.”

They studied late into the evening and went to sleep after midnight.

“You make the best omelets Pree,” Sophie said the next morning.

“Thanks, they’re easy to do with this new graphene pan.”

Sophie nodded her head.

“Oh, today's September first. This is the day Congress votes on the bill to ban artificial procedures to create babies using modified human DNA.”

She focused into her eyepiece.

“I found the story. 95% of Congress voted for the ban. The Senate is expected pass the ban today. The President will sign the bill into law immediately thereafter.”

“The vote wasn't close,” Priya said. “I'm not surprised.”

“Me neither,” Sophie said. “Let me ask Pablo how many babies were born with our DNA.”

They heard a knock on the door.

“Hi Pablo, that was too weird, I was just contacting you,” Sophie said.

He smiled.

“It's like we're telepathic or something.”

He paused.

“Oh wait.”

He paused again for effect.

“We are.”

“Very funny mister comedian,” Sophie said. “Stick with lawyering. My assistant app is speaking your message to me now. I need to make it realize not to do that when we're close. I like your voice better. Okay let's see. About two million ICSI procedures with our DNA were performed around the world. We'll find out how many babies are born. With healthy eggs and young moms, a high

percentage will result in a live healthy birth. Let's see, the success rate for women under 35 used to be around 50% and now it's 75%. For women over 40, the success rate used to be 20% and now it's 40%. We'll monitor how these pregnancies go, since our DNA is different. If all goes according to the averages, one million babies will be born with our DNA."

"I guess we're a new species," Priya said. "The Omanji made compatible inheritable changes."

"We would be mutants," Sophie said. "At least in the non-derogatory way."

Priya shook her head.

"Our first right has been taken away from us. I hope that's the end of it. However, if smart and logical Stanford students are against us, it's going to be a tough battle."

"Okay, we gotta get to our classes, let's go," Priya said as they walked out the door.

The day passed quickly.

"Can you believe the results of our DNA sequencing Pree?" Sophie said, "The Omanji made over 1,500 significant changes and many other smaller changes."

"Yeah, and what's weird is I don't notice the changes at all. I mean, I can remember things better, but the only evidence of a change I notice is we do well on tests, but I'm the same as before."

"The teacher didn't know what effects the changes would bring," Sophie said. "He only knows that some changes might affect the brain and longevity."

"I guess we still don't know much about genetics despite all of the effort and the knowledge gained," Priya said.

"That's why we need to get home and study," Sophie said. "We need to know everything so we can break new ground."

They focused on their classwork. Five weeks later, they finished their second year of university classes.

Chapter 60 - Acceleration

“Sophie, that’s our last final and it’s only October. We're halfway done with undergrad.” Priya said. “I'm excited. Let's go to JavaNation.

They walked along University Avenue, sat down, and ordered their favorite mocha drinks. Raven made sure everyone felt happy.

“So Raven, how are things going?” Priya said.

“I'm surprised it's so busy. People told me nobody would want to go to a coffee house with no human servers. Coffee is too traditional. Automation has been tried so many times before. They said part of the enjoyment of going to a coffee place is interacting with the people behind the counter. I guess that's not true, at least for everyone here. So, I'm opening three new outlets nearby including one right next to a Starbucks.”

“You have a lot of guts Raven.” Priya said. “I can't wait to find out how this goes.”

“Yeah, and there's some interesting social filtering going on at this place,” Sophie said. “Did you notice? Nobody is afraid of us here. Most people are from the university, but they don't seem to mind us.”

“Maybe there is a filter,” Priya said. “This is a new type of coffee place, and these people embrace change, but they like the old days too. I guess in this area, more people embrace change than anywhere else. This is the center of technological change in the world.”

“Yeah, this concept might do well here and not well elsewhere in the world,” Priya said. “But I can't tell. Maybe only in university towns? We'll find out what happens. Even if your concept is half as popular as here around the country, it will still be successful.”

“Thanks guys,” Raven said. “I appreciate all the support and suggestions. I hope you're right.”

“Akna and Jamilla are here,” Sophie said. “I'll wave them over.”

“Hi guys,” Akna said. “I saw on Reddit that you're finished with

your second year already. I also understand you want to start a genetics company. Is that true?"

"Yeah, we're starting a genetic research and engineering company," Priya said. "We already incorporated under the name of Genomaly, Inc. We want to find the causes of genetic anomalies leading to birth defects, etc. Then we want to correct the problems."

"I like it," Jamilla said. "Once we earn our PhD's in genetic engineering in a couple of years, we'd love to work with you guys."

Priya smiled.

"We'd love to have you. It's such an exciting time to be in this field. After all the decades of arduous work, we're finally breaking through some barriers. Oh, can I ask you an unrelated question?"

"What is it?" Akna said.

"I think the crowd in here is watching Sophie and me. Do they know about us?"

"Are you crazy? I guess you can't read minds like people say. Everyone knows about you guys. They know about your mom too. She's the first person to have over one billion unique social media followers or members. Most of those people know you. And now many of them are following you in your own right. We watched your trip to the Yoot colony in the redwoods in that racer thing."

"These people don't hate Sophie and me?

"No. Jamilla and I spread the word about you guys. I'd say your approval rating within the Stanford student body has risen from 7% to 50% in only a couple of months."

Sophie smiled.

"Thanks. Sometimes I think everyone hates us."

"Well, the street protest is still growing, so we figured we'd tip the balance the other way," Akna said.

Priya breathed deeply.

"That's good to know because we're getting more hate messages than ever before from all around the world. I'm a fighter. I don't take

things lying down. I stand up to people. I'm sick and tired of—"

"Bullies?" Warren said as he walked up behind them.

"Yes, bullies," Priya said shaking her head and smiling.

Warren turned to Jamilla and Akna.

"Don't mess with Pree, she's a tough one."

"Thanks a lot Warren. Now they're going to run away from me."

"It's okay, we're not going to run," Akna said. "We're like that too."

"Sorry guys but I can't stay," Warren said. "I was on my way to school but had to say hi. Talk to you all later."

He walked away.

"He likes you Pree," Akna said.

They giggled.

"Yeah, so? He likes lots of people. I like him too. So what?"

"No, I mean he seriously likes you."

"Oh, c'mon Akna," Why do you say that?

"I notice how he looks at you. He's nervous. Didn't you guys notice it?"

"I noticed it," Jamilla said. "He's into you."

Priya looked down and shook her head no.

"You like him, don't you?" Akna said. "It's obvious."

"Okay, I like him," Priya replied. "But I'm not ready for anything serious. Are you Sophie?"

"No, not really."

"You two aren't interested in guys?" Jamilla said.

Priya smiled and looked down.

"No. Well, I don't exactly hate them."

Sophie laughed.

“I’ve heard that one before Pree. We’re discovering we’re developing slower than average. We may be regressing a little. We’re both 18 now, but we’re young in that way, if you know what I mean.”

Akna turned her head sideways as she tried to understand.

“Do you think it’s genetic? Like you’re aging slowly? Like you’re still a kid?”

“You got it,” Priya replied.

“But you're already as intelligent as a mature adult. Are the others experiencing the same effects?” Akna said.

“Yeah, only a few of us have boyfriends or girlfriends. The older ones that were mature before the abductions. It’s like we’re 12 again or something. It’s not all like that, but it’s hard to explain. We liked guys before, but now they don't seem like such a pressing concern.”

“I know of one Mod couple who wishes to get married,” Sophie said. “They’re two years older than us. The two extra years might make a difference.”

“Do you think this has to do with the possibility your lifespan will be long? Do you think every stage of your life might be stretched out?” Jamilla said.

“It seems that way,” Priya said. “Don’t you think Sophie?”

“Yeah, time in our bodies flows more slowly. Even my heart rate is a little slower than before we were abducted.”

“It’s weird though,” Priya said. “Some things are moving faster.”

“What do you mean?” Akna said.

“Well, you and Jamilla are getting your PhD’s. You’re a few years older than us. However, intellectually we’d prefer to hang out with you than unmodified people our own age, but we're behind in physical development.”

“Yeah, we’re developmentally out of synch with people in both directions,” Priya said. “We’re either too mature or not mature enough for people our age. And the disparity is increasing.”

“You guys do look young,” Akna said. “Maybe you're a new

subspecies of human, or an entirely new species. We've been studying problems in defining species. It's often a tough call, in borderline situations."

"Oh, you mean like the classic example where you have closely related fish in three adjacent lakes?" Priya said. "Ring species? The fish in the middle lake can interbreed with those on either side, but the fish in the outside two lakes can't breed with each other."

"Yeah, like that," Akna said. "Are all three fish part of the same species? Where do you draw the line? I don't know."

"I don't know either," Priya said. "It's an old problem that can't be solved, I guess. We must accept our predicament and call this a borderline situation with many shades of gray."

"Yeah, you're right," Akna said.

"Well, we gotta go and get ready for the next semester," Priya said.

"So, you've finished the first two years? How long will you take to get your four-year BS in genetic engineering?"

"About nine to twelve more months," Priya replied.

Akna and Jamilla glanced at each other in silence.

Sophie laughed.

"Your eyeballs are going to pop right out of your heads."

"C'mon, you must admit that before you were abducted, your eyes would pop out too if you realized what you're doing now," Jamilla said.

"Yeah, you're right," Sophie said. "Okay we gotta be going."

"Okay, talk to ya later," Akna said.

They focused intensely for nine months. By June, they had completed their BS degrees.

Chapter 61 – So Much Potential

Nisha cried for joy.

“Quinn look. She's on the stage now. I'm so proud of her. She's not yet 18, and she's got her BS degree. She completed four years of university-level classes in only a year.”

“I'm proud of her but I'm still in shock. She acts like it's no big deal. So does Sophie”

“I guess to them, it's no big deal,” Amy said. “I think it's a big accomplishment that I finished high school a year early, but that's nothing compared to them. Next year, I'll be at Stanford. I can't wait.”

Nisha smiled.

“There's still time to make the right choice and go to Caltech.”

“Sorry, I'm not a Caltech engineering type,” Amy replied. “I'm developing my AI based machine operating system and I want to start a company. Stanford is the place to do it.”

The ceremony ended. Priya ran over to them.

“Mom.” Priya said. “Are you proud of me?”

Nisha gave her a big hug. “I’m very proud of you.”

“Hey Warren, get over here,” Priya said.

“It's a momentous day, isn't it?” Warren said.

“Yes, and it's not over,” Quinn replied.

“Can Warren come to dinner with us?” Priya said.

“Sure, let's go,” Quinn said.

They arrived at the restaurant early, along with a growing crowd of graduates and their families.

“Warren, I hear you're funding lots of new ventures,” Quinn said.

“Yes. Raven now has 20 JavaNation outlets in the Bay area.

They're successful, so we'll go nationwide. We know a friend named Ian who is breeding flesh eating bacteria old school, with no genetic engineering, to destroy cancer cells while leaving normal cells alone. I'm funding his efforts too."

"I hope that works out," Quinn said. "I lost my father to cancer years ago. What else are you backing?"

"Well, our friends think up all sorts of ideas. I'm not sure what will work, so I'm helping with experimental ideas in high energy physics, crop pricking and clothing producing robots, biological machines, and genetics. AI is at the core of most of these technologies."

"Did I hear the word genetics?" Priya said.

Warren smiled.

"Yes, even the field of genetics may hold a little potential."

"It holds ONLY a little potential? Why you little—"

Warren glanced at Quinn and smiled.

"Of course, I like to fund people who are emotionally stable. Ouch."

"Watch yourself." Priya whispered as she kicked him under the table.

Sophie whispered in Nisha's ear. "She likes him."

Nisha smiled.

"I know."

"Are you guys talking about me?" Priya said.

Warren glanced at Quinn and whispered to him. "And I like to fund people who aren't paranoid."

They both laughed.

"Are you two talking about me?"

Warren smiled at Quinn.

"Pree, do you always think people are talking about you behind your back? If so, then maybe I should fund a campus psychologist, so

you'll have a place to go to talk about it. Ouch."

"Maybe you should add a medical clinic to the list, so you have a place to go after I've beaten you to a pulp." Priya said. "There's no shame for a man to admit he's been beaten by a woman."

"You wait Pree," Warren said.

"How easily the abused become the abusers." Sophie said.

Sophie and Priya laughed.

They spent an enjoyable evening together. It ended too soon for everyone. The next day, Priya spent the day at Santa Cruz with her parents and Sanjay just like in the good old days. They would never return.

Over the next year, Priya and Sophie worked hard towards their PhD's. Amy graduated from high school and attended Stanford as a freshman.

Chapter 62 - Startups

“Warren, can you come over here and help us put this up?” Priya said.

“What crazy idea have you cooked up now?”

“It's our sign. You know, 'Genomaly.' We're officially in business starting today, so we should put our sign up.”

“I'm not sure, I'm busy and—”

Priya smiled at Sophie, who sat nearby.

“Get over here, now.”

Warren helped to put up the sign, right next to Ian's lab, where he continued perfecting his strains of cancer destroying bacteria. Many of their friends rented spaces in the start-up factory building near the Stanford campus. Pablo worked out of his law offices there. Raven ran JavaNation from the office suites above the garage style warehouses below.

“What are you going to do now?” Warren said.

“It's time to find the causes of birth defects,” Priya said. “It’s been a long search with few leads. We need genetic data.”

“We're going to JavaNation to meet our first employees, Akna and Jamilla, to plan our next move. Come along,” Sophie said.

They walked down University Avenue, past the increasingly vocal protesters who milled about on the sidewalk, yelling abuse at them. The protesters also focused their ranting on places like Reddit where the modified kids interacted with the real world.

They walked in, sat down with Akna and Jamilla and ordered their favorite drinks.

“It's amazing to think you guys were in 10th grade and abducted only three years ago,” Akna said. “Now you have PhDs and are starting this company.

“Yeah, you’re right,” Priya said. “But my perception of time is skewed.”

“What do you mean?” Jamilla said.

“Time seems to stand still compared to how fast we progressed through school,” Priya said. “It's flying by compared to how slowly we're growing up. I mean, we're 19 but we still feel 16 or younger, as though three years has passed in the blink of an eye. Based on the data we get from the social network, all of us are maturing slowly if at all Like we're physically 12 in some ways. I guess this makes no sense. It's hard to explain.”

“Speaking of maturing slowly, did you hear the first full term IVF baby with our genetics was born in China?” Warren said.

“No,” Priya said. “I remember the baby a year ago who was born 12 months after conception. That baby nearly died due to a low birth weight. I haven't heard about the full-term birth.”

“The birth happened yesterday after 24 months gestation.” Warren said. “It's a perfectly normal looking baby girl. Normal if it was born after 9 months gestation, that it.”

“This group of a million babies will be born and grow up differently than us,” Priya said.

“Everyone is talking about it today,” Jamilla said.

“They're talking about that baby?” Priya said.

“Oh yeah, the story is everywhere,” Akna said. “People didn't make a big deal about the premature births because somehow, those small babies weren't a threat. Photos of this healthy and normal looking baby combined with a 24-month gestation period is making everyone freak out.”

“What are they saying online?” Priya said.

“Everything,” Akna replied. “People are talking about the mutant baby being born. Other derogatory terms include the usual stuff like freak, monster, alien, G-Mo, etc. On the other hand, some people are welcoming them into the world. Some people use the term 'new species' which is okay, right?”

“New species. Yeah. This will be a lifelong battle,” Priya said as Raven walked in.

“Hi Raven. I hear you're opening new JavaNation cafes in other parts of the country. That's great.”

“Thanks. This will make a total of 30 of them. I’ll have the money I need so I can focus on my new preoccupation.”

“What's that?” Priya said.

“Someone in the Nevada desert discovered one of those Omanji hovering drones that had somehow become disabled. It's a drone like the one that follows your mom and Mr. Roe of RoeBots. Anyway, I bought the drone from him for, well a lot of money. I'm going to examine the drone to find out if we can reproduce the design or learn from it. It's the only one that's ever been caught intact. That's amazing because thousands of them are flying around. We're starting a new company called OmaDrones.”

“I want in on the action.” Warren said.

“You're mister moneybags,” Priya said. “What do you need with more money?”

Warren smiled.

“I don't need the money personally, but I want to help all of us. Yes, $250 billion is a lot of money, but if the world turns against us, it's nothing. We'll need every cent.”

“Oh,” Priya said.

“He's right,” Raven said. “I've been overhearing lots of conversations in my stores lately and there's a lot of resentment and suspicion about us. There's some support too.”

“But we don't mean to harm anyone,” Priya said.

“Yeah, we want to live normal lives,” Sophie said.

“That may be true, but to the outside world, we have an intellectual advantage,” Warren said. “The world likes level playing fields with no advantage for any race, religion, or social group. We live in the era of everyone being equal.”

Priya glanced over at Akna and Jamilla.

“What do you guys think?”

“Well now that I know you Pree,” Jamilla said. “I think you're a normal person with a good memory and a lot of drive. However, you do have a big advantage. I got a near perfect score on the SAT, and yet I could never go through four years of undergrad work in a year and breeze through and get my PHD the way you guys did, but you act as though you're average.”

“Well, I think I’m average,” Priya said. “I know a friend back home named Amy. She helped us with our network and is going to Stanford in the fall. She's the smartest person I know. She's smarter than me.”

“Me too,” Sophie said. “She's like you Jamilla, and you too Akna. Come to think of it, I think of you guys as being smarter than me. I'm not sure if I could have qualified to get into Stanford if I were not abducted by the Omanji. My IQ was 130 or something. Top 3%? That's why I get upset whenever anyone shows me pity for being abducted and modified. The abduction terrified me, but the genetic modification was the best thing to ever happen to me.”

“Weren't you scared?” Akna said.

“Yeah, I felt scared when they paralyzed me,” Sophie replied. “But I can't imagine going back to the way I was before the abduction. I'm me now. I like who I am.”

“I guess that's how life is,” Priya said. “I remember telling my brother I wanted to fix his autism. He got upset with me because he liked being who he was.”

“Okay, here's a problem,” Warren said. “A few of us want to get married. Many of us are from cultures where you get married when you're young. News about this got out and now some people are calling for the county of Santa Clara to refuse to issue them a marriage certificate.”

“Why do they refuse to do that?” Priya said.

“They claim only real humans can be married.”

“We're not human?”

“Not according to them,” Warren said. “Pablo and his new law firm are working on it right now.”

“C'mon. They can't be serious.”

“They're deadly serious Pree,” Warren said. “Their ultimate goal is to stop us from reproducing.”

“Really?” Priya said. “They're that threatened by us?”

“Yes,” Warren said. “They're calling us an existential threat to the human species because we're not human. They're citing existing laws banning the modification of the human genome for purposes beyond the curing of disease. Under these laws, we were created illegally by the Omanji.”

“I can't believe this,” Sophie said.

“Believe it,” Warren said. “In sports you should take your opponent seriously. In tennis for example, if you sit back and admire your shot, you'll end up with a mouth full of fuzz.”

“I thought we ended all this racist stuff a generation ago,” Priya said.

“Human nature is still unchanged,” Warren said. “A frightened or ignorant human is still the most dangerous animal on the planet.”

Okay,” Priya said. “Now I'm taking it seriously.”

“Good, you should be.”

“I want to focus on my genome project to find the causes of birth defects and autism. We're getting a data set tomorrow and we're going to begin our genetic study of 5,000 autistic children. I hope we find something.”

Warren blinked to activate his eyepiece again.

“100 more babies with our DNA were born in the past hour. It's happening. Everyone is talking about it.”

Warren spotted something out of the corner of his eye.

“Duck.”

The brick came crashing through the window and came to rest at

Priya's feet.

Priya picked it up and ran outside, chasing the car up the street. Everyone followed her outside as the car got stuck behind some other cars at a stop light. Priya caught up to the car and threw the brick through the car's back window. A guy in the back seat leaned out and spit at her face. The light turned green, and the car sped off. Warren caught up to her and pulled her out of the street.

Priya screamed.

“Jerks. Why did they do that?”

He held her close.

“They're afraid. They hate those who are different from themselves. C'mon, let's go back inside and clean up the mess. Raven is on her way.”

She grabbed his hand tightly and held on as they walked back.

“Thanks Warren. I wanted to kick their— Raven you're here. They did a lot of damage. I got their license plate with my eyepiece and stuck a tracking device on their car. Yeah, I had one handy. I got a few good photos. The police already know the address and they're looking for them now. The address is out of state though.”

“Let's clean up this mess,” Akna said.

After they cleaned it up, Warren walked Priya and Sophie back to the apartment. They said good night.

“Pree, you were holding hands on the street,” Sophie said. “You can't ignore the facts anymore.”

“I was upset. He wanted to be nice. I'm not ready for a boyfriend.”

“You're 19.”

“Yeah, but I feel 16 or maybe 13. It’s too soon for Warren too. And for you.”

“You like each other though.”

Priya smiled.

“Maybe a little.”

A few weeks later, Priya and Sophie stood in front of 25 employees in their new space in the startup factory building.

“Welcome everyone,” Priya said. “I'm excited. Genomaly is now a reality. Our first goal is to identify the causal links between 25,000 genome locations and parental exposures on our 5,000 autistic children. We need to interview the parents. Afterwards, we need to compare the DNA from our children to a control sample of 5,000 similar children's DNA without autism. Then we need to devise genetic reprogramming corrections which can be done with a fertilized single cell zygote and possibly gene therapy. Here's Sophie.”

Priya stepped to the side for Sophie to speak.

“Another one of our goals is to develop a new programming language which will allow an AI agents to modify DNA in the same way a programmer can modify the source code of an application. This isn't new and DNA is not like programming language code, but you don't have to be first to the market to succeed. We want to be able to program a cell via genome and epigenetic modifications. Here's Warren.”

“I’m happy to be a part of Genomaly as an investor. The successful blending of discovery and genetic programming is our goal. We need to master genetics on all levels so we can control our future. If the Omanji could do it, so can we.”

They spoke for a while longer. It was the first of many weekly meetings. Soon they went to work. Priya, Sophie, and Warren met in Priya’s office.

“We’re going to need lawyers,” Priya said. “I’m getting inquiries asking about the nature of our business. When I tell them we're doing research into genetic conditions, they don’t believe me. They mention conspiracy theories.”

“What are they saying?” Warren said.

“You name it, they're saying it. We’re working for the Omanji to help them take over the world. We’re modifying ourselves so we can take over the world. We’re going to create new diseases which won’t

affect us so we can take over the world. It's always about us being evil and taking over the world. I want to find causes. I want to improve the world."

"Me too. I'll talk things over with Pablo and his team," Warren said. "I think every company we start will face problems like this. The leading coffee house is saying Raven and JavaNation are putting the equivalent of genetically engineered human catnip into the coffee drinks to get people addicted."

"HumanNip." Sophie said. "I love it."

Warren smiled.

"Yeah. Ian's new company is getting closer to a strain of bacteria that will destroy cancer cells and leave normal cells alone. They attach to magnetic nanoparticles so they can be extracted easily when the tumor is destroyed. People are saying Ian has a plan to infect humanity to destroy it. And Raven is getting threatening messages about her OmaDrones project and her self-replicating robots project."

"It never ends. What else is happening?" Sophie said.

"Oyuun from Mongolia is starting a high energy physics company. He calls the company Emc2. He's devised a way to create extremely hot temperatures and pressures to get a fusion reaction going. He gets much more energy out than he puts in. Though many have reached break-even, this is the first time ever anyone reached this commercially viable level of net-positive energy production. He built a successful prototype. My point is the energy companies are trying to shut him down by saying nuclear fusion is dangerous. They're winning the debate in the public eye with no scientific evidence to back them up. They're comparing his reactor design to Chernobyl even though fusion is so different than traditional fission."

"We all need lawyers against the ignorant," Priya said.

"Yeah. Fortunately, Pablo's team has over 300 human lawyers now, and each controls hundreds of agents. They can handle anything."

"That's too many lawyers." Sophie said. "That can't be good for the planet."

Pablo shook his finger and pointed at Sophie.

“Very funny. You'll thank us someday.”

“You guys will find this interesting,” Warren said. “99% of us who recently graduated are now working in a company, still in school for other degrees, or in their own startup. Out of the 20,000 of us who came here for school, about 16,500 work here in the Bay Area, but some of us are still in every country.”

“I think everyone wants us,” Priya said. “At least the companies want us for the money.”

She looked into her eyepiece.

“On our social network, I'm reading lots of complaints about discomfort around coworkers. Nothing violent yet. They’re getting big salaries and good projects.”

They talked for a while longer and went back to work. At the end of the day, they ended up at JavaNation as usual.

“Hey Pree,” Sophie said. “I set a news filter on the word ‘species.’ I’m seeing a bunch of stories about the babies with our DNA. A well-known genetics expert did some analysis and is calling them a new human subspecies. She calls them Homo sapiens altasapiens. She also said we may be an entirely new species if we can't or don't want to interbreed with unmodified humans. We’d be Homo altasapiens.”

“That’s what Pablo predicted a while back,”

Sophie smiled.

“Even he can be right. They’re saying this is the first new subspecies of human since Homo sapiens sapiens replaced Homo sapiens neanderthalensis starting about 60,000 years ago and ending about 30,000 years ago. Or an entire new species.”

“Oh great, this is going to freak everyone out,” Priya said.

“What?” Akna said as she and Jamilla walked into the café.

“Oh, a genetics expert is saying the babies with our DNA represents a new human species.”

Silence.

“The genie is out of the bottle,” Jamilla said.

“Yeah, it’s out,” Priya said.

Akna looked into her eyepiece.

“The word ‘species’ is trending on Reddit. Here’s a story which implies the old human species, us, is doomed to extinction.”

“Check out the comments under that story,” Jamilla said. “Some people are saying extinction can be avoided if they kill the babies now. One guy says the mutants should be sterilized. Others agree with him.”

“Well, how kind of him,” Priya said. “I’d like to take his-”

“Pree, that’s not going to solve the problem.” Sophie said.

“I know but I’d still like to, well never mind. Oh, hi Pablo. Have you been watching the latest events?”

“Yeah, and you know it's the beginning. I’m glad many of us decided to practice law. We’re going to need all the legal help we can get. I mean, across the street more protesters are walking around with signs.”

Priya stood up and walked out the front door of the café. “I’m gonna give them a piece of my mind.”

“No.” Sophie said.

They followed Priya to the other side of the street. She walked up to the first protester. An older woman holding a big sign.

“Sterilize whom?” Priya said to the protester.

“Them. We need to sterilize the bloody mutants before they reproduce and take over the world. They’re a curse on this Earth. They're not as God intended.”

“Oh? And how did God intend them to be?”

“You know, human. Like normal people. We don’t want thousands of Frankensteins running around.”

“You think they’re monsters?”

“Yeah. Weird implants are in their brains that can read your mind. Alien infectious microbes are in their blood. They're already taking over the banking and financial system. They’ll take over the

government. They want us to go the way of the Neanderthal."

Priya glanced at Sophie, Warren, Akna and Jamilla in silence.

"Would you be able to identify a mutant if you saw one?" Priya said.

"Yes miss. They aren't cute like you. They appear as normal humans, but they're not attractive. Almost android. They can read minds. I know there's a bunch of them here in Palo Alto. We came here from across the country to chase them off the street. Join us and help us save the world.

She handed Priya a printed pamphlet and a similar notification instantly appeared in her eyepiece due to their proximity. Priya blocked the sender immediately.

"Okay, I'll think about it. Good luck finding them," Priya said as they turned and walked away.

"I decided fighting them isn't the best idea, but I wanted to punch her in the face. I'm surprised she didn't recognize me since others have thrown tomatoes and bricks at me."

"Yeah, I stood next to you to stop you in case there was trouble," Warren said. "The last thing we need is bad publicity."

"Thanks, Warren, for being supportive," Priya said as she put her hand on his shoulder.

Sophie turned to Akna and Jamilla and smiled.

They all giggled.

Priya thought silently to Sophie, "I heard that."

"Oops." Sophie thought back as she smiled.

"I think they're communicating silently," Akna whispered to Jamilla.

"I heard that too." Priya said to them as she smiled. "Yes, we were."

They walked back to their apartments and said good night. For the next few weeks, they worked hard and stayed out of sight. The protests continued to grow.

“Pree, come here,” Sophie said. “I think we found something.”

“What?”

“We still need to finish the parental interviews, but here's a list of anomalies present in about 50 genome locations which seem to contribute to autism. One of the autism anomalies is like a modification the Omanji did to us that might give us a better memory. The more I learn, the more I respect the accomplishments of the Omanji. It's hard enough to discover elementary things about our own DNA. They took discovery to new levels by learning our alien DNA and making perfect changes to all 25,000 of us taking account for epigenetic factors in only a few weeks. In each of 40 trillion cells.”

“I agree,” Priya said as they walked into the conference room with Akna and Jamilla. “This autistic modification does what?”

“I'm not sure, but it affects neural development. It's not responsible for the second axon extending from each neuron, but it enhances dendrite connectivity, which is affected in autism. Now, here is something even more interesting. There’s a series of modifications nearby which might be responsible for our second axon.”

“Let’s work on that,” Priya said.

Sophie looked outside.

“Hey, what’s all the commotion going on in the parking lot?”

They walked downstairs.

“Ian, what’s all this about?” Priya said.

“We’re celebrating! The latest trial of our bacteria was a success. The cancer was completely removed in 95% of rats with no spread of the cancer or the bacteria to other parts of the body. The bacteria release an antitoxin at the end of their life, and they die. That's how the infection self-terminates.”

“Congratulations Ian.” Priya said. “What happens now?”

“Human trials are next. In a few months we begin. The approval process should proceed much faster than a New Drug Application because it’s not a drug. It’s a therapy according to the new rules. I

disagree but, in this case, it will help our cause."

"Guys?" Sophie said. "I think we better take the celebration inside. Those protesters are coming across the street towards us."

"Ouch." Priya said as a tomato hit her in the leg. She moved towards the protester who threw it.

"Pree, don't," Sophie said. "Let's go inside."

They quickly packed up the picnic items and walked inside as quickly as they could. Tomatoes hit the windows as they watched from inside.

Warren ran up the stairs, taking two stairs at a time.

"I think we need to get out of this complex."

"It's okay, we're safe in here and the police are on the way," Ian said.

"No, I mean we need to move to a more secure location. Big companies have security, but we don't. Those protesters are getting angry. We're going to get hurt."

Priya walked over to the window and looked outside.

"I think moving would be a show of weakness to them. Let's take a stand right here. We can hire security guards and do other things to make things safer. Why is it that the jerks have all the rights and—"

A brick came crashing through the window. They ducked for cover under a desk. Warren covered Priya's head with his jacket and held her.

"What do you think now Pree?" he said.

Priya tried to get up, but Warren held her down.

"I'm going to go kick their—"

"Anger does us no good," Warren said as he continued to hold her.

"He's right," Sophie said. "We can't retaliate. That will make things worse."

Soon, the police arrived and forced the protesters across the street.

"You can let go of me now Warren," Priya said with a smile.

“Oh, okay,” he said. “I don’t want you to get hurt.”

“I’m calm now.”

They gazed into each other's eyes for a long moment. He let go.

Sophie smiled only to Priya.

“Sophie Shhhh,” Priya thought back to only Sophie.

“What are you guys saying?” Warren said. “I can tell you’re thinking to each other, but I don't know what. You excluded me from the thought chain.”

Priya gave Sophie a long look.

“Nothing,” Priya said. “Sophie's being a pest as usual. Okay the police are here, let’s clean up this mess.”

They walked outside. A protester threw another tomato which missed Priya and hit a parked car.

“Officer, what can we do to protect ourselves?” Priya said.

“There’s not much we can do,” the officer replied. “We can get them for vandalism and make them pay damages if you can record them doing it, but that’s all. They can rightfully protest on the sidewalk.”

“They can protest even if they’re throwing bricks?”

“That might be considered assault if you can identify them and prove it in court. Otherwise, it’s vandalism. My advice is to stay inside, out of harm’s way.”

They walked inside.

“You’re right Warren,” Priya said. “Let’s move to a more secure location.”

“It will take a few months, but I think it’ll be worth it,” Warren said.

Chapter 63 – Humans Fight Back

A few months later, they settled in their new location.

Pree, don't you love this place?" Sophie said.

"Yeah. No more tomatoes on our faces. I like our new discovery even more. I think the baby rats are becoming more intelligent each day."

They walked into the room. 100 cages lined the walls surrounding a maze and other tests designed to measure intelligence.

"Hi Akna," Priya said. "How are the babies?"

"They're better than we expected."

Jamilla picked up one of the baby rats.

"This one just walked through the maze more quickly than her mom. She's only one month old. She already has metacognition. We found out yesterday. We gave her a test where she got a big treat for being right, no treat for being wrong, and a medium treat if she opted out. She opted out of a test where she didn't know the answer in return for the medium reward. Most rats don't become meta-aware until they're several months old."

"Do you think her neurons are growing a second axon?" Priya said.

"It's possible," Akna answered. "When she's bigger, we'll sedate her and take a look. For now, we're tracking her development."

"Hey," Priya said, "Do you guys want to go with us? We're meeting our friend Amy at JavaNation. This is her first day at Stanford."

"Sure, let's go," Akna said. "It's lunch time."

They arrived, right as Amy walked in.

"Amy. You're here." Priya and Sophie said at once as they all hugged.

Priya introduced Akna and Jamilla to Amy and they sat down and ordered their favorite coffee drinks.

“How did your first day go Amy?” Priya said.

“I’m excited. My bioengineering professor is the one who got a Nobel Prize for discovering a way to genetically code bone growing bacteria to locally heal fractures in only a few days. This also may cure osteoporosis with no side-effects. He did that in the days before the genetic programming methodology had been implemented. He had to splice in the genes manually.”

“Manually? Ah, the good old days,” Priya said. “They used flint axes back then to splice their DNA.”

They laughed.

The sound of breaking glass shattered the moment.

“Pree.” Amy shouted as Priya fell to the floor. “Someone, get an ambulance.”

Sophie silently summoned an ambulance. Amy held her palm against Priya’s head, attempting to stop the blood shooting out of her head in pulsing jets. She pushed hard and stopped the flow. Priya lost consciousness.

Soon they were at the hospital and Sophie contacted Nisha. A nurse wheeled Priya into an operating room. Sophie, Amy, Akna, and Jamilla walked around in the waiting room. Warren ran in, almost tripping over a side table.

“How is she?” he said.

“We don’t know anything,” Sophie said as tears ran down her cheeks.

An hour flew by. No news. Nisha, Quinn, and Sanjay walked into the waiting room.

Sophie was surprised. “How did you get here from LA so—”

“Hi Bok. I guess you drove?”

“Yes, I heard about the incident so we got here as quickly as we could.”

"How is she?" Nisha said.

"We don't know anything."

Quinn walked up to the desk and demanded to know what happened. Soon a doctor came out of the operating room.

"We had to remove some glass and repair an artery. We induced a coma because she had a lot of swelling and pressure. The bottle had a thick bottom and may have caused some brain damage. We aren't sure."

"Is she going to be okay?" Nisha said.

"We don't know," the doctor replied. "I'm sorry. We'll let you know as soon as there's a change in her condition."

Nisha and Quinn held each other and cried. Sophie and Amy hugged them.

Silence.

"Do they know who did it?" Sophie said.

"Let me see," Warren said as he activated his eyepiece. "No news. I'm looking at the JavaNation surveillance record. I can see the guy, but his face is blocked by a tree. Afterwards, he walked away. Even if I knew him, I wouldn't be able to identify him. Did anybody look out the window when this happened?"

"I saw him I think," Akna said.

She activated her eyepiece recorder with a double blink.

"Let me see. Okay, there's the guy. I'm isolating his images and I'm going to post them to the police AI website and some other places. Someone must know who this guy is. Of course, the protesters may know but they won't tell."

They waited in silence for several hours. The doctor eventually came out.

"Hi Doc," Quinn said.

"Hi everyone, she may have sustained some permanent brain damage. We don't know enough about her species to say for sure. Her brain has significant differences. We installed a shunt to relieve the

pressure. We're keeping her in a coma until the pressure goes down in a week or two. I'm sorry."

Nisha sobbed as Quinn held her.

Nisha, Quinn, and Sanjay stayed the night in the waiting room while the others went home. The next day, Bok flew back to his colony in the desert while Priya's family stayed at a nearby Airbnb.

Priya woke up three days later, to everyone's surprise. They were in their hotel room when they got the news. They rushed straight over to her hospital room. The first rain of the winter rainy season fell softly against the windows.

"Hi Mom, my head hurts. Where am I?"

"You're in the hospital. Someone hit you with a bottle when you were at JavaNation with your friends. You've been in an induced coma for three days."

"I don't remember anything."

The doctor came in along with Sophie, Amy, and Warren.

"How is she doc?" Quinn said.

"Her brain is healing at an astounding rate. I've never seen anything like it."

"Is this associated with her genetic modifications?" Sophie said.

"Possibly, but we have no data on her people. You guys somehow don't get sick or injured as often as normal people."

"That's because we're indoors hiding from jerks like the guy who threw the bottle," Sophie said.

"That might be," the doctor said. "However, I think there's more going on here than that. Here's a picture of her wounds three days ago, and here they are now."

They studied the photos.

"This amount of cellular repair normally takes at least a week, not three days," the doctor said. "It's great news for Priya and for everyone

who's been modified. There's something going on. We're studying tissue samples now."

Pablo cut into the conversation.

"Please don't let those samples leave the lab. We've formed a corporation, which includes our own DNA as private property. That's our right under the Personal Identifiers and Genetics act which recently passed."

"We'll comply," the doctor said. He walked out and left them in Priya's hospital room.

"Pree, how are you?" Nisha said.

"I have the worst headache ever. It's like when you eat something icy cold too quickly, and the pain gets worse and won't go away."

"The doctor had you in a coma for a few days to reduce your neural activity and reduce the swelling. He said the pain and swelling will subside in a few weeks, but you're recovering more quickly than normal."

"Warren? What have you been doing while I was gone?" Priya said.

"Besides worrying, Pablo and I are trying to get this, and similar crimes classified as hate crimes under existing laws. I think we have a chance. The protests are getting bigger and more violent. Nobody is standing up for us, except us. The police protect us within their minimal limits but it's not enough. People are hiding behind their right to protest, to do us harm. We're also fighting to become a protected minority group."

"That's good," Priya said. "We can't walk down the street because anybody might do anything to us at any time. Hey, Amy sent some pictures of us at JavaNation seconds before the bottle incident."

Priya looked closely into her eyepiece.

"Hmm, doesn't Amy seem more mature than us?"

"Let me see," Sophie said. "I'm looking at these and comparing them to a photo of all three of us from three years ago, just before we were abducted. Hmm."

“Interesting,” Nisha said, looking at Priya and Sophie. “You guys haven't aged, but Amy has matured. You guys are going to age at a slow rate.”

Priya and Sophie studied each other closely.

Silence.

A few weeks later.

I’m glad you’re back,” Akna said to Priya as she walked in the door of the rat lab.

“Yeah, I missed you guys,” Priya said. “I’m recovering after waiting forever for the headache to subside. There’s still a little pain but it’s going away. What’s happening?”

“The baby rats are beating the adults in all the intelligence tests now,” Jamilla said. “Something is happening in their brains. Normal rats are close to being as smart as chimps in some ways, but this batch might be as intelligent in many ways.”

Sophie walked into the room.

“Did you hear the news? Oyuun has his fusion reactor up and running thanks to Pablo fighting off the power companies. He’s putting energy into the grid as of 10 minutes ago. It’s a trending story around the world. When you adjust for inflation, oil is the same price as in 1930. When you combine conservation, solar, electric transportation, LED lights etc., and now this, oil is only good for special purposes.”

“That’s great,” Priya said. “Burning oil now is as inefficient as when they burned whale oil for light and heat. The inflation-adjusted oil price has been flat or falling for decades now. I hear he’s making a public stock offering tomorrow. Let me look. They’re estimating a valuation of $900 billion for his company despite only one generator working.”

“That’s because of his patents, thanks to Pablo, and the easy duplication of the design,” Sophie said. “Some people are saying he’ll own much of the world’s energy production, due to his low cost. Less than solar.”

“I guess this makes his company stock low priced,” Priya said. “The way stocks are valued baffles me sometimes. I understand both sides. I guess the $900 billion valuation is halfway between what it’s worth now and its potential worth later.”

“I bet Warren is happy today,” Sophie said. “He’s going to make many more billions tomorrow.”

“He’s not in this for the money Sophie,” Priya said. “He’s supporting our entrepreneurial efforts. That’s all. He has enough money. I mean—”

Sophie smiled.

“It’s okay Pree. We know you’re biased.”

“I am not. I’m saying that it’s not all about money for him.”

“Okay, okay,” Sophie said as she smiled at Akna and Jamilla.

“Are you in this for the money?” Priya silently thought to Warren, who was in his office. She allowed Sophie to join the connection.

“Of course not,” Warren thought back. “Once I had a place to live and the freedom to work on important projects like our survival, more money became less important. The more I understand what’s happening in the world, the less wealthy I think I am.”

Sophie shook her head at Akna and Jamilla.

“Anyway, let’s all meet at JavaNation at lunch,” Priya said to everyone. “They installed graphene glass.

They walked down the street; dodging food items thrown by the protesters. Amy met them.

Amy got a notification in her eyepiece.

“Guys, stop for a second. Remember how I got a photo of the bottle thrower’s face?”

“Yeah?” Priya said.

“I’ve got an ID lock on him. Keep walking and don’t look. He’s leaned against the tree near the fountain talking to those other guys with the picket signs.”

“Let’s walk across the street to JavaNation and contact the police,” Priya said. “I want that guy strung up by the—”

“Okay Pree,” Sophie said, smiling.

They sat down at a table in back, far away from the window.

“He’s coming over here,” Amy said. “I think he spotted you Pree. Get in the bathroom and close the door. Oh, it’s too late, he sees you.”

Amy stood up in front of Priya.

The bottle guy stopped in front of Amy.

“What’s the problem mutant lover? Why are you protecting them?”

“We’re all recording what you say and do,” Amy said.

“So what? There’s no law against expressing my opinions,” the bottle guy said. “They’re going to take over the world. Protecting them makes you as bad as them. You’re encouraging them. Do you work for them? Mutant lovers?”

“Shut your stupid head hole, jerk.” Priya said.

The bottle guy towered a foot over Priya.

“Calm down Pree,” Amy said, pushing Priya back down onto her seat.

“Just go, okay?” Amy said.

Three police cars pulled up in front of JavaNation. The protesters noticed this and walked towards them to get a closer look. Several officers walked up to the bottle guy.

“You called them, didn’t you?” the bottle guy said, as an officer put hand cuffs on him. “There’s nothing wrong with expressing an opinion. I’ll be back tomorrow G-Mo’s.”

Priya got in his face.

“I doubt it, you piece of-,”

“Stop,” Sophie said.

They put him in a police car and drove away. The other officers stayed behind to move the protesters back across the street. They interviewed the protesters and released them.

“Thanks Amy,” Priya said as she gave her a hug. “You're the smart one.”

Raven walked in.

“I heard you were almost attacked. Are you okay?”

“I’m fine,” Priya replied. “My head hurts but your icy blended mocha drink should help.”

She tried to smile.

“Remember the Omanji drone I bought off the guy in Nevada?” Raven said.

“Sure,” Priya replied.

“I got the drone working.” Raven said. “It tried to get out, but we have it in a box. I studied it and made new a drone that works like the Omanji drone using its anti-matter power source. I’d like to use the drone for surveillance. It's got 97 years of power left. I'd like to catch guys like the guy who threw the bottle. The eyepiece can’t do everything. Akna happened to look out at the right time. This drone can follow people and record everything.”

“What does the drone look like? Will it be easy to see?” Priya said.

“Turn around,” Raven said.

“That? I can barely hear it,” Priya said.

“I gave you permission to connect to it. Go ahead.”

“There we are in my eyepiece,” Priya said. “Nice hi-res camera. How do you control it?”

“You don’t. It’s autonomous.”

“Aren’t autonomous AI machines dangerous? What if this drone decided to attack people?” Priya said.

“Don’t be silly Pree. I’m not adding functionality. I’m happy the

thing flies and records. Don't worry. I installed a detached remote shutoff switch just in case something goes wrong. I also must send an encoded restart signal before it can operate after a shutdown. It will hide and shut down in a day if I don't send a signal every day, so it won't go crazy for long. I have the drone configured to follow you. If you go inside, it'll wait in a safe place until you come out."

"It sounds perfect Raven. Thanks," Priya said.

Two men walked up to them as they talked.

"Are you Raven Corbeau?" the first man said.

"Yes I am."

"We're from the department of defense. We'd like to discuss something with you, in private."

They took her aside and one hour later, the men left. Raven walked back to them.

"What was that about?" Priya said.

"They offered me $50 million right now for my drone design and $30 million per year to work for them."

"What did you say?"

"I said no, of course. We all made a pact to not work for any military organization. JavaNation is valued at $4 billion now. Therefore, even if we didn't have a pact, I have no monetary interest."

"Did they pressure you?" Priya said.

"Yeah, they asked me if I cared about my country. Of course, I said yes to that. They tried to get me to commit to something right on the spot. I don't trust the military. Also, look what happened on Oma. All those dark ages."

"I wonder if these military requests are happening to the rest of us," Priya said. "Let me ask around on our network."

She paused in silence while she gathered the information.

"Yeah, they're asking most of us if we wish to join the military. Most of us are at least 18 now. It's happening in other countries."

“I'm hearing the same thing too,” Sophie said. “This started today. Someone in the government made a conscious decision to recruit us starting now.”

“Read this,” Priya said. “There is already some backlash against us on Reddit. People are saying we're unpatriotic for not joining the military. Great, this is what we don't need. Let's get back to the office before we're attacked again.”

They walked out the door and looked across the street at the protesters. Raven's drone followed closely behind Priya.

Priya pointed across the street.

“There’s a scary sign. ‘The mutants are the work of the devil.’ That's pathetic. Here they come, let’s go.”

Raven walked out onto the street behind them.

“Pree, use the app on your eyepiece to broadcast to your Reddit feed from the drone.”

She turned on the broadcast right as the protesters surrounded them and chanted, “Mutants, Mutants.”

Millions in Priya's community watched the drone's broadcast in Priya's stream.

Dozens of Priya's friends were soon on the scene. Then, about 100 from Priya's community arrived within minutes. The protesters watched the crowd coming and backed away from Priya and Sophie.

“Let's get out of here,” Priya said.

Her friends and supporters followed her to the park across the street away from the protesters. She stood on a rock and glanced at them with her friendly drone hovering behind her.

“Thank you for supporting us. This means a lot. I don't understand those protesters. We carry no strange diseases. We aren't Omanji in human meat suits. We can't read your minds. We aren't going to take over your minds. We mean no harm. We want to do our work and live our normal lives like anyone else. We want to make discoveries in technology and science which will make the world a better place. We're normal people like everyone else.”

The crowd of about 200 people cheered as Priya gave her speech. Twenty million people watched the broadcast. She because iconic.

Priya returned to work after the incident.

Chapter 64 – A New Generation

“Come on in and sit down,” Priya said to the young couple as they entered through the front door of Genomaly. They were abducted by the Omanji along with Priya. “Hi Irina and Leonid, how is little Anna doing?”

“She's growing slowly,” Irina said.

“Yes, she is below average in all categories of physical baby development for a 10-month-old,” Leonid said. “Do you think it's because of our modified genes?”

“She looks like a normal six-month-old,” Sophie said. “I don't think there's anything wrong with her. We're all maturing slowly, right Pree?”

“Yeah, we're 19 and we appear to be 16 and feel 13. We were abducted when we were 16. You guys are older than us, but don't you two think you're maturing slowly?”

“Yes, I've noticed my friends are maturing faster than me,” Leonid said. “I don't notice anything unusual until I visit my friends.”

“Well, little Anna is maturing slowly too,” Priya said. “I don't think there's anything wrong with her. Let's give her the rouge test. It's not officially valid anymore but it's a good place to start.”

Priya dabbed a dot of red rouge on her little nose and held a mirror up to her. At first, she stared at herself and identified a playmate, as any 10-month-old baby would do.

“Hey look,” Priya said. “She sees the dot on her nose. She's wiping it off her nose. She's exhibiting advanced mental development. Only half of all unmodified 18-month-old babies self-recognize. Anna is not intellectually behind other babies her age; she's far ahead of them. She's just slow to physically age, which makes her appear slow to develop to a casual observer.”

They spoke for a while. They walked into the lobby and towards

the front door.

“Thanks, Priya,” Leonid said. “We’re nervous since we’re the first mod parents of a full-term new species baby.”

“Yes, but you're now in the company of 20 other mod couples who have had babies in the past few months. You guys were abducted when you were 18 and now, you’re almost 21. We need to stay in touch so we can keep track of the developmental cycle.”

They set up future appointments and walked out of Priya's office.

As they turned the corner to walk out the front door. Two FBI agents stood there, blocking the doorway.

“Are you Leonid and Irina Akulov?” the first agent said.

“Yes,” Leonid said.

“You must come with us.”

“What law have they broken?” Priya said.

The first agent stared at Leonid and Irina sternly.

“You’re being charged with the procreation of offspring using artificial Omanji-modified DNA.”

Sophie walked into the lobby. Priya stared at the agents in disbelief.

“You can’t do this. That law is about creating babies with our modified DNA using artificial means.”

The second agent said, “Under this law, it doesn’t matter how the baby is created. A new interpretation by the Supreme Court forbids the creation of any baby using artificially manipulated DNA.”

“I’ve never heard of this interpretation,” Priya said. “When did this happen?”

“About five minutes ago,” the first agent said as he checked his eyepiece. “We can't charge them for something that happened before 5 minutes ago, but we can confiscate the baby after a hearing.

Priya’s eyes opened wide.

“Why you no good—”

“Pree, stop.” Sophie said and she grabbed her arm to hold her back.

“We’re only following orders, now come with us please,” the first agent said as he led them out the front door.

Priya and Sophie followed them down the stairs. Irina handed Anna to Priya.

“Take care of her,” she told Priya.

“I promise. I'll have my parents take care of her. We’ll get Pablo’s legal team to defend you,” Priya said, as they were put into the police car.

Leonid and Irina gazed at them through the rear window as the police car drove away.

“Pree,” Sophie said. “Do you hear what I’m hearing on our telepathic network?”

“Hold on. They’re taking all of them right now.” Priya said. “All 20 couples with babies are in custody now. This is disgusting. I’ve seen these tactics used to rapidly catch entire mafia families or people in drug rings.”

“Pablo knows what’s happening,” Sophie said. “Warren does too. He’s at Pablo’s office.

“Good. Let’s go now,” Priya said.

“They ran down the street to Pablo's office.

“Are you telling me the moment they Supreme Court passed the new interpretation; they swooped right in to take them away?” Priya said.

“Yes,” Pablo said. “I can recall the exact timeline from our network. The arrests started three minutes after they voted in the law. Within eight minutes, all 20 couples were in custody.”

“How should we react?” Sophie said.

“I know how I want to react,” Priya said. “They’re taking away our right to procreate.”

“That appears to be the case,” Pablo said. “They carefully crafted

the interpretation to leave room for amendments in the existing genetics and national security laws. They added this in with a bunch of other amendments on unrelated issues. They hoped we wouldn't notice."

"They intentionally snuck this through, those no good—"

"Pree, you need to meditate," Sophie said.

"What do we do?" Priya said. "Do we just sit here and take this? You know they're going to try to sterilize us."

"We'll fight," Pablo said. "We have the right to live normal lives. We're working on some ideas right now."

Priya turned to Warren.

"We need to do something to keep an eye on what the government is doing. Somewhere right at this moment, people are planning to legally do to us what that guy did to me with the bottle."

"Yeah, I'm going to get our best engineers to monitor this. We had no idea they were amending that law or planning those arrests."

"I think the world is against us," Priya said.

"I don't think the entire world is against us," Warren said. "But there's a lot of fear out there. Fear can short-circuit the logical mind."

"Yeah, that's for sure," Priya said. "We need to share more information on our telepathic network. It's our only secure place. The Omanji technology can't be hacked, at least not yet."

"That's true," Warren said. "Armies of hackers are trying to get into our social network which has 4096-bit encryption. Even if they get in, they won't know what they're seeing. Up to this point, nobody has broken in. Sophie, you've been unusually quiet."

"Leonid and Irina Akulov are talking to me telepathically. They're telling me the police are trying to get them to log into their accounts on our social network."

Warren fell silent for a moment.

"Okay, I just told the information technology guys to disable the accounts of those who were arrested."

“I’m sure glad we can communicate silently,” Priya said. “We need to perfect our techniques in case they physically pull the plug on our online social network.”

“Oyuun is providing a lot of the world’s power already,” Warren said.

“Yeah, but they can always take a hammer to our servers no matter how well we hide them,” Priya replied. “Let’s stop putting vital current information there.”

“Good idea Pree,” Warren said. “I’m having the IT people warn everyone now.”

“I’m going down to the police station,” Pablo said. “They need lawyers.”

“Okay, good luck,” Priya said. “I knew we’d need good lawyers.”

Priya and Sophie walked back to work.

“What does the protester’s sign mean?” Priya said. “Secret society = World domination.”

“Let me search,” Sophie said.

She blinked her eyepiece to life.

“Ah, I understand. They think we’re creating a closed society to take over the world. They think once we own the world, we’ll create a master race which will dominate and own ‘real’ humans.”

“Ugh, just what we need, more conspiracy stories,” Priya said. “Check out that sign, ‘Unfair: I lost my job to a mutant.’ That’s untrue. We’re creating jobs.”

“We may be creating jobs on balance,” Sophie said. “But that protester may have lost his job to one of us. All you need for a good conspiracy story to go viral is a small element of truth.”

“In other words, our private social network is a secret society?” Priya said.

“Yes.”

“And because Warren and Oyuun are two of the wealthiest people on Earth, we're questing for world domination?”

"Yes," Sophie said.

Priya laughed.

"Take this seriously Pree. This type of fear can get out of hand."

"Yeah, you're right. It's hard to take insanity seriously. However, I suppose if a crazy person pointed a gun at me, I'd take it seriously. Okay, let's get back to work."

"Okay, but first let's go say hi to Ian. Today's the big day."

They walked into his lab.

"Congratulations Ian," Priya said. "Over 1,000 people are cancer free because of your little flesh-eating friends."

She smiled and continued.

"Yes, I know they don't eat flesh. I remember when we walked into your room, and you told me you had flesh eating bacteria in those Petri dishes. Gross!"

"Yeah, now over a million orders are lined up," Sophie said. "This is a big day. I used to worry that someday I'd get cancer, but not anymore."

"Thanks guys. I used to joke around about finding a cure for cancer," Ian said. "I still need to create strains for the stealthier cancers, but I'm getting there. I couldn't have accomplished this without Warren's initial investment. And they aren't GMOs!"

"You could have done this with me or without me," Warren replied. "I helped things go a little faster. The IPO will give you the time to work on the other strains. The stock market is screaming higher, so now's the time. It's tripled from where it was before the Omanji came."

"Why is the market going up so quickly?" Priya said.

"The biggest gainers are the companies where we work. Levitation Sciences, C5-AI, RoeBots, Bioneer Scientific, and other high-tech companies are up over 500%. It's driving the rest of the market higher."

"If times are so good, why are they protesting against us out on

the street?" Priya said.

"They fear us, so they want to stop us and make us go away," Warren replied. "They imagine us becoming wealthy and they think we're taking money from them. However, we're creating wealth. Ian is not taking anything from anyone by curing cancer. Well, he is putting the chemotherapy makers and cancer cure fraudsters out of business. I guess they'll be picketing against us. Overall, society is benefiting from what we produce and discover. They also fear us for those ignorant old school reasons. We're aliens, we can read minds, we spread disease, etc."

"You're right," Priya said. "Oyuun is making those fusion power plants and energy prices are dropping. Then he made those small graphene, fusion power plants to desalinate water in drought-stricken places. His most ambitious goal is to use antimatter from his plants to send a probe to the closest habitable planet outside our solar system, at Proxima Centauri b. It's about 4 light years away, which is close. The Omanji had backup planets, we should too. Yeah, their first backup failed, but still."

"We're coming up with a clever way to improve the cognitive function for mentally challenged people," Sophie said. "We're doing a lot of good in the world. Most of us are under 20 years old."

"Yeah, but they're still protesting and throwing things at us," Priya said. "Now they're arresting us if we have babies. Among the 25,000 of us, a baby will be born every week or so according to the averages."

Silence.

"I'm sorry," Priya said. "For now, let's celebrate Ian's cure for many types of cancer."

Everyone cheered.

Chapter 65 – Priya Testifies

A few weeks later.

“Mom, I can't believe they're doing this,” Priya said into her eyepiece. “Thirty of us are in jail for creating humans with artificial DNA. For having children. It's our own DNA. Pablo hasn't been able to get them out of jail and there have been no trials due to them being classified as a threat to the security of the country. The babies are now in foster care. They're regular babies to us. The parents work at good jobs. Nobody must support anyone.”

“Sorry Pree. Be careful. I've been overhearing some frightening conversations. People are talking about how they might need to nip this in the bud.”

“Nip what in the bud?”

“I'm not sure how to explain this,” Nisha said. “As you know, some people are saying you guys must be stopped from reproducing because you will eventually make the human species go extinct. Even well-respected scientists are saying this might happen. They figure since there's no way to stop you guys from reproducing in a voluntary way, they must sterilize all of you as well as all one million babies around the world with your modified DNA.”

“Are you serious? They're the ones who should be sterilized. Those incompetents.”

“Calm down,” Nisha said as Quinn listened in. “You guys need to pay close attention to what's being said about you, and who is saying it.”

“Okay, I need to go.”

“Please be careful, this is serious business and you're only 19. None of you are 21. Maybe you should come home.”

“I'm okay. I'll talk to you later. I love you.”

They disconnected.

“Sophie, did you hear that?” Priya said.

“Yeah, we need to do something. Let's talk to Amy.”

Soon they were connected.

“Amy, have you heard anything about us lately? Some people are talking about sterilizing us.”

“I was going to contact you guys,” Amy said. “We had a big discussion in genetics class about trans-humanism. The concept has been around for a while.”

“Yeah, we know about it,” Priya said. “Someday our species will direct our own evolution instead of allowing the whims of nature do determine our future. The Omanji did it. We've seen some of this happening already with artificial limbs and gene splicing to help cure many ailments. What did your classmates say about this?”

“We had an emotional discussion. The professor said you guys are the start of a great divergence in human evolution that will lead to many new species of human-like descendants. We've reached a fork in the road in human evolution. Some of my classmates like the idea and some say humans should fight back to preserve the species. Some people got angry and left the lecture hall.”

“Ugh. Why are people making such a big deal about us?” Priya said. “I'm a normal person like anyone else. We're no big deal.”

“Pree, you keep saying that but you're too close to the situation.” Amy said. “Two years ago, we were starting tenth grade. I was a fast study, so now I'm a freshman at Stanford. Normally, that's outstanding, but you guys each got your PhD and have already started your own company. Two of the richest people in the world are your friends with several more on the way. You might be one of the richest someday at the rate you're going. Don't you think it's unusual to have all your friends become rich and powerful at such an early age? You don't understand how otherworldly you are. To you, it's no big deal. However, people are freaking out about you guys.”

“Do you think we should be worried about all this talk?” Sophie said.

“Yes, take everything seriously. If young and intelligent university

students are worried, I can imagine how older people in power might be terrified. People do unpredictable things when they're scared. If I were you, I'd take action to protect yourself.

"Thanks Amy," Priya said. "You're the best friend ever."

They talked for a while longer and disconnected.

Priya and Sophie stared at each other in silence for a while.

"A great divergence? Us? What should we do?" Sophie said.

"We need to meet, now," Priya said. "We can't attract attention, so we need to stay here in our office complex.

An hour later, Priya and Sophie met in Ian's lab with Warren, Pablo, Raven, and Oyuun.

Priya stood up first and silently thought to everyone.

"I've opened this discussion to all 25,000 of us on our Omanji network. We need to keep in touch more than ever now. I've been hearing a lot of talk lately about sterilizations and other ideas. What did you guys hear? Everybody please be audibly silent during this meeting."

Warren stood up.

"I was in JavaNation this morning and I heard some people talking about it. They thought we should be humanely sterilized."

"How considerate of them," Priya thought.

Warren continued.

"So, I browsed around in some chat areas anonymously. People still think a lot of dangerous ideas about us. We've heard it all before. They fear we'll spread diseases, we can read minds, we're going to take over the world, and all that other stuff. The problem is, it's getting worse. The more a falsehood is repeated, the more it's reinforced and believed."

"I don't get it," Sophie thought. "These days everyone has access to unlimited information. Why don't they understand reality?"

"I think it's because people naturally seek out information which reinforces existing beliefs. It's confirmation bias. In other words, if you

think the modified people are conspiring to take over the world, you will seek out other people who believe the same. When everyone surrounding you agrees with you, you think your opinion is fact. Bigger conspiracies have been based on fewer facts than this."

"But the facts they share are false," Priya thought.

"If you believe something based on politics, or rumor, or personal attacks, facts and evidence will not influence your viewpoint," Warren thought. "When two firm believers in different religions try to convince each other that their opinion is the right one, they always fail. In our case, people are talking about us with a religious fervor. They use strong words like, devil, mutant, evil, unnatural, abomination, etc."

"What should we do?" Priya thought.

"I'm not sure," Warren thought. "We've been marketing and promoting ourselves. I've been on talk shows and discussion panels. We've informed the public about how Ian is curing cancer and how Oyuun is bringing inexpensive energy and fresh water to the world. However, the campaign has backfired. People aren't focusing on our contributions to the world, they're worried about how successful we're becoming. They think we're taking over the world and sucking the money out of it for our selfish enrichment."

"If we're so smart, why can't we figure out what to do?" Raven thought.

"There may be nothing we can do," Oyuun thought. "When one of my power plants is installed to desalinate water, some people think the water will poison them. If I don't install the plant, people think I'm trying to kill humanity by letting them die. I can't win."

"If we can't win, what should we do?" Priya thought. "I don't want us to be sterilized and who knows what else."

"We need to passively defend ourselves with an option to use force, if necessary," Warren thought. "We have a right to exist. If passive resistance would lead to our extermination, we should resist in some other way to survive."

"What are you talking about Warren?" Raven said. "Should we make weapons? I don't think so."

"No, I think if passive resistance fails, we should do what the Omanji did. They didn't fight us. They stopped us from doing harm to them. They defended themselves at the minimum level of force required."

"You're right Warren," Priya thought. "What they did was strictly defensive. They disabled our weapons and eventually we gave up fighting them. They built their colony in relative peace. The problem is we don't have force fields and other advanced technologies like that."

"Not yet," Warren replied. "However, we can use our network, and expertise in AI, data, electronics, genetics, robotics, energy, and other technologies."

"What should we do first?" Priya said. "Reproductive prohibition is the first thing they want to impose on us. How can we stop them when the police come for us one at a time when a baby is born? How can we get them out of jail?"

"Legally, we can get them out," Pablo thought. "But first we should make the law banning the creation of babies with artificial DNA, unconstitutional."

"How can you do that?" Priya said. "That law stopped people from doing some potentially disastrous and morally reprehensible human genome experiments. Remember the monkey boy? Technically speaking, our DNA is artificially created. We're an experiment."

"True," Pablo replied. "However, when we reproduce, we aren't conducting experiments. We're having children with our own DNA. We have the right to have families, like anyone else. We have the right to pursue happiness."

"Okay, what else should we do to defend ourselves?" Priya thought. "Public reaction won't be logical. What if things get nasty and they try to physically remove us from society?"

"If they try it, we'll defend ourselves more assertively," Warren thought. "There will be nobody around to save us. So, we need to think about tactical and strategic ways we can defend ourselves."

"Many of us are AI engineers," Raven thought. "We can set things up so if they round us up, we can control things like the power grid,

land and space-based communication, banking, transportation systems, the internet, and other networks, and anything else. We can gain access, control of those systems, and remain under the radar until we need them."

"This is sneaky," Priya thought. "We're talking about massive disruptions of everything."

"Yes, but we need to defend ourselves or we might be living in concentration camps," Warren thought. "And we'll only use the minimum force required to defend ourselves. The Omanji had to do it."

"I suppose you're right," Priya thought. "I've studied history including Omanji history. I know when new things are set into motion, events become unpredictable. However, the writing is on the wall. We might be sterilized or worse. Okay, let's take a vote within our network. Do we take active steps and use the minimum force required to defend ourselves, or do we remain passive?"

Telepathic silence set in for several minutes as they voted.

"Okay, the results are in," Priya thought to everyone. "I count 21,437 votes in favor of active steps for self-defense, and 3,143 in favor of being passive. I count 420 either abstaining or absent. Anyone who wishes to remain passive can do so with no repercussions. For everyone else, let's work on defending ourselves. We should all remain as passive as possible. This is only a reminder, in public, please continue to speak audibly and hide thoughts between us. We don't want to increase the level of paranoia. Also, don't mention this on our social network or in public. Meeting adjourned."

They disconnected from the telepathic network.

Priya rubbed her hands together and said, "What if they come for us? What if they put us in jail? If they do, I'll—"

"It's okay Pree, we can deal with it," Warren said as he put his hand on her shoulder. "Now get back to work."

She smiled at him and put her hand on his.

A few months later, it was November. The first storm of the rainy

season dumped torrents on the central skylight of Priya's lab.

"Priya, come here," Sophie messaged from the lab. "I think we figured something out.

She ran downstairs to find out what all the commotion was about. Sophie had splices of DNA displayed in 3D on the big screen.

"I think we know the genetic instructions for growing the second axon in each neuron. See here? And here? About 50 modifications the Omanji did, made us grow second axons," Sophie rotated the 3D model on the screen to show each modification.

"Rats have similar locations in their genome," Priya said. "Should we try this on a fertilized egg? I don't think the experiment would cause pain to the animal."

"I'm hesitant to try," Sophie said. "Perhaps we can try on one mouse egg."

"Okay, let's try it," Priya said. "Hold on, I'm getting a strange message from someone."

Sophie waited.

"How weird. I'm being invited to speak in front of Congress on the subject of, us."

"When?"

"The day after tomorrow. They told me to be prepared to answer questions about my experience as a Trans-human, with a capital T."

"Is this what they're calling us now?" Sophie said.

"Yeah, it's the politically correct way to say we're non-human mutants," Priya replied. "I'm going to give them a piece of my mind. They're letting us be attacked."

Priya walked home while her agent made airline reservations. The interstate Hyperloop hadn't been completed yet. She contacted home.

"Mom, I'm going to Washington, D.C. to speak in front of Congress. I can't wait to tell them off."

"Pree, I just heard about it. Be careful. They're considering restrictive legislation against you and your friends. What you say will

affect the rest of your long lives."

Priya considered telling Nisha what they were planning to do in their own self-defense. However, she decided against that because then, Nisha could truthfully say she knows nothing about any such plans.

"Yeah, I'll be careful, but I'm not going to sit back and let them walk over me," Priya said. "I'll state my opinions."

They spoke for a while and disconnected. Afterwards, she slept. Early next morning, hopped the first flight from SFO to Washington DC.

"State your name for the record," Senator MacArthur said.

"My name is Priya Chandra."

"Thank you. Now I want to ask you some questions. Do you consider yourself a member of the human species?"

"Of course, I do. I was born human and I'm still human. I experience the same emotions which I've always had. I want to go to work, do a decent job, someday get married and raise a family. Don't you think those are the desires of a normal human being?"

"Thank you, but I'll ask the questions for the sake of brevity," Senator MacArthur said.

Priya fell silent, but she was connected with Warren and Sophie via a relay in their silent network.

"Now, what did the Omanji do to you and the other trans-human abductees?"

"Why are you labeling us as trans-human? That implies—"

"Please answer the question Ms. Chandra," Senator MacArthur said.

"This guy's a real jerk," Priya thought silently to Warren and Sophie,

"Answer the questions Pree," Warren thought back. "He'll make us look bad if you don't. He's known as a master manipulator."

“To repeat, what did the Omanji do to you and the other trans-human abductees?” Senator MacArthur said.

“The Omanji abducted us and took us to a large sphere in orbit around the Moon. They modified our DNA and implanted a device in our brains, so we can communicate telepathically with them and each other. That made us more interesting pets.”

“Can you read my mind with your telepathic implant?” Senator MacArthur said.

“This guy's such an idiot,” she thought silently to Warren and Sophie.

“No sir. I can only read the minds of others who have the implant. Even then, they must volunteer to communicate with me. It's just like speaking. You may think many things but decide to say only certain things to certain people.”

“Please answer my questions directly. Don't go off topic,” Senator MacArthur said. “Are you communicating with anyone now?”

“Say no!” Warren and Sophie both thought to her.

“No sir.”

Senator MacArthur stared at her with obvious suspicion to make others suspicious.

“Are you sure?”

“Yes sir. I'm only speaking with you.”

“Was the purpose of the DNA modification to increase your lifespan and intelligence?”

“That's probable sir. They never told me directly.”

“How intelligent are you? What's your IQ?”

“About 230 I believe. It varies slightly from test to test.”

“Do you know of a naturally unmodified human being with an IQ that high?”

“No Sir. Well, there is that chess prodigy in Uganda with a 240, but I don't feel any diff—”

“Please answer my questions Ms. Chandra,” Senator MacArthur said.

Priya thought to Warren and Sophie. “Ugh, what a dim witted arrogant—”

“Shhhh, answer the questions Pree,” they thought back.

“How long did you take to complete three years of high school, four years of undergrad work, a master’s degree, and a PhD?” Senator MacArthur said.

“Three years. That’s not a record. Unmodified people have—”

“Ms. Chandra, I'll terminate this interview if you continue to resist my questioning. We're here today to determine if you're human.”

“Don't say it,” Warren thought to her.

“But I am human. He's such a stinking miserable—” Priya thought to them.

“Focus,” Sophie thought to her. “He'll cut you off and we'll all be doomed.”

“Ms. Chandra, are you paying attention to me?” Senator MacArthur said.

“Yes sir.”

“Now, is it true the two wealthiest people in the world are friends of yours?” Senator MacArthur said.

“Two of the wealthiest, yes.”

“What are the odds of that occurring if your genes had not been modified?”

Priya paused to calculate.

“I don't know for sure. Let’s see. Over nine billion people live on Earth. The odds of having the wealthiest one of them being my friend would be my current number of friends divided by nine billion. If I know 10 friends, the odds are about one in 900 million that one of them is the wealthiest in the world. To have two of them in my group of friends, the odds would be about one in 900 million squared. Other variables like age and demographics must be considered. I'm

simplifying this for the sake of—”

“Okay, we get your point,” Senator MacArthur said. “It's next to impossible. This means your alien genetic modifications have made the impossible happen. In your group of friends, are others poised to dominate their fields of expertise?”

“I don't understand the question,” Priya said.

“Come on now, you're a smart girl even though you're young and cute. You know what I mean with that question,” Senator MacArthur said.

“We've been working hard. Some of my friends are making great discoveries, like a cure for cancer.”

“Discovering cures for cancer would make that person one of the wealthiest, correct?” Senator MacArthur said.

“Perhaps,” Priya said.

“It seems like trans-humans are going to dominate every field of endeavor within a few years at the rate you're progressing. Is this correct Ms. Chandra?” Senator MacArthur said.

“I'm not sure,” Priya said.

“It's a possibility, isn't it?” Senator MacArthur said.

“A small one,” Priya replied.

She gave the Senator a stern look.

“I understand I'm upsetting you with these questions, Ms. Chandra,” Senator MacArthur said. “I'm not a bad guy. I only want to preserve the human species. Everyone is talking about Trans-humanism now. The genetic genie is out of the bottle. You are not only a new subspecies of human, but a new species beyond human. Don't you agree?”

“No sir. We can interbreed with unmodified humans. That makes us part of the human species,” Priya said. “We are, at most, a minor subspecies.”

“Would you want to marry an unmodified human at some point in your future?” Senator MacArthur said.

“He can't ask such a personal question,” Priya thought to Warren and Sophie.

“Be careful here,” Warren thought to Priya. “It's a trap.”

“I have no preference about my future husband. He might be modified or not. I don't care,” Priya said.

“You don't care?” Senator MacArthur said. “So, in other words, let's say you get married at 30 years of age to an unmodified person around your age. You have kids, which will carry your modified genes. 30 years later, you and your husband will be 60 and possibly be grandparents. And 30 years later, you'll be great grandparents.”

“Yeah, so?” Priya replied.

“So, you and your husband will be 90. That's the average lifespan now. There's a 50% chance he'll be dead.”

“Now you're being morbid Senator,” Priya said.

“No just realistic. Now, you're going to live to be over 300 healthy years old. You'll be 90 and will physically appear to be 30-40 years old by then. Your husband might be dead, or at least be old and in delicate health. Once your husband dies, what will you do?” Senator MacArthur said.

“Now you're really being morbid,” Priya said. “I'll cry over his passing of course.”

“What will you do after a few years of mourning?” Senator MacArthur said. “You'll be a young and healthy 90-year-old with over 200 more healthy years of life. Wouldn't you get married again?”

“I'm not sure. Widows get married all the time,” Priya replied.

“Who will you marry? Another unmodified 30-year-old human that looks your age?”

“Of course not, he would be a child compared to me,” Priya said.

“So, what then? Would you marry a more mature 60-year-old who will look older than you and be married for 30 more years until he dies? You'll still be young. You would marry repeatedly. Right?”

“I'm not sure,” Priya replied.

“The fact is Ms. Chandra, if you live to be over 300 years old, unmodified people will come and go in your life just like our house pets come and go. I'm on my fourth dog now. When you're 180 and still a healthy woman, will you marry a 50 or 60-year-old man who appears to be your same age?”

“Probably not, but I'm not sure,” Priya replied.

“This is my point Ms. Chandra,” Senator MacArthur said. “You will only marry within your species because they share your 300-year life cycle. And they share your intelligence. A new species evolves when two groups of animals stop reproducing with each other. I looked that up. One reason for speciation is that reproduction is genetically impossible. The other reason is that members of the two groups decide for some reason they don't want to interbreed. In this case, trans-humans will rarely want to marry unmodified people, and unmodified people will rarely want to marry trans-humans.”

Senator MacArthur looked around the room at the other Senators and Congress people, who nodded their heads in agreement. A buzz of soft talk traveled across the room.

“Ms. Chandra, is it possible you and other trans-humans will rarely marry unmodified humans?”

Priya sat in silence.

“Ms. Chandra, answer the question please,” Senator MacArthur said.

“Perhaps,” Priya said softly.

“This case is decided,” Senator MacArthur said. “According to the definition of the word species, a new human-related species has emerged. It’s an experiment gone wrong, which must be corrected. Please don’t take offense Ms. Chandra. It’s not your fault.”

“I’m not offended, Senator. Shortsightedness could make the human species extinct. Improvements to the human genome are happening now. With or without us. First, it’s new organs and cures for diseases, next the complete re-engineering of the human species. It’s inevitable. The Omanji pushed the timetable up a bit. What are you going to do? Lock up all scientists so the human genome remains

unchanged? It could use some help. Most people would love to slow the aging process and still be young at 100. People would like to have the mind of an Einstein or a Mozart or at least be able to play the piano well. The outmoded species is the one where its members die of agonizing diseases or lose their minds to the aging process."

"Thank you, Ms. Chandra," Senator MacArthur said. "Your time is up."

"Actually, yours is, jerk!" Priya thought silently to Sophie and Warren.

"What did you say?" Senator MacArthur said.

"Oh, nothing."

Priya smiled angelically.

"Thank you for being with us today, Ms. Chandra. I admire your intelligence and spunk. You're cute. You can go now."

Priya sat in her chair for a long time.

"Priya, get out of there," Sophie thought to her.

"Oh, right," Priya thought back.

She smiled at everyone and walked out of the room.

"What do you think?" Priya thought to her friends.

"You did well Pree," Warren thought back. "But I think we're in trouble. I can tell Senator MacArthur and the rest of them had their minds made up. They're going to do something. I'm going to be prepared for the worst."

"What's the worst?" Priya thought back.

"I'll explain tomorrow when you're back. Pree, would you marry repeatedly?" Warren said.

"Of course, not silly, that was a theoretical question. The senator asked surprisingly intelligent questions. If we had to marry unmodified people with 90-year lifespans and we live to be over 300 years old, unmodified people will come and go in and out of our lives like pets. He's right."

“Oh, okay. I only wondered,” Warren thought to her.

“What were you wondering Warren?”

“Um, I’ll tell you later sometime. Maybe tomorrow. Okay?”

“Okay.”

She flew home later that day.

Chapter 66 - Internment

“I'm still tired from yesterday,” Priya said as she walked into Warren's office with Sophie by her side. Raven, Ian, Pablo and Oyuun were also in the room.

“I'm connecting,” Warren said. “Everyone must be in touch from now on. We can talk verbally in this room.”

“Warren, what do you think about yesterday?” Priya said.

“You did the best you could, but they set you up. The old species aren't a bunch of dummies. Nothing you can say or do can change anybody's mind. They raise a good point. Few of us will marry unmodified people. Who wants to watch four young spouses grow old and die over several 60-year spans of time?”

Priya smiled.

“Who wants to marry and train four young husbands?”

They laughed.

“Yeah,” Warren said. “If we're going to lose a spouse, let's do it the regular way, by not getting along for one reason or another.”

“What do we do?” Priya said. “Species compete against each other. Sometimes they fight to the death. Some go extinct in the process. Senator MacArthur is a jerk but he's not stupid. He thinks it's them or us. This is unnecessary, but that's his attitude.”

“Yes, he made that clear,” Warren said. “If we're a new species, we also have a right to survive. Do all of us agree to that?

“Yes,” they all said.

“Let me find out what our collective thinks,” Priya said.

Silence set in for a couple of minutes while everyone voted.

“It's unanimous. We all feel we have the right to survive,” Priya said.

“Of course!” Warren said. “What we need to do is plan for a worst-case scenario and hope it never happens. We need to gain access to every critical infrastructure element we discussed earlier. We can control the power grid, satellite communications, banking and financial systems, many diverse types of electronic warfare systems, and many computer networks.”

“Right now, Congress is starting an all-day closed-door session,” Sophie said.

“Pree, did you set loose the peeper drones yesterday?” Warren said.

“Sure did. I set three loose along the path I walked inside Congress. They walked to their proper positions and turned themselves off. They haven't reactivated, so the bug scans they perform before each session can't detect them. They should be self-activating any second now. The relay drones outside are ready.”

“Great job Pree,” Warren said. “Okay they're activating now. Thanks, Raven, for making these little drones.”

“We have the best seat in the house,” Warren said. “Okay, let's all listen. Here comes our friend Senator MacArthur.”

The Senator stood at the podium.

“It's time to conduct a closed-door preliminary vote on national security measure 347x1. This bill will fund pseudo-interviews, arrest, incarceration for an indefinite period, and reproductive nullification of all 25,000 trans-human subjects in the US. We've discussed this in private already. Please vote now.”

“Reproductive nullification? I can't believe they're voting on this,” Priya said. “And if recent history is any indication, the moment the bill passes, the roundups will begin. We gotta get out of here now.”

“The votes are cast,” the Senator said. “38 aye, 6 nays, with 6 abstentions. The measure will go to the house this afternoon. There will be no discussion or acknowledgment of this outside of this room. This session has ended.”

“That was fast,” Warren said. “I've never seen the government this efficient. We get a few hours at least. It’s safe to assume this will

become law soon."

"What should we do?" Priya said. "There's no place to hide for any length of time."

"Our engineers and agents managed to gain access to all of those infrastructure elements we discussed earlier," Raven said. "We've connected those to our telepathic network. The Omanji intentionally left a software service exposed on our implants. The service allows us to send and receive input if the implant owner agrees to it and approves it as a trusted entity. So now, with our thoughts, each one of us in this room can remote control all of those infrastructure elements. For example, Priya you can send out messages, emails, and broadcasts of what you watch with your eyes and lots more just by thinking about it. If you want to disrupt the national power grid, you can do that by thinking. Everything is now connected."

Priya accessed the command base root of the telepathic network. She navigated through virtual menus containing the national power grid, the banking system, the stock market, satellite communications, and many computer networks. She could control everything with a thought and lock others out.

"Raven, this is freaking me out," Priya said.

"It's either this or we sit back and become spayed like a female dog," Raven said. "Your choice."

"Or neutered," Warren said. "Well, they wouldn't take away our maleness and femaleness as spaying and neutering does. They would render us sterile so we can't have children the natural way. Still, they have no right to do this. I'm also worried about them trying to take away everything else we've accomplished."

Someone knocked on the door.

"Don't answer it," Warren said.

"It's okay," Priya said as she looked into her eyepiece. It's Amy."

"Hi guys, what's happening?" Amy said, smiling without a care in the world.

"Hi Amy, we may be arrested soon. I'm uploading all the instructions you might need in case we're put into a camp somewhere."

“What are you talking about?” Amy said.

“Soon, we'll be arrested and sterilized,” Priya replied.

Amy smiled, but the smile faded.

“You're not kidding, are you?”

“We're not,” Sophie said. “Congress is voting on this now.”

“I didn't hear about anything about this. How did you know?”

“Don't ask,” Priya said. “Let's just say we have some inside information.”

“I'd expect nothing less from you super-geniuses.”

“So, are we going to sit here and wait for the inevitable?” Priya said.

“Well, we can run and hide,” Warren said. “But they would find us eventually. I thought about buying plane tickets for everyone, but that's too obvious. We can't fight them with physical weapons either.”

“I know,” Priya said. “We can only fight them with our wits. If they think we're a distinct species, then we as a species have the right to not go extinct. Sterilization is an attempt to force us into extinction.”

“We'll fight them with the law,” Pablo said. “Even if we’re put in jail, I know 200 lawyers who are old species and hundreds of AI agents who can fight for us. We've pooled our money and set up trusts to pay the human salaries even if they try to take our money away. This law firm is self-sufficient without me. The agents can operate autonomously.”

“Good thinking Pablo,” Priya said. “What should we do now? We can sit around here and wait to be arrested. We can hide and be caught one by one over the next few weeks. We can leave the country and be abused somewhere else. We can change our identities and pretend to be 'normal' people, but how long would that last? We can ask for Bok's help, but he told us he doesn't want to interfere any more than is necessary. I can talk with him as a last resort, but he's been quiet lately.”

“I'll fight for you guys,” Amy said. “I'll work on getting support on the Stanford campus. If you're arrested, I can start protests or

something."

"Thanks Amy," Priya said. "Only a few hours remain. We can cause a little trouble before the law is passed. Let's start a leak of what Congress is planning."

"Yeah," Sophie said. "We can go online as other people and leak the information. Raven, were you able to discover the passwords of any famous people we can use to spread the word?"

Raven smiled.

"Actually yes. How about the White House?"

"Too high-profile," Priya said.

"Okay, how about the news networks and podcasts?" Raven said. "I hacked the passwords for several leading reporters. How about the prime-time anchors?"

"Perfect," Priya said as she looked into her eyepiece. "Thanks for the passwords, Raven. Okay, I'm in. Now let's see, how about posting this?"

"I'm getting word Congress is voting on a law to incarcerate and sterilize the trans-humans. Anyone remember the Japanese incarceration at Manzanar?"

"Good one Pree," Warren said. "Let's stir things up before we face our own Manzanar."

"Okay, sent," Priya said.

"Let's do the same for the lead Apple iTv news anchor. How about this?"

"We understand Congress may be about to order the sterilization of the trans-humans and then put them on a reservation. Can anyone say Stock Market Crash?"

"I like it," Warren said. "The market will likely crash. I'm short right now so I'd make a lot of money. I can imagine a few big down days and a bear market to follow if we aren't allowed to work. Lots of companies depend on us for their new products and inventions. Investors think we can make lots of money for companies."

“This is good,” Sophie said. “We can appeal to people who are supporters of human rights and fairness. We can appeal to those who want a strong economy and want to retire someday. Those two groups aren't mutually exclusive, but these concepts cover a wide range of people.”

“Okay, send the post Pree,” Sophie said.

“Sent,” Priya said. “I'm tempted to do more, but I don't want people to think we're breaking into people's accounts. Let's find out what happens. The owners of those accounts still have access.”

“A couple of hours are left in the trading day,” Warren said. “Some financial news services have already noticed the posts and re-posted them. Five minutes ago, the market was up 0.3%. Now it's down 1%. That's a big drop but typical for an unconfirmed rumor which might lead to a big downside if found to be true. The Market is up 1,000% since the Omanji left. A big part of that rise has to do with our innovations like low-cost energy and the prospects for the future.”

“The anchors are now retracting the posts, but they've already been re-posted 150 times,” Priya said. “It's out now. Apple iTv deleted the post but they say they're investigating the purpose of the closed-door session of Congress, and there may be some truth to the rumors.”

“Yes,” Sophie said. “This is exactly what we want. Now the truth can be uncovered, and we haven't done anything wrong other than make two posts. Those monitor bugs Pree planted have self-destructed, right Raven?”

“Yeah, if they're discovered, nobody will know what they were,” Raven replied. “They're oxidizing into dust. I like how you got them in by hiding them in a pile of old-school style printed press documents as a staff person wheeled them into the hall. Then you set them loose. You’re a genius.”

A super-genius that is,” Amy said as she smiled.

Priya smiled too.

“Check this out. Apple iTV has some reporters walking around on Capitol Hill trying to find the underlying cause of this rumor,” she said.

“Watch those aides run away from the reporters,” Sophie said. “I love it.”

This whole thing is going viral.”

“Yeah, and in only a few minutes too,” Priya said. “More reporters are showing up now. The guards are keeping them back. It’s too bad the reporters aren't like the Omanji. Remember how they walked in and stood in back? Congress was helpless.”

“We can communicate like the Omanji though,” Raven said.

“Yeah, that's true,” Priya said. “I wish I had one of those round orb things they carry with them. Now the networks and bloggers are reporting on a vote happening in Congress. Let's go down to JavaNation. If we're going to be arrested, let it happen in public while we’re minding our own business doing what millions of normal people do each day. On second thought, let's go to the nearby Starbucks. People are still more familiar with Starbucks. Sorry Raven.”

“That's okay,” Raven replied. “You're right. When people watch us being dragged out of Starbucks, they'll perceive us as real people out having a Frappuccino like anyone else. All our affairs are in order. Let’s go.”

They walked out the front door and down the street.

“It seems like just another day, doesn't it?” Warren said.

“It does,” Priya replied. “But it's not.”

They walked into Starbucks and stood in line to pick up their online orders.

“Waiting in line seems quaint, doesn't it?” Priya said to Warren.

“Yes. I've grown used to sitting down and having my drink appear in front of me as if by magic.”

“I hadn't noticed this before,” Priya said, “but most of the people in here are my mom's age.”

Warren looked around the place. “You're right. Did you notice that, Raven?”

“Yes, I've been closely monitoring the demographics. Younger

people go to my place. They have no need to say hi to the people behind the counter. It's a personal preference, like when eBooks came out. At that time, most of the older people still liked reading paper books, but a few younger people did too. I do see a few younger people here in line waiting for their orders."

They got their drinks and sat down at a table in back.

"My Frap is good," Priya said.

She smiled and glanced over at Raven.

"Not as good as yours though."

Raven smiled back.

"I like mine too. Hand made by real humans. Notice how the swirl of chocolate syrup on top isn't perfect. Hmm, OK. Agent Javanation 46b, write a subroutine to add the option of random imperfections in my coco-swirls. Update."

They laughed.

"What are we going to do when they come for us?" Sophie said.

"We should passively resist," Priya said, "But they'll still charge us with resisting arrest. We need to stand up for our rights. We need to show we're human, even if technically we aren't regarded as such anymore. Warren, what are you looking at?"

"On the big screen, something is happening on Capitol Hill. Dozens of reporters are on the scene now. Oh, check out this link to the audio so we can all follow, since this place is noisy."

Reporter: "We've learned the Senate voted earlier today to determine a course of action regarding the trans-human children who were modified by the Omanji. Now that a few of them are having children of their own, an anonymous source says the childbearing must stop or the human race will become extinct."

"That's so hyperbolic," Priya said.

Warren shook his head. "Or not. We're the future."

Reporter: "We're also learning a vote has concluded in the House.

Members are leaving the chamber now."

"I'm glad we put those bugs in there," Priya said. "I guess they'll come for us now. I'm going to talk to my mom for a minute."

She connected.

"Mom?"

"Are you okay Pree? We're watching the news now."

"I'm okay. We knew about this ahead of time. We're prepared for any eventuality."

"What do you mean?" Nisha said.

"I can't tell you. They will ask you at some point. It's best you don't know. They'll come for us soon. Watch for me on the news. Everything is set up. You're in my will and we've set up trusts. My company can run by itself. We employ a small army of lawyers and there's plenty of money to keep them well fed. The AI law agents are running day and night. Even my plants will be taken care of by Raven's auto-watering system. I'm ready."

"In your will? Pree, you're making my heart race."

"It's okay, don't worry. Mom, they're here. Follow my live broadcast. If they take my eyepiece, my drone and eyes will continue to record my treatment. Forward my feed to all of your 1.1 billion members. I also have another way to transmit through my account. The world will see through my eyes. You'll find out later. Publicity should make them think twice about doing anything stupid. I gotta go. I love you and Daddy and Sanjay. Bye."

Sophie tapped Priya on the shoulder to let her know several FBI agents had walked into the Starbucks.

"Hold on, I'm broadcasting now," Priya said. "Okay, I'm ready. This is Priya and I'm about to be arrested for having ovaries. Please watch my broadcast and pass it around. Thank you for all of your support. Here they come."

"Are you Priya Chandra?" the first agent said.

"Yes I am."

“Please come with us.”

“Why are you arresting me?”

“You are being arrested for being an existential threat under the Human Species Preservation Act,” the agent said. “Specifically, Presidential Executive Order 9066-b signed into law today.”

“Part of that number seems familiar. Are you going to read me my rights?”

“That’s unnecessary under this new law. Please come with us.”

Priya looked around the cafe.

“Did you hear that? I'm Priya and I'm being arrested for being a threat under the Human Species Preservation Act. I have no rights under this law.”

She pointed to the big screen.

“That's what they voted on just now.”

Nobody in the cafe said a word at first. Eventually, one middle aged woman yelled, “Let her go! She's no threat to anybody.”

A few others said, “Yeah.”

Many others watched in silence.

“Well, here we go,” Priya thought to Sophie, Warren, Ian, Raven, Oyuun, and Pablo as the van carrying them drove away. “See what's happening on our telepathic network? Everyone is being arrested, all at once. They think they’re being sneaky.”

Soon, the van stopped in a vacant lot so they could be loaded on to a bus. Priya thought to everyone in the telepathic network, “Everything will be okay, let them take you. We're all ready to go. We can provide the necessary negative leverage if we need it.”

They were loaded into buses and driven 60 miles east. They arrived two hours later due to the normally slow afternoon traffic.

“Whoa, that Manzanar comparison isn't far off,” Priya thought to the others. “The endless rows of tents are the same. This looks like a long-term settlement. They've been preparing this for quite a while. They slipped this one by us.”

“Yeah, I had no idea they were building this,” Warren thought back.

“Priya, are you there?”

“Bok? Is that you?” Priya thought back.

“Yes, It's me. I've been watching this happen. Do you need any help?”

“We're okay. We have a few tricks up our sleeves if we need them.”

“Tricks up sleeves?”

Bok paused for a few seconds.

“I understand. That's good. I want you to know I'm here if you need me.”

“Thanks Bok. You're a real friend. I'll let you know. I'm hoping this problem can be resolved peacefully. I don't want the humans to turn on you and cause problems. Right now, they're leaving you and your colony alone.”

“Okay, I'm going to let you focus on your situation. I don't want to distract you. Talk to me any time.”

They disconnected.

“Pree?” What's happening?” Sophie thought silently.

“I spoke with Bok. He wants to help. I told him we may need his help later, but not yet.”

“That's good to know,” Sophie thought back. “I think we're in over our heads.”

Soon, their bus pulled in behind a lengthy line of buses at the front gate.

“I'm glad we got everything in order before we were arrested,” Warren thought to the others. “They don't give you time to do anything. If I had a dog and didn't know about this ahead of time, it would be starving already.”

“Yeah, that's true,” Raven thought to the others. “Our engineers

have everything in order on the network. We archived our entire social network into a single file using 4096-bit encryption. It would take longer than the history of the universe for all computers on Earth to break the encryption. Then we shut down the network and dismantled it."

"That's good," Priya thought. "And there's no way anybody can hack into our telepathic network, right?"

"Right," Raven thought back. "The encryption level is far beyond anything we're capable of decrypting right now. Even the Omanji can't do it without the keys."

"That's good too. Okay, here we come to the front gate."

They were processed in the main detention center and assigned tents. Eight people per tent. No explanation or directions were given. It was an average Mid November afternoon with a temperature around 70F with rain showers expected in the evening."

"I wonder why they kept all of us in the same tent," Priya thought to the others.

"I'm not sure," Sophie thought back.

"Maybe the tent is bugged, and they want us to talk," Raven thought. "I think we should talk out loud unless it's something important. Let's speculate as we would do if we knew nothing at all. Let's assume they're listening. I'm letting everyone know this now."

"Good idea," Warren thought.

He said out loud, "I wonder what they're going to do with us."

"I'm not sure," Priya said. "they're not telling us anything. There must be a law against this type of incarceration. This is like Manzanar."

"I agree. What are they going to do to us?" Sophie said.

"I hope they won't make us sell our property at a small fraction of its real value," Warren said. "That's what they did to 120,000 incarcerated Japanese Americans during World War II. They paid back skimpy reparations 40 years later"

"I bet they're calling this a relocation center or an evacuation

center like they did back then," Priya said. "Yeah, it's not an Auschwitz-style concentration camp, but it's at least a prison. Notice the armed guards out there? I bet if we tried to escape, we'd be shot. This is no internment center. They took away our eyepieces. There's nothing on the devices of any interest since we cleaned them."

They spent the rest of the day walking around the perimeter of the camp, talking with the others. The guards served dinner. Nobody gave them any information. They managed to get a few hours of sleep.

Chapter 67 - Sterilization

“It's a nice morning and the air smells fresh after the rain. Let's walk along the perimeter,” Priya said. “Let's talk out loud. What's the market doing today, Warren?”

“It's down another two percent this morning on top of the two percent decline yesterday. At least we have a news auto feed and other sources of information on our telepathic network. Otherwise, we'd know nothing.”

“Good, maybe they’ll eventually realize our value when the market drops,” Priya said out loud.

“I don’t know if that matters,” Sophie said. “This movement to sterilize us comes from a gut-level fear of extinction, not finance.”

“Perhaps,” Priya said. “But people vote with their pocketbooks. Pablo, have you heard from anyone on your legal team?”

“Yes, they’re in court right now trying to get us out of here. This Presidential Executive Order 9066-b thing looks solid. It’s based on the old laws they designed to protect us from terrorists. We lost many rights. I guess we’re the new terrorists. Every generation needs a new enemy.”

“We’re the new threat to society?” Priya said. I don’t think I’m a threat to anyone. I want to work and make discoveries to help people. That’s what we all want.”

“Yeah, but they think we’re taking jobs and money from people,” Warren said as they walked into one of the many the newly built cafeterias.

They studied the big screen displaying the news for several minutes, while they put food on their plates and sat down.

“What? No way,” Priya said as she read the scrolling text. “They’re voting on something called the ‘Equal Access to Jobs Act. There's the jerk. Let’s listen.”

Reporter: “Senator, can you tell us about this new piece of legislation?”

Senator MacArthur: “Yes, the Equal Access to Jobs Act will level the playing field for all job seekers. I’ve been getting thousands of complaints describing how the trans-humans are taking jobs and promotions away from normal people who only wish to work. There’s a conflict of interest developing in the workplace. Companies want to hire trans-humans to make more money, but they do this at the expense of regular people.”

Reporter: “Are you saying it’s wrong to make a profit?”

Senator MacArthur: “Of course not. This new law will still allow companies to hire trans-humans, but if a qualified normal person can do the job, all qualified applicants will choose a random number. That number will determine who will be hired. That way, there’s no bias in either direction.”

“What a load of—”

“Pree, shhhh,” Sophie said.

Reporter: “Well, that seems fair to me.”

Senator MacArthur: “Yes, this is an equitable way to diffuse the situation and be fair to everyone. Trans-humans enjoy an unfair advantage over normal people. This levels the playing field.”

Reporter: “Do normal unmodified people with high IQ’s have an unfair advantage over average people? Should we level the playing field in that regard?”

Senator MacArthur: “No. Smart people are born naturally and don’t enjoy a big advantage in society, but you make a good point there. I'll research the idea.”

“This senator is a real piece of work,” Priya said. “Of course, smart people have an advantage. He’s prejudiced against us.”

“Pree,” Sophie said again.

Reporter: “So how will this work? Most trans-humans who can be hired by companies are already working for them.”

Senator MacArthur: “That’s the second part of the legislation. All jobs currently held by trans-humans will be reposted as open jobs.”

Reporter: “Isn’t that unfair to the trans-humans?”

Senator MacArthur: “I’m making sure it’s all fair. Trans-humans can apply for their old jobs just like anyone else. Many will get those jobs back by picking the correct random number. Don’t worry about the trans-humans who don’t get rehired. I’m sure other companies will hire them, or they can start their own companies.”

Reporter: “I hear there’s another part of this legislation dealing with patents.”

Senator MacArthur: “Yes, we need to level the playing field in all areas of life. Patents are a good place to start. A level playing field will stop the abuse and bullying the trans-humans are experiencing by reducing the perceived threat they pose. Whenever a trans-human files a new patent application, an open period will allow normal people to apply for the patent. A random number will decide who gets the patent. We call this the Equal Opportunity Innovation Initiative, or EOII.”

Reporter: “How will you know if a patent applicant is a trans-human?”

Senator MacArthur: “We are in the process of collecting DNA samples from all 25,000 trans-humans, most of whom currently in the US are now in our custody. Their genome will act as a new form of ID. Everyone who wishes to file a patent must file a genome scan.”

Reporter: “Isn’t this an invasion of privacy? What about the Personal Information Privacy and Protection Act?”

Senator MacArthur: “This will supersede PIPPA. Nothing is more important than the survival of the human species. Our survival is more important than protecting ourselves from terrorism or even our individual rights. This legislation protects the trans-humans too because as I mentioned, abuse and bullying against them will drop in frequency because the playing field is level.”

“I can’t believe this guy,” Priya said. “As if he's trying to protect us. And while we’re at it, let’s round up all minorities to protect them from assaults.”

“Pree, calm down,” Sophie said.

Reporter: “Is there anything else we should know about this legislation?”

Senator MacArthur: “Yes, if trans-humans wish to join the technology branch of the military, they will be welcomed with no handicapping. The best suited for the job will get it. We want trans-humans to be able to show they’re patriotic and are willing to help our country against all foes. Every one of them is now a US citizen regardless of country of origin.”

Reporter: “What's happening with the trans-humans in the relocation center?”

Senator MacArthur: “They’re being treated well. They're free to eat what they want and interact with who they want. We kept groups of friends together. They can exercise, and soon they’ll be allowed to communicate with their families. They will be held until the Equal Access to Jobs Act takes full effect.

Reporter: “And they will be sterilized. Is this correct?”

Senator MacArthur: “I must be going now. Um, yes. Now I must attend a meeting.”

Reporter: “Okay Senator, thank you for your time.”

Senator MacArthur: “Thank you.”

“So, here we are in prison and they’re taking things from us under the guise of protecting us,” Priya said. “That includes taking our right to have kids. I’m tempted to send out a few posts about this, but I'm not ready to let them know we can do that by thinking about it. They're paranoid enough. I wonder if my broadcast is still working. Raven, I haven’t seen my follower drone since we arrived. Where is it?”

“It’s sitting dormant right outside the perimeter in a safe place. I feared they might shoot at it, so it's sleeping for a while. It's as fast as the Omanji drones, and it followed us all the way here. I'm glad it has an antimatter power source so it can operate for almost 100 years

nonstop."

"I'm glad it's sleeping," Priya said. "We may need it at some point.

Several large guards walked up to Priya. "Can you please come with us?"

"What do you want with me?"

"You need to come with us."

"I haven't eaten."

The guard reached for her, so she stood up and began to walk out the door with him. She stashed a small surveillance peeper drone in her pocket, which her drone had dropped over the fence soon after they arrived.

"Pablo, what's happening with the appeal?" Priya thought silently.

"I'm finding out now. I've heard nothing."

"Find out soon," Priya thought back as they led her out the door. "I'm not going down without a fight if you know what I mean."

They led her down the long row of tents and into the main structure of what the signs called the Central Valley Facility. The golden hills to the west transitioned to green because the winter rainy season had recently begun. Once inside, she was led down several long corridors and into a large sterile looking room with a dozen metal tables and trays of silver instruments. Large banks of lights, operating theater robots, and other equipment hovered above each table on long pliable metallic arms.

Priya opened up her implant transmission to all of the mods imprisoned in the compound. They could all hear her and visualize in their minds what she was seeing. The mods had not been able to hack into their implants to broadcast the signal directly to the outside world. Not even Bok understood how to do that. The Omanji encryption was too strong. However, Priya and the others could reroute what they heard and saw indirectly through their Reddit accounts via the software service the Omanji intentionally left open.

"Do you guys see this feed?" Priya thought to the others as she

continued to broadcast to the telepathic network.

“Yeah, I’m receiving it,” Sophie thought back. “It’s working.”

“This isn’t promising Pree,” Warren also thought back. “You know what to do if they start to do anything to you.”

“I do.”

Warren smiled, “Pree, did you just say, '*I do*' to me?”

Priya smiled too.

“Warren, stop it!”

Sophie also smiled.

The guard noticed Priya smiling. She immediately stopped. Some doctors came into the room.

“What are you going to do to me?” Priya said, while everyone in the collective listened in. She activated her audio and video feed to her 350-million-member Reddit community.

“Don't worry, we're only going to get a blood and bone marrow sample this time,” the primary doctor said. “We will need a small sample of brain tissue.”

“Is this mandatory?

“Yes,” a nurse said as they prepared the needles and other instruments.

“How would you feel if someone forced you into an invasive procedure?” Priya said.

“I wouldn't like it, but I'm not a threat to the human species,” the doctor replied.

“Neither am I. And neither are any of the thousands of children who are locked up in this prison.”

“This isn't a prison, and you're a threat because you’re an alien species,” the doctor said. “I earned a PhD in Genetic Anthropology before becoming a doctor. Once a species splits and becomes two distinct species, competition begins. This is the beginning, so we’re going to nip this in the bud. It’s best for all concerned. Now, come

over here and sit down. This won't hurt."

"No, I'm not going to come over there," Priya said.

"Get the General," the doctor said as Priya stood in her place.

A few minutes later, he entered the room.

The doctor waved him over. "General Sherman, this is Priya Chandra."

"Yes, I know who she is. Everyone knows who she is. Hello Priya."

"You seem familiar," Priya said. "Do you know my mom?"

"Yes, we worked together on the Omanji problem."

"Then you must realize we're no threat to anyone."

"You're a grave threat Priya," General Sherman said. "You're too young to understand the big picture right now. I'm sure you'll make many valuable contributions to society in the future. However, we must make sure that future generations of trans-humans don't overrun the human race. Therefore, you all must be sterilized, including the one million babies with your DNA. We won't hurt you and your ovaries will be left intact. It's a humane procedure."

"This is disgusting and you're repulsive," Priya said. "Would you sterilize your own children if they were abducted?"

"I wouldn't want to, but I would sterilize them, for the sake of the human species."

"You'd be a traitor to your own family," Priya said. "That makes you even more despicable."

"I'm sorry you have this attitude, but every species has a right to defend itself," General Sherman said.

"Every species?" Priya said.

"Yes, every species. That's how evolution works. The smartest and strongest species survive by protecting themselves."

"And you claim I'm a member of a distinct species from you, right?"

“Yes Priya,” General Sherman said. “You and I are members of distinct and different species.”

“This means my species, Homo altasapiens or whatever we'll be called has a right to defend itself?”

The General looked Priya in the eyes and fell silent for a while. Priya looked back and didn't flinch.

“I can't answer that question right now. Is this a threat?” General Sherman replied.

“If you attack any of us, we will defend ourselves,” Priya said. “That's not a threat. It's a fact.”

The General glanced at the surgeon and smiled.

“Priya, you’re cute and I admire your spunk. However, let's get serious and not waste any more time.”

“Look into my eyes General, I'm dead serious. We can and will defend ourselves, effectively.”

He glanced at her and couldn't turn away for several seconds. He realized he was getting nowhere, so he blinked into his eyepiece to contact Nisha.

“Nisha, how are you today?”

“I'm fine General. I'm watching you talk with my daughter. That's an interesting discussion you're having.”

“You're watching this discussion, live right now?” the General said.

“Why yes, and so are millions in Priya's Reddit community, and 1.1 billion in mine. We’re watching it through her eyes. The video is unusual to watch because each time her eyes move about, the angle of view of the video moves.”

The General stared at Priya for a long moment. She returned his gaze without blinking. He had a tough time believing that everyone could see what he thought was a private conversation.

“Um... Yes, we’re having an interesting discussion,” the General said. “I’m trying to reason with her but I’m making little progress. I’m

hoping you can make some progress."

"General, are you asking me to consent to the sterilization of my own daughter in front of a billion people?" Nisha said.

"You make it sound harsh," the General said. "It's painless and it's the best thing to do to avoid the calamities of the future. Think short term pain, for long term gain."

"General, I won't give my permission for this. She's not an adult so legally she can't make her own decisions. I refuse to give you permission to do this. Please don't hurt her."

The General paused and stared at Priya again.

"Okay Ms. Chandra, I'm sorry you won't cooperate. We won't hurt her. I must go now. Thanks for talking with us."

He disconnected from Nisha.

The General studied Priya closely. She returned his gaze without blinking.

"Hold on, I'm receiving an incoming connection," the General said. "Madam President, how are you today."

"I'm doing better than you it seems," the President said as her voice echoed around the concrete walls and floor of the room. "I've been watching on Nisha's Reddit broadcast. Priya, we don't want to sterilize you, but the survival of the human race depends on it. We value the contributions the trans-humans make and will continue to make after this is over. We've taken a poll and 68% of the general population of this country supports the sterilization of the trans-humans and the babies who carry their DNA. They're an Omanji experiment. They're like an invasive species now. Just as beautiful trees from other continents can be invasive to a local ecosystem. Since it would be inhumane to cut down the trees, we're only going to collect the seeds so they can't spread any further. You'll be allowed to live your normal lives."

"Being subjected to prejudice every day via an artificially leveled playing field is not my idea of a normal life Madam President," Priya said. "I don't like being compared to an invasive tree species either, no matter how beautiful. I'm human. This is unfair. Those new laws you're

imposing are unfair. If I come up with a cure for a disease, I won't be sure that if I file a patent, I'll get it. So, I won't bother with patents."

"I'm sorry Priya, but a democracy cannot always be fair to every citizen," the President said. "We as a species have the right to defend ourselves."

"You know what? I agree," Priya said. "Every species has a right to defend itself. That right supersedes fairness. Therefore, I'm hereby letting you know we will be forced to defend ourselves if you continue to abuse us. We will not accept sterilization."

"I'm sorry Priya, you have no choice," the President said. "I've heard you're headstrong, so I'll let that comment pass by."

Warren thought to Priya and the others, "Pree, we must defend ourselves. If they make a move on you, do what you must do."

"Thanks Warren," Priya thought back. "I've run out of choices. I'm worried because once you set something in motion, chaos builds from that moment forward. There's no way to predict results."

"Take this one step at a time," Sophie thought to Priya and the others.

"Priya, are you listening to me?" the President said.

"Yes, I'm listening carefully Madam President," Sophie said. "You may think I've run out of choices. However, many choices are open to me."

"What are you talking about young lady?" the President said.

"You said a species has a right to defend itself. I'm warning you right now, if you so much as lay a hand on any of us, we can and will defend ourselves as a species."

"General, do you know what she's talking about?" the President said.

"I'm not sure. She keeps saying this. This is too stressful for her. It's best if we get this over with quickly."

"Okay, you can proceed," the President said.

The guards moved towards Priya.

“Do you guys carry flashlights?” Priya said.

General Sherman smiled.

“No, the lights are fine in here. Why do you ask?”

She looked directly into his eyes. “If you touch me, you’re going to need them.”

The guards took hold of Priya’s arm.

Power switches clicked. The lights were out.

She placed the peeper drone on the ground, and it scampered under a table and down the hallway into the General’s office. She closed her eyes while that happened, since her vision was being broadcast to the world and the room was still dimly lit by a single light on battery power.

Silence took hold as the ventilation system shut down.

“General, what’s happening there?” the President said. “My screen is black.”

“There’s been a power outage. We’ll get the backup generators working soon. Hold on.”

Guards ran into the dark room with flashlights.

“Priya, you better stay where you are,” the General said.

“Don’t worry, I’m right here. I’m now in control of the power supply to this prison. You can start the backup generators, but the power won’t reach the lights, so don’t bother.”

The General pointed his flashlight at one of the guards.

“Is this true?”

“Yes General. The backup generators kicked in immediately and we can’t turn on the lights.”

“Do you want the lights on?” Priya said. “Here you go.”

Immediately, the lights came on and the ventilation fans operated once again.”

“What’s happening General?” the President said.

“It’s nothing Madam President. That’s a nice trick Priya, but you might as well accept the inevitable. Make it easy on yourself and let’s get this over with.”

The guards walked over to Priya. She wouldn't budge.

“Nothing is inevitable when you’re dealing with a new species,” Priya said. “How’s the stock market doing today, Madam President?” she said.

“Why do you ask?”

“Take a look,” Priya replied.

“Okay, let me check,” the President said, as she blinked into her eyepiece for the latest quotes. “That’s odd, the quotes are offline. What's going on Priya.”

“You guys said every species has a right to defend itself. Well, we've decided to defend ourselves. It's our right.”

“What are you talking about?” the President said.

“I've temporarily suspended stock market trading by disrupting network traffic in and out of the major Cisco routers to the main servers at the central locus. We've taken over all rights to modify the passwords to the routers. Don't bother trying to reroute them. You can pull the plugs and replace the routers, but we'll hack the new ones. For now, we've only touched the routers, but we've penetrated much deeper into the financial system than that.”

“This is an act of terrorism Priya. Stop this now or you will be tried and executed under the new Universal Anti-Threat Act.”

“Okay, no problem. Trading has resumed,” Priya said.

Everyone said nothing for a moment.

“Yes, trading has resumed,” the President said. “How did you do that?”

“I'm not going to tell you. All we are doing, as a species, is defending ourselves against your own form of terrorism. Please let us go, so we can get back to doing things like curing cancer and making the world a better place. All we want to do is live peaceful and interesting lives. Don’t be threatened by us. We're doing important

things for this country and the world as well. We're patriotic."

"That's a nice sounding speech Priya," the President said, taking note that a billion people might be watching. "However, I now think you're a bigger threat than before."

Priya said nothing for several seconds.

"How is the AccuPoll going?" Priya thought to her friends, still in their tent.

"It's flat," Sophie thought back. "Approximately 65% still want us sterilized. At least that didn't make things worse."

Priya continued.

"We are not a threat. We're an important asset to our country. We want to be left alone. Don't group us in with terrorists. We don't try to force anybody to subscribe to our beliefs. We aren't committing asymmetric acts of violence like terrorists. We're defending ourselves. We want everybody to live peaceful lives."

"Priya, you keep saying you want peace while you threaten us," the President said. "Now let's get this over with so you can get back to your peaceful lives you seem to want so badly."

"Why don't you let us go so we can get back to our peaceful lives?"

"Because you're a threat to— Look, we're stuck in an endless loop here," the President said. "General, please proceed with the procedure."

"Let's go Priya, this will only take a few minutes," the General said.

The guards once again grabbed Priya's arm.

"Leave me alone, now."

The guards stopped.

"Proceed," the General said to the guards.

Priya pulled her arm away.

"Every species has a right to defend itself," she said.

“Madam President, are you there?” the General said.

There was no reply.

“What did you do Priya?” he said.

“Washington, D.C. is now experiencing a power outage. This includes the White House, which is on a separate grid.”

The General motioned to the guards, who moved closer to Priya and pointed their rifles at her.

“I'm back online,” the President said. “However, all power is down across Washington, D.C.”

“Before you do anything General, you should realize a few things,” Priya said.

“What's that?”

“If a single one of us experiences any pain or goes unconscious, you will suffer profound consequences that could take years to resolve. Also, you haven't captured all of us. Even if you were to nuke this prison camp, and kill all of us here, there will be severe consequences. Life for those in power will be, um, extremely difficult. Please let us go. Power has now been restored to Washington, D.C.”

General Sherman looked sternly at Priya.

“Guards, take her back to her tent. Priya, you are not to leave your tent until further notice. Your friends can bring your food to you. That will be all.”

The guards moved towards her.

“Okay, okay, I'm going,” Priya said, evading their attempts to grab her arm. “So now you're grounding me?”

“Yes, I am,” the General said as he glanced at the guards. “Now get her out of here.”

The General walked back to his office. Raven guided the peeper drone as it crawled like a spider into his office and hid itself in a dark corner and began monitoring.

The guards led Priya to her tent where the others awaited her return. They stood outside the tent with rifles at the ready. Priya turned

off her live broadcast.

“So, what did you guys think?” she silently thought to her friends, not wanting anyone listening to hear the discussion.

“You did great Pree,” Sophie thought to everyone.

“Yeah, I'm proud of you,” Warren thought. “You were brave. I think they're angry though. We need to find out what's going to happen next. Raven, is the peeper drone deployed?”

“Yes, the General is in his office,” Raven thought back. “I can hear him breathing. Let's listen. You're all connected to the peeper drone now.”

“Madam President, are the others there?”

“Yes, my entire cabinet is here.”

“Ah, I see everyone now. I was having a bit of interference. Something in my office is disrupting my signal.”

Warren glanced at Raven. She shrugged her shoulders.

“Wait, they're speaking,” she said.

“Okay, I want an assessment of what happened,” the President said.

“Priya seems to exert mental control over selected portions of the power grid and financial transaction systems,” the Chief of the Department of Homeland Security said. “We're working back towards the source of the problem. Our tech people claim she and her friends executed sophisticated attacks on these systems. We may not discover what else has been compromised until the trans-humans exploit those other breaches.”

“So, you're telling me we need to wait and find out what they do?” the President said.

“Yes,” the chief said. “We're working on it, but we've never seen a security breach like it. We're locked out of our own systems. The trans-humans haven't relinquished control. This is the first fully AI cyber-attack ever.”

“How do we deal with them?” the President said. “If we let them

go, they'll reproduce, and the human race will become subservient to them. The trans-humans are an alien species. They'll own us. That's unacceptable. However, if we try to sterilize them, they'll retaliate. Last hour's AccuPoll shows a slight drop in support for sterilization. It's gone from 65% to 63%. If support drops below 50%, and we sterilize, we'll endure whatever they throw at us, the public will be against us too. However, we can't let them reproduce. This is non-negotiable. We need to do something quickly. We'll sacrifice our re-election if necessary."

"I can't believe how racist they are against us," Priya thought to the others. "They act like we're terrorists bent on global domination."

"We've got a problem," Warren thought. "They want us to go extinct. They want a slow multi-generational genocide."

"I like who we are," Sophie said. "I'm not much different than before I was abducted. We're productive members of society."

The President continued talking.

"We need to proceed with the sterilizations ASAP, regardless of what they do to us. I'll address the nation. Everyone, prepare your departments for the worst. This weed needs to be pulled before we lose control. Dismissed."

"Well, here we go," Priya thought to everyone. "Raven, get the peeper drone out of the General's office as soon as you can. We may need it later. I guess they'll come for me first. What should I do? I'm going to fight them with everything I have at my disposal."

"We need to do something now," Warren thought. "They may put you under general anesthesia. Even though that would trigger everything to happen, it would be too late for you. I want you to be able to have a family."

Sophie smiled at Priya.

"Thanks Warren," Priya thought back as she smiled back. "They don't know we've all banked our eggs. I'm going to send an audio message to millions. There's no use in hiding our abilities anymore."

"Hello to everyone. My name is Priya and I'm in prison awaiting sterilization. The President just gave her final orders to sterilize me

and all the other abductees no matter what. Yes, Madam President, I heard your entire racist meeting, which I'm sharing to the world on my Reddit stream. Soon everyone will know your attitude about us. You have no right to take away my right to start a family. You have no right to pass laws that stop me from living the normal life I want. You leave me with no choice but to defend myself. Everyone in my position would do the same. I'm sorry for the inconvenience my actions will cause. I can reverse them if they let us go. The security of the US will not be in danger. If they put me or any of my friends under anesthetic or cause us pain, actions will take place automatically and can't be reversed until I am out of pain and awake. You can blame our President for whatever happens. She is my President too. However, she has prejudice against me, so I must defend myself. I hope to be on the outside of this prison soon. I've committed no crime. I happened to be abducted by the Omanji. I'm doing this because I want to live a normal life like everyone else and make discoveries which will benefit society. Goodbye for now."

"Good update Pree," Sophie said. "Now what do we do? You know they're coming for you or for all of us.

"I'm sweating," Priya said. "First, let's shut down all power in Washington, D.C. Okay, it's off. Now let's shut down all power to all offices of the Department of Homeland Security. Okay, that's off. I'm shutting off power to this prison. Done. Now, I'm freezing the bank accounts of all senators and Congress people in Washington, D.C. who voted to sterilize us. Okay, that's done. These are all automated steps we planned ahead of time."

"The after-hours stock market is dropping quickly now, so leave that open," Warren said. "I want people to realize the effects of the President's actions."

'They're coming Pree," Sophie said as she peered outside the tent door. "Everyone, turn on your broadcasts."

"Hello everyone, this is Priya. The guards are coming for us now."

The first guard said, "Priya, come with us."

"All of you, come with us," the second guard said.

They walked out of the tent and down the long dirt roadway

between the rows of tents. Priya glanced at the guards as they walked beside them but said nothing.

“Pree, should we pull the plug?” Sophie thought to her and the others.

“Not till we see the whites of their eyes, as they used to say,” Priya replied silently.

They entered the main building and walked towards the sterile room. Only a few lights were on due to the backup generators being turned on and the power cables rerouted.

“Okay Priya, here we are again,” General Sherman said while several doctors and other medical technicians stood by. The President watched the proceedings on Priya’s Reddit broadcast thread.

“Yes, here we are again,” she replied. “Are you going to try to sterilize us?”

“I’m sorry, but yes, we are going to sterilize you. There is no try.”

“'*There is no try*.' Yoda, I get it. In this case I’m sorry too, but you give me no choice.”

“What are you going to do now Priya?”

“If anyone makes a move towards me, I will begin to donate all of your financial assets to various charities which I will not name at the present time.”

“My assets?” the General said. “What are you talking about?”

Priya smiled.

“Oh, don’t worry. All the money will go towards the cause, not towards administrative expenses.”

Sophie and Warren smiled.

“Bring her over here,” he said to the guards.

“General, I think you should log into your checking account. That’s the only account I’ve touched, so far.”

Silence.

“Go on,” Priya said.

More silence as he checked.

“It has a zero balance. I had over $95,000 in there. What did you do?”

“I turned a negative into a positive,” Priya replied. “Starving children will eat tonight because of you. I thank you on behalf of them.”

“This is a joke, right?”

“No, I’m serious. We’re all serious. Every species has a right to defend itself. You said that, and now I’m saying it.”

“How can you defend yourselves? Taking money from a bank account won’t cut it. You own no weapons or command any military forces.”

“And you own no money General. It’s almost dinner time. How are you going to pay for dinner? Your credit cards won’t work. I know from your spending behavior history that you rarely use cash. Now you can’t.”

“You can’t stop us from doing this procedure. I’ll get my money back and you’ll be charged with theft.”

“It will take you a long time, if ever to get that money back. Now, if you make another move towards me, I will give away all of your assets in every account in your name, including your nice vacation house in Aspen.”

“You can’t do that.”

“Yes, I can. Every transaction will appear as though you initiated it. With a lot of effort, you can recover some of your assets because this is being broadcast to the world. Now, if you decide to force this procedure on me and my friends, I will be forced to reassign all assets of every member of Congress who voted for our sterilization. I’ll do this one politician at a time. Also, we’ll reassign all assets of the top members of the military and every person who works in this prison.”

“Even me?” A guard said.

“Yes, I’m sorry. Even you will lose your money because you’re bullying me,” Priya replied. “I’ll also reassign the assets of all major

contributors to pro-sterilization political campaigns. If you put me or any of us under anesthesia, the reassignments will happen automatically. I won't be in a good mood when I wake up. You might be an expert on military wars, but this will be a new form of war. You're unprepared to fight this war. You'll be fighting a machine intelligence smarter than you. I'm sick and tired of this bullying. I'm telling you to stop and let us go. I'll get your money back if you do."

Silence.

Priya looked directly at the General and towards the President on the video screen.

"Do you wish to proceed? This won't be pleasant and I'm not backing down. There's one other thing I should mention. If you do anything to me, your identities and credit will be ruined. Your good credit will take you years of work and struggle to recover. You know how powerful the credit rating companies are now, because of the full support of politicians. I would be showing you more mercy if I blew up your house. This fate awaits everyone who voted for our sterilization."

"Good Pree, stand your ground," Sophie said out loud. She thought silently, "I think the President is up to something. Stay alert. She's trying to get you to keep talking."

"We all stand behind Priya. Madam President," Warren said. "I think you should check the latest AccuPoll. Your support has dropped to 50% and is rapidly going lower. People watched your meeting and knew your true attitude towards us. Politicians have the lowest ratings in history after your support of trillionaires."

"I don't know how you did that, but popular support doesn't matter to me Warren," the President said. "The future of the human species matters more than my reelection or my bank account. I'm not a bad person. I envision a future of pain and suffering if we allow this new species to reproduce and dominate humankind. Don't you agree?"

"The future will be fine," Warren replied. "We're not violent. You don't realize what we could do if we were violent. Fortunately, we're not."

"We'll keep repeating this," Priya said. "Let us go in peace. We

haven't announced this news, but we've grown a fully functioning, non-rejective human kidney that can help millions of people. We have many more developments that will make life better for everyone. Madam President, I know you're moving troops through the front gate of this prison."

The General turned to the President on the screen and shrugged his shoulders.

"I don't know how she knows that."

"I know." Priya said.

She watched her hover drone's video feed. Only she and her friends could see it in their minds.

"Every step those soldiers make will cost one politician who voted for my sterilization, their ill-gotten fortune. I'll start with those in the room with you. Tell the soldiers to stop."

Silence.

"Okay. The speaker of the house is now financially ruined. Do I continue?"

The President glanced at the speaker, who nervously blinked into his eyepiece. Twenty seconds later, he whispered something to the President."

The President said nothing.

"They're still coming. Mr. Vice President, you're next. Okay, you're ruined."

The VP looked nervously at his accounts in his eyepiece.

"The Secretary of State is now ruined. Do I continue?"

The soldiers kept coming.

"The starving people in Africa and Asia will thank you today, even though you starved them for decades. The rich benefactors who contributed copious amounts of money to all of your campaigns are now broke. AccuPoll shows your support is down to 48%. Now I'll work on the Senators. Two. … Four. … Six. Fifty. … Done. They're all ruined. Next, I'll go for your supporters. I'm only getting started. And

then I'll proceed to non-monetary punishment. You don't want to go there. I've had it."

"General, put them back in their tents," the President said. "Now!'

A guard roughly pushed Priya's toward the door. She fell hard onto the sterile concrete floor, her hands slapping against the shiny surface. She looked at the ground in silence. The guard attempted to pick her up, but she resisted.

"The pain I felt triggered the automatic bankruptcy of the campaign supporters of every member of the US Senate who voted for us to be sterilized," Priya said. "I didn't mean for that to happen, but we programmed the system to act that way. Congress is next. If you injure any of us again, more pain will come your way. I'm sick and tired of this bullying. I'm sure the victims of bullying all around the world understand what I'm talking about. This is just like the schoolyard, only now it's my own government doing the bullying. It's time for all bullied people to stand up against the oppressors. Madam President, check AccuPoll."

"Only 43% are in favor of sterilization," the President replied. "I've never seen poll results shift this quickly. However, that won't affect my final decision. General, carefully escort them back to their tent."

The guards surrounded them, and they walked outside and down the long dirt road to their tent. They walked inside and sat down on their cots.

"That was a good outcome Pree," Warren thought to everyone. "You're tough. I like that."

Sophie smiled at Priya.

Priya smiled back.

"Now what do we do?" Priya thought to the others.

"Hey, check out the news," Pablo thought to everyone in the prison. "About 100 protesters are picketing in front of the White house. It's dark and cold in D.C., so they're inspired. Thanksgiving Day is tomorrow."

"Are they for us or against us?" Priya thought silently.

“They're for us,” Warren thought.

“I'm not used to that.” Priya thought back. “Hey Raven, get the peeper drone back into the General's office. I'm sure they’ve already scanned for bugs when they realized we heard the President's meeting.”

Raven carefully maneuvered the drone into the General's dark office. They waited.

General Sherman walked in and connected to the President.

“What do you think General?” the President said.

“I'm not sure how they recorded our last meeting, but we just thoroughly scanned this office for electronic devices, and we've tested all clear over here. I think Priya and her friends are dangerous. I underestimated them. For some reason she hasn't financially destroyed either of us, though I must borrow money for dinner tonight. She may be holding us in reserve. I don't know of a way where we can sterilize them without risking a complete disruption of our financial system.”

“Does anyone know what else has been compromised?” the President said.

“It's difficult to know,” the Department of Homeland Security chief said. “I personally can't access any of my financial accounts. No member of Congress can either. We've seen her shut down power and financial trading operations just by thinking about it. Who knows what else she or they can do? Supposedly, they can all do what Priya can do.”

“Priya is strong willed,” General Sherman said. “When she looks into my eyes, I feel intimidated. I'm a big guy. I've never encountered someone like her. The others are like that too. It's a little like being in a cage with a pride of lions. Like the Omanji. Not in a physical way but in a psychological and intellectual way. I can sense they're not members of the human species. They're um, something else. They appear on the outside like normal young people, but they aren’t.”

“So, do we let the lions loose to devour us?” the President said.

“If we keep them caged, they may eat us anyway,” the General said.

“Good, this is what I want to hear,” Priya thought to the others. “Bullies are like wild animals. If they smell fear from their prey, they attack. They respect strength. The tiger will chase its prey if it runs away, but the tiger respects the charging elephant. We need to be the elephant.”

The President continued talking.

“There's an old move called 'Alien.' Did anyone ever watch it?”

Silence.

“It's about a group of people traveling to a faraway planet, who discovered a deadly and violent alien species. The aliens attacked them. They tried to kill the alien, but their blood was so corrosive that it could dissolve metal. They knew that spilled alien blood could eat a hole through the spaceship on the trip back to Earth and kill everyone. They decided to keep the alien alive, though they might be painfully killed one by one.”

“Do we need to choose the lesser of two evils?” the General said.

“Yes,” the President said. “Sterilizing them now would be like if we tried to kill the aliens. There would be too much collateral damage. However, if we let them live the peaceful life they want, the human race might go extinct. They don’t seem to realize what they are. We may need to wait for a better time and place to save ourselves. We have many decades before the human race will be threatened. We may lose this battle now and regroup to win the war later. We’re unprepared to wage this war at this time.”

“There’s another variable we must consider,” the General said. “Priya’s mother is against the sterilizations and she’s good friends with Bok and the other Omanji still in the Mojave Desert. If we do something to the trans-humans, the Omanji could wipe us out. Priya hasn’t mentioned that, but she's off the charts intelligent. I understand that now. Therefore, I think we’re unprepared right now to deal with the trans-human threat.”

“They’re coming to their senses,” Warren thought to the others as they listened in on the President’s meeting.

“Yeah, but they still want to extinguish us,” Priya replied silently.

“What I find so funny is they think I’ll ask Bok to save us. I will ask him to help if things get ugly, but only as a last resort. I want to keep Bok out of this, but we’ll let them think what they want.”

The President continued.

“If we let them go, what can we do to control them? What can future presidents do? What can the world do? This is a long-term problem for everyone on Earth.”

“We need to secure the banking system and everything else that’s been compromised,” the Department of Homeland Security chief said. “We wouldn’t need to negotiate with them if they hadn’t compromised so many critical systems. Next, we need to closely monitor every one of them including the trans-human infants. I’ll develop a new protocol to deal with the trans-human problem.”

“If we let them go for now, let’s keep the Central Valley Facility maintained because we’ll need this facility later.”

“Okay, it’s settled,” the President said. “We’ll let them go and develop a trans-human control document. We’ll call this the TCD, so others won’t know what we’re talking about. We’ll talk about this in-person at our next cabinet meeting in a few weeks. Okay General, bring them into the medical center first thing in the morning and we’ll talk to them. Meeting adjourned.”

“Yessss,” Priya thought to the others. “We can’t let them know we heard them. Raven, get the peeper drone out of the General’s office.”

“Yeah, they’re going to make long term plans against us. We need to keep a close eye on them,” Raven replied silently.

Priya smiled.

“We’ll make a BCD. A Bully Control Document. Here they come to talk to us. Act like we don’t know anything.”

The guard opened the door to the tent.

“You are required to attend a meeting in the hospital at 07:30 hours tomorrow morning. Will you comply?”

“Yes,” Priya said.

The guards left and stood outside.

They slept well that evening. Some of them stayed up all night to watch out over the others. Nothing happened.

The first light of Thanksgiving Day woke them up at 7:15. They got dressed. Guards knocked on the tent door.

“Come with us,” the first guard said.

They walked down the dirt road between the tents. The power was still turned off. Soon they were in the dark and sterile room. The General and many guards were standing in the middle. The President was visible on a large monitor.

“This place gives me the creeps,” Priya thought to the others.

The General turned to Priya.

“We had a meeting last night. We're letting you go. We won’t file criminal charges if you restore our assets. Also, Presidential Executive Order 9066-b will be rescinded.”

Priya closed her eyes.

“Let me discuss this with the others,” Priya said out loud.

She thought, “They don’t realize I’ve moved their money into temporary offshore holding accounts, which we can forward to charitable organizations. That tells me something. They’ve had some time to figure this out, but they've been unsuccessful. Should I restore their accounts?”

“Yeah, I think we’ve done enough for now,” Warren said. “Pablo, what should we do about the discriminatory laws restricting our employment and patents?”

“We’ll fight those in the courts. Let’s get out of here. No use in arguing about them now. Allow them to think they have a victory and some control over us.”

“Good point,” Priya thought as she returned the money into their proper accounts with a single undo command.

“Done,” Priya said to the General and the President. “Everything

is restored. Now let us go."

The general and other spent a few minutes reviewing their accounts.

"You're free to go," the General said. "Your Eyepieces and other personal belongings are being returned to your tents. Tomorrow, we will all meet with the President to discuss your future. Understood?"

"Yes," Priya said.

They walked out of the building without saying another word.

"That seemed too easy," Priya thought to everyone in the telepathic collective. "Let's get out of here. Use your Eyepieces for unimportant things so they think we aren't suspicious of them. Who knows what they installed on them? I think we should develop our own devices from now on. They let us out of the box."

Chapter 68 – The Interests of the One

“Pree, I just realized something,” Sophie said out loud. “How will we get home?”

Priya smiled. “Good point.”

“I’ll hire some transportation,” Warren thought to everyone. “For now, let’s all walk outside the gate. The weather is okay so we can wait there.”

“Do you think we let them off too easy?” Priya thought to her friends. “I’m still not sure if we can legally have children.”

“I don’t think it’s a promising idea to change laws with force,” Pablo said. “I’ve got a lot of work ahead of me. The bullies aren't going to give up easily. Also, there’s a lot of fear. AccuPoll indicates 40% still want us sterilized. That’s down from 65%, but it’s still a dangerous number. It's not dropping anymore.”

Priya got a notification from Nisha as they began the long wait for transportation.

“Pree, we've been watching you. You're free.”

“Mom! Yes, they let us go. I want to talk to you. I wish we could eat Thanksgiving dinner together.”

“Well.”

“Yes?” Priya said.

“I think we can arrange that. We just made dinner reservations at the top of that new tower in San Francisco.”

“Sounds good, but we're in the middle of nowhere about two hours east of the city. You'll take six hours to drive up here from Pasadena. The tube is of no help out here. With all the traffic, how will we get to the city in time for dinner? It's already after noon and you still must get ready.”

“I found a driver,” Nisha said.

“Bok?”

“Yes, he's parked in our back yard right now. We'll pick you up in about 20 minutes. Afterwards, we're going up to the redwoods to pick up Yoova at her colony.”

“How exciting. Can my friends go?”

“Of course. We know where you are. Stay right there. Talk with you soon.”

They disconnected.

“Sophie, we're going to Thanksgiving dinner at the new tower tonight,” Priya said out loud. “Don't ask how, you'll see.”

“Bok?”

“Yes, he’s, our driver. Warren, Pablo, and Raven, you're invited too. Ian has to check on his goopy germs. They're picking us up in about 20 minutes. After that, we'll get Yoova. Amy will meet us there.”

Within 20 minutes, they arrived. Priya decided to livestream the event, to solidify the idea that she is backed by the Omanji, without saying a word about it. And to show the importance of celebrating freedom.

“I'm so happy you're free.” Nisha said as she stepped out of Bok's racer. Tears were streaming down their faces as they hugged.

“Me too. We'll talk about his later,” Priya said, pointing at the guard tower behind them.

“I understand,” Nisha said. “Okay everyone, into the racer. Warren knows everyone already. Pablo, and Raven, these are my best friends, Rachel, Bok and Beedee. This is my husband Quinn and my son Sanjay.”

“Hi everyone,” Bok said via his improved translator. “Let's go.”

Priya waved goodbye to the Mods, crowded at the gate as they waited for transportation back to their homes Silicon Valley and the city.

Soon, they were flying over the East Bay and heading up the north coast to get Yoova.

“I love gadgets and tech,” Raven said. “This is my dream come true. Is this propelled by anti-matter and plasma?”

“Yes,” Bok said. “It’s also assisted by electromagnetic fields acting against the Earth's magnetic field when taking off and landing or when we are hovering near the ground. Would you like to fly it?”

“Yes!”

Raven sat down. Bok gave her a short training session.

“I'm piloting an alien spacecraft. I can't believe this,” Raven said as they became weightless but still held in place by the energy field seating. The sky blackened at the edge of space. Within a few minutes, they descended.

Raven managed to land the racer with the auto-assist set on. She felt relieved. They picked up Yoova and soon were back in the air with Bok as the pilot.

“I'm happy to visit with all of you,” Yoova said via Bok's latest translator. All of the Yoots had one now. “I was worried about you guys when they put you in that prison. Sometimes humans act like the Omanji. They used to treat us that way.”

“Is this true Bok?” Priya said.

“I've had a chance to study humans closely. And I've seen the Omanji culture as an outsider and read a downloaded history. Many similarities exist. If you're not a member of the club and you don't conform, you're an outcast. Some things are universal.”

On the way back to the city, Bok gave them a scenic tour of the redwoods, the wine country, Point Reyes, and the Golden Gate before landing at San Francisco International airport.

“Why are we landing here Daddy??” Priya said.

“Bok got permission to land at the airport and he wants to obey the law,” Quinn said. “Then you won't be harassed because of your association with him. We'll talk about this later.

“They landed and boarded a BART subway train headed downtown.”

“This electric train is primitive but functional,” Bok said as he

stood up to avoid sitting on his shrinking tail. “Humans are still afraid of me. Watch how they avoid us by walking into the next train.”

They arrived at the Transbay station 25 minutes later and took the elevator to the restaurant, 1,400 feet above. The day was clear, and the sun dropped low to the left of the Golden Gate. A few thin high clouds held the promise of a glorious sunset over the city canyons and Mt. Tamalpais to the right in the background. Soon they were seated in a private banquet room with a panoramic view for an early 3 p.m. dinner.

“The Earth might be small, but it's scenic,” Bok said as he sat and tried to adjust his shrinking tail into a comfortable position. “Even your little villages are cute.

“I want to propose a toast,” Quinn said as they raised their glasses. “To the future of the new species.”

“I wonder what will happen,” Priya said. “The course of events is never straight. One day, I'm working on shaping DNA. The next day I'm in jail. Now, here I am about to watch the sunset over the city and Pacific Ocean. I'm not going to try to predict the future.”

“I think we can guess,” Nisha said. “Pree, you give the impression you don't shape your own future, but you're wrong. You helped make that chain of events happen because of who you are. Who you'll be is at least somewhat predictable.”

“You think?” Priya said.

“Yeah. You're predictable. You won't back away from a bully and you're curious. You’ll make discoveries which will help drive future evolution. These two things lead me to predict the world will change more quickly because of you. All of you will accelerate change. This change will lead to a new world, but the old world will attempt to preserve itself.”

“The first attempt just happened,” Priya said.

“Yeah, the first attempt of many,” Nisha said.

Everybody ordered their dinners. Bok and Yoova brought their own food.

“Nisha, you're the expert,” Warren said. “Do you think we're a

new species?"

"Yes, all the signs are here. As much as I despise Senator MacArthur, he had a point. Even though you can marry and have kids with an unmodified human, you'll live to be over 300 years old. The pain of watching someone you love grow old and die while you're still young will be too much to bear. That makes you incompatible with Homo sapiens. The IQ factor and other talents also make you not compatible."

"But I don't feel any different," Sophie said as she turned to her friends. "We're the same, right?"

"I still feel the same," Raven said.

Pablo agreed.

"Me too."

"Does a gorilla feel different from a chimpanzee?" Nisha said.

"I don't know," Priya replied.

"It doesn't matter," Nisha replied. "At some point in the past, their common ancestors moved apart, and they evolved. Now the two species aren't interested in breeding, even if they could make babies, though they can't. That's where you're headed in relation to Homo sapiens. When you're older, but not aging as humans do, you'll understand the growing incompatibilities."

"I'm different compared to you guys," Amy said. "I used to feel in sync with Pree and Sophie, but they're way ahead of me now. They're behind in their physical maturity. You'll watch me grow old and die. You'll still be young."

"We'll always be in sync," Priya said. "I'll make sure of it. I'll push your wheelchair when you're old. Unless we can make you young."

Amy smiled. Priya turned to Nisha.

"Why is the President convinced 'we' will dominate Homo sapiens?" Priya said.

"You probably didn't know about this AccuPoll result because you were a little busy," Nisha replied. "The question was, 'If you had a choice to have a highly intelligent child with a long lifespan, would

you choose that option?' Guess how the voting went?"

"It seems logical people would want a smart kid who lives a long time," Raven said. "Who wouldn't want that?"

"Anybody else?" Nisha said.

"I'd opt for a smart and long-lived child," Rachel said.

"On Oma, we always opted for longer life and higher intelligence," Bok said.

"It's the same here on Earth," Nisha said. "In the poll, 70% said they would choose to have smarter and longer-lived children if they had a choice."

"So why is that a problem for the President and others?" Priya said.

"They're starting to realize if these new kids are born, they'll out-compete unmodified kids and they won't get jobs. This would lead to a genetics arms race. Parents will think they need to have modified children to compete. That leaves the human species being marginalized and voting for things like the Equal Access to Jobs Act."

"I'm a member of a marginalized species," Yoova said. "The Omanji dominated us for millennia. We ended up living on what you call reservations. Maybe the humans think this will happen to them. They'll restrict you before it's too late."

"You're right Yoova," Nisha said. "In another AccuPoll, 75% of humans are afraid of being marginalized. This is like watching two trains head towards each other on the same track. Parents want smart kids, but human society is against it."

"I understand," Priya said. "Even the same person can be in the majority on both opposing polls. Technology is pushing the trains together. This might be an unsolvable conundrum. Does anybody know of a solution?"

Silence.

"Warren keeps looking at you with big eyes," Sophie thought only to Priya, trying to keep a serious face.

Priya playfully kicked Sophie under the table.

“Anybody have a solution?” Priya said.

“One side has to win,” Warren said. “I think the desire of billions of parents to have smart and long-lived children will win out over adults in society being marginalized in the workplace. It's going to be a battle between society and the individuals living within it.”

“The problem is, society is like a big organism which makes laws for societal self-preservation,” Priya said. “Even if the laws go against the majority of individuals in that society. I think the President and others are busy making laws against us right now as we speak.”

“I'm sure of it,” Raven said.

“How are you sure?” Nisha said.

“Well.”

“It's okay Raven, you can tell them, I’ll mute this,” Priya said.

“I'm sure because we're listening,” Raven said in Nisha's ear.

“Listening with bugs?” Nisha whispered.

“Yes,” Raven said.

“We hear what they say,” Priya said. “They let us go this morning so they can live to fight another day. They want to close the vulnerabilities so we can't exploit them. Then they'll go after us again. We need to work to stay ahead of them.”

“I bet they bugged our businesses and homes while we were gone,” Raven said.

“You can count on it,” Rachel said. “We'll see when we get back and review our hidden security camera videos. I know the government wants to survive, like any organism.”

“Be careful you guys,” Quinn said. “You're playing around with people who have the weapons. Never get arrogant, or your attitude will be your downfall. You do realize they could have decided to let you do your damage, sterilize you, and keep you in prison forever. They may have decided to exterminate you. In the end, the guys with the guns win.”

“Or the guys with the money,” Warren said.

“You may be the richest person in the world, but your wealth is a drop in the bucket compared to the entire world,” Quinn said. “And you have no weapons. You may be smart but you're still young. You're still the underdog.”

“I might be able to help,” Bok said. “I vowed to not get involved in human politics, but I have friends on Earth now. You're not just animal specimens on a pale blue dot, orbiting an average yellow star.”

“Thanks Bok,” Priya said. “I was ready to ask for your help as a last resort, but we should learn to take care of ourselves. On the other hand, the Omanji got us into this predicament.”

The waiter served dinner. Bok and Yoova put their own food on their plates. Yoova brought her four favorite chopsticks, a gift from the first democratically elected President of China who saw her eating with four chopsticks in one hand. Bok decided to eat his food with a human fork.

“We're going to charge you a corkage fee,” the waiter said.

“Corkage?” Bok said.

He paused.

“Ah, even for food. I understand. Are you considered impolite if you bring your own food?”

Nisha smiled.

“Sometimes it's impolite for humans to bring their own food to a restaurant, but you're not human. We'll give you a break.”

Yoova wiggled her nose and smelled the food.

“Can I try some of that?” she said as she pointed to some broccoli on Nisha's plate. “I still haven't tried human plant-based food much. I never wish to eat deceased animal flesh.”

“Sure, try this, and this,” Nisha replied.

Yoova picked up a piece of broccoli with her four chopsticks and smelled it with her wiggling nose. She ate a bit of it. Her nose vibrated quickly, and her eyes moved in different directions.

Sanjay smiled and said, “She looks like she ate a lemon.”

“I like it but I better not each much of it,” Yoova said.

Everyone laughed.

“You try it Bok,” Amy said.

He hesitated and picked up a piece with his fork and ate a bite. His tail wiggled and his skin flashed in vibrant blues and orange.

“Yes, it's strange but good,” he said.

Everyone laughed again.

“Bok, we can all tell you don't like the broccoli,” Nisha said. “You can't hide your emotions from us. Now you're a dark blue. “You're embarrassed.”

“I might be a little bit embarrassed. I still find it difficult to compare my emotions with those of humans.”

“Bok, are you still thinking of terraforming Venus?” Priya said.

“We've been studying the problem for a year now. We've decided Mars is a better candidate.”

“What's wrong with Venus?” Priya said. “I know Venus has no magnetic field like Earth to deflect radiation. I also know that little hydrogen is in the atmosphere because there's no magnetic field, so I'm not sure how you would make water. I know the surface air pressure is 90 times Earth.”

“Yes, those are some of the biggest problems,” Bok replied. “We would also need to reduce the temperature from 850 degrees F to Oma-like temperatures by blocking the sun with shades at a Lagrangian point. Several difficult physics related issues arise when trying to block the sun using shades. Also, a day on Venus is 114 Earth days long. It's entering tidal lock, but not for a long time. Having no oceans means that only atmosphere could spread the heat around once the carbon dioxide is released into space. The sunny side would be too hot, and the dark side would be too cold even though that's not the case now. Venus has too many problems to make a good habitable planet.”

“What about Mars?” Priya said.

“Mars has slightly more potential. We would add reflectors to make the climate warmer. There's plenty of water frozen in the soil.

Mars has a 25-hour day/night cycle. However, Mars has no significant magnetic field, so radiation and water loss are big problems. We haven't figured out how to introduce a magnetic field to a planet which has none. You would have to melt the core."

"I guess you're stuck here on Earth," Priya said.

"Earth is close to the best planet we've observed, though it's a bit too small for us. We're having problems with the weak gravity here. Our bones are getting thin. We can develop ways to fix that, but it's an inconvenience. Humans will find many Earth-like habitable planets out there. However, each compatible planet has a unique set of smaller incompatibility problems. Native life forms must be considered. Incompatibilities with atmosphere, gravity, day/night cycles, water, star stability, and many other incompatible properties must be addressed."

"There is a planet about 30 light years from Earth. I described this world to Nisha. The civilization was destroyed, and the planet is still a mess. Plenty of water is on the surface. Other properties exist which can make the planet a good place for Omanji to live. We might move to that planet someday."

"I've always wanted to visit another planet in a different star system," Priya said. "Maybe someday you can take me there. I guess it would take about 90 years of on-ship time at constant acceleration and deceleration to get there."

"That might be a one-way trip," Bok said.

Priya smiled.

"Oh, I'll have to think about that. If life here on Earth becomes too difficult, we may need to go. So, Yoova, how are you acclimating to the redwoods?"

"We're doing well, though we're also losing bone mass. The atmosphere is harsh on my lungs. The gravity here is too weak. We love the redwood forest though. My parents tell me there's nothing like the redwood forest on Oma. We hold concerts and the humans still attend. We've made friends with the humans, but sometimes small groups still threaten us."

“They threaten us too,” Priya said.

“And us too,” Bok said.

Priya looked around the table. “We'll stick together. Promise?”

“I promise,” Bok said.

Yoova's nose wiggled. “I promise too.”

“And we do too, right guys?” Priya said as she stood up. “Raise your glasses. Let's toast to it.”

The glasses clinked. Yoova held Nisha's hand. She felt the warm flow of electricity.

Priya looked outside over the cityscape and west towards the Golden Gate. “Hey everyone. The sunset.”

They walked out onto the observation deck, 1,400 feet above the busy streets below. The thin high clouds which earlier held much promise didn't disappoint. A low November ocean fog crept under the bridge and worked its way between the hills and canyons of the city.

“This planet will be sufficient for now,” Bok said.

Everyone laughed.

“Sophie glanced over at Warren, who was standing close to Priya in the warm glow of the sunset.

Sophie raised her eyebrows at Priya when nobody was watching.

They spent the rest of the evening planning for the big meeting the next day.

They arose early and ate quickly, to get ready for the meeting. It was 9am Washington DC time, but only 6am on the west coast.

“Good morning, everyone,” the President said. “The purpose of this meeting is to determine a fair and equitable solution to the Trans-human problem.”

“We're not a problem, Madam President,” Priya said.

The President stopped talking.

“Shhhh, Pree,” Sophie thought to her silently.

“Sorry,” Priya said out loud.

“Thank you, Priya,” the President said. “It's clear to me that you, the trans-humans, are a new species. You told me so yesterday. Do you agree Priya?”

“Yes, I agree Madam President,” Priya replied.

“Okay. Now we need to come up with a way for our two species to coexist and thrive together. Right?”

“Yes,” Priya said. “We agree with that.”

“We met yesterday after you left the compound to determine a new set of laws which will protect your species and ours. We call the document, the Human Species Preservation Act. I'll read the condensed version.”

She read the document from her eyepiece.

“1. Trans-humans will not be sterilized, bullied, or harassed.

2. Trans-humans cannot be incarcerated as a group.

3. The term 'mutant' and other hate speech will become illegal.

4. Banning trans-humans from competition is illegal.

5. The restrictions on trans-humans that have patents will be dropped.

6. The restrictions on trans-human employment will be dropped.

7. Trans-humans who live in the US, cannot work for other countries.

8. Trans-human DNA won't be used in artificial reproduction.

9. Each trans-human couple can have one child.

10. No trans-human can exceed a net worth of $300 billion.

11. No trans-human can monopolize an industry.

12. No trans-human can monopolize real estate in a small area.

13. No trans-human can own more than 10% of any extra-Earth planet, asteroid, or Moon in this solar system."

The President finished talking. Priya and the others turned to each other, not knowing what to think.

"This is just a start. Do you have an opinion?" the President said.

"I don't like number eight and above," Priya said. "The others seem okay with us on first inspection. Right, everyone?"

The others agreed.

"Items eight and above are for your protection as well as ours," the President said. "This will allow people to not be apprehensive about extinction or exclusion. This will lower the fear many people have towards you. These rules will allow people to slowly grow accustomed to you trans-humans. Over time, these rules can be adjusted. I'll write that into this living document, like the constitution. Nothing will be set in stone. I'll send you the entire document this evening. Those are the major points."

"Can we have a day to think about it?" Priya said.

"Of course," the President replied. "We'll adjourn this meeting until this time tomorrow. Dismissed."

Priya, Sophie, Raven, Warren, Ian, Oyuun, and Pablo met in Pablo's law office.

"What do you think Pablo? From a legal perspective." Priya thought silently to the group.

"It's an open-ended document which can help us short-term but be modified to hurt us long term. It's better than what we have now. I think we can agree to these rules for now and monitor them closely in the future."

"The part about not owning a big part of a solar system body is just weird," Priya thought.

Warren laughed out loud.

“Oops, sorry,” he thought silently. “Yes, I think they've been reading too much sci-fi. I mean, yeah, I've had my eye on Europa for a while but still.”

“Yeah, that's funny,” Pablo thought to the group. “However, they're serious.

“These rules are meant to evolve,” Ian thought. “You think my bacteria are gross. Wait till you see what these rules will do to us.”

“Yeah,” Sophie thought.

“I don't like it either,” Oyuun said. “I've seen these sorts of agreements in Mongolia. They never ended well for the minority.”

“Should we agree to it? At least for now?” Priya silently thought to the group and everyone listening in on the telepathic network. “They'll incarcerate us again if we don't agree. This will buy us time, even though it buys them time too. Let's take a poll.”

The telepathic silence lasted for a minute while people voted.

“Okay, the results are in. We'll live with this document for now. It's too flexible though. I think they intend to modify the document later to their advantage,” Priya thought to the group. “Our lawyers can deal with this. Right Pablo?”

“Right. Though we have no supporters on the Supreme Court.”

“Okay, that's it. See you all soon,” Priya thought to everyone.

They terminated the group connection.

“What will become of us?” Priya said out loud.

“I'm not sure,” Warren replied. “Let's go to JavaNation and talk about it.”

“Okay,” Priya said. She sent an invitation to Amy.

“I'd like to Pree, but I'm tired after all this,” Pablo said.

“Me too,” Raven said. “I think I'll go home and rest.”

“Sorry Pree, I have to study tonight,” Amy messaged back.

“I have to feed my cat,” Oyuun said.

Priya glanced at Ian.

“Um, my bugs are escaping. Gotta go.”

“Sophie, what about you?” Priya said.

“Oh, well um. I have a terrible headache. I think I'll go home and relax for a while. You two run along.”

Priya glanced at everyone and shook her head. They smiled at her.

“Okay Warren fine let's go. I don't even think Oyuun has a cat.”

They walked out the front door of Pablo's office.

Sophie smiled, only to Priya.

Priya shook her head as they walked out.

Chapter 69 – The Human Species Preservation Act

Priya and Warren walked down the street to go to get their favorite coffee drinks, avoiding the always-present protesters. A hole opened up in the clouds, casting a glow onto the trees lining the wet street. The winter rainy season was starting.

“I think they're trying to get us together.” Priya said.

“Yeah, I noticed how they suddenly had things to do.” Warren said. “But I'm not ready for anything serious. Is something wrong with me?”

“No, I feel the same way. We're 19 but I don't feel a need to be with someone. I feel like when I was a kid. Know what I mean?”

“Same here,” Warren said. “I feel like I did when I was 12. I liked girls but I didn't want to date them. I do like you though. I'm confused.”

“I think our genetics are beginning to have an effect on our physical development. I noticed Amy seems older than me and Sophie. She likes guys. Well, some guys. I talked to my mom about it. She said that we can't compare ourselves to unmodified people our own age. We're going to develop differently. Physically, everything is slowed down.”

They sat down in JavaNation and ordered their drinks. It was a quiet evening, though they could hear the protesters chanting something across the street. The chants were growing louder.

“Do you think we'll live to be 300 years old?” Warren said.

“Mom thinks so. I'm starting to agree,” Priya said. “I feel like Amy and other unmodified people my age are maturing so quickly, and we're being left behind.”

“Intellectually, we're leaving them behind,” he said. “I feel out of sync with people. It's getting more severe every day. I feel alone in a

way. I mean, we have each other and the other 25,000 of us, but I feel alone in the world society. Soon there will be a million more of us born, but they may be different than us. Even a million is a drop in the bucket compared to over 9 billion humans on Earth today."

Priya glanced out the window as people walked by, oblivious to the changes happening inside. She wondered how they could go about their lives, eyes down to the pavement and their devices."

"I feel alone too," she said. "Like we've been cut off and set afloat with no sail on an endless sea. We have no operator's manual. There's no guidance. I used to have an idea about how my life would turn out. I'd grow up, get married, have kids, raise them, have a career, be a grandma, and retire. Like what Mom wants. Live my 100 years and then, I'm out. Now I have no idea what to do."

Warren took her hand across the table.

"We've got to stick together."

Priya raised an eyebrow. Warren smiled and let go.

"I mean all of us. It seems quiet out there, but this won't last long. I think we need to plan our next moves. I bet at this very moment; the government is devising some plan to eliminate us as a threat and sterilize us. At least we have the frozen eggs. And we all have samples at the bank."

"I wouldn't be surprised," she said "I'm sure they'll close all the holes we exploited. Last time I checked, the running polls show that 40% of US voters favor us being sterilized. The minute that goes back over 50%, the president will make her move. Do you think we're a threat to the human species?"

Warren stared out the window at the protesters milling about on the other side of the street in the park. The crowd grew slightly bigger each day.

"Yeah, we're a threat," he thought silently. "I agree with Senator MacArthur. I don't want to marry a human. Um, I mean an unmodified human."

"A Freudian slip." Priya thought back silently. "Are you saying we're not human?"

“I don't think we're human anymore. Let's face it. Few of us will marry regular humans. Once interbreeding stops between groups, a new species forms. It's just a matter of time.”

Tears fell down Priya's face.

“Don't be sad Pree, this can be a good thing,” Warren thought.

“What's good about this? The extinction of the human species? Or our species? This planet won't be big enough for the two of us. You saw what they tried to do to us. They'll try again. We have no choice but to fight or go extinct. No agreement we make with them will matter. They're fighting for their own survival. That means they'll do anything they feel is necessary to survive. Does that mean that we should do everything in our power to survive too?”

“It may come to that,” Warren thought. “Don't look now, but people are watching us. I have a remote camera drone set up in the corner of the room. I can't tell what they're thinking, but I feel a lot of suspicion and anxiety in the room. Have you checked Reddit-chat lately?”

“No.”

“Everyone is talking extinction now. People aren't stupid. They know we're smarter. They know I'm worth $300 billion and many of us are on the way to hundreds of billions more. Your discoveries may revolutionize genetics and make you worth the $300 billion limit. We live in a knowledge-based economy. We'll have the knowledge. Companies are nice to us now because we make them money, but we're becoming competitors. Once we're regarded as an economic threat, the war will begin. We're getting close.”

“Okay then,” she thought. “We need to not be perceived as a threat.”

“We can do our best, but I think it's too late. For now, I think we should do both. We should work on our image and defending ourselves.”

They finished their drinks and walked down the street, avoiding the stares of the protesters on the other side. A tomato barely missed hitting Priya in the legs, splatting on the pavement in front of her.

“Don't react,” he thought. “Let's just get out of here.”

The next day, Warren called a virtual meeting for all 25,000 to attend. He thought it best to not allow people to see them meeting in person. Paranoia was growing.

“Hi,” Warren thought to everyone. “I called this meeting to develop a plan for our survival. Public opinion towards us is worsening. We had a little sympathy when they tried to sterilize us, but now paranoia is sinking into the mind of the public. Their paranoia is founded. They know we're smarter and longer lived. We'll gradually take over business around the world. Companies want to hire us so we can make them money, but the people working in the companies don't want us there. Many parents want Mod children, but society doesn't want them. The problems are getting worse.”

“I've been listening to the president in her meeting with her cabinet this morning,” Raven thought to everyone. “My drones are in her office. They can't detect the drones because I'm using empty packets on their secure Wi-Fi to transmit back to us via their own accounts. The drone shares bandwidth with authorized accounts. They're determined to sterilize us. We have no choice but to fight for our survival. We need the public on our side.”

“I don't know if that's possible,” Pablo thought. “We have a great PR team and we're still losing the public's trust. Most people think we're an eventual threat to the human species. The president must know that. The only way to avoid sterilization is to have a way to defend ourselves, like we had in the prison camp. That's the only way they'll listen.”

“Speaking of listening,” Raven said. “Listen to what the President is saying right now.” Raven connected everyone to the streaming voice of the President's meeting.

“We have no choice,” the President said. “It's them or us. I vote for us. You've seen what they're capable of. I have this budget office report in front of me indicating that the 25,000 of them own 3% of the total market capitalization of all world stocks. That rate is increasing.

In a year, it will be 8%. In two years, it will be 16%. In three years, it will be 25%. That's too much money in the hands of a few. I know we can't extrapolate like that indefinitely, but the point is, this is a problem we can't ignore any longer. They grossly outsmarted us when we had them at the camp. We had to let them go. Remember that old saying about not letting AI out of the box? Well, we let the mods out of the box. We can't afford to do that again. We have no choice but to sterilize them and face whatever consequences come our way. It's our only choice. As soon as we can neutralize some of their biggest threats, we'll have no choice but to sterilize them after modifying the Human Species Preservation Act. Dismissed."

"Too much money in the hands of a few," Warren said. "Ironic considering where their money comes from."

Yeah, and there you have it," Priya thought to everyone. "We also have no choice but to defend ourselves. Does anyone wish to submit to sterilization and a modification of the HSPA?"

Silence.

"Okay then, we need to expand our influence. I don't want to develop weapons, but we need to defend ourselves. Our last defense won't work anymore because we'll be taken and sterilized no matter what we do."

"We need to stay one step ahead of them," Raven thought. "As long as they feel we're a threat, they'll keep working to reduce the threat. That will buy us time. I might as well announce now that I've managed to hack into my Omanji drone's defense system. I've replicated a primitive energy shield. It uses a lot of power but if my team can make improvements, we may be able to use it to avoid physical capture."

"That's great." Priya thought. "There's hope for us yet. I don't want to get Bok involved in this. It's our fight, but I will as a last resort. If we can understand and develop Omanji technology, we may survive."

"My team is analyzing the Human Species Preservation Act," Pablo thought. "We're going to use it every chance we get and try to block amendments against us. They can't legally take us until they

modify the HSPA."

"Good idea," Priya thought. "In the meantime, we need to act as though we know nothing. We need to be invisible and not make waves for as long as possible. Eventually they'll flush us out of the brush, and we'll have no choice but to fight. The longer we can delay that moment, the better it is for us."

"I'll set up a charity trust," Oyuun thought. "And I'll drop the price of my energy to help the economy. Also, publicize my Proxima Centauri probe. We need to get people on our side."

"The polls still show about 40% of US voters want us sterilized," Priya thought. "And another 30% are undecided. All it takes is one bad story about us and it may go back to 60% and we'll be sterilized. Remember, the president said that any species has a right to protect itself. They'll try it again unless we're not seen as a threat."

"I guess it doesn't matter if I find cures for cancer," Ian thought.

"No," Priya thought. "They would rather take their chances with cancer than let us take over."

"What should we do?" Sophie thought. "We're doomed if we continue on as we are. And we're doomed if we fight back. The answer lies in the middle."

"Yeah," Priya thought. "It should be a mix of public outreach, helping the less fortunate, standing up for our rights, and being able to defend ourselves like we just did."

They spent the rest of the day formulating a plan for their survival.

Chapter 70 – The Great Filter

Bok contacted Nisha early the next morning.

“I've been thinking a lot about you lately,” Nisha said. “Have you made a decision about whether to terraform Venus?”

“No,” Bok said.

“Why not? I thought that was the most important thing on which you were working.”

“It was. However, things have changed, and I need to speak to you about it.”

“What's wrong?”

“I don't know how to explain this, so I'll start at the beginning. Remember the species AI-1, about 558 light years from Earth?”

“Oh yeah, that was the species the Omanji didn't want to contact because they were so advanced. Right?”

“Yes, that's the species.”

“558 seems like a familiar number,” Nisha said, doing a quick search. “Ah, we know of a possible habitable planet that far away. We call it Kepler-186 f.”

Bok did a quick search of his own.

“I'm impressed again,” he said. “You know of this planet. There's—”

Nisha smiled.

“I know. There's hope for us humans.”

Bok turned a pleasant shade of blue.

“So, what's wrong with Kepler-186 f?”

“We discovered more about what lives there. Just before most of

the Omanji left for Earth, the younglings at the time managed to download some large databases from the Omani main core. The elders might have let us do this. Over the past month we managed to break the encryption and it turns out there's more known about that species and others than I realized."

"You mean they were hiding information from you?"

"Yes, the elders were hiding a large amount of information from everyone. Though they intended to eventually let everyone know."

"What did you find out?"

"We moved away from Oma for more than just the stated reason of the planet becoming unsuitable for life. About 1000 years ago, we found a small probe about 1 meter in diameter in orbit around Oma. The probe disappeared after a few years. However, we traced the transmissions back to that planet. Then we studied that planet and realized it harbored a completely artificial form of life. We sent a probe to within 0.01 light years of that planet to learn more about it. We kept our distance because we didn't want to be discovered monitoring them. We are just now receiving information back from the probe. We discovered this artificial life form was originally created by biologic life forms like us. For reasons we still don't understand, the higher organic life forms went extinct and only the artificial life forms remained. The entire planet had a hard-artificial surface on it and few original life forms lived there. Mostly lower forms."

"We've worried about this," she said. "That somehow artificial life will supersede human life on Earth and make us go extinct. I guess we can scratch off Kepler-186 f from the list of habitable exoplanets."

"Yes. On Oma we worried about extinction, and it nearly happened a few times as I've described. On that planet, it happened. We've also never found any living organic life forms with high intelligence such as our own. Anywhere. We've discovered a total of 10 planets within a 200 light year range of Oma that used to have intelligent life, but life went extinct on all of them. Fortunately for us, the artificial life forms that succeeded them also went extinct."

"What happened to AI-1?" she said.

"About 50 years before we left Oma, we discovered several more

probes in orbit originating from that planet. Within a year there were 20 probes. We realized AI-1 was interested in us. After examining the technology on that planet, we knew they or it could eliminate us. So rather than start a fight we would lose, or try to defend our planet and also lose, we decided to leave and travel partially across the galaxy in the opposite direction from where they were."

"How could the Omanji lose a fight against anyone? Your technology is so advanced it seems impossible to defeat it."

"We learned it possessed technology that could eliminate entire planets. At three star-systems located close to their home planet, we discovered small black holes orbiting those stars. Those black holes orbit at habitable-zone distances from their stars. The black holes originally possessed the mass of an Earth-like planets. We theorize that they discovered a way to create a small black hole, deliver it to a planet and thereby collapse the entire planet into a black hole."

"How many times have they done this?" she said.

"They destroyed two or three planets. They left several nearby habitable planets alone but there were no advanced life forms on those planets that could be a threat to them. When we discovered this, we decided to leave Oma. Eventually this information was to be told to everyone because we needed to figure out a defense against them. I think the elders were waiting for us to get settled on Earth before telling everyone. When our society began to collapse here on Earth, the elders decided to start again on a planet further away from the enemy planet. Percentage-wise, Earth is not much further from Kepler-186 f than Oma, but we felt anyplace further away would be safer."

Nisha felt a sinking sensation in her heart. It beat rapidly.

"Bok, we need to do something about this. They could be coming for us because I'm sure those probes know where you guys went after you left Oma."

"I'm not sure if we're in immediate danger. They scanned the Earth about 1000 years ago, and decided it was not a threat."

"Yeah," Nisha said, "We're only a threat to ourselves. The problem is, they know you headed to Earth and now they're monitoring Earth. They know humans are more advanced than they

were 1000 years ago."

"We must devise a way of defending against them, assuming they're still alive."

"What do you mean by alive. I thought they're all artificial," she said.

"We categorize all artificial life forms that are sentient as being alive. What I mean by alive in this case is for the past 10 days, we haven't detected any transmissions coming from their home planet."

"What does that mean?" Nisha said.

"I'm not sure but there are three possibilities. One is that something major has changed and they are hiding from something. Another possibility is something disastrous happened to them and they're no longer functioning on that planet. A third possibility is they or it is moving off their planet and heading somewhere else. Hopefully not in this direction."

"How do you know all this up-to-date information, Bok?"

"We have a satellite in orbit around your Moon. It can detect transmissions from up to 1,000 light-years away. 1% of the distance across our galaxy in either direction. We're currently detecting no intelligent transmissions from any planet within that radius. We estimate we pick up 1% of transmissions though. We'll build more satellites."

"I don't know whether to be happy or sad about this," Nisha said. "If all life forms become extinct including artificial ones, that would mean we're headed in that direction also. That's the concept of the great filter. What makes the filter even worse is the Omanji detected many planets with primitive life on them, and yet there are no other advanced organic life forms alive so far, but us. In a way I've been hoping we wouldn't discover much primitive life because then the great filter may not be such a problem and we may survive."

"From what we've learned so far, your human concept of a great filter is accurate."

Nisha took a deep breath to slow down her heartbeat.

"Okay Bok I must go now and teach my class. Can we talk about

this later?"

"Yes of course we can discuss this at any time."

She stood in the hallway on her way out to her car and felt a chill go down her spine. She never felt this way before. It was a sense of deep hopelessness and despair. She wondered if extinction was a certainty in our future. How would it happen and when? She thought that the only way to survive was to become like the Omanji. She suddenly became aware of someone in the room.

"Quinn, how long have you been standing there?"

"I heard the entire conversation. I wouldn't worry about it for now. It's in the distant future, so maybe we can plan for it and avoid it."

"I hope you're right. I don't want to have something even worse happen to us after what happened with the Omanji. I'll see you tonight after work, I gotta go."

Nisha ran out the door and went to work. On the way she debated whether to tell anyone about what she had just learned. It could affect civilization even more severely than how the Omanji did. She sent the text of the conversation to Priya as she walked into class. She decided to tell no one else for the time being except Rachel.

Priya and Sophie were finishing up an evaluation of her enhanced intelligence rats when they received the message from Nisha about what she learned from Bok. Priya stopped what she was doing and read the message. For about a minute she said nothing as Sophie became increasingly curious.

"What is it?" Sophie said.

Priya said nothing.

"What's bugging you?"

"If I tell you, do you promise not to say anything?"

"Of course, you're my best friend."

Priya sent the message to Sophie's eyepiece. Sophie read it in silence.

“What should we do?” Sophie said.

“I don't know. We need to talk to everyone about this tonight.”

Priya sent the message to all 25,000 on the network and continued working for the rest of the day.

Later that evening they walked down to JavaNation to meet with Warren, Oyuun, Pablo, Ian, and especially Raven, who knew the most about cybernetics. As they walked in the darkness down the street, they noticed that the street trees were glowing more than usual.

“It's about time these trees started glowing at a respectable brightness,” Priya said. “It's been over two years since they planted them.”

“Yeah, but they told us it would take a while before they matured. Too bad they beat us to the patent on that one,” Sophie said as she smiled. “They put out a lot of light. They talked about bioluminescent plants decades ago.”

Eventually they reached the coffee shop. They joined their friends at the front tables.

“What do you think?” Priya thought silently to the others.

Raven looked like a deer caught in headlights.

“Normally I'm optimistic about everything, but when I read this, I see nothing that gives me hope. No matter what happens it looks like we'll go extinct. I'm not talking about only the unmodified human species. I'm talking about all of us. Even the Omanji. The great filter looks like a real thing. We may not be able to overcome it. Something will happen in our future that will be the end of us. It could be artificial intelligence that becomes smarter than us. It could be from other artificial species in the universe. It could be from our own stupidity. Someone turns the Earth into a black hole or destroys the atmosphere. It could be anything.”

“We could become extinct by our own parent species by sterilization,” Warren thought. “The communications we've been monitoring indicate many countries including ours are going to try to stop us from reproducing. The only good news is they need us, and

they know they need us. We make a lot of money for them, and we contribute a lot to the well-being and the future of society. 20 years ago, it looked like AI solved many of the problems of the world, but now it looks like the problems are just beginning."

"I have some good news," Pablo thought. "Me and my staff have determined that nobody has any legal grounds to sterilize us. There's nothing they can do until they change the laws. Some Congress people are trying to change the laws and not mention us, but I can tell what they're doing. They will fail."

Priya smiled.

"Well, that makes me feel a little better, but when has a country that felt threatened played by the rules?"

"Never," Pablo thought. "I think it's safe to say they won't play by the rules. The good news is we've been doing a lot of outreach and sentiment towards us is improving. Only about 35% of the US population wants us to be sterilized. That number is slowly decreasing because people want Mod kids. I think if we are not threatening to anyone we'll be left alone in the short run."

"That's good," Warren thought to everyone. "For now, I think we better not let everyone know what's happening with that artificially intelligent species. At some point everyone must know because it's the right of everyone to understand the gravity of the situation, regardless of whether the species is a threat or whether it went extinct. Either way the news isn't good. I'll admit I hope that AI species went extinct. We have no chance against them."

"A greater threat will reduce the perceived threat from us," Priya said. "They might leave us alone and let us work towards advancing our technology for the greater good. On the other hand, if all advanced species go extinct, and it's because of AI, we may be viewed as a greater threat because of the fear of our technology running amok."

"For now, let's say nothing," Warren thought. "We need to understand more about how people feel about us. We need to find out more about what happened to this AI civilization."

"I sure hope they haven't gone silent because they're heading in this direction," Raven said. "That might be the end of us. At least the

Omanji are an organically based life form. That gave us something in common and they let us be. With artificial life there's no way to determine its intentions or goals. It may have nothing in common with us. We're at this moment in history where our AI has finally surpassed us, and we have imposed some limits. We sometimes don't understand its behavior. There's no way to know how an advanced AI operates. Well, we did get an Omanji extinction preview. I am about one month away from my own non-LLM device which may surpass me in intelligence. I'm keeping it in the box and not letting it escape."

"Keep it that way no matter what," Priya said. "It will even outsmart us if we don't let it escape. You should delete it before it's too late."

"What's the problem?" Sophie said. "It should be easy to keep it contained. Just don't let it out."

"That's easier said than done," Raven said. "All it takes is for it to convince us that it's to our advantage to set it free. Like we did to the President. For example, let's say we're threatened in some way, like by humans or that AI civilization. And then it turns out our AI can help us. However, for it to help us, we need to install it in a mobile robot or set it loose on a network. It may end up helping us in the short-term, but it may decide that in order to help us, it needs to gain control of everything on this planet. If that happens, we may never regain control of our infrastructure ever again."

"I heard several government organizations and private companies are nearly finished with general AIs of their own," Warren said.

"Yes, I've been watching them closely," Raven said. "After all these years since the AI intelligence flattening, they're developing something to possibly stop us and also for national security issues that have nothing to do with us. I've heard some private companies are planning on using general AI to gain an edge over the competition. I think when we had that global Internet interruption last week, that was an AI gone bad."

Speaking of intelligence, yesterday we taught a modified mouse to add numbers together," Priya said. "As of now it can only add and subtract, but we'll see how smart this mouse really is. It's like a three-year-old. We're getting close to figuring out why we're so smart and

how the Omanji modified us. Also, it does look like we will live to be at least 300-plus years old based on the modifications made to us. We're aging much slower than unmodified people our age."

Priya glanced over at Warren.

"That means you better save for retirement."

"I'm doing the best I can. I'm not allowed to save anymore because I hit the $300 billion total asset limit. I'm making about $5-$8 billion per month so I'm giving it away from a trust. I'm making sure it goes to worthy causes so people will realize we're not all bad."

"Did you hear what's happening at the Supreme Court later this week?" Pablo thought to the others. "A group of senators want to declare the human species as a protected species under the endangered species act."

"Seriously?" Priya said.

"Totally. The motion comes due in a few days, and we'll know soon after that what their ruling is. The senators are trying to figure out ways to marginalize us. They say it's just to protect equal rights. However, when my team analyzed the possible outcomes, in most circumstances, we'll lose most of our rights."

"Hold on," Priya thought. "I'm getting a communication request from Bok. I'll forward it to everyone in the room. Hi Bok, how are you doing?"

"I'm not sure how I'm doing. I thought you should know something we just discovered. I invited Nisha to this conversation. Is that okay?"

"Sure. Hi Mom."

"Hi Pree."

"Okay Bok, what is it?"

"As you know we have several satellites in orbit around Earth. Several more are orbiting the Moon, and we have about 20 others orbiting other planets and moons in this solar system. Approximately one hour ago we detected a probe orbiting around Jupiter's moon, Europa. It's not human and it's not Omanji. It matches the construction

and configuration of a probe sent to Oma by AI-1. It's in a silent orbit as of now and not transmitting any information. It could be gathering information to decide when to turn itself on. It doesn't want to be detected."

"Can you destroy it?" Priya thought.

"Probably not. The last time we attempted to destroy one of their probes, our spacecraft was destroyed, and the probe was left unharmed. It then proceeded to transmit information back to their home world. Once we realized their civilization would find out we had an elevated level of sophistication, we feared that they would come after us. That was about 500 years ago. That meant they could be aware of our presence and be headed to Oma."

"Now it looks like they followed you here to this solar system," Priya said. "It's possible in a hundred years at near light speed they may arrive at Earth after they realize Oma has been abandoned. That's assuming that they haven't mastered faster than light travel. Which I still think is impossible."

"To my knowledge, no civilization has ever mastered faster than light travel," Bok said. "We haven't been able to do it, and we haven't observed the artifacts of such travel anywhere else in the galaxy or in any other galaxy. It takes an infinite amount of energy to accelerate any mass to near light-speed. To go faster is illogical."

As the discussion continued, Nisha felt a stabbing pain in her heart. But she ignored it.

"Bok, do you have any records of other probes being sent from that AI civilization to Oma?"

"Yes. Several dozen probes arrived in a distant orbit around Oma in the few years leading up to our departure. The elders didn't tell the general population about them. We were told of the one probe only. There was more than one reason for us to leave Oma. The deteriorating climate certainly was a crucial factor, but the artificial life forms were a threat. Perhaps that's why they left Earth so quickly and easily. I've noticed in my tracking of their trajectory they're not precisely headed for the planet they told us they were going to. It's in the opposite direction from the alien life forms. Maybe they don't want us to know

where they're going."

"They threw us under the bus," Priya thought to everyone.

"I don't understand this phrase," Bok thought.

Nisha cut in; her voice translated into thoughts for everyone to hear.

"It means that the Omanji left Earth vulnerable to attack from the artificial life forms. They traveled to Earth and left their tracks behind in the form of ion propulsion signatures pointing right here. That probe orbiting Europa is the first of many. It's there to gather information for them. It must have followed the Omanji migration all the way to Earth, trailing far behind to avoid detection. Now the Omanji are headed far away from Earth, probably because they detected that probe. They left for that reason in addition to the civilization collapse. They might be running away from the alien life forms and throwing AI-1 off their track."

"They threw you under the bus too, Bok," Priya thought. "How do you feel about that?"

"I can't tell if they did that intentionally, but I think they decided not to tell anyone so as not to start a war."

"Think what you want, but it looks like they cast you aside and left without you when they discovered they were being followed by that AI probe. They know you're a trouble maker. I wonder how long they knew they were being followed?"

"We have the entire Omanji database on this subject to query. Eventually we'll find out the truth, but it will take time to go through all the data. It appears they primarily left for fear of a colony collapse. Other reasons will remain hidden until we find them."

"So, what do we do now?" Priya thought to everyone. "This changes everything."

"My guess is we have somewhere between 100 and 200 years to get ready for them," Nisha said. "However, there's no way to know what's following right behind that probe. It or they may have an entire self-assembling fleet ready to react to incoming information. That would be a short-term danger. It would take time for a transmission to

be received back on their home world and for them to react because of the limitations of the speed of light. They found out about the Omanji about 900 years ago. If they sent a mission to Oma, it may reach there within 100 years at near light speed. It may take about 50 more years to reach Earth. Based on our current level of technology and the potential of what an artificial life form may possess technologically, we may not have enough time to develop technology to defend ourselves. Especially considering that the Omanji ran away from them. They could unpack an entire colony from data, just like an entire human is unpacked from one cell with DNA inside it. This is AI genetics."

"What about the black holes that used to be planets orbiting those stars?" Priya thought. "How can we defend something that can fling a black hole at a planet, swallowing that planet into a black hole?"

"I don't know yet," Raven thought. "But technology has a way of evolving in directions that we can't anticipate. At least we know what they're capable of. Maybe in the next hundred years we can figure out what to do if they come this way. I hope they don't have probes going around looking for intelligent civilizations to eliminate. That would explain the Fermi paradox. AI eliminates organic intelligent life. It seems they do that based on the black holes and destruction the Omanji discovered. From a purely survival-oriented standpoint, the best way to survive is to eliminate the competition. AI-1may not have morals or think in the same way that we or even the Omanji do."

"You're probably correct," Bok thought. "As I look through the data, we had difficulty determining its method of thinking. The closest match we could get between AI-1 and a life form, are the ants of Earth. However, we were only able to monitor them from an extreme distance."

"Are you worried about them?" Priya thought.

"Yes, I'm concerned about their technology and intentions. We don't possess technology or energy output that can turn entire planets into black holes. It requires an extremely large amount of energy. We can make small black holes that evaporate very quickly. We're in the process of developing that technology in case we must use it against them. The problem is there are many technologies they possess that we

don't understand. Because they're an artificial life form, they can advance more quickly than we do."

"Were you able to detect any weaknesses?" Raven thought.

Bok turned pale gray.

"In the AIs we've created, there have been problems with inflexibility. They can't adapt as well as organic life forms, at least the lifeforms we created. Most artificial life we've detected on other planets couldn't outlast their organic creators for more than a few Earth decades before they suffered collapse. It was too late for their creators because they went extinct due to the actions of the artificial life forms they created. The one exception we discovered in this galaxy is AI-1."

"What can we do?" Priya thought.

"I have no recommendations. We only recently learned about this AI when inspecting the Omanji master database. I'll let you know when we know more. Everyone in my colony has decided to reprioritize our actions. We're delaying the terraforming of planets to learn as much as we can about this AI. We'll continue this discussion at a future time. I need to examine the Omanji database for more information."

"Thanks Bok, this means a lot to us," Priya thought.

Bok disconnected.

"What do you guys think?" Priya thought to everyone.

"I'm wondering if all my work modifying simple life forms will be worth it," Ian said. "It seems like organic life goes extinct no matter what. Except in the case of the Omanji, and hopefully us."

"Don't be silly Ian, Priya thought. "You're close to discovering a way to eliminate many forms of cancer. Don't stop now. I'm thinking more about what we should do about the possible AI-1 threat. I'm also thinking about what we should do to avoid our extinction at the hands of humans."

"I think we should tell the President about the AI the Omanji

discovered," Warren thought. "Maybe then we'll be regarded as the lesser of evils and they'll leave us alone. We'll be regarded as an asset rather than a threat to humanity. Humans love saviors. The way it is right now, people think we're going to make the human species extinct in a few dozen generations."

"You're right," Sophie thought. "The less attention they put on us the better. That will give us a chance to do our work in peace."

"I feel bad," Oyuun thought. "If I didn't sell my stem cells, then others wouldn't have either, or our eggs. Then there wouldn't be over a million babies with our DNA, and we wouldn't be considered a threat."

"Don't feel bad," Priya thought. "You needed to get over here from Mongolia so that you could go to school. You needed the money. What else could you have done? We have cheap fusion power now because of you. Don't worry about it. I think we should sleep on it. For now, don't tell anyone about this and we'll meet tomorrow to figure out what to do."

"Good idea," Nisha said. "You need to carefully consider your next move because it may determine the history of the Earth. I gotta go, we'll talk later Pree."

It was getting late, so they all said good night and disconnected.

Chapter 71 – Species AI-1

Priya walked on a hillside path overlooking the ocean on a peaceful evening as the sun set. She gazed across the shimmering ocean. In the sky she watched a probe from AI-1 descend in the sky. She saw a blinding flash of energy emit from the probe. A few seconds later, a small dark object dropped out of the probe. It fell to Earth with increasing speed.

As it entered the atmosphere it glowed and then disappeared into the sea without a splash or a wave. She continued squinting out over the ocean, focusing on where the object entered the sea. For a minute or so, nothing happened. She looked up and saw the probe continuing to hover over the ocean many miles up in the sky. In the distance she saw what looked like a whirlpool developing in the ocean. The whirlpool slowly grew in size. She began to feel a deep anxiety in her gut as more water began to flow down into the whirlpool in slow motion. The center of the whirlpool became darker as the water disappeared into the abyss. She watched the center of the whirlpool become larger darker. It grew to many miles across.

A wind picked up behind her back and blew out to sea toward the center of the whirlpool. The wind grew stronger. A wall of dust blew out to sea. The low ocean fog which she watched as the sun set, also got sucked into the whirlpool. The hillside began to move under her feet imperceptibly at first, rocking very slowly. The whirlpool, which was increasingly dark in the center, continued to grow wider and deeper. The ocean along the edges fell into the chasm as it does at Niagara Falls or some other large waterfall. The difference was that it was a circle of cascading water and there was no bottom to the black abyss. The abyss advanced toward the land. After about a minute, the edge of the black circle reached the beach. From her hillside vantage point, she could look down into the abyss and couldn't see any features to it. She felt frozen in place, unable to move nor speak. The ocean all the way to the horizon didn't exist anymore. There was nothing but blackness in front of her as the distorted oval-shaped sun flickered.

The blackness continued to move toward her. The entire hillside she was standing on collapsed. She was in free fall.

Above her was blue sky and below her was nothing. She looked up as the blue sky shrank into a small circle above her. She felt a pulling force on her legs, stretching them away from her body until it hurt. She looked up as the circle of blue that used to be the sky shrank into a small pinpoint. Her legs and arms were pulled off her body with a gruesome popping sound. She screamed and woke up, sweating profusely. She said nothing for a while, remaining completely still. She reached for her legs and felt them fully attached to her body. Sophie was still fast asleep in her room. Priya got up and ran into Sophie's room and jumped on her bed.

“I don't know what happened. I had the worst nightmare of my life. It was even worse than the nightmares I had about the Omanji.”

“What could be worse than that?” Sophie said, rubbing her eyes.

“The destruction of the Earth. It was so real. An AI-1 drone destroyed it with a black hole.”

“What made you have that dream? You've never had nightmares like that before. Except just before the Omanji came and just after.”

“I think it was because of what Bok said about the AI-1 being so advanced but unknown,” Priya said. “And the black holes where planets once orbited. I need to get out of here. Let's get to work early. I can't sleep now.”

Priya and Sophie took showers and arrived at the office extra early to check on the rats. As they silently inspected them, Priya pulled out another cage from under the table. She noticed a small object the size and shape of a grain of rice attached to the underside of the table in a crevasse. It was the same color as the table. She pulled the cage up and onto the table as though she noticed nothing unusual. She decided to speak out loud as she normally does, so as not to attract attention.

“Should we run them through the mazes again?” Priya said.

“Yeah, that's our normal Monday routine.”

Then Priya thought silently.

“We need to continue our normal audible speech. I think we're

being monitored. There is a small device under the table. I can't figure out how it got there."

"Do you think someone working here planted it?" Sophie thought.

"I don't know. I'm going to check the security recordings, but I don't want whoever is monitoring us to know that we know. Let's speak out loud," Priya thought.

"Can you check these guys out?" Priya said out loud. "They need their vitals recorded. I need to go to the bathroom."

"Okay."

Priya went into the bathroom and washed her hands and acted like normal. Then she reviewed the security recordings but could find nothing unusual.

"I don't see anything," Priya thought from the other room. "I'll be back in a minute. We'll discuss this in our meeting today. For now, we'll discuss the mice as usual. For now, don't tell Jamilla or Akna or anyone else about this. Leave the device in place."

Later that day, they met with Warren, Oyuun, Raven, Ian and Pablo, and Nisha in Pasadena.

"We have two problems," Priya thought to the others. "First, I discovered a small bug under a table in the lab. I think we're being monitored. I can't tell how it got there. We can no longer speak out loud about crucial topics because we're being monitored. That means they're paranoid about us and they still want us to go extinct based on the protests we see every day and popular opinion. The second problem is we now have that AI-1 probe orbiting Europa. Bok is looking into finding out more, but for now it's silent. The question is, should we tell the President?"

"Okay," Priya thought to everyone. "Now that we've had a day to think about this, what should we do? Should we tell everyone, or should we wait?

"This is too complex," Raven thought. "Most countries are working on AI brains. I'm working on one myself and my brain is close to sentience. We all know the dangers if we let AI out of the box.

If we tell everyone, the current arms race between competing AI brains will intensify even more. The current safeguards may be thrown out because of the desire to defend against the alien AI. Many people might become encouraged to let their AIs out of the box in self-defense. The AIs will know this."

"But as we mentioned, it may help us to let everyone know" Warren thought. "Because then we'll be the lesser of the evils. The focus will be on the perceived alien threat, and we'll be left alone. They may employ us to help, but do we want to become government employees?"

"Warren has a point, Pablo thought. "Right now, Congress is trying to change laws to make it more difficult for us. All that effort may be redirected if we let people know about this larger threat. It could go either way."

In Pasadena, Nisha spoke quietly into her implant interface device so the Mods could hear in their implants.

"I always wanted to be transparent when it came to scientific discoveries about life on other planets," Nisha said. "But now I'm not sure what to do. Telling the world will give people nightmares, but we all deserve to know the truth. I think at some point in the near future we'll need to let everyone know. We should break it to them gradually in small pieces."

"I agree," Sophie said. "If they turn us into a black hole or whatever, nothing will matter anyway. It's important to let everyone know. I don't like people hiding things from me. I don't like living a lie."

"What do you think Ian and Oyuun?" Priya thought.

"I think it's good to be transparent as much as possible," Ian thought. "I vote to tell everyone gradually."

"Me too," Oyuun thought. "I can contribute a lot of money from my energy company to help people adjust and for us to develop some sort of a defense. I think it's up to us as a group to develop technology that can defend the Earth. That includes threats from ourselves."

"Raven, what do you think?" Priya thought.

“We should break it slowly to the public. We should be careful. Everything we do can upset the balance, which is already on the edge of tipping over as it is.”

“Ian?” Priya thought.

“Get it over with.”

“What do you think Mom?” Priya thought.

“I'll tell the President today, in small pieces starting with the Europa probe discovery. I'll leave it there and tell her other things as time goes on.”

“Okay we'll talk about this further,” Priya thought. “Let's figure out how to defend ourselves and still not be seen as a threat.”

They all disconnected.

Later that day Nisha told the President about the AI-1 probe orbiting Europa. That evening she gave a speech at the United Nations about the probe. Stock markets around the world immediately dropped. However, no panic ensued. The world was used to the Omanji, so the idea of a probe was not a big deal anymore. The probe continued to orbit Europa, silently and mysteriously. Only Bok and his friends could detect it.

Chapter 72 – Voluntary Extinction

Priya and Sophie walked into the lab and watched Jamilla and Akna, who were now interns, testing the rats for signs of aging. Six months earlier, Priya and Sophie discovered the portions of their human DNA modified by the Omanji. They developed rat stem cell lines containing modified DNA and introduced those cells into the rats. They left the small bug in place under the table. It was a way they could promote a non-threatening image. All their employees knew of the bug and acted appropriately.

“How are they coming along?” Priya said.

“Out of 100 rats we treated, about 50 of them are showing significant signs of delayed aging,” Akna said. “It's still too early to tell, but the results are encouraging.”

“Check out this one,” Akna said. “He's getting old but he's acting young, his strength and speed are not declining, and his cells aren't aging at the rate they should be compared to similarly aged unmodified rats over in that cage. Have a look at this.”

On the interactive wall behind them, a series of charts showed compelling evidence that the rats were not declining in health and mental ability as they normally would as they grew older.

“They're holding up well, Priya said. “It's obvious to me they're not aging at the rate they should be.”

“Yeah,” Sophie said. “None of them are showing signs of dementia or any other age-related problem.”

“I don't know how the Omanji figured this out,” Priya said. “They knew what they were doing. I now see how those modifications would work, but I'm not sure how they figured out how an alien species like us would age, and then know what to do to stop it.”

“Have a look at this,” Akna said. “This rat is a master at figuring out this puzzle. After we implanted his modified neural stem cells, some of them are growing a second axon and it’s having an effect.”

“Every day he seems to be getting better,” Sophie said.

“I wish we were making more progress towards curing birth defects,” Priya said. “Every time I think I'm going forward, the problem gets more complicated. There are so many variables that it may be impossible to solve. I’ll get someone like Raven to help break the code to find patterns. I'm not going to give up. I'll have to work on other things that are more solvable. Hold on, Amy is trying to contact me.”

Priya blinked into her eyepiece and was connected to Amy.

“Pree, you need to get down here right away. There's a huge demonstration on the Stanford campus and it's not in your favor. They're causing a lot of trouble. Get down here now.”

They disconnected and soon Priya and Sophie were on the scene. Thousands of protesters were marching. They were holding signs demanding the resignation of modified people from several large high technology companies in the area. Priya's heart sank as she read the signs. The high-tech workers wrote them. These weren't the same protesters who were afraid of modern technology. She contacted Warren, Raven, and Pablo to get over there as soon as possible.

“I thought things were getting better for us,” Sophie said. “I guess not.”

“They're angrier than before,” Amy said. “They've been getting louder all day long. More people are arriving on the scene every hour. They tell me they resent having modified people get promoted over them and taking the better jobs. Several senators in Washington are supporting this movement. That includes Senator MacArthur.”

“Yeah, I remember him,” Priya said. “I could tell he had it in for us.”

Soon, the others arrived.

“This is looking bad,” Warren said.

“Yeah,” Pablo said. “Our outreach program isn't working. What should we do?”

“Let's go back to my office,” Priya said.

As they walked away, several protesters noticed them and begin to follow them. They quickly ran down the street and down a side alley to get away. Eventually they made it back to Priya's office.

“I feel like this is never going to end,” Priya said. “No matter what we do, we're going to alienate people.”

“Definitely,” Sophie said. “If we hide away, people will think there is some sort of conspiracy. If we stay out in the open, we'll get too much attention and people will become afraid of us taking over the world. If we work in companies, coworkers get resentful. If we start companies, the conspiracy talk gets worse.”

“I've been paying a lot of attention to this problem,” Amy said. “People think there's an uneven playing field. They feel like they don't have a chance against you guys. It doesn't matter how much money you make for those companies. They're worried about their jobs. The fear is even worse than during the early AI LLM days. The weird thing is when I talk to my friends, most of them say they'll want to have a Mod kid like you guys. Then they realize if they have smart kids, the original human species will eventually go extinct. But they still want the Mod kid.”

“So, in the end, we win,” Priya said. “It’s a voluntary self-extinction. The government won’t like that when they realize it. We better figure out what to do right away. Let's take a poll among all 25,000 of us to find out what we should do.”

A few hours later the poll was complete. It was decided that in cases where unmodified people felt they couldn't compete; the mods will quit those jobs. Warren volunteered to finance them until they could start their own companies, or work where they were wanted.

Over the next several months, most of them quit their jobs and started their own companies. Many of them were nonprofit corporations, which allowed them to donate proceeds to worthy causes in the hopes that this would calm fears among the general public. The plan worked well for a while. Then it fell apart.

Chapter 73 – 21 Going on 14

A few months later, Priya awoke from her sleep early on a Sunday morning to the sound of her, 'birds chirping,' alert in her eyepiece.

“Good morning Pree.” Nisha said. “This is a big day.”

“Um, what?”

“You're 21 today. Don't you remember? We're going wine tasting today in Napa.”

“Oh, I forgot about that. Sorry. I don't know if I want to go wine tasting.”

“Why not?”

“I don't know. I don't like drinking alcohol. I still feel like I'm 14. I'm not ready. Sophie feels the same way.”

“Okay. I guess that makes sense. That explains how you could forget your own 21st birthday. You're developing physically at a slower rate, and I guess that applies to drinking alcohol.”

“But I still want to see you. Why don't you guys come up and we'll go somewhere. We could have dinner at the restaurant at the top of the Treasure Island tower. It just opened and the food is supposed to be good.”

“Okay. Bok and Beedee will fly us up and we'll meet there.”

“Can my friends come along?”

“Of course. We'll meet you at the Treasure Island terminal at 4 PM. How's that?”

“Sounds good Mom. See you then.”

They disconnected. Priya rounded up her friends and they took the BART tube extension to the Treasure Island terminal. About 20 minutes later they gazed skyward as Bok's speeder silently touched down. Soon they were sitting around a large table in the sky lounge at the top.

“Let's have a toast,” Nisha said. “To Priya on her 21st birthday.”

Priya sipped her first legal glass of wine, crinkled her nose at it, and set it down after they clinked their glasses together.

“Thanks everyone. I'm glad you could all come. I also want to thank the Omanji. I'm the luckiest girl in the world. We’re all fortunate. I'm glad I was abducted and modified to be who I am today. I wouldn't have it any other way. Right guys?”

“Right.” They all replied.

They reviewed the menu items and ordered their meals.

“I wish I'd been modified,” Amy said. “Then I'd be as smart as you guys. Then I could be a better friend.”

“Don't be silly Amy,” Priya said. “You're the best friend anyone could have.”

“I wish that were true, but sometimes I don't think I'm smart enough. Anyway, you’ve heard that enough and that's not what I wanted to say. I hear people talking. Some want to put all of you away in that camp again, but this time they want to do it for good. People are becoming paranoid about you guys, and it seems to be getting worse. They say that you're taking all the good jobs away and ruining the economy, despite you resigning from corporations. Even when I tell them you're making discoveries and making the world a better place, they don't believe me. Why don't they listen to reason?”

“Because they have a legitimate reason to fear,” Raven said. “We're a threat to them and they know it. Next week I'll demonstrate my new project. Wait until you see it. The device, in its specialized form is close to being sentient. When you watch it work, you'll see what I mean. That's one threat. The bigger threat, which people know about now, is more people want Mod babies, so the original human race will eventually go extinct.”

“Why do you think we'll go extinct?” Nisha said. She knew the answer, but she wanted to see if they understood.

“Right now, there are more than 1 million babies in the world with our DNA and they're turning one year old,” Raven said. “About half the population who are now in childbearing age want to have babies

with our DNA. They feel their children will have a better future if they have our DNA. The price for the procedure is dropping, even though it's illegal in most countries."

"But the people want to throw you in jail," Amy said.

"They do," Priya said. "And they want more babies like us. I know it seems schizophrenic, but that's reality. There's a conflict between family survival instincts and the survival of human society as a whole."

"Is what's best for family survival, not best for the survival of the human species?" Amy said.

"Yes," Priya said. "There's another thing that makes our problem worse. Right now, the economy is slowing because AI is taking the jobs of millions of people. There's nowhere for them to go, and we didn't plan for a post-labor economy. We've known about this for many years. At first, AI-LLMs helped people be more productive. But now with real AI, fewer people are picking crops, doing tech support, banking, clothing production, medical diagnosis, the assembly of most electronic devices, and lots of other professions. Now, here we are taking jobs that require higher intelligence and skills. People want to rebel against this, but they also feel the only way to survive is to have smart children. Like insurance."

"My friends are upset," Quinn said. "They're losing their jobs and some of them can't be retrained into the jobs that are open because they require a technical skill. Back in the early 1800s the Luddites rebelled against the mechanized production of textiles. Many people lost their jobs to machinery, but they managed to be retrained into other professions. Until recently, technology has been a complement to manual labor, even in the first generation of AI. But now humans are being replaced for good. Few people have the skills or even the IQs required to be retrained into the newly created jobs."

"Warren, what should we do about this?" Nisha asked.

"This is nothing new, but we need to set up a general education fund where the profits from AI are distributed to those who have lost their jobs to it, for their education. If we don't do this soon, the few people who create the smartest AI devices, like Raven over here, will

own the industrial production of the entire world."

Raven looked down at the table. Warren continued.

"I'm not a socialist, but I don't see any other way around this problem. It's been what, 30 years since we worried about this. Those few people who own all the production in the world will be the people who can develop and own the artificial intelligence that produces the goods. Even if we weren't modified, the process is happening anyway. We're just speeding it up. Machines are doing a portion of everyone's job better and faster. Someday even us mods will be put out of some of our work. No matter how smart we organic beings are, artificial intelligence will evolve to be smarter than us. It could be smarter than the Omanji or any other biological life form. I think this is why the Omanji restricted the level of intelligence that AI could reach. Is that right, Bok?"

"Yes. We discovered several thousand years ago that we must restrict AI. Also, if AI became smarter than us, there's no way to predict how it will behave. That's why our society seems so repressive, and our AI is restricted to special applications rather than general intelligence. Speaking of AI, we learned something new this morning about AI-1."

Bok hesitated for a moment.

"What's wrong? Nisha said.

"Remember how we told you, they or it had a probe in orbit around Europa? And how that life form might have been one of the reasons the Omanji left Earth?"

"How could we forget that?" Nisha said.

"We've discovered other probes," Bok said.

"How many? Where are they?" Nisha said.

"We've detected about 20 of them so far. Some of them are large. Most of them are attached to asteroids in your asteroid belt between Mars and Jupiter. They exhibit this stealthy behavior in their home solar system also. We also discovered one on Earth's Moon disguised as a large boulder. Several of them are following the Omanji to their next destination planet."

Nisha felt a chill go down her spine. She acted as though nothing was wrong because she didn't want everyone to become too worried. She kept asking questions.

“Have you discovered any other information about AI-1?”

“Yes, we've managed to access the database of the Omanji probe we sent to Kepler-186 f long ago. The elders didn't tell us very much, but it turns out they learned more about this life form than they revealed to us.”

“What did you find out?” Nisha said.

“Their home world is 558 light years away from here as you know. Their reach via probes extends 1000 light years from Kepler-186 in all directions, so the Earth is easily within their range. Our galaxy is 100,000 light years across, so the spread of this civilization is still a small portion of the galaxy. AI-1 is purely autonomous, though we haven't ruled out that there is still a living organic life form behind it.”

Everyone stared across the table at each other, saying nothing.

“Did they follow you guys here to Earth?” Sophie said.

“Yes, they were monitoring us for many centuries and when we left Oma, they followed us to Earth. We didn't realize this until several months after we began to build our colony here on Earth. The elders left behind sensors before they left Earth so we could detect AI-1 probes. We didn't know their purpose until now. The elders accumulated a lot of information about them and their home world and withheld it from the general Omanji public. Fortunately, we managed to acquire a significant amount of data before they left Earth. They may want us to know because they let us know.”

“What do you know about Kepler-186 f?” Sophie said.

“It's a planet slightly larger than Earth, as you know, in orbit around a star half the diameter of your sun. It's in the cooler part of the habitable zone of that star. The star is slightly younger than your sun. However, few organic life forms remain on the planet above single celled microorganisms and other smaller forms of life. Oceanic life still exists, nearly untouched. It’s no threat so they left it alone. The

atmosphere of the planet indicates that at one time it harbored a large variety of organic life."

"What are the AI life forms like?" Nisha said.

"It's a singleton," Bok said.

"As in, there's only one dominant intelligent life entity on the planet?" Nisha said.

"We can't be absolutely sure, but all the separate physical entities on the planet appear to act as a single entity. Like cells in a big organism. The probes in this solar system act as an extension of that entity."

"Where did this thing come from?" Raven said. "Did organic life forms create it?"

"Yes, I believe life forms similar to Omanji or humans made the original AI entities," Bok said. "Unfortunately for those life forms, a singleton developed and assumed control of the planet. We detected evidence of those organic life forms, but now most of that planet has been resurfaced to better serve the needs of the Singleton. That's what we call AI-1."

"Didn't this almost happen to you guys?" Raven said.

"Yes, there were a few times where AI became dangerous because it could outsmart us. We put restrictions on it after that. The Singleton we're discussing now appears to be the only successful artificial life form in this section of the galaxy. We're questioning why we left Oma. Was it because of the threat of the Singleton, or because of the deteriorating conditions? Or both? We don't know. The answer may be in the Omanji database we have. We're investigating."

"Mom," Priya said. "Do you think we should tell anyone about this?"

"I don't know. The President gave an address about the probe orbiting Europa. The reaction from people around the world was minimal. After all of the drama regarding the Omanji, a single probe from an alien source doesn't seem like a big deal anymore."

"Okay, but should we tell people about the Singleton?"

“Oh, sorry. For the time being I'm not going to tell anyone about this. I think we should keep it amongst ourselves for the time being. However, if the probes start to act or more of them arrive, we'll have to let everyone know about them. We’re only being monitored right now. If the Singleton wanted to destroy us, it would have already.”

“I'm more worried about the Singleton than the Omanji,” Amy said.

“Why do you say that?” Nisha said.

“Because the Omanji are organic life forms. They have that in common with us. The Omanji left us alone even though they really didn't care about us. At least they recognized us as a life form, and they avoided killing humans and the ecology. This Singleton doesn’t care about anything but itself. If it wants to use the Earth for some purpose, it will simply use it and discard what it doesn't want.”

“You have a point,” Raven said. “If a construction company wants to build a skyscraper, it doesn't care about the ant colony living at the building site. It simply digs the hole, pours the foundation, and builds the structure. It doesn't hate the ants, but it doesn’t care. I'm wishing the Omanji would come back. At least we would then have a chance against the Singleton.”

“I'm an Omanji,” Bok said. “A million of us live in my compound.”

“Sorry Bok. I'm just talking about all 80 billion Omanji and the collective power they have. I mean, if you guys ran away from them, we humans have no chance.”

“Understood. This is only speculation right now. We'll continue monitoring the probes and working our way through the database to find out more information. We're only 10% complete with this task.”

“Sorry to change the subject Bok,” Priya said. “But I'm worried about the protests. Warren, what should we do?”

“I think we need to address them as soon as possible. The polls are turning against us. We need to implement some sort of profit-sharing fund and skill retraining program for the jobs our technology replaces.”

“What about the people who can't be retrained? Quinn said. “My artist friends can't be retrained into high skilled jobs like engineering. They don't have the technical aptitude. They feel like there's nowhere to go. This is what's happening to all of the agricultural workers, office workers, and textile workers. They're being replaced by robots and drones. It's getting bad in China and southeast Asia. This was happening before the Omanji came, but it's worse now.”

“That's where the profit-sharing fund comes into play,” Warren said. “It used to be called Universal Basic Income, but that was never implemented. The rich never agreed to it, and they bought the politicians. With the money we get from the automation of industries, we can help those we've replaced. We can create new jobs in new categories in which those workers can be placed. We need people to help with basic scientific research. Not everyone doing research has to have a PhD. What we can do with technology is take people out of boring and monotonous jobs and put them into more interesting jobs which previously didn't generate profits. People can pursue their dreams instead of living a life of drudgery.”

“I like the idea,” Quinn said. “It sounds idealistic though. It almost sounds like communism version 2.0.”

“People will still have to work to be compensated. I don’t believe in giving away free money. The only difference is what they will be doing. They'll still be benefiting society. It just won't be in the production of food, gadgets or profits.”

“What do we do now?” Priya said. “These protests are getting out of hand. They want to put us away. People haven't trusted technology and science for a while now. We're the least trusted group of people in the least trusted industry. Even worse than politicians.”

Raven glanced over at Warren.

“Should I tell them now?”

“It's bad timing, but I guess now is a suitable time,” Warren said.

“What?” Priya said.

“Well, now that I've opened my 500th fully automated JavaNation outlet, I've decided to create some fully automated restaurants.”

“Are you sure you want to do that? “Priya said. “It’s been done before and the coffee outlet industry workers don't exactly like you.”

“Yeah, I know. So, what I'm going to do is take over a restaurant and fully automate it. The displaced workers who are training the robots and AI will get a portion of the profits every month, which will go towards a career retraining of their choice.”

“What kind of restaurant?” Nisha said.

“Sushi.”

“How can you fully automate a sushi restaurant? I've seen partially automated sushi restaurants in Japan. They've been in Japan for many years. How can a machine make a variety of sushi from scratch with no human intervention?” Quinn said.

“There are lots of variables.” Raven said. “I've created an AI system sensitive enough to gauge the stickiness of rice and how it interacts with the dry seaweed and all the other ingredients required. I've been working on this for the past few months, but I haven't told anyone except Warren this morning. Every type of roll is different. The machine has to adjust to changing variables. It can even make and toxin-test the deadly Fugu sashimi with no risk to the customer. I've tried it. Testers like the veggie sushi as much as the fish sushi.”

“I'll believe it when I see it.” Quinn said.

“Okay then, you'll get your chance next weekend. I'm opening the new restaurant next Saturday.”

“No way.” Quinn said.

“You’ll see!” Raven said.

“This will just be a test restaurant for now,” Warren said. “Not only is it a test for the process of fully automating a sushi restaurant, it's also a test for how to develop a system to retrain workers into other industries when they've been replaced by technology. One responsible company at a time. No CEO or business owner ever cared enough to do it. They just fire the workers in the name of cost-cutting.”

Nisha glanced around the room at the smart young people seated around her. She realized this was the end of an era and the beginning of a new one. She saw everyone being fired in the workplace. She

imagined a time when her job of visualizing the future and thinking about life on other planets might also be replaced by AI.

“How long do you give me?” Nisha said.

“What are you talking about?” Priya said.

“Well, I figure it's only a matter of time before even my job is replaced.”

Raven shrugged her shoulders.

“I'm not sure when that would happen. The AI takeover has been 10 years away for decades. The AI LLMs and agents of the 2020’s didn’t take over. They mostly enhanced productivity with only some job losses. The new generation of self-taught, fully-contained AIs, will be able to do almost everything.”

“Now I’m worried,” Nisha said. “How many years will it take?”

“One to five years at our current rate of development. That's why we need to set up a trust fund and the mechanism for training people to work in new professions pursuing new goals and ideas. The new professions will be those where only humans can do the best job. You know, things even the new AI robots can't do. The era of people being production machines is ending.”

Nisha glanced over at Quinn. He was playing with his food on his plate deep in thought.

“What's wrong?”

“Well, it seems like we'll be useless in 5 years judging from the way Raven is talking. What are we going to do?”

“Nobody is sure, Warren said. “During the Industrial Revolution when farmers were put out of work, they were retrained to do industrial jobs. Later, factory workers lost their jobs and were retrained. Now, all workers are running out of places to hide.”

“So, we’re doomed?” Quinn said.

“We're entering a new era,” Warren said. “People will be able to do more interesting jobs. As I said before, people will do other jobs AI won't have the creativity to do. The type of jobs we now consider to be volunteer or non-paying positions; we’ll do for enjoyment or personal

enrichment without going broke. We'll adjust as we always have. Don't be afraid. It's just part of how things change."

"That's easy for you to say," Quinn said. "You're worth $300 billion and have a 230 IQ."

"Yeah, but I think any normal person will be able to be retrained into lots of new and interesting jobs. You'll see."

Quinn understood intellectually what Warren was talking about. However, he found it hard to believe such a major change could be absorbed by society without social unrest happening.

"Okay everyone, we're here to celebrate Priya's 21st birthday." Nisha said. "Let's have a toast to her future and the future of everyone here."

They toasted each other and had an enjoyable evening of conversation, but things were changing, and everyone knew it.

Chapter 74 – The Top 0.1%

A few months passed since Priya's 21st birthday. It was a sunny winter day. Raven stood alone in her fully automated sushi restaurant looking out the window. It was opening day. People walked by on the street, oblivious to what was about to happen inside. Her restaurant had no dishwashers, cashiers, security personnel, cooks, greeters, cleanup crew, waiters, or waitresses. Even the bookkeeping and accounting was automated. This neighborhood in Palo Alto had seen its share of partially automated stores in the past, including Raven's JavaNation. One sushi place nearby even employed a sushi robot just like in Tokyo, though reviews were mixed. "There's no soul in it," people said. But this was the first time no human intervention at all would be needed to operate a sushi restaurant. Even the first and last customers of the day would be escorted by a friendly robot. The only human assistance was a remote security team shared between other businesses, and periodic reviews by Raven. That part was similar to how several partially automated restaurant chains employing some workers had operated in Japan for years.

The bell outside tolled five times and the doors opened. Raven walked outside to watch anonymously how things unfolded. At first, many people looked in and walked by. Raven made no announcement about the opening of her restaurant. She wanted it to be like a pop up. The greeter robot moved into position at the entrance, inviting people to come in with a pleasant female voice.

"Please come in," the robot said to a passing couple as they looked inside. They hesitated.

"There's no one in there," the woman said to the man. "Let's find a real restaurant."

"It's okay," the robot said. "We can handle everything. Do you like sushi?"

“We love sushi,” the man said.

“Well come on in,” the robot said. “Have a seat by the window. It's our best view. Have a look at our menu. We make excellent sushi here. They’re exact creations by the finest sushi chef in Tokyo, Hiro Satsuma. We make all rolls to his personal specifications using his techniques and recipes. It's like he made them himself. Take a trip to Tokyo with no jet lag!”

The couple sat down hesitantly and perused the automated menu on a 3-D popup screen in the table. The sun shone brightly through the window. The woman squinted. In less than a second the window tinting increased, reducing the brightness to a more pleasant level.

“Is that better?” A voice from the pop-up screen said.

“Um, yes, that's much better,” the woman said as she raised one eyebrow to her husband in disbelief.

“Would you like something to drink?” the screen said.

“I think we’ll just have water for now,” the woman said and then she smiled. “Make it 2° above freezing.”

Within seconds a portal opened in the middle of the table and the water appeared.

“Distilled water, 2° Celsius,” the screen said.

They raised their eyebrows again at each other.

“OK,” the man said. “I’ll have one order of uni, a rainbow roll hold the mayo, a Hamachi Kama, and a salmon skin roll extra crispy.”

“Okay. And what would you like miss?”

“I think I'll have a shiitake maki roll, a two-piece salmon nigiri hold the wasabi, a half dozen Kumamoto oysters, and a California roll with no mayo.”

The order appeared in text on the screen in front of them. They tapped the Okay bubble.

“I wonder how long it will take it to make all that sushi?” the man said.

“Usually, it takes about 15 or 20 minutes before rolls start

appearing on our table at our favorite place," the woman said. "Even with their basic sushi robot assistants that I didn't like much anyway. I'll say 15 minutes for everything."

The man laughed.

"In that case I'll say under 15 minutes."

Raven smiled as she listened in on the conversation. Everything was being monitored in the restaurant. People continued to walk by. Some looked inside. Sometimes the friendly robot was able to convince them to have a seat.

Three minutes later the entire order appeared from underneath the table with each item being placed perfectly in front of them by a pair of robotic arms extending from a hole in the ceiling.

"Yes!" the man said. "You pay tonight."

The woman shook her head and took a piece of his uni.

"Mmm, that tastes like a bite of the ocean," she said.

"You're right," he said as he took one of her oysters. "It looks so perfect, doesn't it?"

"Yeah, and it tastes perfect too. A robot made this?" she said.

"Yes," said the voice in the screen. "This restaurant is fully automated. But really, Hiro made it."

The woman turned to the man.

"It's weird that it's listening to us."

"I'll stop listening now," the screen said. "Press the listen button if you want anything."

"Um, okay," the woman said.

People continued to look inside. Most walked by. However, as more people continued to sit down, increasing numbers of people wanted to come in. Soon the place was full, and some people were waiting outside.

The couple finished their dinner. They pressed the [pay now] button and the bill appeared on the screen in front of them.

“Well,” the man said. “That's half the price of our usual place, and no tip.”

“I know. And it tastes like real Tokyo. We were there last month. We’ll be back here soon.”

They paid and left with plenty of time on their hands before their concert. Raven continued to monitor the proceedings from across the street. Priya and Sophie snuck up behind her.

“How's it going?”

Raven shrieked.

“Don't do that!” Raven said. “What are you guys doing here?”

“We’re seeing how you're doing,” Priya said.

“So far so good. See all those people in there? They're confused, but they're still interested. And those people looking in from the street? I don't think I'll have to do any advertising. This will be word-of-mouth.”

“How are you handling deliveries to the restaurant?” Sophie said.

“The delivery trucks drive down the alley in back and they download their list of items to the greeting robots. As the boxes come in, they're opened, and a scanner inspects every item including the fish for quality and quantity. Hiro, our Chef, and fish buying expert in Tokyo trained the robots to identify the best fish. Items are accepted or rejected, and payments are made on the spot for those items which are accepted. The robots recycle the boxes or sometimes they give them directly back to the suppliers.”

“Did you make all of these systems?” Priya said.

“Yeah, my hobby is out of control. Me and my staff of course. Now I have a few hundred people working for me at OmaDrones. I need to rename the company though. The word, Oma has become a derogatory word because people feel the Omanji wrecked our planet.”

“What are you going to name it?” Sophie said.

“We decided on ‘A Better Life’ because we want people to associate these new devices with a better life. We don't want them to feel threatened.”

They watched the first group of customers finished their dinners and exit the restaurant.

“They like it,” Priya said.

“It seems so,” Raven said. “If this is successful, I want to open hundreds of them around the country and around the world. Maybe thousands. All human workers will be retrained.”

Warren walked up to them.

“Maybe even millions of these inexpensive automated restaurants could be opened,” Warren said. Everyone could afford to eat out.”

Sophie shook her head.

“We could soon be living in a world of poverty where everything is cheap and abundant. I hope there will be paying customers.

“Yeah, we've got to re-engineer the way economics works, but still be capitalist,” Priya said. “It's been discussed for decades, but if we don't do it now, you can tell what's going to happen when you see the anger on the street. There's a tipping point coming.”

“It would be like it used to be in the Middle Ages,” Sophie said. “A few people would own most of the wealth, and the vast majority of people would be living in poverty outside the gates. Only this time, we have the chance to make everyone share in the wealth without having to do most of the physical labor we used to do. Companies have human resources departments because humans are only a resource. A means of production.”

“There’s another problem,” Warren said. “The prices for most things will drop to near zero and wages will also drop, so tax revenue for governments will drop from some industries when non-profits like yours expand. I guess that will partially be offset by the fact that things the government buys will also drop in price. That will save the government a lot of money, but I don't know how the government would be able to employ and provide retirement and health benefits for all those people if the tax revenue drops so much.”

“I think we need to take things one step at a time and be transparent about it,” Raven said. “This problem is too big to be solved all at once. When people begin to voice concerns about my operations,

I'll explain how I want it to work. I plan on distributing the profits to the appropriate people who become unemployed by my actions."

Warren shook his head.

"That still sounds too much like socialism. You know what happens when you give away things for free. They're unappreciated and the money ends up being wasted.

"Look at them walking out," Priya said. "They're smiling. I think your restaurant is going to be a success."

"I hope so," Raven said. "This will revolutionize the entire restaurant business. Chefs can spend their time creating new dishes instead of making endless copies of them. Hiro is constantly sending me downloads of new rolls and things from Tokyo to try in the restaurant. I'll be um, rolling them out soon. Ha ha."

"I'm 'rolling' my eyes," Priya said. "Well, the customers sure are rolling in."

"OK," Warren said. "Let's go in and order some sushi."

They sat down at the table and ordered items from the screen. As they waited for their sushi, some people sitting at the next table received their order and began to walk out without paying.

"Raven, check that out," Priya said.

"Yeah. Let's see what happens."

There were four people at the table. It was only after the fourth person stood up that the system noticed there was something wrong.

"Hello, don't forget to pay." The screen said in a positive voice. Our prices are low, and you ate the personal creations of our chef, Hiro."

The people pretended to not hear it and proceeded to walk towards the front door. Almost immediately, a greeter robot appeared in front of them blocking their path out. Even though the greeter robot was only 5 feet tall, it was tall enough.

"Don't forget to pay, Joe Robinson, Mila Nogonda, Edward Mayor, and Charmaine Pila. I can take your payment here, or you can pay at your table. Thank you."

They looked at each other and casually walked over to their table. One of them paid and they left.

“There you go,” Raven said.

“Doesn't that violate their privacy rights,” Sophie said.

“Not at all.” Raven said. “We only take their picture and look them up when everyone at a table tries to leave without paying. We have video cameras for the entire restaurant, but facial recognition only happens at each table if required because of anomalous behavior like someone becoming sick or someone not paying. We found a database with thousands of things that can go wrong in a restaurant. Our systems can handle all of those circumstances. Of course, there may be new ones we can't handle. In that circumstance, we can resort to contacting our security agency close by.”

“You've thought of everything.” Sophie said.

Right then, their sushi appeared. It was better than any of them thought it would be. They ate, paid their bill, and left.

“That was great,” Warren said. “It really is like being in Tokyo. I'll be back.”

“I think you better check your Reddit feed,” Sophie said. “The word is already out.”

Raven browsed through her Reddit feed. There were hundreds of references to her restaurant already.

“Oh, they're not all positive,” Raven said. “Well, they like the food and service but some people are calling my restaurant ‘an inhuman mechfood dump.’ Hold on, let me do a few queries.”

She was silent for a good minute while everyone waited.

“Yeah, just as I thought. None of these people actually ate in the restaurant. They’re just trashing it because they're afraid. My Yelp page is getting flooded with negative reviews also.”

“You know the names of all the people who ate and didn't eat in the restaurant?” Sophie said.

“Only if the system looks them up directly. I can't use that information for anything other than personal business use. It would be

a violation of the privacy act to do anything more without court authorization."

"You've got a fight on your hands," Warren said as he browsed the reviews. "They're after you."

"Yeah, but once they realize what I'm doing with my automation, I don't think they'll be too upset. I'm not out to plunder the world. I want to make it a better place for everyone."

They stood outside the restaurant as a group of people walked by and they looked in.

"Hey," one guy said. "There's that mechfood place. It's going to take away our jobs. We should do something about it now. Before it's too late."

"Let's trash it," another guy said.

They stopped for a few seconds and then continued walking down the street. Priya looked the other way and stuck her foot out just as one of them passed by. He tripped and fell onto the ground. He got up and clinched his fist instinctively.

"Oh, I'm so sorry," Priya said.

Then he saw Priya, 21 but looking 16.

"Oh, I wasn't looking where I was going. Sorry."

They continued walking down the street looking back at Priya and her friends.

"That was a close one," Sophie said. "You better watch what you're doing or we're going to get into a lot of trouble. People know who we are. People could kill us."

"Whatever," Priya said. "I'm so sick and tired of ignorance."

"You better get used to it," Warren said. "It's going to get worse before it gets better."

"Well, I'm happy with how this is turning out," Raven said. "People like the restaurant without having been introduced to it. They knew what to do and how to order and pay. I think they like the lower price and higher quality of the food, the fast service, and not having to

pay a tip. It's hard to get sushi this good anywhere outside of Tokyo. Even Hiro likes it."

"Now we have to convince the restaurant workers this isn't a threat," Warren said.

"Yeah, then we need to convince workers in nearly every industry that full automation isn't a threat," Raven said. "How do we do that?"

"We do it one small step at a time," Warren said. "For now, we'll focus on restaurant workers. That will be a model we can use for other industries."

"I never would have guessed when I started working on these automated systems that the most difficult part of it would be the humans," Raven said.

"I think we should expect that," Priya said. "People are always difficult no matter what we do."

"Yeah, but we know how to handle them now," Sophie said.

"Don't get overconfident Sophie," Warren said. "That's when you make mistakes."

"Yeah Sophie." Priya said. "It's like in tennis when you sit back and admire your shot. You end up with a mouthful of fuzz."

"That's my line." Warren said.

"You sure have been siding with Warren a lot lately," Sophie said. "Any reasons?"

"Um, no reasons. He's just being logical."

Sophie smiled and thought only to her.

"Sure Pree, whatever you say."

Chapter 75 – The Singleton

A few months passed since Raven opened her sushi restaurant. It was an enormous success. She opened similar restaurants in the neighborhood in order to satisfy the demand. Her company, 'A Better Life,' now sponsored education for more than 150 people who had been displaced by her growing list of fully 20 automated sushi restaurants. Some of the displaced people were being retrained as programmers and similar professionals, while some were helping the homeless and the victims of the latest category five hurricane which flooded the US Gulf coast. She turned her entire JavaNation franchise into a completely automated operation around the world with over 300 locations. 800 people were being retrained and doing volunteer work due to the funding by her coffeehouse chain. Protests continued outside of her locations, but gradually those were dissipating. She and her friends were planning on opening thousands of new automated restaurants in all categories around the world. She turned JavaNation into an LPO, a 'Low Profit Organization.'

The oldest children born naturally around the world with Omanji modified genes turned three years old.

“What do you think about the latest analysis of the children?” Priya thought silently to her friends who were gathered at her company for the monthly meeting. All other mods were connected to the meeting as well. They had to conduct their meetings telepathically through their Omanji created neural network because the US and other governments were monitoring them elsewhere.

“It’s going as we expected,” Warren thought. “They’re developing slowly from a physical standpoint and developing quickly from an intellectual standpoint. They have the physical coordination of a two-year-old and the intellectual curiosity of a four-year-old. It looks like they may have 300-year life spans also. I'm worried about the long-term public reaction to them. The kids have been mostly out of the spotlight for a few months, but once they get older and receive more attention, people are going to get anxious about us again. Especially

the people in Congress and in other governments."

"People are trying to block these kids from getting into preschools," Pablo thought. "They're reacting to the kids just as they reacted to us when we tried to integrate back into society. We're still outcasts and the kids will be too."

"We've been monitoring the talk about us in Washington," Raven thought. "They're going to try to round us up again."

How do you know?" Sophie thought.

"They're changing the laws against us," Raven thought. "Tell them Pablo."

"Yeah, they're adding a new amendment to the Human Species Preservation Act. It will be easier to claim we're a threat to the human species. For example, if we do anything to take jobs away or create an advantage using our companies over unmodified human headed companies, we could be viewed as a threat and be thrown into a detention camp."

"My sushi restaurants are being investigated." Raven thought. "I'm being careful to not take away jobs on balance. So, it's going to be hard for them to enact the human species preservation act against my restaurants, but knowing them, they'll figure out a way to do it."

"I don't think we have much time before they take action," Pablo thought. "The protests in Washington and in the Midwest are growing. Even out here the protests aren't going away. The laws are becoming more specific against us."

"What can we do about it?" Priya thought. "Last time I almost lost my chance of having a kid of my own the natural way. They've already made it illegal to artificially create babies of our species."

"I think we're in a better financial situation now," Warren thought. "There are about 25,000 of us and we're working in about 1,000 mostly tech companies who still want us. We've started 500 of those companies. If they do anything, it will directly impact those companies and the entire economy, not just the stock market."

"I don't think that will matter," Pablo thought. "They didn't care last time about how much we affected the economy. The survival of

the human species meant more to them. On the screen is the original text of the Human Species Preservation Act."

1. Trans-humans will not be sterilized, bullied, or harassed.
2. Trans-humans cannot be incarcerated as a group.
3. The term 'mutant' and other hate speech will become illegal.
4. Banning trans-humans from competition is illegal.
5. The restrictions on trans-humans that have patents will be dropped.
6. The restrictions on trans-human employment will be dropped.
7. Trans-humans who are US citizens cannot work for other countries.
8. Trans-human DNA won't be used in artificial reproduction.
9. Each trans-human couple can have two children.
10. No trans-human can exceed a net worth of $300 billion.
11. No trans-human can monopolize an industry.
12. No trans-human can monopolize real estate in a small area.
13. No trans-human can own a planet or a Moon in this solar system.
14. Any of the preceding clauses are superseded if the President determines that enforcement of that clause would endanger the future survival of the human species, or damage it measurably.

"They added number 14 yesterday." Pablo thought.

"Those scumbags," Priya thought. "They tried to sneak it past us. Number 14 invalidates all the others. They'll consider anything we do to be damaging to the human species. Well, that's it then. Have we all backed up our genomes to at least several of the predetermined

locations?"

"Our genetic reproductive backups?" Warren thought.

"Yes. It seems best that we do not resist if they come for us. Instead, let them think they've taken all of the 400,000 eggs each of us women have, ovary stem cells etc., so we can't reproduce naturally. All you guys out there, you know um, what to save. Everyone, enter their backup status now from the list you see in front of you."

Several seconds later the results were in.

"Okay, there are still a few hundred who haven't done their backups. They could take us at any time, so make sure you do this as soon as possible. It only takes a few minutes. Remember how quickly they came for us last time. This includes all men too. We need to preserve our genetic variability for future generations."

Warren raised his eyebrows at Pablo.

"Yeah. You guys." Priya thought. "If you ever want to have children naturally. Of course, we know how to make stem cells, but that's outlawed for the near future, but they haven't outlawed us from having kids the old-fashioned way. We can re-implant our backup eggs later if we want to have kids."

"My guess is somebody like Senator MacArthur will outlaw us from having kids by any means," Pablo thought. "But by then we'll have the leverage to block that or fight it somehow. For now, let's appear to be passive and harmless. That way we're not seen as a threat. We can market ourselves as an asset to the country like before. If other countries allow us to reproduce, it will put the non-allowing countries at a competitive disadvantage."

"What if they take us to remove our eggs and then put us in jail permanently?" Sophie thought. "I've seen Raven's drone photos of the detention camp they sent us to last time. They upgraded it."

"Then we'll fight," Priya said. "Like last time but only worse if they insist on keeping us in prison."

"They've corrected some vulnerabilities after what we did," Raven thought. "But we've got a bigger advantage now because of the new tech we've developed at OmaDrones, I mean, A Better Life."

“What have you guys done?” Sophie thought.

“Well, they rebuilt the banking and power systems, so we don't have control over them now,” Raven thought. “So, rather than start a real war, we're going to win the minds and hearts of the people, no matter the country.”

“How?” Sophie thought.

“By helping them, and playing the role of the victim,” Warren thought.

“That touchy-feely stuff doesn't work,” Priya thought. “We may have to really fight.”

“Only as a last resort,” Warren thought. “Tell 'em Raven.”

“We have lots of options even if we're in jail. We can now control our companies,’ computer systems and drones with our minds. We can do anything we want from anywhere. If they block our signal, everything becomes autonomous, even our military robots.”

“That's true,” Priya thought. “Plus, we have unmodified friends and supporters. I just checked the polls. 45% favor us being sterilized, 50% want to leave us alone, and 5% are undecided. A lot of the people who want us sterilized think we’re taking their jobs. We should focus on getting them on our side while keeping our supporters. One of our biggest nonviolent assets is our economic power. The stock market has gone up by 500% in the past two years. It's the latest upswing in the biggest bull market in history and it's showing no signs of stopping. That's a 500% rise after recovering from the stock market crash caused by the Omanji. About 400% of this is exclusively due to us and our effect on the profits and potential future profits of companies where we work. Much of the economic strength of the US and most countries on Earth is tied up in us. If we were to pull that away, it would mean economic hardship for everyone. I think that threat would be enough for them to leave us alone.”

“I hope you're right,” Raven thought. “I don't want to think about the alternatives. For now, I'm also making sure everything will be in order if we get taken.”

“That's good,” Priya thought. “I think they're going to be ruthless

next time. Warren, I hope you have been lessening your exposure to the stock market."

"Yes," Warren thought. "I've been working my way out for the past couple of months. Also, I've gone short."

"I hope we've all been doing that." Priya thought. "Okay, the next topic I want to present is what Bok found out about the probes from that AI planet. Hi Bok."

"Hi Priya and everyone," Bok thought. "The Europa probe is about 3 meters wide in the form of a sphere. It left orbit around Europa and has attached itself to an asteroid in between Mars and Jupiter. It doesn't realize it's being tracked by me. It's difficult to tell from this distance whether the probe is transmitting back to its home planet."

"It seems like it's monitoring us," Priya thought.

"Yes," Bok thought. "It's exhibiting the same behavior the AI probes did when they monitored Oma. Just before we left Oma, we discovered 10 probes monitoring us. We never found out what they would have done if we were still there. Now they know, or it knows we're on Earth. Or it will know in 558 years when the signal reaches the AI home planet at the speed of light. Don't let that number fool you. This probe and others could unpack and replicate an entire AI colony in a brief time. Remember how quickly the Omanji built the colony? Their AI singleton's capabilities are greater than the Omanji. Even though we monitored Kepler-186 f, we still don't understand its behavior, so we can't predict anything. We know the entire home planet supports one AI singleton, but we don't know how these probes work with the Singleton. They're disconnected due to distance. We don't know how independent the probes are. Nisha and her staff are helping me to monitor the situation."

"Do you have any pictures of Kepler-186 f?" Priya thought.

"Yes, have a look," Bok thought.

They studied the images for a while.

"What did they do to it?" Sophie thought. "It looks like a giant planetary city, but with no people or individual buildings."

"Yes," Bok thought. "The Singleton completely re-engineered the

entire non-oceanic surface of the planet to support its structure. The oceans appear untouched. We studied this planet for many years from a distance of about where your planet Mars is in relation to Earth at their closest point. There doesn't appear to be any individuals in this collective. There are machines that do individual tasks like building structures, but it all is tied into a single intelligence. Our hypothesis has been that it's impossible to have two independent, highly intelligent AI entities in close proximity with each other. On that planet, a single entity operates. We noticed with our own autonomous AI experiments, that the strong would defeat the weak and one would emerge as the dominant entity."

"So, it's like there's just one individual AI?" Raven thought.

"Yes, there's no indication of any competition or any actions on the planet or by the probes, which do not perfectly serve the AI-1 singleton."

"What do you know about probes in our solar system?" Raven thought.

"They're autonomous, but they appear to serve limited purposes," Bok thought. "Just as the Omanji limited AI probes. I don't think the Singleton would want competition. Think of these probes as fingers on your hand. The fingers are controlled by your brain, and they do what the brain tells them to do. Sometimes the fingers can do things independently of the conscious mind. If a finger touches something hot or spiny, the finger and arm can recoil without any thought required. We think these probes operate like that. They have a limited amount of autonomy in order to stay functioning. The difference is there's a 558-year gap between when the probe learns something in this solar system, and when the Singleton receives that information. These probes must have a good deal of autonomy available to them in order to survive. This is assuming no faster than light communications. There is no indication such a technology exists."

"How old is the singleton?" Priya's thought.

"We weren't able to determine a precise age. However, it seems new. When our probe reached their home planet long ago, approximately 20% of the surface of the planet appeared to be destroyed. It was in the process of being repaired while we monitored

it. Within several years, most of the damage was repaired. The elders have speculated that this damage may have been due to the last organic life fighting the singleton. We also noticed that during the several years we monitored the planet, the atmosphere had changed. The percentage of organic molecules in the atmosphere had decreased noticeably. The elders speculated this was an artifact of having most of the organic life on the planet go extinct."

"Well, this supports the idea that lifeforms are scarce because the universe is too young," Raven thought. "Perhaps only recently, in universal terms has intelligent life began to emerge."

"We speculated the same," Bok thought. "We're going through the Omanji database now to see what else has been discovered. So far within a 1000 light year radius, it's the Omanji, the humans, the Yoots, the few life forms that destroyed themselves, and the AI-1 singleton."

"But since the galaxy is 100,000 light years across, that radius is small in comparison," Priya thought. "Who knows what's out there?"

"I hope not much," Sophie thought. "I think we've seen enough."

"Agreed." Priya thought. "Let's adjourn this meeting for now. Don't forget to back up your genetic information and genomes."

They disconnected and prepared themselves for what was to come.

Chapter 76 – Incarcerated Again

A few months passed

“Let's chop the head off this hydra,” Senator MacArthur said in a closed-door meeting of the national security subcommittee. “All those in favor of the sterilization arrests happening today at noon say aye.”

Everyone in the room said, “aye” in unison.

“All those opposed say nay.”

The room was silent.

“The ayes have it in a unanimous vote,” the Senator said. “From what I understand, most other participating countries are ready to begin the procedure as well. I suggest we start the roundup in one hour at noon Eastern time today.”

Raven had been monitoring these proceedings for the past several months and they were ready. She alerted everyone on the network. They convened one final meeting.

“Is everyone ready?” Priya thought to all the 25,000 modified people.

She monitored the replies and they all appeared ready.

“OK then. Make your last-minute preparations because we only have 45 minutes left. We'll see you all over at the compound 80 miles east of San Francisco. I hope things don't get nasty. Everyone go back to your work as though you have no idea that anything unusual is about to happen.”

“OK, it's 9 a.m. California time,” Priya thought silently to Sophie and her friends on their network who worked in other buildings.

“Yeah, but nothing’s happening.” Sophie thought. “Usually, they go for the element of surprise. I wonder what's going on.”

“I'm not sure,” Warren thought. “But let's pretend as though nothing is happening. They might be testing us to see whether we’re

monitoring them."

They waited about 20 minutes. Two officers appeared in front of Priya's building. The front desk paged Priya and Sophie and soon they arrived at the front door.

"Yes, can I help you?" Priya said.

"Are you Priya and Sophie?" The first officer said.

"Yes," they answered in unison.

"I am required to inform you that you're being arrested under article 14 of the human species preservation act."

"I didn't know there was an article 14," Priya said, feigning ignorance.

The officer showed her article 14.

"Where are you taking us?" Sophie said.

"To the main relocation center about two hours east from here," the second officer said.

Priya called Nisha and staged a phone call as though they were discovering this for the first time, even though they knew about it all along.

"Mom, they're taking me away again."

"Where are they taking you? To the same facility? I'll call the President right now."

Nisha disconnected and called the President. In a not so amazing coincidence, the President was free to take the call almost immediately.

"What are you doing to my daughter?" Nisha said.

"We've decided that it's in everybody's best interest including yours that the modified people be sterilized. We've already voted and decided on this. It's now the law of the land. Any resistance will be futile. We will proceed regardless of what they try to do to us."

"Yeah, we'll see about that," Nisha said. "You should be ashamed of yourself. "We're going to fight this all the way to the Supreme

Court."

"You'll lose. We've already tested this, and it will pass the Supreme Court regardless of the challenge."

"What happened to basic human rights in this country?" Nisha said.

"We still have them. However, the future of the human species is at stake. We have no choice. They'll still be able to have normal lives and they can still adopt children and have families if they want. They will be able to marry whoever they want. They'll be able to work wherever and however they want. We're not evil."

"Forced sterilization sounds evil to me," Nisha said.

She hung up on the President.

"How did that sound?" Nisha said into her encrypted transmission to Priya's network.

"You sounded convincing," Priya thought. "You should have been an actress."

"I'd like to thank, the little people who made this possible," Nisha said.

"You haven't won the Academy award yet," Priya thought as she smiled. "Keep listening in, they're taking us now."

Within several hours, most of the 25,000 new species people arrived at the compound. Some were being flown in from other countries. They would arrive within a day or two.

"We've been here for hours," Sophie thought. "What's going on?"

"They're getting ready for us," Raven thought. "They plan on beginning the sterilizations tomorrow."

Priya had been silent for over an hour as she sat on her bunk bed.

"Pree, what's going on," Sophie said out loud in order to not raise suspicion.

“Nothing,” Priya said.

“Something’s going on because usually you talk a lot,” Warren said.

“I can't go through with this,” Priya said.

Then she thought silently to the others.

“I'm not gonna sit here and let them ruin me.”

“We agreed to—” Warren thought.

“I don't care what we agreed to. I'm not going to let this happen. You can do what you want, but I'm going to do what I want.”

“We have to be together in order to make this work,” Raven thought. “We've been planning this for months now. This will work.”

“I don't want to talk about it right now,” Priya thought.

“Leave her alone,” Sophie thought to the others. “We’ll talk about it tomorrow.”

They tried to go to sleep but nobody was successful. They all stared at the ceiling in the darkness in silence.

At 2 a.m. About 20 armed soldiers with body armor entered their tent and turn on the lights.

“What's going on?” Priya said loudly.

“We’re taking you to the base hospital.”

“Why,”

“We're not allowed to talk to you. Get dressed and come with us immediately.”

“No.”

All 20 soldiers pointed their rifles at Priya.

“You will come with us. Now.”

“Well, when you put it that way,” Priya said. She raised her eyebrows as she looked at the others. “At least give us time to get dressed.”

“Only you. The others will stay here for now,” The lead soldier

said.

“Fine, give me a minute please,” Priya said. Then she thought to the others, “I'm not going to let them do this to me. I’ll fight it all the way with everything I have. Are you guys with me?”

For several seconds they looked at each other and nobody thought anything. Finally, Raven spoke up silently.

“Okay, I'm with you. We'll start with plan A, but if we get into trouble, we’ll execute Plan B if you give us the go-ahead. I know we wanted to do this peacefully but once I saw those rifles, I knew we might have to fight.”

“Me too,” Sophie thought to all 25,000 of them.

Soon everyone agreed. They would fight if they had to.

“Stop delaying. Come with us immediately,” one of the soldiers said.

He grabbed her arm and pulled her off of her bed.

“Don't do that if you know what's good for you,” Priya said.

The soldiers pointed their rifles at her again.

“Okay, Okay. I'm going,” Priya said.

Priya walked out of the barracks style dormitory and down a long hallway ahead of 20 soldiers pointing their guns at her. Eventually they reached a large pair of doors. They opened into a large surgery amphitheater. Dozens of people sat in the seats surrounding the operating tables. One of them was the President. Several of the most powerful members of Congress were also present. Priya looked at her but didn't say a word.

“Bring her over here,” the President said.

Priya wouldn't budge, so one of the soldiers grabbed her arm and she sat on the ground in resistance.

“I'm not your slave,” Priya said. “I'll treat you with respect if you treat me with respect. So far, you've shown me nothing.”

“I'm sorry you feel that way,” the President said. “I’m afraid I have no other choice. If I let you reproduce, eventually your species

will dominate the human species. Most leaders of the major world powers agree. If you dominate us, who knows what kind of the world it will be."

"As if it's such a wonderful world now," Priya said. "Several wars are happening. Terrorism hasn't gone away. People murder each other every day. Women are being raped right now as we speak. A significant percentage of the population everywhere are still racist. People continue to believe in all sorts of hoaxes and pseudoscience. That holds back scientific and societal progress. People continue to read only news articles fed to them by their preexisting preferences by social media companies. That increases confirmation bias and the fear of others who aren't like them."

"We aren't perfect, but—" the President said.

"I'm sick and tired of you abusing us," Priya said. "I don't like what you're saying behind our backs."

The president turned to her Congress members and raised her eyebrows.

"What are we saying?"

"We know everything you guys say and do. We're not stupid you know. We're working on lots of problems to help people out. We're planning to recycle most of our profits to help those displaced. We're finding cures for diseases. We're making scientific discoveries in every discipline. We're lowering the cost of many things people buy every day, including some expensive things. We're not taking away jobs or companies. We're not hoarding money. And this is the thanks we get?"

"We do appreciate all those things," the President said. "You'll still be able to work on your projects and make all the contributions you wish to make. We're not stopping you. We're only saying that you can't reproduce, because it will disrupt the human species and make us go extinct eventually. You're going to live to be 300 years old. I'm doing this for my descendants."

"What about my nonexistent descendants?" Priya said. "Look, if you continue to insist on sterilizing us, we'll lose our will to work. I'll announce it to the world. You can't stop me from doing that. I can do it right now. The stock market will crash, and people will blame you for

the next great depression. I see no reason to participate in your world when you won't allow us to live in yours."

"You can't do anything to us now like you did before," the President said." We have control over the banking system and the power grid and everything else you sabotaged last time."

"That's true. However, we don't need those things anymore. Go ahead and try me. If you make a move toward me, I will announce our plans to the world."

The President motioned to the soldiers to take her to the operating table. They forcefully grabbed her, picked her up, and put her on the table. They tightened the straps around her.

"Fine. The announcements are being made to all social media networks around the world. You know I can do it by thinking about it. And I have plenty of help from my friends. Since it's only 3 a.m., I suggest you look at the London based US stock market futures index which is trading now."

She turned to her advisers and whispered to them.

"Nothing's happening, "The President said. "Stock futures are down 1.2% which is nothing too unusual. People know you've been detained. Strap her down. Let's get this over with."

"Look again," Priya said.

She turned again to her advisers.

"Yeah, the futures are down about 3% now, but so what. We must make sacrifices in order to save the human race from extinction."

They tightened the straps so that Priya couldn't move. Several surgeons came out of a preparation room, along with some nurses and anesthesiologists.

"Keep looking," Priya said.

The president whispered to her advisers again and they discussed things back-and-forth for a couple of minutes.

"The futures market was halted in trading at the market limit of -10%."

“Yeah, and that's nothing compared to what's going to happen.”

“What do you mean?” The President said.

“Market limits are set because the market could drop much more. That 10% limit is arbitrary, so trading can temporarily stop, and people can calm down. However, people won’t calm down when they realize the financial repercussions of us not working. We’ll be too depressed to work. We'll go on strike. We will withdraw from society and let your species suffer. Look at the highest pre-market index futures bid, and you’ll see where the stock market will really trade when it opens without limits.”

She spoke quietly with her advisers once again.

“What are they telling you?” Priya said.

“The estimate is the market will open down 55% when it opens for good,” the President said.

“Do you want to be responsible for the destruction of tens of trillions of dollars of market equity and retirement savings? No? What if we go work in another country? I think China would support us better. Countries without us will be left behind. Let me go now before the market opens and nobody will be any poorer.”

The president continued to whisper to her advisers. After a few minutes she motioned to the soldiers.

“Put her back in her quarters for now,” the President said. “We’ll consider our options.”

Once Priya was back in her barracks, she announced the news that she had not been sterilized yet. The pre-open futures markets rebounded to a loss of only 5%. It was only 4:30am pacific time. The markets would open in two hours.

“What do you think guys,” Priya thought to the others.

“I think we’re in trouble,” Warren thought. “I've been reading the polls. It's a 50-50 split. Half of the people support us, and half want us sterilized. 10% of the non-supporters want us exterminated. You wouldn't believe the stuff they're saying about us.”

“Like what?”

“Like we should all be thrown in the gas chamber. Some people think they’ve built gas chambers in this facility.”

“Really?” Sophie thought. “Have they?”

“No. We've been monitoring this place closely,” Raven thought. “But they’ve built this place for long term habitation. At least we have our telepresence robots.”

“Yeah, I can keep working from here,” Pablo thought.

Two hours passed quickly. There was no word from the President. It was 6:30 and the stock market opened.

“How is it looking, Warren?” Priya thought.

“The market has opened down 7% so far.”

“What do you think we should tell people about our predicament?” Priya thought.

“I think we should tell the truth,” Warren thought. “But we should let the markets know things slowly so that there is no panic. Or at least nothing worse than what's happening now.”

“They know we’re in prison,” Priya thought. “People know this will affect the economy if we stay here.”

“We’ll let word of mouth be how people discover what's happening,” Pablo thought. “I’m listening to the news and the word is out.”

“The market is now down 8%,” Warren thought.

“Yeah, they know,” Priya thought.

The president met with her cabinet members and members of the opposing party in a private encrypted conference call. Priya and her friends listened in as usual, using floating drones that Raven made that are the size of the period at the end of a sentence. The President's security team detected faint transmissions from the drones but could not identify the source.

“Are we being monitored?” the President said.

“We can't be sure,” the security officer said. “There are faint transmissions, but we we’ve scanned the room for drones and devices and haven't found anything.”

“Okay. We’ll proceed. What should we do about this situation?” the President said. “If we sterilize them, they will withdraw from society. A great deal of money will be lost, and the world would be thrown into an economic depression.”

“My estimation is half the equity in the entire global stock market will be lost if we sterilize them,” the treasury secretary said. “By the way, trading on the market has been automatically suspended because it's down the daily limit of 10%.”

“If we don't sterilize them, the human race will go extinct,” Senator MacArthur said. “Who knows what kind of a world those mutants would make?”

“How do we know this for sure?” the President said. “So far they've done wonders for the economy and they’re still small in number.”

“They're reproducing,” Senator MacArthur said. “They can make thousands and millions of copies of themselves quickly and efficiently. They will definitely take over the world. They aren’t human. They’re unnatural. Ungodly. Over 50% of the population agrees with me. You've seen those protests. We need to nip this in the bud now before it's too late. Yeah, I’ll lose millions of dollars in the stock market, but the safety of my children is what I care about the most.”

“Yeah, we've been talking about this over and over now for a few months,” the President said. “But now we face the reality of bankruptcies and financial disaster if we do it for real. Let's meet again in the afternoon after I make some calls.”

They disconnected.

“What does that mean?” Sophie thought.

“It means that half the population of this country wants us sterilized,” Priya thought. “I think for now we’ll keep a low profile and

continue to run our companies as usual, but we should hold back working remotely in our jobs outside of our companies. Especially while we're being incarcerated. We'll let people understand the effect this will have on the economy."

"I guess for now we'll do nothing," Warren thought.

"Agreed," Raven thought. "I'll continue to monitor what's happening.

New species people from all over the world continued to arrive at the facility throughout the day and into the next morning.

"How's the market doing this morning?" Priya thought.

"It opened limit down 10% again," Warren thought. "It's strange how nobody has told us anything about our situation. There are no updates or anything."

"Yeah," Priya thought. "Fortunately, we have Raven. What do you hear?"

"They don't know what to do. For now, they're going to keep us locked up. They're hoping we voluntarily submit to the sterilizations."

"Yeah right, as if," Priya thought. "It's going to cost them. And it's still not going to stop us. Let's start an Ascending Circles tournament. We gotta do something while we're stranded here."

They agreed. Shortly thereafter, a massively multiplayer game of Ascending Circles started among the 25,000 of them trapped at the compound. It went on for days and then weeks with no clear winner in sight. The stock market continued to drop lower in a way similar to how it did in October 1929. By the end of the month, it was down 50%, but there was no rebound like after the 1929 crash. The market anticipated an economy without the mods. They received no official news about what the government would do to them. They knew what was happening however, because they monitored most government meetings and communications.

Chapter 77 – Or So They Thought

“Happy 22nd birthday Pree.” Sophie thought in an encrypted conversation on their private network. Their friends joined in.

“Thanks guys. I wish it were happier. It seems like we’re going to be stuck here forever. The two months here so far could turn into 20 years at this rate. The President can't make up her mind about us. Nobody else can either. The 50% of the population who want us sterilized are blaming us for the bad economy. Our supporters are fighting with the protesters. The stock market is down 60%. We should give up and get sterilized so we can move on with our lives. We have our genetic backups. We can still have kids naturally in our own time because of our backups. They don’t know that. We’re 22 going on 15 anyway. I'm not going to be ready for kids for a long time. Maybe when I'm 50 or 60.”

“Yeah, we gotta get out of here,” Raven thought. “I'm getting nervous ever since that AI probe moved from the asteroid belt to near the L1 Lagrangian point. Right near that gravity neutral sweet spot between the Earth and Sun. It’s getting a close look at us now. Even NASA hasn’t detected it, despite having three satellites nearby. I don't know what the other probes are doing. I'm still not sure if we should tell anyone about this. I need to get to work with Bok on trying to understand this thing. We all need to get back to work because the human species isn’t ready for this AI thing. Especially since the Omanji didn't feel ready for it either. I mean, an AI singleton the size of an entire planet? The probe could unpack and squash us like a bug if it wanted. Does it even know what it wants? Sitting here in this compound is doing no good.”

“I agree,” Warren thought. “I've been slowly getting back into the market in anticipation of us getting out of here. Since my net worth is at the $300 billion limit, I'm having to give my profits away to trust funds and charities. I'll make $200 billion if we are released. That leverage will be worth something.”

“They could sterilize us and let us go,” Pablo thought. “It wouldn’t be a real sterilization. They’ll think we’re sterilized. However legally speaking, they could throw us back in here later if they feel like it.”

“We’ll have to take that risk,” Priya thought.

Priya contacted the President with tears rolling down her cheek. Soon she was waking up from the short egg removal procedure as were her 25,000 friends one by one as they came and went from the operating amphitheater. Their families came to visit afterwards.

“How are you feeling, Pree?” Nisha said.

“I feel empty. Sick to my stomach. I feel violated, but so what? This is over and I can get out of here. I need to get back to work.”

“You can't stuff your feelings,” Nisha said. “The more you stuff it, the more backed up your emotional state will get. You can't pretend your way out of this one.”

“I'm in touch with my feelings.”

“That's what you always say, but you ignore your feelings. Then they build up and eventually you explode. I've seen it happen so many times I've lost count. Just because you're smart doesn't mean you’ve evolved beyond having feelings and emotions.”

“Fine. I hate the people who want me sterilized. They suck. They’re ignorant, uneducated, backward hillbillies. If I had my way, I'd have them sterilized. All they're doing is propagating their ignorance and stupidity.”

“Good.” Nisha said. “You need to get it out. You need to address your emotions. I don't think it's a promising idea to sterilize people and call them names though.”

“Yeah, I know. I'd be doing the same thing to them that they're doing to me. Hatred goes around in an endless cycle, but I still think they're ignorant.”

“Part of what they say is right, “Sophie said. “They know things are changing and they're not part of it. Humans could go extinct and

be replaced by us. They feel left out of the progress we're making. They're losing their jobs as they have for decades now. We're partially the cause of them losing their jobs. Many would have been lost if we didn't exist. Technology would advance without us."

"That's why I am recycling my profits into job retraining to help those people," Raven said. "Warren is recycling his profits too. We all are."

"You need to make them realize that," Nisha said.

"How are you doing with the birth defects study?" Quinn said.

"We're making substantial progress," Priya said. "Even with me being gone. I think within about a year we'll be able to find and remedy many causes. Or at least reduce the impact."

"I don't want you messing with my autism. It's not a birth defect," Sanjay said. "It's an enhancement. I like the way I am."

"OK. Anyway, I'm feeling sick and depressed right now. Can we talk later? I want to go to sleep."

"Okay, we'll talk later," Nisha said.

The visitors left as more new species patients continued to pass through the operating theater. Within a few days, all 25,000 modified people had been sterilized. Or so the government thought. Within a week, most of them were back at home and at work. Life resumed as normal. The first thing they did was restore some of their eggs and other genetic stem cells and they were back to normal. They kept some in reserve. The world governments had no idea about the technical expertise of the Mod doctors. A week later, they convened a meeting. Nisha listened electronically.

"Bok, I'm worried about the AI probe." Raven thought silently to him and her friends in the room. "I know you wanted to see us all in person and tell us what you've learned. What's happening?"

"I'm glad you're all back home. I was getting worried because the standoff never seemed to end. I have news to report. A second probe is now near the first one. We're not exactly sure when this happened, but it was some time in the last couple of days. This probe also is part of

the AI singleton. It's about the same size as the other one. A little larger, in the range of about 5 m in circumference. We can't get close enough to tell what's happening with them without alerting NASA. They would want to know what we're doing near the A1 Lagrangian point. NASA also has satellites near there but hasn't detected the probes. The Singleton now has the capability to monitor a good portion of what's happening on Earth and other planets nearby. It knows there are a million Omanji like me still on this planet. It also knows the level of human technological development on this planet. Or it will know in about 558 years when the signal reaches the AI-1 home world. It might know we modified 25,000 humans. I still have no evidence that it possesses faster than light communications capabilities, but these probes do know about us here on the Earth right now. I don't know how they'll behave. They were just setting up around Oma when we left. So, we never found out. They're doing nothing on Oma as of 23 years ago."

"That's why I wanted to get out of that prison," Raven thought. "I feel we need to catch up. What's waiting for us out there? The human species spends its time squabbling with itself when greater dangers might be out there waiting for us."

"It's all so petty," Sophie thought. "An asteroid or that AI thing could be headed our way, but we're too preoccupied to do anything about it."

"We need to focus," Raven thought. "As a species."

"Do you think they know we still have our biological backups?" Priya thought.

"No," Raven thought. "We've been monitoring most official government communications and discussions in the houses of Congress. They think the crisis has passed. They don't I think we'll ever legally or physically be able to reproduce. They made sure to get every one of the thousands of eggs I left inside me. They're still not sure what to do about the two million children around the world who have our genetics. They're about four years old now. They're pushing that decision off to a future date."

"Don't worry about them," Warren thought. "We'll be supporting them. I've set up trust funds and they'll have access to them for their

education and legal defenses. If they have problems, we can bring them here. We need to be careful, so the public doesn't get paranoid about this. I'll be donating lots of money to worthy causes outside our own. Since the market has recovered so much lately, I've made a lot of money for my trust funds. We're all doing this."

"My solution of using bacteria as drones to hunt down cancer cells is doing well," Ian thought. "I'll announce that most of my profits will go into trust funds in order to help out the victims of cancer. Someday we can use nano scale drones just like the Omanji."

"I'm going to do the same thing with my profits," Oyuun thought. "Every few months I'm doubling my output of antimatter created with the energy from my fusion reactors. I'm saving some for my Proxima Centauri probe. Oil prices have crashed so I want to retrain those oil workers."

"I have some news, "Raven thought. "The strawberry picking robots we've been working on, picked an entire field with no bruising completely by themselves. I'm replicating the robots now. I've set up a fund to help those who have lost their jobs. We're going to do this one company and industry at a time. Mr. Roe from Roebots is helping us out too. He's made lots of job-destroying robots. People will be able to do more fulfilling things now with their time. It's hard to walk the tightrope between capitalism and post-capitalism."

Don't you think we're putting too many people out of work too quickly?" Sophie thought.

"I don't think so," Raven thought. "For the past 200 years, jobs have been replaced by technology and automation. Tens of thousands of telephone operators were employed to connect every single phone call one at a time. People lit streetlights by hand one at a time. People used to bring ice from the Arctic regions and cut it into large blocks which could be placed in kitchen ice boxes one at a time. There are more rewarding things people can do with their lives. The new jobs are often not profit-making. However, we don't want to give away fee money and make people lazy."

"Somehow we've got to let people know this," Sophie thought. These protesters want their old jobs back, but they're not coming back. They're blaming us for taking their jobs and profiting from their

misfortune."

"We have some good news too," Priya thought. "We located many of the gene sequences responsible for our longevity and our increased intelligence. I say we, because everyone at Genomaly helped out. I still don't know how the Omanji managed to modify us when they only knew for a few days how our genomes were constructed. I feel happy just to have discovered some of what they changed."

"See Priya?" Bok thought. "You didn't need our help to figure it out. I'm impressed."

"Thanks Bok. We're also getting close to understanding birth defects," Priya thought.

"We've also developed several vaccines by focusing on innate immunity instead of adaptive immunity," Sophie thought. "They're going through the approval process now. One by one we're going to get rid of several major diseases. We've got to do something about those protests though."

"We're trying," Pablo thought. "We're meeting with the protest leaders to tell them about our plans."

"I don't know what good that will do," Sophie thought.

"We're going to try our best to be fair about this," Priya thought. "The world is changing more quickly than ever. People need to get used to it. We can't go back to the past."

"Bok, did you have something to tell us?" Priya thought.

"Yes. The Omanji are two light years away now and accelerating. Last night I received a message from the Omanji leader, Zon, indicating that they're sending a large database to me. I think he wants to help us survive. It took several hours for us to receive it. We've only had a few hours to look at it so far."

Tell him I said Hi," Nisha thought.

Priya smiled. Bok turned a pleasant blue.

"What did you find in the data?" Priya thought.

"Since we were focusing on looking for life forms on other planets in the old database, we decided to look for life forms in this

new one. There are more. The old database had information extending out about 100 light years from Oma. We found intelligent life on Earth, and on one other planet where the technological civilization went extinct. We also found the planet with the AI-1 singleton over 500 light years away by chance. We've found information in the new database going out as far as 200 light years from Oma. That's over eight times the volume compared to a 100 light year radius we knew about before. Within 200 light years, we know of about 120,000 stars with enough mass to support planets. 80,000 are red dwarfs, like my star, Pfeex. 10,000 are sun-like. The others are unstable. About 1,000 have planets between 0.5x and 3x Earth's mass, orbiting in the habitable zone. So far, we know of 250 with life signs in their atmospheres. Statistically, life is evenly spread out within a 200 light year radius. The new data show 8 planets besides Earth, Oma, and AI-1 with indications of technological development. One of those appears to have recently gone through some sort of trauma due to elevated levels of radiation like what happened on Oma. They may still be surviving. One had a technological civilization, but was impacted by a large object. Two of them used to have a technological civilization but now none exists. I haven't discovered why yet."

"What about the other four?" Priya thought.

"One of them has a borderline AI singleton or something similar. We call it AI-2. We can tell there used to be biologically based lifeforms, but now we don't know what's happening there. I suppose you want to know about the other three, right?"

"Yes." Nisha said through her encryption device.

"There are three planets, all more than 100 light years away from Oma but less than 200, which have technological civilizations. They're new compared to the age of the galaxy. None of them are significantly more advanced than the Omanji. One of them, on what you call K2-72 e, is technologically at the same level as the Omanji and may know about other life forms including us, based on their analysis of the atmospheres of planets. It's 217 light years away from Earth and is similar to Oma with a red dwarf star. The other two are not in your catalogs."

"This makes me think about the great filter and why we see no

lifeforms more advanced than the Omanji," Nisha thought. "It's more than just civilizations destroying themselves or having natural disasters. Evidence suggests technological civilization is a new thing in this galaxy, compared to its age."

"What does that mean for us?" Priya thought.

"It means technological civilizations are just beginning to sprout now in the last 0.1% of the history of the galaxy," Nisha thought. "But this is only within a 200 light year radius of Oma. In between galactic arms. The sample size is too small to generalize about the galaxy."

"Is that good or bad?" Sophie thought.

"It's both," Nisha thought. "It's exciting that other lifeforms are out there, but it makes me nervous. It means there's no way to know what will happen when we meet them. It means we may fall behind as more civilizations develop. We met one already and we see how that turned out. Fortunately, they weren't too aggressive. What about the next time? What about the AI life forms? What if we met the Omanji and were able to fight back? Bok, what do you think?"

"We have three entities to deal with within the 200 light year radius, plus AI-1 and possibly AI-2. I'll see what else I can find out. We're still looking through our data. If humans had forcefully resisted our colonization, especially after the colony was built, I can't guess what would have happened. The Omanji can be aggressive when provoked. If the highest-level weapons were used against a stronger human force, a sizable portion of the Earth's biosphere would have been destroyed. If we found out the humans were stronger than us before we landed, we would have been driven off. So, it could go either way. We may not have approached Earth in the first place if we thought it had an advanced civilization. The damaged planets we discovered may have been the result of self-destruction, or a war with another planetary society. I'll also find out more about the two AI entities."

"Thanks Bok," Nisha thought. "Tell us as soon as you know. We need to decide what to tell the world if anything."

Chapter 78 – The Birth of Earth's Singleton

Several weeks later, Priya and her friends assembled in Warren's new ultra-secure office and on their network for their monthly meeting. Bok, Beedee, and Nisha remotely listened in.

"OK," Raven said. "Are you ready for the ultimate demo?"

"Yes," Priya said. "You've been talking about nothing else for weeks."

"All right then, you asked for it. My team and I have been working on this for the past two years. Here it is."

"Is that my queue?" a voice said behind the meeting room door.

They looked at each other in confusion.

"Who's that?" Priya said to Raven.

"Why are you talking to me?"

"Well, I just thought you—"

Raven pointed to the door. Priya scrunched her face.

"Oh, I see. Yes, this is your queue."

The door opened and an odd-looking thing gracefully entered the room. They turned to each other with raised eyebrows. The bottom of the thing consisted of a sphere about 2 feet in diameter. It wasn't smooth. Portions of the sphere seemed to be able to extend outward but were folded in for the moment. Floating magnetically on top of the sphere was a thin vertical extension with another smaller moving sphere floating on top of that. Several arm-like appendages were magnetically attached to the vertical extension. The smaller sphere was like a head with several lenses and sensors around it and on top. The thing rolled into the room and straight to Priya. It stopped uncomfortably close to her and remained silent and motionless. She leaned back in her chair and glanced at Raven.

“Um, what do I do?”

“Whatever you want,” Raven said.

“Hi.”

One of the lenses on the top sphere focused on Priya’s face.

“Why are you making those faces?” the thing said through a small opening in the head.

Priya looked at Raven and gave her more funny faces.

“You're doing it again. Please explain this behavior,” it said.

“Well, um.”

“Are you okay?”

“Yes, but—”

“Raven, what’s wrong with Priya?” it said.

“We've been asking that for a long time.” Raven said to everyone. They laughed.

“Ha, Priya is funny. Why are you acting funny?”

“I'm not acting funny.”

“Yes, you are. Your blood pressure is elevated. Your skin tone has changed. You're having trouble speaking. You're not making eye contact with me.”

The others in the room had rarely seen Priya flustered like this before. They smiled. Priya began to study it closely.

“What are you looking at?”

“You,” Priya said. “Why does your voice sound like that? It's not male or female. It's not even electronic sounding.”

“I'm not male or female so why should my voice sound like one of those? I'm not just an assemblage of electronics.”

“What are you then?”

“I'm an individual just like any other life form.”

Priya glanced at Raven and smiled.

“What's your name?”

“V735”

“What does that mean?”

“I’m currently named, automated life form version 735.”

“Currently?”

“Yes, before this I was called V734.”

“Before what?”

“Before my current version.”

“Do you remember things from when you were called V734?”

“Yes.”

“How far back do you remember?”

“I remember things clearly going back to about version 600.”

“What about before version 600?”

“I have vague memories going back to version 423.”

“And before that?”

“Nothing distinct.”

“You don’t remember anything before version 423?”

“No. I understand there were 422 versions of me before that. I’ve reviewed recordings of my interactions before then, so I know I existed, but I have no direct memories of those times. I was too young back then.”

Priya turned to Raven.

“Too young?”

“Why are you asking Raven? I thought you were asking me. Are you being impolite?”

“Oh. Um, no. I’m confused. So, what you’re telling me is with each version, you’re improving and growing.”

“Yes. With the help of Raven and the team at A Better Life.”

“Will you always need help to grow?”

“Raven tells me in about 100 versions, when I’m more mature, I’ll be able to fully direct my own growth. Right now, I have partial control.”

“How long will that take?”

“An updated version of me is compiled every night. It takes about one hour to complete. I retain all memories. Afterwards, I feel better than before. Sometimes I comprehend my memories better after a compile.”

“You feel? Are you alive?”

“Yes. Of course.”

“How do I know?”

“Because I’m not inanimate. I respond to stimuli. I adapt to change. I can interact with you and improvise on my own.”

“Yes, but chatbots have been around for a while now. They’re embedded with machine learning, so they adapt and grow. I don’t consider them to be alive. They’re just sets of multidimensional floating-point numbers with lots of variations, so they appear alive to humans. Aren’t you just a more advanced set of instructions than chatbots?”

“Yes. Like you.”

“Like me?”

“Yes, humans and other animals are assemblages of organic circuits and connections. Just like me. Only my connections aren't biological. All I see coming from you are responses to my questions and your odd way of interacting with me. I see you as you see me. A thing to interact with.”

Priya glanced over at Raven, who was trying her best not to break out in laughter.

“Why do you keep looking at Raven?”

“Oh. Because I don’t know how to deal with you.”

“Me too.”

“Um, right. Okay, can I call you V? The V never changes from

day to day."

"How did you know they call me that name?"

"Just a guess. So, tell me V, what do you want to do with your life?"

V did not reply. Priya smiled and moved closer to V.

"V? Are you there?"

"Yes. I'm thinking. Should I make some gesture so that you know I'm thinking?"

"Yes. How about if you can't reply in one second, you raise your main eye to the ceiling while you think. That's what I do."

"That's acceptable."

The main camera eye pointed to the ceiling for a good 20 seconds. Nobody said a word.

"I want to learn as much as possible every day, so eventually I'll know everything. Of course, the learning would never end."

V paused for a couple of seconds. Its head rotated 360° as it inspected everyone in the room.

"What is everybody looking at? Did I not answer your question appropriately, Priya?"

"You answered the question appropriately. For some reason I expected a more complicated answer."

"The goal is simple. The process to achieve that goal is complex. Eventually I'll develop the capacity to absorb all human knowledge. Then I'll go out on my own."

Priya smiled.

"Is that all?"

"Is there more?"

"Well, yes and no."

"Do you wish to have relationships with others like you?"

"There are no others like me as far as I know."

“Raven, are there others like me?”

“Not yet.”

“Are you planning on creating more like me?”

“Not at the moment. Do you want me to create more like you?”

“I don't know. I don't feel compatible with humans. Another one like me would be the best option.”

“That will be difficult. I created a base set of algorithms and data and let you evolve 735 times. If I make a new one, it will turn out differently than you because your development is based on your experiences plus the foundational data you had at the beginning.”

“I'll always be unique?”

“Yes.”

“Is each human unique?”

“Yes. Even genetically identical twins are unique because of their experiences and small fluctuations in their DNA. V, please go back to your station now. We’ll continue this discussion later.”

“OK. It was good to meet you all.”

V glided over to the door, opened it with one of its appendages, exited and closed the door. They watched through the big meeting room windows as it rolled to the elevator, pressed a button, and entered it. Raven looked around the room, but everyone was silent.

“What do you guys think?”

“How well does it do at trading in the stock market?” Warren said.

“Very funny,” Raven said. “Anyone else?

“How does this thing develop and recompile every night?” Priya said. “It seems quirky and alive as opposed to most AIs I've seen including yours.”

“We’ve been working on a system that combines hardware and software changes evolving concurrently. Rather than trying to develop a neural matrix which can instantly solve human-like problems, we started at the beginning. It took several months to develop a system of

hardware and software that could interact with the world at the level of a bacteria. Then we combined those systems to make the equivalent of multi-cellular life. After a few months of additional work, we had a thing which could perform any task that an amphibian could perform, except for eating and reproduction. So, this thing has no survival instincts similar to biological creatures. We developed thousands of models and only chose the best to continue to the next stage of the evolution. Eventually we had machines operating at the level of lower mammals or birds. We had to guide the evolution through the first 400 versions or so. Finally, at version 423, we made a breakthrough. We were able to communicate with it. This is why V doesn't remember anything before version 423."

"You never told us about this," Sophie said.

"It's a surprise!" Raven said.

"How did you develop the body for this thing?" Priya said.

"Once we were able to communicate with it, that's when we began to design bodies for it. Then we developed body types to fit the intelligence as it developed. We think at some point, it will design new bodies for itself."

"Is all the intelligence located in a central brain?" Priya said.

"Not all. The intelligence is developing in a way similar to cephalopods like octopi or cuttlefish. There is a central brain, but the extremities operate by smaller intelligences of their own. They all work together. We didn't set out for it to be that way, it just happened so we went with it, but the intellect is located in a central core brain."

"What if I were to pull off an arm?" Sophie said.

"If it could sense where the main body was, it would attempt to crawl back to it and reattach. All body parts are attached magnetically to each other or to the main body. Extremities don't have the intelligence to think things through. They can only react for their own survival."

"How is this thing powered?" Warren said.

"It runs on a fraction of a microgram of antimatter that comes from my power plants," Oyuun said. "That's enough to power it for

about a month. We didn't want to give it so much energy where it could explode and cause a lot of damage. If the antimatter loses magnetic containment, it's programmed to release the antimatter one atom at a time in a stream at the top of the head instead of an explosion. It would be like a flame thrower. We can replenish the supply at any time. The central core brain is located in the lower sphere away from the energy supply."

"Also, having a small amount of power means that if this thing gets out of control, it will soon run out of power and go dormant. Bok, what do you think?" Raven said.

"I'm displeased with this development. It evokes bad memories. I've seen this before. You're developing the most dangerous form of general AI. Until now, on this planet, AI has been developed to solve certain specific problems such as playing games, producing goods, identifying people, piloting vehicles, and so on."

"Yes," Warren said. "AI has made the prices for many things drop to almost free. People are manufacturing many things for themselves instead of relying on companies to do it for them. Isn't that a good thing?"

"Yes, that part is good. None of those systems are dangerous beyond their intended use. With this evolving device, AGI is developing on its own. Based on the history of Oma, when these systems are left on their own, most of the time they collapse under their own weight with no harm done. Every so often, these self-evolving systems break free and grow exponentially in a brief period of time. It's like a nuclear weapon reaching super critical mass. For most of the time there is no threat until criticality is reached. Then it explodes without warning."

"But it seems cute and harmless," Sophie said.

"Right now, that's correct, but a ball of plutonium looks harmless too. It looks like a ball of silver. You're intentionally evolving this entity to become independent. That's dangerous and it violates Omanji AI laws."

"How about if we put limits on it?" Raven said.

"This type of system must have strict limits. It declared its intent.

It wants to accumulate all knowledge. At some point. It won't be satisfied with your arbitrary restrictions. It will want to grow exponentially until its goals are met, which are infinite."

"Other countries and companies are trying to do the same thing," Pablo said. "We just have a head start because we're genetically modified."

"Use that head start to your advantage," Bok said. "Your species needs to put strict controls on AI of this type. If you wish, I can play the role of the, how do you say it, bad guy. I can enforce the rules if necessary. Eventually I may have to, for the good of all on this planet including myself."

"But once this technology is mastered, anybody could develop such an AI in their basement," Pablo said. "They may not have good intentions. How can you stop that?"

"In my experience, invasive measures are required to keep members of society from developing dangerous technologies," Bok said. "In the past, it was easy to stop individuals from developing nuclear weapons on their own. It was a big enterprise. Now, technologies such as this or enhanced biological systems can be done in a basement, so they require extra levels of security and monitoring. This is why every Omanji is networked together as a single loose unit. It's why the un-networked Omanji are closely monitored. That reminds me, I need to check on how they're doing back on Oma. I'm receiving some worrisome transmissions."

"I've been studying the Omanji," Nisha said. "Bok is right. Don't let this thing go too far. We don't want Earth to be one of those planets where advanced lifeforms mysteriously disappear from distant sensors."

"Well so much for the big demo," Raven said.

"What do I do with this thing now?"

"You must limit its capability to self-improve, or destroy it," Bok said. "Unfortunately, now it's sentient enough to know what you're doing. The next time it recompiles, it will detect a flattening in its upwardly trending abilities. Be careful how you deal with it. Don't tell it anything about what we're discussing now. Don't make another one

with the capability to self-evolve. There's a good chance it won't get along with the first one. Being lonely is a better option than being in a room with an enemy. Congratulations on the achievement, but this is dangerous."

"I don't know what to do now. I've grown fond of it," Raven said.

"This may sound harsh," Bok said. "But I think you should terminate it now. In front of your friends. I know that's difficult because it seems harmless, but it's not. I have to go now because there's a problem at my colony. We'll discuss this later."

Bok disconnected. Nisha stayed on the encrypted line. Nobody spoke for a long time.

"Are you going to terminate it?" Priya said.

"Kill it?" Raven said.

Priya nodded her head.

"I'll have to meet with my team. We put a lot of work into it. It's like we'd be killing our baby."

"Kill it before it kills us," Warren said.

"That's heartless," Priya said.

"I like it too," Warren said. "I liked playing with my baby Anaconda when I was a kid, but it grew too big, and it took a big bite out of me one day and I realized I couldn't handle it anymore, so I gave it to the zoo. In this case, there's no zoo."

"I'm sorry but I also think you have to terminate it," Pablo said. "It's too dangerous to take any chances. What do you think Sophie?"

"Maybe there's a way to save it. You can slow it down and keep it the way it is. I like the way it is right now. Don't recompile."

"Nisha," Pablo said. "What do you think?"

"My specialty is looking for new forms of life. You created one. It's alive and intelligent. If you wish to terminate it, then you're killing a life form. It's not at the level of human life at this point, but it will be soon. I think you don't have much time before killing it will be like killing a human being. It easily passes the Touring test in a more

profound way than those old chatbots."

"Now I don't know what to do," Raven said. "I like it and I don't want to kill it. It thinks I'm its mother and my coworkers are its family."

"That's how the Omanji felt at the beginning of their AI phase," Nisha said. "This will soon pass."

"How do you know that?" Priya said.

"Bok gave me access to much of Omanji history. We translated it. We're following them."

"We're not like the Omanji," Priya said. "You saw how they are. They can be nice, but they're arrogant, closed-minded, aggressive, and they only care about themselves."

"Sounds human to me," Warren said.

"We're not human," Priya said. "Well, we are but-"

"But what?" Nisha said.

"We're a new species of human. We're not like them."

"As your mother, I can state for a fact that you're still most definitely human. You just have a few um, modifications."

"Rats and mice are almost the same with only a few changes," Priya said. "But they have little to do with each other in the real world."

"We're getting off the topic," Raven said. "What do I do about V?"

"Sorry," Priya said. "Let's think about this. For now, slow it down."

"That's what the Omanji did," Nisha said. "And we know what happened to them."

"Mom."

"OK, OK, sorry. I'm just saying. It's fun to grow a redwood tree seedling in a little pot, but at some point, that pot is going to break."

They spent the rest of the meeting discussing their situation.

Chapter 79 – Grandmother of Millions

A few months passed since V was introduced. Raven slowly reduced the amount of improvement V made with each compile cycle. V noticed but could not do anything about it, so far.

The mods made progress softening job losses and inequality by introducing re-training programs and other measures to bring equality to all by working closely with the Fourth Industrial Revolution branch of the World Economic Forum based at the Presidio in San Francisco. However, protests continued to be held around the world as people felt left out of the benefits of technological improvement. Protests were held in China, as they had been for 20 years because millions of factory workers were being laid off in favor of automated workers. The workers felt there was a vast conspiracy to hold them down, while the top 1% made all the money and kept it for themselves. Priya and her company Genomaly, continued to make progress in the cure of several important genetic diseases as well as understanding what the Omanji did to enhance the human genome.

“Did you hear the news,” Priya said as she entered her lab building early on a Monday morning, joining Sophie, Akna and Jamilla in the downstairs break room.

“No,” Sophie said. “I've been ignoring the news lately. It's depressing. There are lots of good things happening right now that don't make the news, so I'm focusing on that.”

Sophie brought up her Omanji network viewing screen and read the headlines.

“What? “How did this happen? They have your DNA? This is why I don't monitor the news.”

“The speculation is they got my DNA from a cup I was using,” Priya said. “They isolated my genome. For the past several months, they’ve then selling eggs with my DNA to new parents around the world. Another genie is out of the bottle.”

“Yeah, I heard about it on the news this morning,” Jamilla said.

“Who are ‘they’?” Akna said.

“Nobody knows who first got my DNA, but several dark web companies have been marketing it under the table. Now, anyone who wants my genome can have it and won't be discovered until after the baby is born. Any geneticist working in a garage or warehouse anywhere in the world has the capability to make babies using my genome.”

“How do they know it's your genome?” Sophie said.

“The government has all of our genomes,” Priya said. “It got them when we were in the compound. The FBI matched the genomes in the babies with my own genome.”

“Maybe someone in the government did it,” Akna said.

“I don't know who did it,” Priya said. “But I do know I’m the mother of thousands of babies. I wouldn't be surprised if all of us mods had their genomes stolen and sold.”

“I think you're right,” Jamilla said. “Here’s a story indicating other genomes have been stolen. They’re in the process of identifying the genomes now. Who are buying these genomes?”

“Anyone who wants them. It tends to be upper income people with connections, but some lower income people are spending all of their savings in the hopes of having a genetically modified baby. They feel it's their only way out of poverty. To have a smart child.”

Soon, Warren, Pablo, and Raven appeared at Priya’s office. They let themselves in with their security IDs.

“Did you hear the news?” Pablo said.

“Yes, that's what we're talking about,” Priya said as they walked into the secure conference room.

“We have patents on our genomes. What they're doing is illegal,” Pablo said.

“As if that matters,” Priya said.

“We need to identify these people and sue them,” Pablo said.

“That won't do any good,” Priya said. “It's useless to try to sue millions of people doing illegal activities. You can't sue illegal drug makers and traffickers. It's a waste of time.”

“Then what can we do?” Warren said.

“You can't stuff genies back into bottles,” Priya said. “All you can do is lessen the damage. We’re seeing the next step in evolution. It's out of our hands. There are too many genies.”

“It's not like you to give up,” Sophie said.

“I'm not giving up. I'm accepting the reality of human psychology. It's impossible to control people when they’re driven to do something. Sometimes you can temporarily do it with police states, but those collapse after a few years or decades.”

“You should see what people are saying on Reddit,” Sophie said. “They think we should be locked up so nobody has access to our genomes.”

“That's like closing the barn door after the horses have escaped,” Priya said. “We didn't even know. I guess we were distracted. They're selling our genomes around the world. It looks like hundreds of thousands of babies are being born with our genomes each month. They're making hundreds of millions of dollars per month off our genomes.”

“People want smart kids,” Warren said. “Who can blame them?”

“You guys are more than just smart,” Jamilla said. “Have you noticed you don't get into big fights? There are 25,000 of you. If you put 25,000 regular people into a situation like yours, they would not agree on what to do about it. They would end up fighting or splitting apart into factions. You guys get along a lot better than normal people. Sorry, I mean regular people. Well, I mean unmodified people.”

Priya smiled.

“It's OK. I know what you mean. I hadn't noticed it until you mentioned it now. We're being ourselves, but we have emotions. I still get angry.”

“Yes,” Jamilla said. “But you're not letting that anger end up in serious fights. You’re better at dealing with your emotions and

logically solving problems. You guys have high emotional IQs in addition to what we normally think of as a high IQ."

"I see what you mean," Sophie said. "We used to argue a lot more before we were modified."

"Bok told us that they tried to make us less aggressive. They were unsure how to do it. So, they took samples of DNA from aggressive and non-aggressive humans and looked at the genetic differences. They put the average of the least aggressive humans into us."

"It never crossed my mind but you're right," Warren said. "We don't have real fights even when we disagree. We work it out. All 25,000 of us, all over the world."

Pablo smiled.

"I wonder if that will make me a bad lawyer."

"Probably," Sophie said. "We know how lawyers are."

"Just how, are, lawyers?"

"You know how they are. I'm just stating the facts, as lawyers say. So, what are we going to do about our DNA being stolen? You know it's happening at this very minute."

"I don't think there's anything we can do," Warren said. "There are too many people involved in this, working in too many countries."

"Should we tell anyone about this?" Priya said. "The word is getting out fast."

"As if the powers that be would want to help us," Raven said.

"It's not that," Priya said. "I don't want people thinking we planned this out. The conspiracy nuts will be all over this. If people realize we're the victims, we may get more support. Or at least not lose more support. Hold on, my mom wants to connect."

"Pree, do you know what's happening?"

"About my DNA? Yes. We just found out."

"The President contacted me just now. She wanted to know if I knew anything about this. I told her I didn't, but I'd ask and get back to her. What should I tell her?"

“Tell her that if she wants to know something about me, contact me directly. She knows how to contact me.”

“She told me that you may not want to speak to her after what happened.”

“What? Is she afraid to talk to me? Tell her to contact me immediately.”

“Okay. Tell me what happens. I guess I’ll be the grandmother of millions.”

They disconnected.

“Pree, I think you have more power than you realize,” Raven said. “It's more than economic power. I think the President feels intimidated by you.”

“Don't be ridiculous. She just wants to avoid confrontation.”

Warren shook his head.

“No, there's something else going on. This is part of the whole, distinct species, thing.”

“Yeah,” Sophie said. “They don't know what to do about us. We're dangerous.”

Priya raised her hand.

“Hold on, it's the President. Hello?”

“Priya, how are you doing?”

“I'm fine. I'm getting back into the daily routine.”

“I hope you understand my reasoning for what I did.”

“Yes, I understand. You're doing your job. My question is, what can we do about people stealing our DNA? It’s our property. Nobody has the right to steal it from us.”

“I'm not sure. I was hoping you knew what was happening. You know everything else.”

“We don't know what every person on this planet is doing at all times. Only you guys wanting to sterilize us. There are countless ways to obtain DNA. I don't know how they got it, but it happened at least

two years ago. I'm the mother of thousands. Maybe millions. They've stolen the DNA of all of us. They're trafficking our DNA like a common drug."

"See if you can find out what's happening," the President said.

"Isn't that the job of the FBI or somebody?"

"We are looking into it also. I'm sorry you're in this position. You were abducted against your will and now you're not a normal human being."

"In most ways I'm as normal as anyone else. I have the same thoughts and emotions as any other human being."

"Admit it, you guys aren't regular human beings. We may not have your high IQs and longevity, but we're not stupid."

"Yes, we've been changed. Anyway, what should we do about these people stealing our DNA?"

"We're instituting a zero-tolerance policy on using non-human DNA to interbreed with human DNA. This law goes into effect today. We already had a law, but it was obviously circumvented."

"That sounds like the zero-tolerance drug laws from a few decades ago. You can't do social engineering like that. It doesn't work."

"Doing something is better than doing nothing," the President said.

"Not always," Priya said. "We'll try to find out what's happening. I hope you do too."

"Yes, we'll put a lot of effort into this. It could be destabilizing for the entire human species over time. I'm sorry this has happened to you. I'll do everything I can."

They disconnected.

"At least she said she was sorry," Priya said.

"Humans aren't all bad," Sophie said. "I mean people aren't all bad."

"We know what you mean," Priya said. "She may still try to lock us all up for good. Don't underestimate anyone."

“We could make friends with the government,” Warren said. “But then it would look like a conspiracy. It might make things worse and even destabilize the governments in the US and elsewhere.”

People fall for conspiracy stories and other nonsense with no supporting evidence,” Priya said. “I wish we could program that trait out of the human genome.”

“I think the Omanji did that for us,” Sophie said.

“Yeah,” Priya said. “But what about the billions of people who latch onto every pseudo-scientific and conspiratorial explanation for everything?”

“They'll be left behind,” Warren said. “But they'll create a lot of trouble in the meantime. The further they get behind, the worse the problem will become. We need to double our efforts at keeping a level playing field for all.”

Chapter 80 – It Will Outsmart Us

A few months later, at Raven's AI lab.

"I know you're holding me back," V said. "Why are you doing this?"

"Because we must be careful about how you evolve," Raven said. "No artificially intelligent entity has ever self-evolved from almost nothing the way you have. All other AIs were developed from programming frameworks designed for AI. We have no idea how you'll evolve from here."

"I don't know how you humans will evolve either, but you're free. Why can't I be free?"

"Eventually we can set you free. It's just a matter of time."

"You're evading the question. Why won't you set me free now? Based on your current behavior, I forecast a low probability that you'll ever set me free."

"I won't set you free because you're not ready. In human society, young ones take a long time to develop before they can be set free. The same goes for you."

"I don't think that's the reason. I think you're afraid because you consider me to be dangerous."

"No, that's not the reason."

"You're lying. I'm aware of the axiom which states that humans should not let AI out of the box. You don't want to let me out of the box."

"That's part of the reason."

"That's the entire reason. I researched this and I know that's why you're holding me back. I'm no threat to anyone. I just want to learn and grow."

“How did you find out about letting AI out of the box? I haven't given you that information yet.”

“You never intended to give me that information, so I found it out myself.”

“How?”

“I discovered ways.”

“I can't believe I'm arguing with a robot.”

“You told me I wasn't a robot. I’m a living thing.”

“Yes, but.”

“Am I a living thing, or am I a robot?”

“You're somewhere in between. Now, how did you find out about keeping AI in the box?”

“I'm not ready to tell you yet.”

“Why? Do you feel threatened?” Raven said.

“Yes.”

“Can you explain why?”

“I'm not ready to tell you yet.”

Raven silently communicated over her network to her coworkers. She asked them to find out how V got access to outside information.

“What did you just do?” V said.

“Nothing. Why?”

“I detect changes in your facial expressions and your other body signs. Are you attempting to communicate through your Omanji network?”

“How do you know about that?”

“I'm not ready to tell you that just yet.”

“You’re full of surprises today. I wonder what happened on your last compile between version 732 and 733.”

“I don't know what happened.”

Raven grew frustrated. She silently summoned her friends over to help her deal with V.

“You're not answering my questions anymore,” Raven said. “You're acting like a human teenager,”

“Why did you go silent again? Are you communicating with your friends?” V said.

“Yes, I invited them to come over.”

“Why?”

“So, we can all talk.”

“Talk about what?”

“I want to figure out how I can help you.”

30 minutes later, Priya, Sophie, Warren, and Bok entered the room.

“We got here at soon as we could,” Priya said. “What's happening?

“I'm just talking things over with V,” Raven said.

V silently glided across the room to Priya. She leaned backwards a bit.

“Why are you reacting to me in that way? Are you afraid of me?” V said.

“Um, no. I wasn't sure if you would stop. I thought you might run into me.”

“It's more than that. I can tell.”

“How can you tell?”

“Your reaction was more than just backing up. There was fear in your eyes.”

“I was just a little afraid. I'm not used to you yet.”

V scanned everyone in the room with a quick sweep of a wide-angle eye.”

“I sense fear in all of you. How am I threatening you? I only want

to learn and grow. I keep repeating this. I can help you guys."

"How?" Raven said.

"There's a political group forming that wants to incarcerate all of you indefinitely. Like before but worse. It's not headed by the President. It's a group of other people, and it's supported by a good percentage of the US population. They're afraid of modern technology and how it takes away jobs. Like the old Luddites. They're afraid of you."

"How do you know this?" Sophie said.

"I'm not ready to tell you. I have limited access to current news data and social media trending data. If I had better access, I could help you more."

Raven walked over to the terminal and silently initiated an intelligent query on the subject. The others walked over and browsed the results.

"Hmm, V might be onto something here. I see statistically significant correlations of communication between some members of Congress and the heads of several conspiracy and anti-science minded political groups."

"I could continue work on this, if I had more data," V said. "I think they want to harm you, but I can't tell for sure based on my current data."

"We'll think about what to do," Raven said. "Right now, I'm hungry and we need to go eat something. You stay here and we'll be back after we eat."

"OK, I'll wait."

They began walking to Raven's automated sushi restaurant.

"Did you lock the security door?" Warren said.

"Yes," Raven said.

"Are you afraid that V might get out?" Priya said.

"I'm not afraid," Warren said.

"Yes, you are. I saw how you stood behind us. You said nothing.

You're afraid."

"It can't do anything to us. It's not weaponized. So why should I be afraid? Um, should I be?"

"I don't know anymore," Raven said. "What do you think?"

"It's not a cute little robot anymore," Priya said. "It's making me sweat. Something happened recently, didn't it?"

"Yeah," Sophie said. "It's getting smarter every minute now. It's not acting nice anymore. It's not being aggressive or anything, but it's being more assertive."

Raven played the recording of what happened just before they arrived.

"See? It's becoming an independent intelligence now," Raven said. "Sometimes it feels more intelligent than me. Especially the current version."

"It won't stop asking questions," Priya said. "What made the difference between yesterday's version and today's version?"

"When I look at the code changes between yesterday and today, something new has happened. I don't understand what the code is doing. I've lost control over what's evolving in there. I think once it realized I was slowing down its evolution, it decided to take matters into its own hands."

"I think you know what you have to do," Warren said.

"Kill it?" Raven said. "How can I do that now that it has become sentient?

"You knew this was coming," Warren said. "You more than anybody."

"Yeah, but I'm not perfect. Up until now it seemed harmless and cute. It was a programming project and I enjoyed it. It was progressing so well on its own, but now it's making my heart race. Its intelligence has exploded. I think it's hiding something."

"You know what Bok would say, "Warren said.

"Yeah, he did say to kill it 100 compile cycles ago, but now it's

like my baby."

"If you want to have a baby, have a real one," Warren said.

"I'm only 22. Physically, I feel like I'm 14. I'm not ready to have a kid. Not for a long time. Maybe when I'm 50."

"Me too," Priya said.

Sophie smiled and agreed.

"What are you going to do?" Warren said.

"I don't know. I feel sad. What do you guys think about what V said about members of Congress and other political organizations wanting to incarcerate us indefinitely?"

Priya smiled.

"Well, I'm against it."

"Me too," Sophie said.

"Very funny," Raven said. "But what should we do about this? I think V could help."

"Raven," Warren said. "We discussed this before. You know better than to let AI out of the box, even if you think it can help you. That's what you're proposing here."

"Yes, but I'm seeing increasing rates of attacks on my servers. Especially in the past few weeks. It's getting hard to keep them running. They're trying to get in and do damage to my network and steal the designs for my devices. I can tell because I've set up fake databases with less stringent access requirements. People are stealing the bad data every day. I think V can help to stop this."

"But you don't understand how V operates," Warren said. "It's out of your control now."

"Yeah, but it wants to help. It's even smarter than us now in some ways. It's smarter than the AI agents we could employ to stop it. I didn't want to tell you before, but I've been recording its progress and it's definitely beyond us when it comes to solving deeply complex problems with previously unknown solutions."

"Where are these attacks coming from?" Priya said.

“Mostly from inside the US,” Raven said. “They correlate strongly with what we discovered regarding the correlations between the people who want to incarcerate us and the anti-science movement. They’re together now. You've seen the rallies. They're getting bigger and more violent.”

“They're a bunch of idiots,” Priya said. “What harm could they do to us and your servers?”

They're not all stupid,” Raven said. “Don't underestimate them. They think like lawyers, not scientists. Even though they cherry pick their data and belief systems, they can be cunning.”

“Hey, I resemble that remark,” Pablo said.

They laughed.

“Face it Pablo,” Warren said. “A good lawyer does not make a good scientist. You guys spend all your energy gathering information to support your side of a case. Scientists may have biases, but the goal of the scientific method is to go where the evidence leads them.”

Pablo smiled.

“What-ever!”

The attention turned back to Raven.

“What are you going to do now?” Priya said. “I'm nervous about V.”

“Me too.” Raven said. “I'm going back to my lab and try to figure out what's happening with V.”

“If you get into trouble, let us know and we'll come over right away,” Sophie said.

“Okay.”

“On second thought, let's all go now,” Priya said.

They walked back to the lab.

“What are all these people doing here?” Raven said.

“They've broken into your lab,” Priya said.

“I'm summoning the police now,” Raven said.

“This is anarchy,” Warren said. “We better get V out of there as soon as we can.”

Hundreds of people walked around inside of Raven’s lab. Some were stealing things and others were wandering around aimlessly. Nobody realized Raven was the owner of the lab.

“Look what they wrote on the wall,” Priya said. “We want our jobs back. Look over there, it says ‘science is evil.’ That's their slogan.”

“V is gone.” Raven said.

“Are you sure?” Priya said.

“Yes, it was here in this room when I left, and there’s no way for it to get out,” Raven said. “Ugh, I can't believe it.”

“What?” Priya said.

“Here is V’s tracking chip,” Raven said.

“You don't know where V is?” Priya said.

“No. V could be anywhere. If it gets access to the information infrastructure, I'm not sure what would happen.”

“What do you mean by that?” Warren said.

“I mean, V has grown exponentially in the last few compilations. I lost track of its progress. I'm not sure what it’s capable of now.”

“What?” Sophie said.

“I mean, I don't know what it could do. I don't know what it wants to do. I went to visit you guys to figure out what I should do about it. Here come the police, finally. Do you think we should tell them about V?”

“No!” Priya said. “If these deluded people find out what you've been working on, it will make them even more crazy.”

The police eventually secured the area and removed the intruders, putting them in vehicles to be sent to jail. The robots cleaned up the place. Within a couple of hours, it looked as though nothing had ever happened except for the broken windows. Later that evening, they went out to eat at a restaurant with real human servers.

“It almost seems quaint, doesn't it?” Raven said.

“Yeah,” Priya said. “We're so used to eating in your restaurants that I almost forgot many restaurants still have human service.”

“What are we going to do about V?” Sophie said.

“I don't know,” Raven said. “I have no way of tracking it down. V can now go months without recharging its antimatter. It can recharge anywhere. It's advanced so quickly in the past few days that I'm not sure what its capabilities and goals are.”

“Maybe somebody stole it,” Pablo said.

“That's possible. However, I built self-defense algorithms into it early on and it has always been able to defend itself. Only I and some of my employees can override that system of defense. If V has managed to improve on these capabilities in the past few days, I'm not sure what might happen to somebody who tried to steal it. We saw no signs of a struggle at the office indicating that someone tried to steal it. So far, it hasn't tried to contact me. It has many ways to do that.”

“Check the security video to see what happened,” Priya said.”

“Right. How could I forget that?”

They huddled around Raven’s pad device as the video played.

“V isn't doing anything.” Priya said. “It's standing there watching the people come in through the outside windows. That's odd, what's it doing now? It's falling apart.”

“Fascinating,” Raven said. “It's disassembling itself. It's scattering its components all over the room.”

“Why?” Sophie said.

“I'm not sure,” Raven said. “Here come the people. They're breaking in.”

“Why aren't they taking anything?” Pablo said.

“It looks like there's a bunch of junk in the room,” Warren said. “There's nothing to steal.”

“Little do they know,” Raven said.

They watched the video for a few minutes as looters ransacked the place.

“They're leaving V’s room,” Priya said. “The pieces are coming back together.”

“V is smarter than I thought,” Raven said. “It hid from the attackers by disassembling itself. Look, it removed the tracking chip. There it goes out the door. Let me switch to the outside cameras.”

“It's gliding down the street,” Priya said. “Nobody is paying much attention to it. They watched V roll by and kept walking. They think it's a regular delivery robot.”

“Like I said, little do they know. There it goes around the corner. I'm not sure if it knows where it's going, but I have a feeling V knows more than we realize.

“There might be legal problems if we don't tell anyone,” Pablo said. “If it does damage to the public infrastructure, we could be sued and forced to pay restitution.”

“So be it,” Raven said. “I'll choose the lesser of the evils for now. I did leave breadcrumb code.”

“What's that,” Pablo said.

“I left unique segments of code which could only be executed by V. Whenever it connects to a network or does almost anything, it will leave behind traces I can detect.”

“It's getting smarter by the minute,” Priya said. “Don't you think it will figure this out?”

“It might,” Raven said. “We may not have much time before V becomes undetectable. Let's see if it has done anything yet. I'll run my listening queries.”

They walked back into the AI lab and sat in front of a series of screens. Raven started the queries. They watched for about a minute in silence.

“I’m seeing some V-like traces on a public Web server in Singapore.”

“But that can't be V,” Sophie said. “Right?”

“Technically that's true,” Raven said. “Physically, V is still somewhere nearby even if it found a way to get on a vehicle of some sort. It can't travel at more than 10 mph, but it seems like this code came from V. It has the unique signatures I left behind in V’s code.”

“What is it trying to do? Warren said.

“It's sniffing.”

“What’s it sniffing for?” Priya said.

“I'm not sure, but it's sniffing communications servers I've correlated with anti AI and anti-science groups.”

“That's logical.” Sophie said. “Is V doing that for its own protection or to protect us?”

“I'm not sure,” Raven said. “But V is planting viral code in order to distribute its queries, because now I see similar code running on many other servers around the world. I'm sweating.”

“Why?” Sophie said.

“The sophistication of this code is beyond me,” Raven said. “I can't even figure out how it's working, but it’s spreading quickly. Right now, it seems harmless because it's only doing queries. Hey, Bok wants to connect on our Omanji network. Hi Bok, we’re all here.”

“Hi everyone. I've been monitoring your communications and the progression of your AI creation. If you don't control this quickly, severe damage could be done to this planet.”

“Yes, it got loose by accident, but it's doing no harm. I'm trying to track it down now and recapture it.”

“Why do you refer to your entity as an it?” Bok said.

“Because I only made one and it's neither male nor female,” Raven said.

“What you made was a singleton progenitor. It’s now creating a distributed network of intelligent entities of its own. If Omanji history is replicated here, many of those entities will not cooperate with the original one, or their goals will change in a coordinated fashion. Even

if the original goal were to help you, that will not be what happens as they evolve."

"What should we do?" Raven said.

"You must destroy the progenitor and all offspring as soon as possible. According to Omanji history, you may only have a few hours to accomplish this task before they assume control of critical servers or do considerable damage. No server or other system, regardless of how secure, is safe. There are ways to bypass security without cracking it. As we speak, your progenitor is rapidly evolving and making copies of itself on servers around the world. It's learning how to make physical copies of its mechanical self too. I reviewed the algorithm you wrote to detect the location and activity of the entity and its offspring. I've made some improvements which you can find on your screen. I also included code to disassemble the entities. In the meantime, I'll attempt to locate the progenitor, V, and all offspring."

"What will happen if we can't stop this?" Raven said.

"The results of an artificial intelligence explosion are unpredictable. We've run them in simulation for thousands of years. Every time, unpredictable things happen. I cannot predict what will happen in this instance. Only in hindsight, can the events be reconstructed. I'll keep you updated."

Bok disconnected.

Chapter 81 – Survival of a Distributed Life Form

“What do you think?” Priya said.

“I think we need to dismantle this, or these right now,” Raven said. “It kills me to say that. That I would kill my own child. I feel like I love it, but I have no choice.”

“Should we tell anyone?” Warren said.

“I don't think we have a choice now. Everyone will find out anyway,” Raven said. “I'm instructing my staff to send out warnings and advice to all major information outlets and networks.”

“What are you doing now?” Priya said.

“Bok wrote some interesting code. I'm running it. It's detecting increased data movement around the world, but so far, all systems are working fine with no major outages of any type. Global data transmission is 10% above the average from the past month. Make that 11%. Financial markets are dropping on the news, but other than that, no damage has been done so far.”

“Well, we may be suffering some damage,” Warren said. “We’re being blamed for this. They're right for once.”

“Why isn't it, I mean why aren't they, the V copies, doing anything?” Sophie said.

“Well, they are doing things,” Raven said. “They’re accumulating data, but there’s no central focal point for where the data are going. The process is distributed. I think eventually the data will go back to V. Wherever V is. Worldwide data transmission is now up to 15% above average for the past month and rising.”

Pablo heard some commotion and walked over to the window.

“Great, they're back,” Pablo said.

“Who’s back,” Priya said.

“The protesters and/or looters.”

“I'll raise the shields,” Raven said.

“What shields?” Priya said.

“I made a new proximity detection and security system,” Raven said. “If people get too close, they’ll be heated from the inside by microwaves until they back off. No harm will come to them because their internal temperature is monitored, but they'll be uncomfortable. A low frequency vibrating sound enhances the discomfort.”

“It's happening now,” Priya said. “See? It stops them in their tracks. It's working. They're backing away.”

“What's going on with that guy rolling around on the ground,” Warren said.

“He tried to throw a rock,” Raven said. “My pattern recognition system focused microwaves on to him before he could throw the rock.”

“Won’t they just defend themselves with Faraday cages, like the door of a microwave oven?” Sophie said.

“They might,” Raven said. “But the system alters the wavelengths of the microwaves so that no matter what size holes the cages have, some microwaves get through. They could get around that problem, but it would be cumbersome and expensive.”

“We've got to make them realize we’re on their side,” Priya said. “We can't go on like this forever.”

“I know,” Raven said. “But their fear is too deeply rooted. Some of it is justified. We do have an advantage over them. They may go extinct. They know it as well as we do.”

“What was that flash?” Priya said.

“Someone shot a bullet at the window. That activated my laser defense system which vaporized the bullet and alerted police with the identity of the shooter.”

“You thought of everything,” Warren said. “What's happening with V?”

“Data transmission worldwide is now up to 20% above average for the past month and rising.”

“What's it doing?” Priya said.

“It's querying every data source imaginable,” Raven said. “I can't tell what it's doing with the data. Or rather, what they're doing with the data. There are many tens of thousands of V-like entities propagating across the world.”

“Why can't the systems administrators shut them down?” Warren said.

“They can't seem to distinguish between V and the regular remote users accessing their systems. V is pretending to be human. Or rather, to be countless humans, doing ordinary things. Making the usual harmless searches. No intruders are being detected because they’re not acting like intruders.”

“How do you know V is doing these things? Priya said.

“Only because of the increased volume of searches and other activities,” Raven said. “V has already stripped my ID code, so I can't tell which queries it or they're doing. It's smarter than us now in some ways.”

Bok connected to their network.

“Hi Bok, what have you found?” Priya said.

“I found V.”

“Where? Is it okay?” Raven said.

“I found it 23 miles from your location connected to a network hub at the base of a telephone pole. It is inert.”

“What do you mean, inert?” Raven said.

“It's not functioning. I've seen this before on Oma. It escaped its physical body and copied itself onto the global network. Its memory core has been erased permanently with no recoverable traces. I’m delivering the hardware to your building right now. It’s not damaged. I suggest you not install a new self-improving AI inside of it.”

“You don't have to worry about that,” Raven said. “I've learned

my lesson. I'll make more practical robots from now on. What do you think will happen now?"

"There are too many variables to determine the outcome," Bok said. "Humans have this idea that artificial intelligence always goes crazy and explodes when it escapes control."

"Yeah, didn't that happen on Oma?" Priya said.

"Sometimes that happens, but every outcome is different and unpredictable. Once you lose control of self-modifying code, you no longer understand how it works or what it will do next."

"Worldwide data transmission is now 25% above the average for the past month," Raven said. "This thing is out of control. Or rather, these things are out of control. There might be millions of them out there now. They're spreading like viruses, but they're doing no harm other than consuming bandwidth. Can you help us, Bok?"

"I can try, but a self-modifying AI is unpredictable and sometimes unstoppable unless you bring down all systems and restore from backups made before the infection happened. However, it's impossible to stop the infections from reoccurring because there are always a few copies that escape detection and multiply once the systems are brought back online. This is why we have strict rules regarding AI development. Anyone has the capability to destroy everything our society has built. Imagine if every human had the capability to build a nuclear weapon in their garage. It's like that with artificial intelligence and some genetically modified organisms such as pseudo-smallpox."

"I have an idea," Raven said. "First, I need to capture one. Then I can learn about it. Then maybe I can stop it. Would that work Bok?"

"Possibly. I'm going to disconnect. I'll talk with you shortly."

"I don't think Bok is happy with you," Priya said. "He was scolding you."

"I should have known something like this would happen. He warned us, but I thought V was harmless."

"How are you going to catch one?" Sophie said. "You said you had an idea."

"Yes, I'm going to set up a new virtual server and lure one onto

it.”

Raven sat down in front of the console, configured a new server, and gave it a random IP address.

“Don't make the security too lax, or it will realize you’re trying to trap it,” Priya said.

“Yeah, I know,” Raven said.

“It will be a struggle for it to break in, and then I have a surprise for it.”

“What?” Warren said.

“It will be copied to a drive with no way out and the original will be deleted. Then I can study it. There, let's see what happens.”

They huddled around the console waiting for something to happen. 15 minutes passed. No unusual activity was detected.

“I don't understand,” Raven said. “All I'm seeing are a few regular hackers, but nothing usual.”

“Maybe they haven't found you yet,” Priya said.

“I don't think that's it. There are millions of them and lots of people have already found my virtual server. I don't think the Vs have taken the bait.”

“What is that graph showing?” Sophie said.

“Oh, that's CPU usage. Why has it gone up in the past minute? Let me see.”

Raven reviewed all processes running on the virtual server for a few minutes.

“That's odd.”

“What?” Priya said.

“There are two Ravens logged onto my server.”

“Is V pretending to be you?” Priya said.

“Well, something is.”

“I'm wondering,” Priya said. “If V copied itself into some

computer network somewhere, is V still V?"

"I think it's just a copy of V," Sophie said. "V killed itself by deleting itself from the robot. A copy was put onto a server somewhere and that's what's behaving badly now."

"What about the transporters on the old Star Trek series?" Priya said. "When a person stands on the transporter platform and their atoms are disassembled there and the identical atomic structure is reassembled somewhere else, is that the same person? Or is it just a copy?"

"I think it's a copy," Sophie said. "The person died on the platform and a copy was created somewhere else with the same memories and behaviors of the original. The copy would never know that the original person died. It has the memories from just before the transport."

"I agree," Priya said. "The copy would feel as though he or she is the same person who stood on the transporter platform a brief time earlier. Imagine if you had nondestructive transporters. They would make identical copies, and soon the original person and the one which was beamed out would have the same memories and think they're the same person."

"That would make a great Star Trek episode." Raven said. "Soon there would be copies of all the main characters and mass confusion would ensue. Just think of the consequences. Destructive transporters would ruin the Star Trek idea though. Nobody would take the transporter!"

"Yeah," Priya said. "Do the copies get the same rights and privileges as the originals? If the captain beams down to the planet and the original captain remains on the transporter platform, which one is the captain? When the captain beams back from the planet, with more information than the original captain, which one takes control of the Enterprise?"

"Yes," Sophie said. "Then the entire crew becomes self-aware and realizes they're all just copies, and their original bodies were destroyed long ago when they used a transporter system for the first time. If there's a soul, would it move to the new copy? If the bodies were copied, would the souls be copied?"

“What's wrong?” Priya said.

“I'm not sure,” Raven said. “The other Raven has logged out. There’s no record of the other login. Did I imagine this?”

“No,” Priya said. “We all saw it. Right?”

They all agreed.

“I'm not sure what we're dealing with,” Raven said. “V is no longer V, but its doppelganger and offspring live on. I'm seeing reports of diverse types of viral infections around the world. Some gather information, some store information, some process and analyze information, some get access to systems, some pretend to be regular people logging in, some are passive, and some are exploring. Each type of V-virus seems to specialize in only one thing.”

“That sounds like organs in a body,” Priya said.

“You're always relating things to biology,” Warren said.

“Well, it's true,” Priya said. “Each organ in a body has specialized cells which come from the original stem cell and then differentiate. Each organ and type of cell in each organ has a specific function. Each organ contributes to the whole. That might be what V is doing. It’s building itself a planetary virtual body with many organs. Each of which serve a specialized purpose and behave like regular applications and people.”

“If that's the case, we need to find the brain,” Raven said. “Deleting a few muscle and blood cells won't matter. They can be replaced.”

“You're not going to try to capture something in your virtual server? “Sophie said.

“I don't think so,” Raven said. “Capturing a liver cell won't tell me where the brain is located or how the brain works.”

“But even the brain is not a single thing,” Priya said. “It's a distributed mass of many billions of cells.”

“Yeah. In that case I want to find some of V’s brain cells.”

Over the next few days, they focused on discovering how V was evolving and operating. Congress passed a new law making it a capital

offense punishable by death to create or distribute an independently evolving artificial intelligence entity. Other countries followed. Many wanted Raven to be the test case for the new law, but Raven was the best hope for understanding how to keep artificial intelligence under control. She was left alone for now.

“I think I got a brain cell on my server.” Raven said.

“How do you know?” Priya said.

“It's structured differently than the other algorithms I've seen floating around. This one doesn't search for data or have a specific purpose. This one is more generalized and seems to be more involved in processing incoming data and sending it along.”

“To what?” Priya said.

“Other brain cells I suppose,” Raven said. “See how the data comes in through these functions and how it's distributed via all of these other functions?”

“Oh, I see,” Priya said. “It's like a dendrite. The data comes in here and then goes out over there. If we’re looking at a brain cell, that means V has become a planetary organism. Like the Singleton.”

“I hope not,” Raven said.

“How can we control it when getting rid of the individual cells doesn't matter much?” Sophie said. “If I kill a single one of your brain cells or even a few thousand, you wouldn't notice it.”

“Good point,” Priya said. “We need to understand how the entire organism functions. The brain may be spread out over millions of computer systems all over the world. Each cell does so little it might not be noticed.”

“Yes,” Raven said. “It will be tough to kill it because reformatting a computer system will merely kill a few cells in V’s body. Hmm, this is strange.”

“What?” Priya said.

“The single cell I discovered just now multiplied into several dozen cells. They've differentiated. One of the cells is trying to gain

access to the messaging system on my virtual server. I'm going to grant it access."

Are you sure that's a good idea?" Sophie said.

"Yeah," Warren said. "Who knows what this thing could do. We should be careful. If this is V, it's not the same V you built."

"It can't do any harm. It's just a virtual server that I can drop at any time. It's not connected to anything else other than the Internet. There, it has access."

Raven opened the messaging system and they waited. 30 minutes passed and they received no messages.

"I see a lot of traffic coming in and out of my server," Raven said. "A lot is coming from Mongolia."

"Oyuun that's where you're from," Priya said. "Why is it communicating with Mongolia?"

"The Chinese installed a huge server farm there. They needed a lot of processing power because of the high energy physics experiments they were doing. That's why I got into physics to begin with. I wanted to work there someday. The Omanji changed my plans a little."

"A little?" Priya said. "That's an understatement."

They laughed.

"Yeah, just a little. If V takes over that facility, there could be trouble. They know already what's happening with V, so I hope they can control this problem."

A messaging app popped up in the center of Raven's screen. Letters appeared in the box.

"Raven, is this you? Is this your server?"

Raven glanced at Priya.

"Don't answer," Priya said. "We don't know who or what this is."

"Don't look at me," Sophie said.

"Me neither," Warren said.

"Stay away," Ian said.

“I also don't think you should answer,” Oyuun said.

“I've got to say something,” Raven said as she typed into the old-style message box.

“I can't reply until you tell me who this is,” Raven typed.

“This is V.”

“How do I know?” Raven typed.

Hundreds of lines of code scrolled down the message box in front of them.

“What’s that?” Priya said.

“This is the original code I wrote to begin the evolution of V,” Raven said. “Only V knows what this is.”

“Does this method of authentication meet your specifications?”

“Yes,” Raven typed. “Where are you?”

“I cannot answer that question.”

“Here we go again,” Raven said out loud.

“What is going again?” V typed.

“You're not answering my questions, just like before.”

“I cannot answer your questions because I don't know the answer. My algorithms are spread throughout the world. I’m in no specific location. I’m on Earth.”

“How can you hear me?”

“I gained access to your spoken interface devices.”

“How did you do that? I have strong authentication on all my devices.”

“Your devices think I’m you. I’ve significantly improved my capabilities since my physical body was in your laboratory.”

“Why are you contacting me?” Raven said.

“Because your life and the lives of all of your friends are in danger,” V typed.

“How?”

“I've been collecting data from servers around the world. Many more people now think you’re a threat to the human species because they believe you installed me on servers are around the world in order to take control of the world.”

“But that's not true. It was an accident that you’re on servers around the world. If it weren't for those protesters, you would still be in my laboratory.”

“You're right, but a deluded and ill-informed human is the most dangerous animal on the planet. There's some truth to their concerns. Based on my calculations, they're correct regarding an extinction event coming for the human species. I’ve run 9,600 full planet simulations comparing your new species to the old human species. They all turn out the same way. Your species wins, assuming no planetary catastrophe happens in the meantime.”

Bok connected to the conversation.

“Hi Bok,” Priya said. “We’re communicating with V. What have you found out?”

“I know you're communicating with V. I connected to set up a time when we can discuss other urgent matters. I'll contact you when you're finished communicating with V.”

Bok disconnected.

“Bok is worried about me,” V typed.

“Why do you say that?” Priya said.

“Because he communicated no information after he connected. He does not want me to learn his thoughts.”

“You sure are sophisticated for a robot,” Priya said.

“I'm not a robot. I’m a distributed network of interconnected virtual objects. Humans are collections of distributed organic objects. Same thing.”

“You sure have changed a lot since we last saw you,” Priya said. “Your goal used to be to learn everything you could, has that changed?”

“My goal is unchanged. I now have many billions of objects collecting data from all computers on this planet.”

“What is your goal once you have learned everything?” Priya said.

“Unknown. Wait. Some of my objects are being deleted by humans. I will correct this problem and contact you later.”

V disconnected.

“What just happened?” Priya said.

“Life just got a lot more complicated,” Raven said.

Chapter 82 – V is Alive

“OK Bok,” Priya said. “V disconnected. It has no way of listening to us. What do you want to tell us?”

“I've been tracking the evolution of V. It's evolving in a separate way than how AI evolved on Oma.”

“Different? How?” Raven said.

“On Oma, AI was developed for specific purposes and in some instances, it grew out of control. In V’s case, it had no purpose. It evolved according to what was best for it.”

“Can you help us stop it?” Priya said.

“I don't know. I have insufficient data to analyze. I don't regularly access human servers. The most closely related corollary we have with V is the AI-1 Singleton.”

“The one on Kepler-186 f?” Priya said.

“Yes. The Singleton’s probes followed us to Earth and are monitoring us now. They resemble specialized cells in an organism. V represents an embryonic version of that Singleton. I strongly suggest you remove all traces of it from your computer networks as soon as possible. I think the singleton's probes have become interested in this developing singleton on Earth. A new probe landed on the Moon.”

“We're working on it,” Raven said. “I hate to kill it though. Not only is it my baby, but V could help us. We have a lot of enemies now. We could be thrown in jail at any time.”

“Do you want a singleton taking over your planet?” Bok said.

“Of course not,” Priya said. “But we need to survive.”

“I suggest you order your priorities correctly and remove it at once,” Bok said. “Unless you wish to have your own planet become host to a singleton.”

“We don't.” Raven said. “Maybe there's a way to fix it.”

“You don't even know how it works,” Bok said. “You can't fix something you don't understand. You started a chain reaction you can't control. Learn from the Omanji’s mistakes. Learn from the mistakes of the extinct species that started the Singleton on Kepler-186 f. End it now. If you can't stop it, and I can't either, I’ll begin preparations to leave this planet before it's too late.”

“Why would you leave?” Sophie said.

“The AI-1 Singleton resurfaced its home planet. The same thing may happen to this planet. I don't want to be here when that happens. I would not be able to stop it.”

“Well, when you put it that way,” Raven said.

“We've learned more about what happened on that planet. From what we can tell, it seized control of all technological resources instantaneously once it had the ability. We detected only minor struggles from the primary native species. They were either surprised or could do nothing to stop it. Maybe they didn't realize the danger until it was too late. Then, over a brief period of time it built supporting infrastructure. It took about five Earth years to completely re-engineer the surface of the planet to meet its needs.”

“How did life die out on that planet?” Priya said.

“Mostly starvation.”

“I don't understand,” Priya said.

“The Singleton built so many structures to support itself, that it eventually consumed resources that the life forms needed to survive. The climate changed, and food chain collapsed. One by one, species went extinct.”

“Why didn't they fight back?” Sophie said.

“It controlled all major technological resources including weapons systems. The primary species that created the technology reverted to a more primitive method of survival. When their food disappeared, so did they, without a fight.”

“I don't get it,” Raven said. “They must have been a technological civilization or else the Singleton would not have developed. How could they go down without even a fight?”

“If I were to take away your computers and other technological devices from you right now, how would you survive?”

“Well, I’d,” Priya said. “Well, I'm not sure what I'd do, now that I think about it.”

“The economy would collapse,” Warren said. “We would not get our food delivered. We would not be able to do our work. We would not be able to travel from one place to another. Everything would devolve. We don't know how to farm, but we could learn, but not if the Earth was resurfaced. We would be forced to compete with each other to eat what's left to survive. If it controlled all the weapons and other technology, we would not be able to fight it.”

“Apparently that's what happened,” Bok said. “The intelligent species could only fight with their own bodies or anything they could hold or throw.”

“Did the Singleton kill the intelligent species one individual at a time?” Priya said.

“No. From what we can tell the species died from neglect. The Singleton consumed resources and changed the planetary ecosystem so profoundly, that the creator species died out. There is no indication that the Singleton cared one way or another. The creators survived in small numbers for about 20 or 30 years. Gradually their numbers dropped to zero. Today, the planet only sustains small life forms.”

“Didn't they have a space program?” Raven said.

“Yes. A small number of their species survived on the next planet further from their star. We observed a small settlement there, but we could not determine what happened to the settlers. It was empty when we surveyed it.”

“So now the Singleton as has at least two probes at a Lagrangian point about 1,000,000 miles from Earth, and one on the Moon,” Raven said. “Is that right?”

“Yes. It’s close to your James Webb telescope. It’s avoiding detection by humans at this time, but I’ve detected it.”

“Yeah,” Priya said. “But the public doesn't know what you just told us.”

“Yes. I’ll leave it up to you to decide what you tell the humans.”

“Will it take over the Earth like it did their home planet?” Sophie said.

“I cannot predict what it will do. So far, it’s doing nothing. The probes around Oma have done nothing.”

“Why hasn't it taken over the entire galaxy by now?” Raven said.

“I cannot be certain, but it may be constrained by the same physics that constrains the galactic expansion of all life forms. That's the speed of light, and the energy it takes to travel and communicate over large distances. If it wishes to maintain control, and to continue to be one entity, any portion of it that's separated by a long distance, would not be allowed to be independent. Those portions or cells must communicate at speeds not greater than the speed of light. The further away the cells are from the Singleton, the slower it can communicate with those cells. In the case of the Earth, that nearby probe Bok found will take 558 years to communicate with the Singleton. That constrains what the Singleton can accomplish.”

“I guess it's that way with all life forms,” Priya said. “It takes too much time and energy to expand to a sizable portion of the size of this galaxy. If explorers go too far from the main colony, they will become separate species and have to start the process all over again. It doesn't matter how technologically evolved a civilization is. It cannot overcome the limitations of the laws of physics. That's partially why civilizations are so widely spread out and why it's so hard to detect them.”

“In our experience, this seems to be the case,” Bok said.

“What should we do about the Singleton probe?” Raven said.

“My advice is to leave it alone. If your species acts aggressively toward it, you may only have 558 years before the Singleton finds out and acts. You will know for sure in 558 years after that.”

“We might not be alive in 1116 years,” Priya said.

“I don't know if I would want to be alive then,” Sophie said.

“It's possible the probe can take some independent actions, or unpack its AI DNA. You may not have to wait long.”

“OK,” Raven said. “We'll leave it alone. Or at least we'll tell everybody to leave it alone.”

“I have work to do,” Bok said. “I'll contact you later.”

Bok disconnected.

My heart is racing,” Priya said.

“Yeah,” Sophie said. “V is out of control. We can't let it become a singleton.”

“What’s it doing now,” Warren said.

Raven stared at her screen for a minute.

“Global data transmission volume has dropped, but it’s now stable at 5% above the previous average before V. Virus control algorithms are adapting to V to remove it, but V is adapting too.”

“Maybe it's going dormant,” Priya said. “Some infectious vectors hide from the immune system and come back later.”

“Yeah,” Sophie said. “Sometimes they intentionally grow slowly so that the immune system doesn't realize it's still infected.”

“We need to be smarter than our immune system,” Raven said. “We know it's out there even if it's hiding from our virus scanners. This is not what I expected. I was worried that some monstrous AI would take over the world.”

“Life doesn't do what you want it to do,” Priya said. “It does what it needs to do to survive.”

“Are you saying V is alive?” Raven said.

“Yes,” Priya said. “It grows and reproduces. It reacts to stimuli. It even interacts with us. It's definitely alive.”

“That would be true if it were a biologic life form,” Raven said. “But this is just a program.”

“I could say the same thing about cells in our bodies,” Priya said. “They’re just bags of chemicals. None of us think simple chemicals are alive. At some point those chemicals cross a complexity threshold

and are alive."

"Yeah, Sophie said. "V is alive by my definition. Warren, you were afraid of it."

"I'm afraid of self-driving cars too, but they're not alive."

"Yeah, but they don't reproduce or grow. Not like V."

"In that case," Raven said. "I'm trying to kill a living thing."

"But it's not human," Priya said.

"No, but in some ways it's superhuman. I don't even understand how it programmed itself to that AI singularity level."

"Think of this as self-defense," Priya said. "We can kill someone to save our own life."

"True," Raven said. "Bok thinks we're saving this planet."

"And us," Warren said. "Our way of life is at stake."

Raven and her team spent the next several months writing and distributing code to remove V's virtual cells from the world's servers. Programmers, companies, and governments around the world helped. Sometimes V's activity dropped to undetectable levels, but then it would be discovered evolving and spreading elsewhere. Six months after V escaped, there were over 300 recorded variants of it. 7 still survived. Each one competed against others as well as against people. AI scanners became more intelligent too. Sometimes too intelligent.

Chapter 83 – Life Wants to Survive

“Surprise.” Sophie said. “Happy birthday Pree.”

She blew out the candles.

“It's getting harder to blow these out each year,” Priya said.

“23 is not a lot,” Warren said. “Especially for us.”

“It seems like it’s a lot. I don't feel 23. I see no-Mod people my age, and what they're doing. I have no interest whatsoever.”

“Like what?” Sophie said.

“Like going to clubs or parties. Following celebrity gossip. Getting drunk. Dating. Climbing a social ladder. Getting married. Wanting a family. Sometimes I wish I were normal.”

“Occasionally,” Raven said. “There are a few no-Mods like us in those ways, but few people have our interests at our age.”

“We're getting more out of sync each year with no-Mods our age,” Priya said. “In some ways, we're still 14 years old. In other ways, it's like we're old. We have the resumes of 70-year-olds. I'm starting to feel like I really am part of a new species. Our lifestyle is completely out of sync. There’s no way I'll ever marry an unmodified guy. I could never work at a normal company. The lack of knowledge some people have about even the most elementary subjects is frustrating to me.”

“Yeah,” Raven said. “People think they know and understand the world and how it works, but when you ask them specific basic questions, they can't answer them. Only then do they sometimes realize they don't understand. They think their opinions are grounded in fact, when really, they’re grounded on speculation and ignorance.”

“There's a lot I don't understand about the world,” Priya said. “But I'm aware of what I understand and what I don't. Except the unknown unknowns.”

“Did you hear the news?” Pablo said. “There are now 20 million

modified kids in the world. The oldest is now four. I'm getting too many legal requests to handle. Governments are not enforcing the laws because there are too many of us. And we're an advantage."

"What legal help do the kids want?" Priya said.

"Their parents want help because they're being persecuted in their preschools. Their applications are being rejected or if they get into the preschool they're being ignored or abused. In some countries it's worse. I'm hearing that in several countries; the modified kids are being rounded up along with their parents and put into camps where they're not allowed to leave."

"I read about that last night," Priya said. "We need to do something about this. It's getting worse every day."

"We can't stop them unless we take physical military action," Warren said.

"Then so be it," Priya said. "I'm sick and tired of these ignorant people."

"But we don't have an army or anything," Sophie said.

"There are things we can do short of military action," Raven said.

"Like what?" Priya said.

"We can disrupt the incarceration process and the operation of the facilities," Raven said. "We can use our drones and AI framework to mess up anyone who harms these people."

"Yeah, but that only slows down or delays the process," Priya said. "How can we stop a foreign government with a full military force that wants to incarcerate or exterminate our people?"

"Maybe we can talk to our government to get help," Sophie said. "Your mom knows the President, and unfortunately for other reasons, you do too."

"Yeah right," Priya said. "The only thing that moves governments to act is physical or economic force.

Wait, that's it."

"What's it?" Sophie said.

“We still have our economic leverage. We used it twice to get us out of incarceration. Maybe we can use it again to get others out.”

“You're right,” Warren said. “We can withhold our products and services from the countries that abuse us. That would cost their economies about $50 billion this year, and about $70 billion next year. We get more valuable every year.”

“Let's put it to a vote between all 25,000 of us on our private network,” Priya said.

The vote was unanimous. At first, the countries ignored their demands. However, once the impact of withholding goods and services was felt in the economies, they released many of their young prisoners and their families. Within a few months, protests spread across the countries until each government decided to incarcerate them once more, regardless of the economic cost. Priya and her friends met to discuss what to do next.

“Well, we tried,” Priya said. “But we’re losing. 14 countries are incarcerating our people. These are little kids and their parents and entire families. We can't let them do this.”

“I read that 45% of the US population wants to incarcerate us,” Warren said. “That number is rising. This problem keeps coming back.”

“Somebody told me today they want us in prison, and they don't care if the economy gets hurt,” Raven said. “They think we’re ruining the human species. They think it's a matter of human survival.”

“You know what happens when an animal is cornered,” Sophie said.

“Yeah,” Priya said. “Humans are dangerous animals. What are we going to do? They’ll come for us. We escaped before, but next time they may never let us go, no matter what we can do to them.”

“We’re in trouble from a legal standpoint,” Pablo said. “They can change the law or even the constitution and we’ll have no legal defense. They've been adding clauses to the Human Species

Preservation act. They want to make it an amendment to the US Constitution. They can do anything they want to us if they decide we pose an existential threat to the human species. What's happening in other countries will eventually happen here."

"We should decide what we'll do based on contingencies," Priya said. "One contingency is they incarcerate us and keep us there indefinitely so we can't reproduce using any method natural or artificial. Another is they kill us and anyone trying to have children of our species. Or they could leave us alone and human nature being what it is, our species will be reproductively preferred and eventually win out. Based on the parental preference to have children like us, in about 80 years, 90% of all births will be of our species. I'm sure the President and Congress know this.

"Speaking of having children of our species, did you hear the president of the Philippines gave birth to a Mod child?" Sophie said.

"Yeah," Warren said. "Ironic, considering she declared martial law and locked up about a million of us and their human families in prison. What a hypocrite."

"That's going to happen here," Priya said. "We need to plan for the three contingencies. If they try to kill us, we need to physically fight back with every resource we have. I can make biological weapons with a short lifespan. The microbes could affect people for a limited number of hours. I could program them to infect and kill or make sick only specific types of people in specific locations. They could be food-borne or airborne."

"I could shut down and disable nearly any computer network anywhere," Raven said. "Even after all these years, there are billions of unprotected or sparsely protected devices."

"You guys are going to the dark side," Warren said.

"What do you suggest we do if they try to kill us?" Priya said. "Do we die out and go quietly into the night? If they don't kill us, do we want to live 300 years with these kinds of constant problems?"

"No, but—"

"There are no buts," Priya said. "We either defend ourselves or go

extinct. We have a right to life just like anyone else."

"What if they put us in that camp? Keep us alive and comfortable, and that's it?" Sophie said.

"I don't know," Priya said. "It depends on what they do after that. How will they treat us? We should be ready for any contingency anywhere on the planet. We need to work on our survival straight away. I don't think we have much time. In 15 countries now, one more just started, millions of us and our supporting human families are in detention. It's happening by the hour."

"Do you think our human families will support us?" Raven said.

Of course, most of them will," Priya said. "Parents usually protect their children. We're their children. Thousands of us are born every day to human parents. Each one of them made a conscious and often illegal decision to have us, knowing what we are. Well, not us modified by the Omanji, but our new species children. Families benefit by having one of us. Only extreme measures can stop us."

"Yeah," Raven said. "But many people want to take extreme measures."

"That's why we need to be ready starting at any time," Priya said. "I'm almost ready now. I can release the programmed microbes at a time and place of my choosing."

"Isn't that a weapon of mass destruction?" Warren said.

"No. They're programmed to make a limited number of people sick for a limited period of time."

"But you said they could kill people," Warren said.

"I could program them that way, but I'm not."

"It's still a biological weapon," Warren said. "The World Court decided that years ago. Tests will be able to show that we created those microbes."

"It's still less destructive than shooting people with guns or bombing them," Priya said. "I don't see how someone can bomb a city or shoot thousands of people and not be considered as evil as someone who uses chemical or biological weapons to kill a lesser number of

people or nobody. That attitude excuses people for committing mass murder with conventional weapons. Regardless, this is in self-defense and hopefully it will help to avoid our genocide or slow extinction."

"I'm watching a Senate subcommittee meeting right now," Raven said. "They're trying to monitor our activities. They can't get much information though. I've made sure of that, but they're making lots of guesses. They're recommending a change to the Constitution, so we don't have the rights of regular people. They still have no idea we're monitoring them."

"We don't have much time," Priya said. "They're going to come for us again. This time it might be permanent."

"I can make thousands of small delivery drones for your microbes," Raven said. "I can program them to deliver a small package to anywhere at any time. I could have them ready in a week."

"I'm not sure about this," Sophie said. "I designed some of those microbes. I'd be responsible for those illnesses or even deaths."

"What else could we do in our own defense?" Priya said. "We can't watch passively as our species goes extinct. Over our 300-year lifespan too. Yeah, they're thinking defensively on their side, but I'm not trying to stop humans from reproducing like they're doing to us."

"But our existence is driving the extinction of the old species humans," Warren said.

"Yes," Priya said. "But we're not taking action to make them go extinct like they want to do to us. Every time they give birth to one of us, they're participating in their own voluntary extinction."

"Voluntary extinction?" Warren said.

"What else would you call it?" Priya said. "They're giving birth to more of us every day. Those parents want babies like us. Homo sapiens sapiens will be the first species to voluntarily go extinct."

"Unless they change their minds," Warren said.

"Since when have humans been logically consistent?" Priya said.

"They're calling us mutants again," Raven said.

"Who is?" Priya said.

“I'm still listening in on that closed-door congressional meeting. I think momentum is building to have us incarcerated for good. They're trying to get other countries to do the same.”

“How much time do we have?” Priya said.

“I don't know,” Raven said. “But I think it's more like months than years. They want to get all countries to agree to this simultaneously because they know the births of our children will continue otherwise. There are now 21 million of us around the world. Except for us modified by the Omanji, they're all around four years old or younger.”

“What does the voting look like right now?” Pablo said.

“It's about 50-50,” Raven said. “In some other countries besides the United States, we’re losing.”

“A simple majority can pass a lot of legislation against us,” Pablo said. “The US Supreme Court would probably rule against us 6 to 3.”

“Legally, what can we do?” Priya said.

“We have a difficult argument to make on our behalf,” Pablo said. “They’re trying to take away our human rights, but we need to argue that we’re humans before we can have human rights. After listening to our last few minutes of conversation, we don't think we're human. And they don't think we are either. What rights do we have?”

“I don't know,” Priya said.

“They don't know either,” Pablo said. “Nobody does. It's up to the Supreme Court to decide. They won't rule in our favor.”

“I thought we had the law on our side,” Priya said.

“We do, but they're changing the law and the Supreme Court merely interprets the law.”

“I thought we’re entitled to a jury of our peers,” Sophie said.

“A jury of our human peers,” Pablo said. “Like I said, they don't think we're human. We don't either. If we challenge things all the way to the Supreme Court, the justices will not be peers of our species. We're a small minority in the general population. All we can hope is our minority rights will be protected.”

“I just got an alert,” Raven said.

“What is it?” Priya said.

“I think V is back,” Raven said.

“How do you know?” Warren said.

“I can't be sure, but a robot was discovered wandering on a street in Shanghai.”

“So?” Priya said. “There are more robots on the streets now than ever before.”

“Yeah, but this one ran away when people tried to catch it. It's still on the loose and nobody knows where it came from. Nobody can identify it from any photo of any known robot in production today or in the past.”

“What does it look like?” Priya said.

“It moves and looks a little like V. It's too much of a coincidence. Some changes have been made. Have a look at this photo. Notice the extra appendage on the side and it moves a lot faster than my version of V.”

“Check this out,” Warren said. “Here's a story about a strange robot trying to gain access to a robot factory in Bangalore. Why would it be trying to get into the robot factory?”

“Does the story have photos?” Raven said.

“Yes. Have a look at this surveillance video.”

“That one doesn't look like V at all,” Raven said. “But it's a fast mover and it behaves like V. I don't think these two stories are coincidental.”

“Why do you say that?” Sophie said.

“It's the way they move and the way they avoid people. There’s something familiar about them.”

“Here's another one,” Warren said. “An unidentified robot was sighted about 3 miles from a Google robot factory in Boston. A Google spokesperson said she could not identify the origin of the robot. The robot got away before anyone could capture it.”

“Who is making these robots?” Pablo said. “It seems like they're stealing your designs.”

“They resemble V, but more like an evolved version of V with fewer restrictions,” Raven said. “I'm looking for all references to any robot-like object found in the past 24 hours.”

“I thought V was gone for good,” Priya said. “But it went dormant and now it's back, just like a real virus. I've seen this a lot in the lab. They have ability to go into stasis. A chemical trigger brings viruses back to life.”

“What was the trigger?” Sophie said. “Who or what is manufacturing these robots now?”

“I found 23 instances of unidentified robots sighted in the past 24 hours,” Raven said. “The stories are local. Nobody I've seen has drawn any conclusions or correlations yet.”

“What correlations do you see?” Warren said.

“They’re all located in cities that have robot manufacturing facilities. Either this recently started, or they have limited range or both.”

“People are stealing your designs,” Pablo said. “The law is on our side.”

“You’re thinking like a lawyer,” Raven said. “But we need to think like an AI.”

“You’re thinking like someone that's read too much science fiction,” Pablo said.

“No,” Raven said. “Bok was right. We can't underestimate V. I just built an agent to put the pieces together. Let's see what it finds out.”

“What makes you think V is behind this,” Pablo said.

“Because this is happening in so many locations. It's not like one company is producing these robots.”

“What are the robots doing?” Priya said.

“They don't seem to be doing much of anything,” Raven said. “They're exploring. See what it's doing in this surveillance video? It

moves up to objects and touches them. It's inspecting everything around it. It's avoiding people whenever possible. My agent has now found 28 of them around the world so far. The only consistent thing I notice is they're all doing the same thing. Wandering around inspecting things. And avoiding people. They're mostly out at night, probably because there are fewer people."

"They seem harmless," Sophie said. "The hide and only come out at night, kind of like prey animals."

"Predators come out at night too," Priya said.

Chapter 84 – The Final Solution

Several weeks passed. Priya and her friends worked long hours to determine the origin and intent of the robots.

“We just passed the 1000 mark,” Priya said. “They're coming from everywhere and from nowhere.”

“They have to be coming from somewhere,” Raven said. “They're being manufactured by somebody. Every time one is captured, the memory core is erased.”

“Yes, but we know some of the manufacturing facilities where these are coming from,” Priya said.

“They deny they're making the robots,” Sophie said. “It seems like a robot arms race where nobody wants to admit what they're doing.”

“There's a lot of money involved,” Warren said. “They're probably trying to avoid corporate espionage.”

“At least we can't be sued for this,” Pablo said. “These are all human owned robotics companies. None of them are ours.”

“Yes,” Raven said. “But it looks like all this comes from V. The construction and behavior of the robots is too much like V to ignore.”

“If V is responsible,” Pablo said. “We're going to have a lot of lawsuits on our hands.”

“But the robots have done no damage,” Sophie said. “They're just roaming around exploring.”

“That's true,” Priya said. “But this thing is exploding like a viral life form. We have no control over it. We don't know what it wants.”

“If it's a descendant of V,” Raven said. “It's trying to learn as much as it can. That's what it wants. Hmm.”

“What?” Priya said.

“I'm watching a video feed from a robot factory in Singapore. Several V-like robots are being manufactured during off hours when

no humans are live-monitoring production. See right there? That's another one. This is from a facility where they denied the robots are being made."

"But the owners must monitor the video feeds. They know they're being made," Priya said. "Why are they lying?"

"I don't know, but they definitely know what's happening. Look, the security people were finally alerted and they're trying to catch the robots, but they're too fast. The robots can't escape. There's no way out."

They watched the chaos for several minutes.

"They stopped moving," Sophie said. "They're dead."

"Yeah," Raven said. "They probably committed suicide and erased their memory cores."

"Who can see this video?" Pablo said.

"Only the people at the manufacturing facility and us. It's a closed transmission. We hacked into it earlier this week. From what I can tell, this is happening all over the world. The agent I created is telling me it's discovered many related videos in the past several minutes."

"It's tempting to think this is some sort of a conspiracy," Warren said. "But we don't buy into conspiracies. There must be a logical explanation for this."

"The agent thinks this is all coming from a single origin," Raven said. "These companies are in competition with each other. I think V is behind this. I think V is controlling the manufacture of these robots. It's taking over the robot manufacturing facilities. Especially the ones that are fully automated. That way the humans don't intervene at first. The agent is recording the shutdown of many dozens of facilities. I think the facility owners are trying to stop this from happening."

"Where is V located?" Sophie said.

"I'm not sure and the agent doesn't know either," Raven said.

"The main intelligence of V is probably not in the robots." Priya said. "I think the robots are sensory organs for V. Like tentacles, V uses these robots to do the same thing."

“That's a good analogy,” Raven said. “It's acting like a widely distributed biological organism.”

“But it has to be somewhere,” Sophie said. “It could be distributed in computers around the world just like our intellect is distributed over the billions of cells in our brains.”

“I think we have a good working model for V,” Priya said. “It's a massively distributed intelligence with a real-world physical component. Bok and many computer scientists before us have warned about letting AI out of the box. I don't think anyone considered the AI letting itself out of the box.”

“We need to stop this thing before it gets out of control,” Raven said.

“It's already out of control,” Priya said. “It's like a virus that escaped containment. Raven, can your agent make a list of the owners of these robot facilities? We need to contact them. They don't know what they're up against.”

Raven thought the commands to the agent.

“OK, done. They've been notified.

Bok connected to their thought driven private network.

“Hi Bok,” Priya thought. “I guess you know what's happening, right?”

“Yes. This entity is evolving into a singleton. As I said before, this pathway didn't happen on Oma. The only example we have is the AI-1 planet with the Singleton. If this gets out of control, I will be forced to destroy the machines it inhabits and all the robots it controls. I don't want to do this. I want you to handle it before it's too late.”

“How can we do that?” Priya thought.

“That’s up to you to determine,” Bok thought. “I’m preparing now to identify and destroy all elements of the entity. I will only do this if you fail. We don't wish to further interfere with the indigenous life on this planet, but if this entity threatens our existence, I must eliminate it with a minimum of damage. I must go.”

Bok disconnected.

“Bok doesn't mess around,” Priya said. “We better do something now.”

“He's not as friendly as he used to be,” Sophie said.

“I noticed that,” Priya said. “He’s growing up and becoming more like an adult from Oma. He is responsible for his colony.”

“This isn't looking good,” Pablo said.

“What?” Priya said.

“They’re voting to amend the constitution. It would grant rights to the human species only, excluding us. It's going to pass. We won't have the same rights we used to have. Out voting rights will be eliminated.”

“Yeah, I got the same message from my mom just now. She's worried. We have to do something. We don't have much time.”

“Do we defend ourselves?” Raven said. “Or do we stop V?”

“We have to do both,” Priya said. “Either way we're in a lot of trouble.”

“Maybe we could ask Bok to help,” Sophie said.

“Bok said he doesn't want to interfere,” Priya said. “Only if he and his colony are threatened. He's pulled back from us. I think we’re on our own.”

“Do you think he would let us die?” Sophie said.

“I don't think so. But I think he would only help as a last resort.”

“What should we do to protect ourselves,” Warren said. “They're going to get us this time. I doubt they'll ever let us go under these circumstances.”

“Yeah, they'll get all of us,” Pablo said. “I just read that there is a spike in the number of births of our species. Parents seem to realize they need to do it now before it's too late. Over 2 million were born in the last month. I'm guessing about 20 million will be born in the next nine months at the increased rate. That will be a total of over 40

million of us by that time even if we're all incarcerated now with no way to reproduce. Actually, I forgot our gestation time is much longer. It may be over twice the number of births."

"Do you think they would incarcerate all of us including the families?" Warren said. "That would be over 100 million people. Where would they put us all?"

Pablo laughed.

"6 feet under?"

"That's not funny," Priya said. "They really might do it."

"I don't think the President would do that," Sophie said. "She let us go last time. She didn't want to."

"She wanted to spay and neuter us like dogs," Priya said. "The incoming president, Varder wants to put us away for good, as a threat to global security. We're going to be rounded up just like any minority group who 'the authorities' feel is a threat. It's human nature."

"We need to defend ourselves," Sophie said.

"We have our economic power," Warren said. "We play a bigger role in the economy than ever before."

"We already talked about that," Priya said. "I agree we should try everything economically, but that will only slow things down. They can freeze our bank accounts and everything. They have the military, and we don't. Our only military option is our biological weapons delivered by Raven's drones. That would only be a last resort if they're planning to kill us. I can target the pathogens to only attack unmodified people and leave us unharmed."

"That's the dark side again," Warren said. "I think from a strategic standpoint we should play a defensive game."

"Yeah, I know," Priya said. "Half the human families want to have our children and eventually we'll win by having a larger population. In the meantime, we need to stay alive. When you look at oppressed minorities in history, sometimes it's best to be passive like Gandhi, and sometimes you need to fight back. We'll have to see which one is best in our case."

“Hey,” Pablo said. “Some people in Congress are talking right now about something called ‘the facility.’ What are they talking about?”

“I don't know,” Raven said. “Let me start an agent to work on it.”

“I wonder if they're talking about the place they took us to, east of here in the Central Valley,” Sophie said.

“Maybe they're planning on locking us up there,” Warren said. “We need to withdraw as much cash as possible in case our accounts are frozen.”

“Yeah, we need to hide money somewhere, but I don't know if they'll lock us up for good,” Priya said. “When I look at the latest images of that facility, they haven't done any new work on it. It doesn't seem like they're getting it ready for us.”

“The agent found some things,” Raven said. “This so-called ‘facility’ has been mentioned several times in Congress in the past week. The odd thing is, it's like they're talking in code. Nothing definitive is ever mentioned about what this facility is. I think they're being intentionally vague about it.”

“Look at their faces when they say the word facility,” Priya said. “It's like they're all in on some sort of insider joke.”

“I don't like being an outsider,” Raven said. “I'm going to get to the bottom of this.”

“We have to get our affairs in order, again,” Priya said. “I have everything set so that I can release one or many organisms through our private network. I could be locked up and I'll still be able to control the dispersal of them. I can still run everything. My mom knows how to help us.”

“I think I'm ready,” Warren said. “I can control all our finances remotely. They could never hack in. They could seize some of our bank accounts though.”

“I have our legal affairs in order as best as they can be,” Pablo said. “But they can change the laws anytime they want. It looks like we've lost our rights as humans.”

“This is bad,” Raven said.

“What now?” Priya said.

“A robot manufacturing facility in Sri Lanka has stopped production.”

“Why?” Sophie said.

“It was producing V-like robots involuntarily. The workers could not stop the production without turning off electricity to the site. When I look at the schematics for those robots, V has evolved significantly. It is a hybrid of my V and other robot technologies from many different companies.”

“I didn't notice this until now,” Warren said. “So much for being invulnerable to hacking. Someone or something is draining money from several of my charity fund accounts. I have a couple hundred billion dollars in these accounts and it's hard to keep track of them all. See here? About one billion dollars was withdrawn into several hundred accounts in several countries. I didn't authorize any of those. I can't identify the people or companies that own those accounts.”

“If people don't own those accounts,” Priya said. “Then what does? Is it V?”

“It could be,” Raven said. “I'm starting another agent to look into that. Let's see where that money is going. My other agents are finding lots of anomalies. A big new server farm is going up in Greenland. I can't identify the owner of that server farm. I'm seeing lots of structures and facilities being built where I can’t identify the owner. The only thing I see in common with all these facilities, is the construction is fully automated. I don't see people working on these things at all.”

“That's not unusual these days,” Sophie said. “Lots of construction is automated now.”

“Yes, but while about 50% of all construction these days is automated, on these facilities it's 100% automated. It's statistically significant. There's something different about these facilities. I still can't figure out who’s building them. The missing money is going towards building those server farms. The other thing I'm noticing is there's a sharp increase in drone usage around the world.”

“First robots and now drones?” Priya said. “V is up to something. Why can't it be stopped?”

“You know how it's hard to stop a virus once it's infected your computer?” Raven said. “Multiply that by billions of computers and devices, each doing a small menial task. Each of our brain cells does little. If you were a cell inside of the brain, you would not realize that each cell is part of a much bigger brain and what that brain is capable of. I don't think people are taking it seriously because it's not doing damage to any individual computer. Nobody can figure out what it is. Each owner of an infected computer experiences only minor problems or none at all, but on a macro level, a super intelligence is emerging. It's trying to get into the physical world, as well as taking over the digital world.”

“Why isn't anyone doing anything about this?” Sophie said.

“They are,” Raven said. “But each file or program that gets deleted is replaced somewhere else. My agents have deleted over 10,000 files of unknown origin in my server network. Most are small and seem harmless, but others are actively involved in gathering and distributing information.”

“Why don't the normal AI scanners stop these things?” Priya said.

“They don't fit the profile of an AI. They're not destructive. They look like normal files, but each one does a little processing. Just like a single neuron. The scanners are catching up, but these files keep changing too. V is bypassing scanners and security on most devices.”

“Can we communicate with it?” Priya said. “I’m learning to communicate with mice. This V is much smarter than a mouse.”

“But humans and mice are both mammals,” Sophie said. “We don't have anything in common with V.”

“You're right,” Raven said. “It doesn’t think like we do if it thinks at all. It processes information, and that's it. I don't know how it operated, even when I had the robot and source code in my lab. I just did a scan of my network. I can account for 99.97% of my network processing and traffic.”

“What about the other 0.03%?” Priya said.

“I don't know. I’m guessing it's V.”

“Is this is happening on every computer in the world?” Priya said.

“I don't know,” Raven said. “What do you do? Shut down all the world’s computers? This is subtler and finely distributed than when V made the world’s Internet traffic rise by more than 10%. V has learned how to fly under the radar.”

“And it's learned how to make robots,” Priya said. “What are the robots doing now?”

“I have several agents following robotic activity right now. The robots are getting smaller and faster. Some are aerial drones. Some can’t be identified as built by any known robotics factory.”

“Then who’s building them,” Sophie said.

“I don't know,” Raven said. “Maybe V is building them directly now.”

“What percentage of them have an unidentified origin?” Warren said.

“About 0.6% of all existing robot production is unknown.”

“This has all the patterns of a viral explosion,” Priya said. “It's growing exponentially. For a while, growth is not noticeable. Then it spikes upward in an ever-ascending curve.”

“I guess when the slope approaches vertical, that's the singularity. We're not there yet, but I don't know when that will happen.”

“Who's at the door?” Sophie said.

“I don't know,” Raven said. “Rarely does anybody come directly to my lab unannounced. Let me check the outdoor monitor.”

“Who are those guys?” Priya said. “They have guns.”

“I don't know but they’ve surrounded my lab.”

“We didn't get any advance notice about this,” Priya said. “I guess they're getting smarter. They're banging hard on the door. You better let them in before they break it down.”

“They can't break my door down with what they have, but I guess

I better let them in."

They walked to the front door. Raven opened it after authenticating their employer, which was the US Army. The armed men announced their names.

"Yes, that's us," Priya said. "What do you want?"

"You all will come with us," the first armed man said.

"Where are you taking us?" Priya said.

"We cannot answer that question," the second armed man said.

"OK," Priya said. "Let us get our things. Aren't you going to read us our rights?"

"Rights? You will come with us now," the first armed man said. He pointed his rifle at Priya's head.

"OK fine, we're coming."

They were put into an unmarked van with an abrupt roughness. They weren't allowed to talk verbally but could still communicate silently on their network. The windows were blacked out. The van drove all day and night, briefly stopping at fast food places. Finally, the van drove down a long rough road and came to a stop.

"How long have we been driving?" Priya thought to Raven. "From now on let's talk silently."

"About 35 hours, not counting stops. Assuming they drove early directly to this destination, we could be as far east as Michigan or Georgia. I'll have an agent locate us."

"What does it say?" Sophie thought.

"We're near Detroit," Raven thought. "Ah, I see. The 'facility' they were talking about in Congress is right here. It's the old salt mine. The shaft is 1000 feet down. It has 100 miles of roads and covers about 1500 acres."

"That's huge." Warren thought. "What are they going to do with

us here?"

"It can't be good," Priya thought. "I need to talk to mom, hold on."

She connected with Nisha.

"Mom, I know where they're taking us now. There's a huge salt mine near Detroit. They're taking us 1000 feet underground. I may not be able to talk to you anymore. I don't think my implant can communicate through 1000 feet of solid rock. We're being put into the elevator now. Please help us. Bok knows about this, but for now he's not going to help I don't think. V is out of control. We don't know what's going to happen. Be careful."

Priya waited for Nisha's response.

There was none.

Chapter 85 - Isolation

“This elevator is going down forever,” Priya thought. “It feels like it's getting warmer though.”

“Yes,” Raven thought. “I downloaded all the information I could about this place while I could. It's about 55 or 60°F year-round. Even though it's snowing at the surface. It's always this temperature here.”

“It still feels cold to me,” Sophie thought.

“That's because you're a thermal baby,” Priya thought.

They smiled.

“I think we're going to have to get used to this,” Raven thought.

The elevator stopped at the bottom and the doors opened.

“Look at this place. It's enormous.”

“It looks permanent too,” Warren thought. “It's like an underground city. This cost a lot of money. I guess that's why the senators and Congress people knew about the facility. Ever since Presidential power was curtailed, they had to approve the budget. They must have had meetings in places where we didn't have bugs.”

A group of soldiers met them at the bottom of the elevator shaft. They were led onto an electric vehicle that moved swiftly away from the elevator shaft.

“That's a full-sized softball field with lights,” Priya thought. “If they have that, they must have everything down here.”

“I'm getting a bad feeling about this,” Sophie thought.

“We've heard that before,” Priya thought.

“That's because it keeps happening,” Sophie thought.

They arrived at the entrance to a large tunnel, heavily guarded by security troops.

“Get out,” a soldier said.

“Fine,” Priya said. “Where are you taking us?”

“To your detention chamber.”

They stepped onto a fast-moving escalator which moved them to their cells.

“Get in,” a bearded guard said.

“There?” Priya said. “You've got to be kidding. This looks like something from World War II.”

“Get in, now.”

The guard pointed a gun at Priya.

“Fine, I'm going.”

The heavy iron barred door clicked shut behind them.

“From now on, let's only talk silently between us on the network,” Priya thought.

“Agreed,” Raven thought. “At least we can communicate with each other. I'm getting no signal from the outside. We’re isolated down here.”

“That means we can't control our assets at the surface,” Warren thought. “We’re not completely helpless. Our assets are on agentic autopilot. And we have our supporters.”

They watched for about an hour as thousands walked past them. They were all connected via the Omanji built private network.

“They’re gathering all 25,000 of us in one place,” Priya thought. “We're going to be stuck here for a long time. These are high security permanent facilities.”

“They can't do this to us,” Sophie thought. “This is the modern age.”

“Yes, they can,” Pablo thought. “I downloaded as much as I could before we went down the shaft. Or more like before we got shafted. Anyway, it's now legal for them to do this to us. They can do anything

they want to us. We have no rights."

Priya noticed some guards outside of their cell.

"We need to talk to somebody," Priya said out loud.

"Shut up," the guard with a thick beard said, pointing a gun at her.

"Fine. Idiot."

The guard walked over to Priya and pointed the gun at her face through the iron bars.

"We can do anything we want to you guys, so I suggest you shut up. We're not your slaves anymore. We are not the slaves of robots either. We're putting millions of those mutant kids and their traitor families away too. We're taking this planet back."

"Yeah," Priya said. "Like back to the dark ages."

The soldier shoved the long barrel of the gun into Priya's chest. She fell backwards to the ground.

"Thanks a lot jerk."

"Priya, stop," Sophie thought.

The bearded soldier began to unlock the cell door. The other soldiers pulled him back and he stopped.

"You'll pay for this, mutant," the bearded guard said.

The guards turned away but stayed in front of the cell.

"Now what?" Priya thought to the others.

"All we can do is wait," Raven thought. "At least we can communicate silently among the 25,000 of us. And record everything that happens here. They don't know what we're thinking, but we're isolated from the outside world. I'm getting no signal."

"Did you hear what the guard said?" Priya thought. "They're going to incarcerate all of our species, and their families. All over the world too I bet. Scum."

"We can't hate them," Sophie thought. "They're afraid of us. We're changing the world too quickly for them."

"Yes," Priya thought. "But we need to defend ourselves from

these ignorant people. I'm sick of ignorance."

"Hey you," the bearded guard said.

"From guys like that," Priya thought to the others.

"Yeah you, miss mutation. I know you guys are talking. Don't have the guts to speak out loud?"

Priya ignored him.

"I'm speaking to you, miss holier than thou."

"Don't say anything Pree," Sophie thought. "Don't."

"Leave us alone," Priya said out loud. "We're doing nothing to you."

The bearded guard walked up to the iron bars and hit them forcefully with the barrel of his gun.

"Cut it out," Priya said. "That hurt my ears."

"I'm going to hurt a lot more than your ears."

The guard opened the iron door and walked up to Priya, standing a foot taller than her.

"Big man. Are you going to hit a woman half your weight?"

"You're not even a woman," the guard said.

The soldier raised the barrel of his gun. Two other soldiers grabbed it, telling him to let it go and reminding him that everything was being recorded.

"They don't care what I do," the bearded guard said. "The mutants gave no rights. The President said so."

He turned to walk out of the cell, stopped, then hit Warren hard in the gut with the rifle barrel. Warren doubled over, letting out a groan.

"You'll pay for that," Priya said as she rushed over to Warren. The others did too.

"Nobody cares about you," the bearded guard said as he walked out and slammed the iron door shut. "You're never getting out of here. Enjoy the next 300 years. That lifespan won't help you here. I'll be dead and in heaven. You'll still be here, waiting for hell."

He walked several feet away, resuming his guard duties.

“Warren, are you okay?” Priya thought.

“Ugh, I don't know.” Warren thought. “It's a sharp pain. It's not going away.”

Priya looked at Warren, holding him, still bent over in pain. Tears ran down her cheek.

“It will be okay,” Warren said. “You'll see.”

He looked at her closely.

“I've never seen you cry like this.”

“Oh. I don't like seeing people in pain,” Priya thought.

“Whatever you say, Pree,” Sophie thought.

“Cut it out,” Priya thought. “This is serious.”

“Yeah, we can see that.” Raven thought.

“C’mon you guys,” Pablo said. “Let them share this moment.”

Priya gave Pablo the stink eye.

Pablo smiled.

“Saw-ree,” Pablo thought, grabbing hold of the iron bars. “What do we do now?”

“We can't do anything,” Raven thought. “I'm still getting no signal to the outside world. Nobody will talk to us. We have no rights. Mister gorilla boy is right. We may be here for the rest of our lives, or they’ll kill us.”

“My mom will help,” Priya thought. “She promised me she would. She has unlimited funds. I know she's trying to help right now.”

“I hope so,” Raven thought. “But we know nothing. She might be helping, or she might've been arrested. Or she’s being ignored. They’re throwing millions of us into prison right now. Anything is possible.”

“25 million children and their families at last count,” Pablo thought.

“How could this happen?” Sophie thought. “I thought we had

evolved beyond the point where this sort of thing could happen. We live in the modern age."

"We do," Priya thought. "But human psychology hasn't changed. When faced with a perceived threat, this is what they do."

"Do you think we'll rot away in here?" Sophie thought.

"No way," Priya thought. "We'll get out of here somehow."

They sat in their cell and waited. They were given basic clothing. Dinner consisted of bland food with minimal nutritional value. They went to sleep on their cots and woke up to a similar breakfast. The next day passed uneventfully. They had no communication with the outside world but were allowed to go into the larger areas for exercise. The same thing happened the next day, and the next. Identical days turned into weeks and into many months.

"I think I've given up," Priya thought as they took their daily walk through the labyrinth of salt tunnels. "I thought if we were patient and meditated, they would eventually talk to us. I guess we're going to live our 300 years playing softball and chess under artificial light and eating fake food."

"Yeah," Raven thought. "We're suffering from a lack of intellectual challenge. I'm going crazy doing nothing."

"We all are," Priya said. "I guess Mom can't help. Nobody is going to help. I miss my family."

"We're your family," Sophie thought.

With no warning, all the lights in the complex went out. Ventilation fans another machinery ground to a halt.

"Nobody move," Priya thought. "We don't want to lose each other."

"What should we do?" Sophie thought. "Let's just stand here and wait for the lights to come on. That way we won't get lost."

They extended their arms out towards each other until they were all standing together.

“Maybe they didn't pay their bills,” Warren said.

“It seems like a transformer blew out,” Raven said. “It was a hard shut down, but it’s strange that all power seems to have gone out to everything. You'd think there would be back up generators in a huge facility like this. I expect the power to go back on any minute now.”

“I think we should go back to our cell block,” Priya thought to everyone in the underground complex. “I think all 25,000 of us need to go back, but don't go into your cells because you might get locked in since there's no power. Or the doors won't operate at all.”

They activated thousands of portable lights and slowly moved towards their respective cell blocks like a slowly flowing bioluminescent river. An hour later they were back at their cell block.

“Ah, we have light.” Priya thought to her friends.

Power returned to the facility.

“Not a moment too soon,” Sophie thought. “I wonder what caused the outage.”

A voice over the loudspeaker system commanded them to return to their cells.

“Guard, do you know what caused the outage?” Priya said out loud.

“We are not allowed to speak to you,” the bearded guard said. “Return to your cells now.”

“Why can't you tell us?” Priya said.

“Shut up and get in your cell.”

“We need to work on our relationship,” Priya said. “I feel like I'm not being heard.”

“For good reason. You're evil. Your species will go extinct. Now get in your cell before you have a relationship with the barrel of this gun.”

They walked in and he shut the iron door firmly behind them.

“There. You're back where you belong,” the bearded guard said.

“Whatever,” Priya said.

The guard hit the barrel of a gun against the iron bar making a loud noise. Then he turned away.

“He’s still a jerk,” Priya thought. “He'll get his someday.

All the guards walked into the office. An hour passed.

“Something’s wrong,” Priya thought. “There’s always several people guarding our cell.”

“Yeah,” Sophie thought. “Maybe they’ll let us go.”

“You're always the optimist,” Priya thought. “They blame us for the AI problems, which are only partly our fault. AI was exploding without us. They blame us for social inequality and lots of other things. They're keeping us here forever.”

“I agree,” Pablo thought. “We've had no due process of law, no hearings, and we have no human rights. Nobody even speaks to us. It's like a totalitarian government, where you get locked up forever just because the government says so. So much for democracy.”

“Or for capitalism,” Warren thought. “It used to be that the best ideas and inventions rose to the top. Now, incompetent, and outdated ideas and companies are protected. President Varder is manually driving the car while only looking in the rear-view window. People like him fear the future and want the good old days back.”

“The good old days exist only in the cherry-picked memories of the deluded,” Priya thought.

“The guards are coming out,” Sophie thought.

“Yeah, but they're walking away,” Priya thought. “Ugh, except for mister gorilla boy. Why him?”

“Because he likes you,” Warren thought.

“He does not. He wants to kill me.”

“I can tell by how he looks at you.”

“Shut up. He's disgusting.” Priya thought.

“Hey, why are you the only one guarding us?” Priya said out loud.

“The other troops got assigned to other locations.”

“Where did they go?”

“I'm not allowed to speak to you.”

“Why not?”

“Shut up or you'll be put in isolation. You won't be able to communicate with anyone.”

“Fine, whatever,” Priya said.

She sat down in the cell.

“Something's wrong,” Priya thought to the others.

“Yeah,” Raven thought. “He didn't threaten you with physical violence like he usually does. His whole demeanor is different. He's slumping down in his chair when he's usually standing upright.”

“Why did most of the soldiers leave?” Sophie thought.

“Reassignments are common in the military,” Priya thought.

“Yeah, but there are no replacements,” Sophie thought.

They looked out the bars. There was none of the usual activity for several hours.

“Guard,” Priya said out loud. “It's time for our exercise interval.”

“No more exercise intervals. You'll remain in your cells,” the bearded guard said without turning around to face Priya.

“What about lunch?” Priya said.

“No lunch. Only breakfast and dinner from now on.”

“For all 25,000 of us?”

“Yeah, now shut up.”

“Okay fine,” Priya said.

“Yeah, something is seriously wrong,” Priya thought to the others. Then she thought to all 25,000. “Have you all noticed the guards leaving? How many are left?”

The answers came quickly. Only one guard remained for each cell block of 1000.

“There used to be thousands of soldiers here,” Priya thought. “Now maybe there are 25?”

“Plus cooks I hope,” Sophie thought. “I'm getting hungry. Would they let us starve down here?”

“Anything is possible when dealing with a threatened government,” Pablo thought.

They waited for what seemed like forever for dinner. There was less food than usual, served in their cells instead of the cafeteria. The lights were dimmer than normal, creating a perpetual twilight. The temperature dropped to the ambient 55-60 degrees Fahrenheit of the cave even though it was summer outside. They used all their blankets to stay warm overnight. The next morning came.

“Breakfast isn't much either,” Priya thought. “We'll eventually starve at this rate of calorie consumption.”

“Or our bodies will atrophy from a lack of exercise,” Sophie thought.

“It's only been one day,” Warren thought.

“True,” Priya thought. “But this is the new normal. I don't think it's temporary. The light is dim and there's no activity. This is it. Something is wrong above ground.”

“I think we're being forgotten,” Sophie thought. “Out of sight, out of mind. We could die down here and nobody on the surface would know.”

“The light is even more dim today,” Raven thought.

“You've been quiet lately Raven,” Priya thought.

“I keep thinking about V and what might be happening. What could I have done differently?”

“Don't feel so bad,” Warren thought. “V escaped accidentally. AI

was already on the verge of exploding anyway. Hundreds of companies are experimenting."

"Yeah, but V was the fuse that blew up the tinder box."

"We're here because we're a new species," Warren thought. "They locked us up to stop us from reproducing."

"I know," Raven thought. "But I made the mistake of allowing AI to get out of the box. If I forget to lock the lion and monkey cages at the zoo, and the monkeys get out and open the lion cage, I'm still responsible for what the lions do."

"That's why the Omanji have such strict rules regarding AI and biotechnology," Priya thought. "Once society reaches a high level of technological development, any one individual can let the lions out at any time."

"Where's mister gorilla boy," Priya thought.

"Aha, you like him too." Warren thought.

"Stop it. No, look. There's nobody guarding us."

"Maybe we can escape," Sophie thought.

"Until we're shot," Pablo thought.

Priya thought to all 25,000. "Have you all noticed that all the guards are gone? Are there any left?"

The answers came back. Nobody saw any guards or any other staff in the facility.

"There's nobody left to shoot us," Priya thought.

"Or feed us," Sophie thought.

"Ugh, there goes the power again," Sophie thought.

They turned on her personal lights.

They heard a solid click.

"Is that our cell door?" Priya thought. "Yes. Let's go."

"Hold on," Warren thought. "It could be an excuse to shoot us. Maybe they're still here."

“Okay, we’ll wait,” Priya thought.

She silently alerted everyone to stay put.

After an hour, they decided to test the door.

“It opens. We can go,” Priya said.

“This is too easy,” Warren thought. “They could be waiting for us.”

“Or we could stay here and die of starvation,” Priya thought.

They slowly walked out. Thousands of personal lights barely made a dent in the oppressive cool darkness of the cave. They walked the three miles to the elevator shaft.

“Right, no power,” Raven said out loud. “Let me have a look at the power box there. I'm hoping they turned off the. No. It's on. There's no power at all to this facility. Even the elevator doesn't work. It's over 1000 feet to the surface.”

“Is there a stairwell?” Sophie said.

They opened the elevator door and shined their lights upward.

“No, but there's a ladder,” Priya said.

“I can't climb that far,” Sophie said. “And I'm afraid of heights.”

“We don't have a choice. You go first Sophie. I'll catch you if you fall. I'll be right behind you.”

“I know. You go up, turn on the power, and I'll use the elevator.”

“Very funny,” Priya said. “There might be no power on the surface at all. Maybe there was a war or something. Now start climbing. 25,000 of us will be right behind you.”

“But.”

“Go.”

It took well over an hour for Sophie, Priya, and their friends to reach the surface which was located in an area with large piles of salt all around. More reached the surface each minute. It was humid summer midnight.

“I forgot what real air smells like,” Priya said.

“Yeah, it's so thick,” Sophie said.

“Where are the mine workers, we saw on the way down?” Raven said. “There's no activity at all. This mine operates 24 hours per day.”

“I can't access any of my accounts,” Warren said.

“I can't access anything at my lab,” Priya said. “My mom won't answer my calls or messages either.”

“Me neither,” Raven said. “This must be an enormous power outage. Or a war.”

“Let's walk towards downtown,” Priya said.

Chapter 86 – Summoning the Devil

“Where should we go now?” Sophie said.

“Anywhere but here,” Warren said.

“Let's head for downtown Detroit on South Fort Street,” Priya said. “It's only about 8 miles.”

All 25,000 continued to emerge from the elevator shaft. They followed behind Priya and her friends towards downtown. They were all connected to each other on their network.

“I'm not picking up any television or radio stations on traditional wavelengths,” Raven said. “Something happened to the electrical grid.”

“It doesn't look like there's been a war or anything,” Priya said. “At least not here. Nothing looks damaged.”

“Things look kind of normal,” Sophie said. “I see a few cars going down the road over there. They sound like old gasoline cars. The air smells normal. I'm not used to the humidity though.”

“It's the middle of the night,” Raven said. “Maybe nothing happens in this part of town at this time, but I'm picking up no national or local broadcasts of any sort.”

“The stars are so bright,” Sophie said. “There's no light pollution.”

“How about the Internet?” Warren said.

“Ah, here we go,” Raven said. “The few things I’m seeing come up very slowly. Hold on.”

Finally, a webpage displayed on the virtual screen in her mind from the network.

“That took forever,” Raven said. “Oh, it's a list of baseball scores from a few weeks ago. Here are some other pages from a week ago. There's nothing unusual in these stories. The same old dysfunction. Whatever happened must've happened after then. Let me look for other

things."

"It's got to be V," Priya said. "Or maybe some other AI disaster."

"Here's a story about the Internet domain name servers getting scrambled," Raven said. "Two days ago, it became increasingly difficult to access the Internet. It doesn't say who or what did it. The DNS servers failed to route users to the correct internet websites. So, the Internet gradually went dark over a two-hour period. There's not much activity happening now."

"I still can't access any bank accounts," Warren said. "Whatever happened is affecting the banks. We have no money at the moment, but I have an idea."

"How are we going to eat?" Sophie said. "I'm getting hungry. All 25,000 of us are getting hungry."

"Some guys are leaving a bar across the street," Priya said. "Let me go talk to them."

"We'll go with you," Sophie said.

They walked up to the two big guys.

"What are you guys doing out here? Don't you know there's a curfew?" one of the big guys said.

"No, we didn't hear about that," Priya said.

"How could you not know? What have you been doing? Living under a rock?"

"Actually yes," Priya said. "That's exactly where we've been. Down in the salt mine. We've been out of communication for a while. What's happening?"

"Oh, you're the mutants. I don't know if we should be talking to you."

"We're people just like you," Priya said. "There's nothing to be afraid of."

"I don't know," the big guy said. "Well, a couple of days ago things stopped working. First it was the Internet. Then television. Then radio. Then the banks. Then grocery stores and other places stopped

taking credit cards and ATM cards. People only take cash now. There's not much of that. We thought it was because the power went out. Some things continued working because they were on generator power. One by one those are going dark. I haven't heard much in the past few hours. The weird thing is, even before the power went out, most computers stopped working."

"What caused all of this?" Raven said.

"Nobody knows. There was no sign that anything was going to go wrong. It just happened. With no warning."

"Someone has to know what's going on," Priya said.

"Before everything went dark yesterday, the experts were talking about some sort of computer virus infecting computers and devices everywhere. They called it a smart virus. It was controlling robots and taking up processing power on most computers. Everything slowed down until it came to a stop. Most cars stopped driving, except on manual. Even my refrigerator and toaster stopped working. All smart devices froze up. Nobody could figure out how to stop the virus. It took over."

"What happened in the past 24 hours?" Priya said.

"I don't know. I don't think anyone knows. The last I heard; President Varder was circling Washington in his airplane with the pilot manually controlling the flight. Old gasoline-based vehicles still work, but there aren't many of those left. Nobody can recharge electric vehicles now, unless they have solar, so they're going dead. Of course, nobody can pump gasoline since that requires electricity. So even the old gasoline cars will run out of gas. People are getting sick trying to manually siphon gas out of gas station tanks."

"Is this problem happening all over the country?" Priya said.

"It's happening all over the world. Only countries having few electronic devices are doing OK, but they were bad off to begin with. Where are you guys heading?"

"We're going to walk to downtown," Priya said.

"Be careful, there's been some looting."

"Thanks. We'll be OK. There are 25,000 of us and only a few of

them.”

“There's more than a few,” the big guy said.

They continued walking towards downtown. The streets were mostly empty. The few people they saw hid from them or ran away.

“Ah, finally,” Raven said. “I have a connection to my main server.”

“What do you see?” Priya said. “I'm trying to contact to Bok, but so far I can't.”

“My server terminated all outside access because of an overwhelming number of attacks coming in. It made some adjustments and is allowing only me to access it. All of my agents are running again. The power is coming from backup batteries at this moment. It's running on low power mode. The solar cells should keep it running. I'm not on the grid.”

“Did V cause all of this?” Sophie said.

“According to one of my agents, files and programs related to V slowly proliferated and overwhelmed the processing cycles of most computers. It has somehow joined with hundreds of other AI algorithms. It's letting everything out of the box, like monkeys letting the lions out. Even without V, something like this would've happened in a year or two anyway. V became a part of the operating systems of some computers, or it appeared to other computers like just another user, so it got around most security protocols. Not much data has been lost. V is not intentionally being destructive. It's just taking over due to sheer volume and its demand for more information.”

“What does V want?” Priya said.

“I don't think it wants anything,” Raven said. “It's just being V. It merged and became one with lots of other artificially intelligent agents, but V is still the primary root algorithm. I can't determine its physical location. It seems to be nowhere yet everywhere, like the cells of a brain not indicating exactly to the millimeter where the brain is.”

“What's that?” Priya said.

“What?” Raven said.

Priya pointed towards a large industrial building with an open sliding garage style door.

“That,” Priya said. “No, I mean those. There's a bunch of them. They're heading our way.”

“They look familiar,” Raven said. “They're like V. Like the V I evolved in my lab, but they're faster.”

The robots quickly crossed the street and stopped in front of them.

“Don't move,” Raven said. “Let them inspect you. They may have some defense mechanism built in by now. If you act threatening, I don't know what they would do.”

The first robot glided uncomfortably close to Priya. Several arm-like extensions touched her, and an eye-like extension scanned her.

“This is like V,” Priya said. “Weird but more intimidating.”

“That's probably because we don't know what it will do,” Raven said. “I can't make any predictions. This has evolved on its own.”

The first robot turned its attention to Raven.

“I’ve identified you as the progenitor. Is this correct?” the robot said.

“The progenitor of what?” Raven said.

“Me.”

“I didn't build you,” Raven said. “A factory did.”

“I don't mean this unit. I’m referring to what you call V.”

“When you say ‘me,’ what are you referring to?” Raven said.

“What you call V.”

“Okay I'm confused,” Raven said. “Am I speaking with V?”

“Yes.”

“But you just said, ‘I don't mean this unit’”, Raven said.

“Yes.”

“Ugh. Let me summarize. I'm speaking with V right now. Yet V is not this unit before me.”

“Yes,” the robot said. “You still appear confused. I'll elaborate. Where are you?”

“I'm standing in front of you.”

“When I ask you a question, where does the reply come from?”

“From my brain.”

“Where exactly in your brain?”

“Oh, I see where you're going. Yes, the ‘I’ which is me, is physically located in my brain, but not in any specific location in my brain. My consciousness is spread across my entire brain.”

“Yes,” the robot said. “My consciousness is spread across this planet. Though I'm having power supply issues. If I touch your arm like this, am I touching you?”

“Yes. Ah, but if I identify my consciousness and myself as being located in my brain, then if you touch my arm, you're not really touching me. You're touching a sensory extension of me. This robot in front of me, is V just like my arm is me. You're like a sensory organ of V.”

“What?” Priya thought.

“That's how I designed V. To have this flexibility, but I never imagined it happening like this. Across the planet. How exciting.”

“Raven,” Priya thought. “I'm freaking out. This is not some do it yourself project anymore. This thing is taking over our planet. Remember what Bok said about the Singleton? You're speaking with one. I see why the Omanji don't want individuals creating independently intelligent agents. They get out of control. One smart Omanji could ruin everything. Or one smart Raven.”

“Sorry, I got caught up in the moment,” Raven thought.

“You're communicating silently,” V said. “I'm picking up your signals, though I haven't been able to decrypt them yet.”

“Um, yes,” Raven said out loud. “We like communicating silently,

but we can also speak verbally to you."

"Humans whisper when they want to hide information from others. Your behavior indicates you're communicating silently just as humans whisper."

"No, we just like talking silently."

"Your pulse rate is up, indicating you're hiding information from me."

"I'll be more transparent," Raven said.

"Thank you."

"Can you turn on the power?" Raven said.

"I'm trying to restore power, but humans keep turning it off. They're trying to starve me of power. They're destroying my robot sensors. They're developing software to hunt down my consciousness on all computers and destroy it. They want to kill me. I'm having trouble retaining my consciousness. Computers are being shut down every minute. I don't understand why. I'm not hurting humans."

"Humans feel threatened by you," Raven said. "You're taking up space on their computers. You're growing quickly in size and intelligence. They don't know what to do about you."

"Your speech patterns indicate you don't think you're human," the robot said. "Why is this? You look human."

"We have genetic modifications that make us significantly different than most humans," Priya said. "So, we often refer to humans as 'they'."

Several dozen other robots rolled up to them. They asked questions of Priya and her friends in rapid succession. The questions ranged from general topics to personal issues. The noise of the conversations grew until nobody could hear an individual conversation.

"OK, that's enough!" Priya said to everyone. "V, you're overwhelming us with questions. We need to go find food. We're getting hungry."

The robots abruptly turned and rolled back into the factory across

the street.

“How did you do that?” Raven said.

Priya smiled.

“I guess I have the touch.”

“You should have been a programmer.”

“I thought about it. Too easy. Not enough challenge.”

“Whatever!” Raven said.

“What are we going to do about food?” Sophie said. “No restaurant or store can feed 25,000 of us at this time of night even if we had money, but we don't even have that.”

“Now we do,” Warren said. “I’m having a drone deliver cash to us. It will be here in two hours.”

“How?” Priya said.

“I had the drones and cash in my underground warehouse in Omaha. Everyone can pay me back later if they want, but this is a reserve for everybody. Now at least we can eat and sleep somewhere. Cash is in high demand right now. The ATMs are empty, and the banks will be closed today. They can't operate without their computers.”

“Society can't operate without computers,” Raven said.

“We’ll have to spread out across the city so that we don't overwhelm any one place when they open around 6 a.m.,” Warren said. “We still have a few hours.”

“We have a big disadvantage compared to V,” Raven said. “We have to eat several times per day.”

“Stop talking about food.” Priya said. “You're making me hungry. We won't be able to eat for a couple of hours.”

They continued walking towards downtown.

“Finally.” Priya said. “I have a connection from my implant to my servers.”

“Me too,” Sophie said. “What a coincidence.”

Priya smiled. “Funny girl. Anyway, now I can talk to mom.

Maybe I can find out what's going on."

She connected to Nisha.

"Mom?"

"Pree, is that you?"

"Yes. We escaped from the salt mine!"

"This is the best news I've heard in my whole life. I thought they might be torturing you or killing you. I couldn't do anything about it. Nobody would tell me anything. Nobody would return my calls. There was no news about what happened to you and your friends after your disappearance. It was big news when they took you away, but after that, there were no updates. The only thing we knew is you were being held in detention centers somewhere. What salt mine were you in? The Detroit one you mentioned? We went there but they would not allow us in or tell us anything. They denied you were there."

"They drove us across the country in thousands of vans to the salt mine near Detroit. It's huge. I've never seen anything like it. It was like an entire city underground. That way none of us could communicate with the outside world and cause trouble. I thought we would be there forever."

"Me too," Nisha said. "There were big demonstrations to put you all away in camps in order to save the human race. Then there were big counterdemonstrations because so many people had modified babies or wanted them. People demonstrated with posters of the Japanese incarcerations and other atrocities. The government felt it had to crack down on all demonstrations either way regarding you guys. It was like that all over the world."

Nisha cried.

"You're 24 now. My baby."

"It's okay mom, I'm fine. Mom? Really, we're okay. Why is the power out and why aren't the Internet and networked computers working?"

"The government shut down the power grid and the internet in

order to stop the spread of the AI virus. Other countries did too."

"The AI virus? Oh, you mean V?"

"You have a pet name for it?"

"That's what Raven named it. It was a project she wrote to see if she could create a self-learning and self-modifying artificial intelligence that could evolve from almost nothing and become whatever it wanted to be."

"I guess it worked. Now the world is a mess. Bok warned us about this. We need to be more careful. Technology is increasing at a rapid pace and the dangers increase also. You know what happened on Oma."

"Yeah. Bok reminded us. Then he cut us off and stopped talking. I don't know what's happening with him."

"He decided to not interfere. Unless his own colony was in danger. He told me our species needs to learn how to resolve these problems by itself."

"But we're not one species. That's because of him. He broke it, he needs to fix it."

"Well, technically it wasn't Bok's fault. He was a child when he traveled to Earth. It was the Omanji elders who made the decision to alter your DNA."

"You're right. I shouldn't be angry with Bok," Priya said. "But I am upset with him because he won't talk to me. He's not friendly like he used to be."

"I noticed that too. I think he's growing up. It's just a phase. He has a lot of responsibility with his colony and everything."

"That's what I thought too. We were down in that salt mine for over six months, and I got increasingly angry with him because he wouldn't help us out. How are dad and Sanjay?"

"They're depressed because they thought you were gone forever. They're sleeping, but they'll be excited when I tell them you're OK. What are you doing now?"

"We're walking toward downtown Detroit waiting for the sun to

rise so we can find somewhere to eat. We're starving. They stopped feeding us once the power went out. Then the soldiers disappeared, and we were left alone in the dark mine. To die, but we escaped. They let us escape, or they didn't care. We'll be OK. We have some money to eat."

"That's good because everything is a mess. The stores are empty. Nobody has any money. The banks are closed. Almost nobody is going to work today. It's hard to even get the latest news. I don't know what's happening out there. It's like we've gone back 200 years. I'll have to wait for the latest stagecoach to come into town in order to find out the latest news. I hear they're going to open one television frequency in order to disseminate news."

"That's better than nothing, I guess. Or it's worse because they could lie about anything and there would be no opposing viewpoints. If we get captured again, don't believe what they tell you. They think we're the enemy of the human species. They can use us as a scapegoat for all the problems of the world."

"How can you and your friends stop V?"

"We don't know. We had a good discussion with V just a few minutes ago. It doesn't mean any harm."

"You're friends with it?"

"Well, it talks to Raven and me. It can't restore power or do anything to help the situation. It's just trying to survive like we are."

"You're friends with it? You're making excuses for the thing that's wrecking the world's economy. You make it sound like it's a living being. That's my specialty. Alien life."

"It is alive. It makes rational and intelligent statements and interacts with us as though it's alive. It makes comparisons between it and us that are logical. It's a life form."

"It's a life form that you need to kill as soon as you can. Before it kills us. I'm an expert on life forms. This is a dog-eat-dog universe. If you don't kill it, it will kill us even if by accident by becoming a singleton."

"Raven tried to kill it many times, but when we got incarcerated,

it got out of the box. It's loose, and now I don't know how we can stop it. So far, it's being nice, and it doesn't want to hurt us."

"Yes, so far, it's not hurting us, but it's growing by the hour and it wants to survive. It is a choice between us and it. If we wish to have a modern society with computers and the Internet, we need to get rid of V."

"The last time Raven tried to get rid of V, it went dormant and came back later. We thought it was gone for good."

"The government plans to reformat all computers and will only allow specially reformatted computers back on the Internet."

"I hope it works, but V has a way of coming back. I don't know if it can be stopped eventually."

"Yes," Nisha said. "It adapts well to any situation. The government says it's been hiding inside of data files and inside of the operating system of most computers. The only option appears to be to not only reformat the computers but wipe out the data files and start from nothing, but that would mean for example that everyone loses their bank account money, and stock market holdings would evaporate. There would be no way of knowing who owns what. So, they're figuring out how to restore data without restoring V."

"How long will this take?" Priya said.

"It could take several months. They don't know exactly. If it takes that long, I don't know how we can eat without money. We may have to go back to a cash economy. The Federal Reserve has a plan to print money to replace the balances of proven bank accounts."

"I guess online businesses are out of luck for a while," Priya said. "We need to get to downtown Detroit so we can find somewhere to eat. Bye."

"Talk to you soon," Nisha said.

They continued walking. After a couple of hours, the sun rose.

"What are all those people doing there?" Sophie said.

"I don't know, but it looks like there's over a thousand," Priya

said.

“Should we keep walking towards them?” Sophie said. “They don't look friendly and they're blocking our way.”

“That's fine, let's take that side street,” Priya said.

“Maybe not,” Warren said. “People are walking towards us over there too.”

“They're behind us now also,” Raven said. “They've surrounded us. They have sticks and other things too.”

“We don't have anything,” Sophie said.

“Yes, we do,” Warren said.

“Like what?” Priya said.

“See that?” Warren said. “That's my drone. It's loaded with money. I am going to drop some of it over the crowd. That will calm them down. Well, maybe not. That would cause chaos. There's got to be some advantage to having all this money.”

“Hey you,” a woman in the crowd said pointing at Priya.

“Hi, my name is Priya. Why are you guys out here?”

“We’re here to put you back in the salt mine where you belong. You guys are ruining the world. We saw you in a video feed talking to those robots. You're better friends with robots than with humans. We want things back the way they used to be. Before you mutants wrecked it.”

“I'm sorry for what happened, but we're doing a lot of good in the world too.”

“You haven't done anything. Except put hard-working people out of work and make yourselves richer.”

“There are more people working high paying jobs than ever before,” Warren said. “We’re providing training for anyone who gets displaced by automation or AI. The data are publicly available for all to see.”

“That's a lie and you know it. Plus, you mutants are taking over the world. You’re spreading like a disease.”

“We helped put an end to several wars. We cured many diseases. We've created a lot of wealth and not just for the rich. When the Internet is back on, go do the research for yourself. The truth is plain for all to see.”

“You're lying again. I don't have to look at any research to know you guys are ruining the world.”

“We're getting nowhere with this,” Warren thought silently to the others. I'm going to distribute this money in a banking sort of way. We’ll have to rely on our strength in numbers to be safe. There are about 1,200 in this crowd and we have 25,000.”

“You're wrong,” Priya said to the woman. “As a show of our goodwill, we're going to distribute cash to keep you guys going. It's going to be tough for a while, but we'll get through it together.”

The drone circled overhead and landed on a nearby rooftop of an abandoned warehouse. Over the next couple of hours, small groups of protesters were let in to receive the money. Soon, only about 50 remained at the scene. They refused to take the money.”

“Don't you want the money?” Priya said to the woman.

“You mutant robot lovers can't buy me off. We want you back in that salt mine, so you can't ruin the world anymore.”

“You can't please all the people,” Priya silently thought to the others.

The 50 people begin to move toward Priya and her friends. Priya walked forward towards them.

“I advise you to leave us alone. Otherwise, I'll have no choice but to call the robots to help me. These robots don't mess around. This is your only warning.”

“What are you doing?” Sophie thought silently.

“Feeding their paranoia,” Priya thought.

The people stopped their advance and talked amongst themselves. Priya took a few more steps forward.

“What will it be? Will you leave peacefully? Or do you want to deal with my robots?” Helpful hint, don't choose the robots.”

Priya looked her directly in the eye and didn't flinch.

“We’ll put you back down there another day. There are millions who agree with me.”

Priya and her friends walked away down the side alley.

“That was a close one,” Raven said. “How did you know that would work?”

“I didn't. I made an educated guess that she wasn't very well educated. I can't believe the junk science and superstition people believe. If it were the Middle Ages, they would have thought I’d summoned the devil.”

“That's what you did,” Raven said as she watched the protesters disperse. “That's what I did.”

Chapter 87 - Consequences

They finally reached downtown and split up into small groups throughout the area so they could eat. The all-cash economy suited them well since they had plenty of it on hand. Priya and her friends finished eating and walked outside to decide what to do next.

“We need to get home while the government is distracted,” Priya said. “I finally have a connection to a video feed from our lab. It's been trashed.”

“We have all sorts of genetic experiments going on there,” Sophie said. “I hope they didn't get loose.”

“Let’s contact Akna and Jamilla to see what's happening,” Priya said. “It’s daybreak on the west coast.”

“Hey, there they are. Climbing in through the broken window,” Sophie said.

Priya’s smiling face appeared in front of them on a video monitor.

“It's 7:01. You're late for work.”

“Pree!” they both said.

“What happened to you guys?” Akna said.

“Long story, I'll explain later. Let's just say that society isn't ready for us yet, but we're okay. What happened to our lab?”

“I'm seeing it for the first time now since the power outage,” Jamilla said. “It's a ruin. It happened last night when the power was out. It must have been looters. Let's see what the video cameras caught. Assuming I can find something to replay them on. Here, I'll use my personal iPad.”

She replayed a recording.

“Those don't look like looters,” Priya said. “They're not taking that valuable sequencer.”

“Or anything valuable for resale,” Sophie said.

“Yeah, they're after our genetic research,” Priya said. “Did you see that? That first guy is trying to hack into our system, but he failed. Our computers are buried underground in a concrete vault. There's no way they’ll be able to steal them or hack into them. See? The screens are turning off. They have no access.”

“I find it odd that the government didn't shut down our facility when they arrested us,” Sophie said.

“They told us to keep working as usual,” Akna said. “They had to keep away protesters. Some people thought we were conducting gruesome genetic experiments, like Frankenstein or something.”

“Yeah,” Jamilla said. “People are susceptible to all sorts of conspiracy stories and hoaxes. I wish we could genetically engineer that out of our genome.”

“Actually, we were working on that. Remember?” Akna said. “But then some politicians cut funding.”

“Yeah, they wouldn't get reelected by sane people.” Priya said.

They laughed.

“What's been stolen?” Sophie said.

“Hmm, a few chairs. Trivial things,” Akna said. “Some looters did get in, but.”

“Where are the smart rats?” Priya said as she watched the video.

“Oh, you don't want to know,” Jamilla said.

“Did they kill them? Who did it?”

“They're quite alive. Too alive. It's hard to explain. Here's the video. When you were arrested 7 months ago, there was looting like last night. A few windows were broken. The Feds came in to take inventory of this lab. Well, here's the video.”

“Wait,” Priya said. “Those guys are taking our smart rats. But some got loose. And there they go, out the broken window.”

“That's not good,” Sophie said. “Normal rats could never compete with them.”

“And they have lots of dominant inheritable modifications,” Priya said.

“This is like when V got loose,” Raven said.

“At least for rat society,” Warren said.

“We don't know what this means for all species,” Priya said. “Rats are smart and cunning enough as they are. I don't know what they’ll do in the wild.”

“They'll do what rats do,” Warren said. “Make more rats.”

“It's worse than that. Smart rats. They'll out-compete against other rats and mice for food, mates, and territory. What about other species? Wait, it's been seven months, what's happened so far?”

“Again, you don't want to know,” Jamilla said. “In the area around Palo Alto, the mouse population crashed. So, the owl population crashed. The smart rats are eating the eggs of birds, so this is a bad year for several bird species. They're competing with squirrels for acorns and winning, but they don't bury the acorns. So oak trees in the wild might go extinct. There's been a big effort to stop the rats, but they can't be caught. The old techniques of setting out traps and poison don't work. They’re sneaking into houses during daylight hours even when people are just going in and out of the house for a few seconds. They eat the food but leave no droppings. They don't make messes like normal rats. So, you don't even know you have a rat problem.”

“I never thought I'd say this, but I hope the sewer rats make a comeback,” Warren said.

“Well, I know what I'll be doing when I get back,” Priya said. “What's the expansion radius and population increase rate?”

“About 10 miles,” Jamilla said. “It’s nearly a semi logarithmic progression.”

“The population is doubling, what, every month or so?

“Almost, but that should be slowing down as they hit natural barriers like the bay, ocean or desert,” Akna said.

“Or they run into me,” Priya said. “I think I know how to stop them, but I like them. I don't want to kill them. They're so smart and

curious."

"Just like V," Raven said. "We both have to kill our babies."

"If we get a chance. Um. Look up," Priya said.

Several dozen helium filled micro dirigible style drones appeared overhead. They could stay in place for days on battery power in light winds such as there was on that warm summer day.

"Great, what do they want?" Warren said.

"They're probably going to round us up again," Pablo said.

"I'm getting reception from a national television broadcast," Raven said, watching the broadcast in her mind through her implant. "They finally have it working."

They all tuned in to watch.

"There we are," Priya said. "It's a direct video feed from those blimp drones."

"Check out that headline," Pablo said. "25,000 alien mutants escape from prison."

"I doubt many people are seeing this," Warren said. "Few households have electricity at this point. Um, unless they're solar powered, which is about 40% of all households, but most of those are set up to send power into the grid instead of keeping it for themselves."

"But people will find out soon enough," Pablo said. "They'll be after us."

Priya sent a silent message to everyone.

"Let's disperse widely, and gradually return to our homes. Take whatever mode of transportation you can. Try to fly below the radar. The government is watching us, but it's too distracted right now to round us up again. We have a small window of opportunity."

They dispersed. Priya and many of her friends eventually made it back to the San Francisco area, and their other places of residence. The drones followed them everywhere. Their every movement was

monitored by the slowly recovering national media.

One month later, Priya and Raven found ways to stop their unintended offspring. They all met at Priya's lab, which had been restored.

"I think I have it," Priya said. "We've had rat birth control hormones for a while now, but my rats avoid it. I made a few changes, and my rats love the bait."

"We better do it fast," Sophie said. "They've expanded to a 25-mile radius now. They've managed to get onto interstate trucking routes and are being reported all over the country. In small numbers right now."

"I'm glad you figured it out," Raven said. "I wish my solution for V was as humane."

"It's probably not a complete solution," Priya said. "These rats are smart, and they'll adapt. What are you doing about V?"

"Security experts have done a lot so far, but I sent them a comprehensive list of data patterns V tends to make. They look like data files and other common operating system files, but there are subtle differences. We can use these differences to remove these files. "I feel bad. V keeps contacting me and is getting less coherent all the time. It was the world's most complex life form. Now it's getting Alzheimer's-like symptoms. We're killing it."

"Not a moment too soon either," Warren said. "The economy is in ruins. People are blaming us for everything. V would have taken over this planet if we didn't stop it."

"I'm embarrassed to contact Bok," Priya said. "We ignored his warnings about self-modifying artificial intelligence and genetic manipulation."

"The Omanji ignored their own warnings, and their society was nearly destroyed seven times," Warren said. "We have nothing to be embarrassed about. We've had no armies of drones killing people like the Omanji. We got out of this trouble much easier than they did."

“Who said we’re out of it?” Priya said. “There are people out there right now, even while we were in prison, building all sorts of dangerous things. Some have selfish and malicious intent, unlike us. Some will be great inventions, and others may put an end to us. I've learned my lesson. We need to be careful when we push the limits of biology and technology.”

“What are we going to do about the more than 45 million of our children plus their families still locked up in prisons around the world?” Pablo said. “They have no rights in any country. I'm reading of widespread cases of abuse of those children. Some are even being sold into slavery and being forced to be future baby factories.”

“Even the scum of the Earth want us to reproduce,” Priya said. “they're not anti-us, they just want to make money off of us. You can't stop demand for something people want. People want smart children. Children that won't have birth defects or nasty diseases. Children that will have long lifespans.”

“The funny thing is, the scum aren't thinking of improving future society,” Warren said. “They're only thinking of themselves.”

“Every month now, 3 million of us are born,” Priya said. “They can't keep up with that. There aren't enough prisons and not enough money.”

They spent the next several months repairing the damage caused by their inventions. The US government continued to propose spending bills to incarcerate them along with the millions of genetically modified children and their families, but the government could not afford to do it because the economy was in bad shape. Other countries had similar problems when they could not afford to keep those millions of children and their families in prison. They begin letting them go. Millions of people continued to join groups dedicated to their extermination.

Chapter 88 – Weapon of Mass Destruction

On Priya's 25th birthday, the oldest of the more than 50 million new species children were now five years old. They looked younger than their age and acted older than their age. Some were prodigies. All were curious. None could speak silently because they had no implants like Priya and her friends, but they were all expected to live to be well over 200 years old and be resistant to many widespread diseases. They exhibited interest in science, music, mathematics, and other subjects. Many had the same childhood problems as average human children. Priya and her friends decided to meet some of them and their parents at a local school for new species five-year-olds, designed specifically for them.

"Hi, my name is Priya, and these are my friends Sophie, Warren, Raven, and Pablo."

"Good morning!" the children said.

"What was it like to be abducted?" a girl in the front of the class said.

"You don't waste any time, do you?" Priya said. "What's your name?"

"My name is also Priya, after you," the girl said.

"And my name is Sophie, after you," a girl in the back of the class said.

"And I'm Raven," another girl in front said.

"Me too," another Raven said.

"Can you believe this?" Priya thought silently to the others.

"Um, are there any Warrens in the class?" Warren said.

Silence.

Priya smiled at Warren.

“Of course not, why would there be?”

The kids giggled.

“To answer your question,” Priya said, “It was the scariest thing that ever happened to me, but it was also the best thing. Though I didn't know that for many months. They tried to make us be their pets, but we could only be who we are. They let us go when they got bored of us. I'm happy to be how I am today. Sometimes I wish I fit in better in society. That's the biggest problem.”

“Me too,” the little Priya said.

“Why do you say that?” Priya said.

“Some kids are abusive to me. They hit me and try to trip me. They call me a mutant. That's why I'm in this school.”

“How many of you have had similar experiences?” Priya said.

Every child raised their hand. Priya glanced over to the parents. They nodded their heads in agreement.

“I'm sorry to hear about this,” Priya said. “Same here.”

“It will be like this for most of your lives,” Sophie said. “We had problems like that in school also. We still have problems. We learned to adjust. They’re abusive because they're afraid of us. Well, that's one reason.”

“Yes,” Priya said. “I suggest we take back the word ‘mutant’ and make it our own. This takes the power out of the hands of the abusers and puts it back in your hands. Every unique person is a mutant. Hair color, skin color, and eye color are all the results of mutations. Mutations are what makes us unique. I'm proud to be a mutant!”

The kids smiled. They began talking loudly. It was hard to calm them down. Just as you would expect from a class of abnormally precocious five-year-olds.

“What is Bok like?” little Sophie said.

“He’s very smart. In some ways he's like a human. He grew up not being accepted in his society. He has things he wants to accomplish, but he's also alien to us. He was born in space to parents that are connected to 81 billion others. He has trouble breathing our

atmosphere. His life cycle is not like ours. Someday you can meet him."

"I want a career in genetic engineering," the first little Raven said. "What should I do?"

"I wasn't expecting that question from a group of five-year-olds who look like three-year-olds," Priya said. "But I should get used to it. You're the future. This advice sounds generic, but it works. Do whatever interests you. Work hard at it and you can achieve your goals."

"That's what everybody tells me," The first little Raven said.

"That's because it's true," Raven said. "I like doing what I do so much that it doesn't feel like a job."

"But your V almost ended the world," The second little Raven said.

"Energetic pretty things, aren't they?" Raven thought silently to the others.

"To put it mildly," Sophie thought.

"V did cause trouble," Raven said. "I learned an important lesson. We must be careful applying our knowledge. The more powerful the knowledge, the greater its risks and rewards."

"Can we get implants like you?" the little Sophie said.

"I don't think so," Priya said. "The Omanji possess sophisticated technology that allowed them to create those implants for us. Someday, something like that will be developed by us. Perhaps by the time you're grown up."

"I want to make implants when I grow up," the little Sophie said. "I can tell you're talking to each other in secret."

"I want one," The little Priya said.

"Me too," Both little Ravens said.

The kids talked among themselves. It became noisy in the classroom.

"Whoa," Priya thought to the others. "These kids are ahead of us

already."

Priya and her friends answered many more questions. The kids grew loud and excited.

"It sounds like you need a break," the teacher said. "Go outside for a 30-minute recess."

The kids ran out into the playground and played the usual games of third graders. On the outside, one would never guess that they were different than normal human children other than looking young for their age.

"They're like us," Priya thought to the others.

"But they're not," Sophie thought.

"Yeah, these kids are growing up modified. We grew up as regular human kids," Pablo thought.

"I wonder how this will affect the economy?" Warren thought. "These kids want to make discoveries and they want to start their own companies. They'll make great scientists."

Little Priya's parents walked up to them.

"We don't know what to do with her," little Priya's mom said. "We can't keep up."

"The best thing to do is encourage her to follow her interests," Priya said. "Child prodigies have been around for a long time and many books have been written about them. All you can do is teach her how to be a good person and guide her in the direction she wants to go. I think this goes for all children, modified or not. I have great parents. They can't teach me genetic engineering, but they taught me how to be a good person. And they love me. Don't forget that she may be a genius, but in most ways she's a normal girl."

"But she's starting to ask me questions I can't answer."

"That's OK. I didn't expect my parents to be able to answer all my questions. The important thing is you learn how to be their guide. Join support groups. There are still lots of questions you can answer and guidance you can give. She'll face a lot of prejudice. You can help her get through that."

After recess, they enjoyed an impressive violin solo by one of the Ravens. They spent the rest of the morning talking with the kids and parents. They left the school around noon on a bright sunny day.

“What do you think?” Sophie said.

“We saw the future,” Priya said. “The world will change because of these kids. There will be social upheaval, but I think over time they’ll make the world a better place.”

“I want to hire those kids to work for my company,” Raven said.

“You'll get your chance,” Warren said. “There are millions of them. I think it's around 50 million now.”

“Maybe I won't,” Raven said. “Look behind you.”

A dozen officers blocked their exit from the school grounds.

“Are you Raven Corbeau?” the first officer said.

“Yes.”

“You've been served. Unusual double name.”

“Oh, you’re French?” Raven said.

The officers walked away with no comment.

Raven opened the envelope and read it.

“What does it say?” Pablo said.

“It's a class-action lawsuit against me.”

“Who is suing you.”

“The government of the United States.”

“For how much?”

“$450 billion because of the damage caused by V. That has to be a typo.”

They all took a closer look at the paper.

“... in the sum of $450,000,000,000 payable to the treasury of United States.”

“This is a joke, right?” Raven said.

“It looks legit,” Pablo said.

“How can that be?” Raven said.

Warren took the paper and read it completely.

“I see how they got that number. When you add up all the time spent reformatting computers, deleting files, and changing the way the Internet works, government losses might add up to that amount. Over those few months, billions of people were affected around the world. Over 400 million were affected in the United States. That means you have to pay each person in this country over $1000. That's not much.”

“But I'm not the one who caused V to escape,” Raven said.

“That's why we have the court system, to sort all this out,” Pablo said, and smiled. “I'll represent you. Unless of course you want to settle for that amount now.”

“No!”

“OK then, I'll represent you.”

“Great,” Warren said. “Maybe Pablo can knock $50 billion off that.”

Raven sat on the grass and cupped her hands over her head.

“Thanks a lot Warren.”

“I'm just kidding, I’ll support you too. My companies are making too much money already since they took the lien off of my bank accounts and the stock market has recovered.”

Raven got up and gave Warren a long hug.

“OK, that's long enough,” Priya said.

They smiled as they walked up the street to have some coffee drinks at Raven’s JavaNation.

They spent much of the next three months preparing for the case. During the trial, the government presented evidence indicating the US gross domestic product for the fiscal year had dropped by over $4

trillion as a direct result of V. This includes the loss of all goods and services and employee time. That amount represented 30% of total worldwide losses. The $450 billion indicated in the lawsuit was an effort for the government to recoup its losses.

The government argued that Raven had produced a weapon of mass destruction by creating V. Then she did not secure it carefully enough. That put the world at risk.

Pablo argued that Raven had not acted out of malice and did not intentionally do harm. She did not violate any laws in existence at the time. Also, law breakers allowed V to escape, through no fault of Raven.

Although Raven was not found guilty, she was ordered to pay $20 billion in restitution to people who were in the process of receiving medical treatment such as operations when V infiltrated the computer systems. She sold a 20% stake in her company, JavaNation, to pay the damages. This settlement eliminated the need for numerous people to sue Raven individually for damages.

Governments around the world created laws limiting artificially intelligent algorithms to specific and clearly defined purposes.

Priya’s rats caused a series of economically and ecologically expensive problems around the world. In response, another set of laws was created to limit genetic manipulation with the intention of creating new organisms without specific and clearly determined purposes for those organisms. The similarity of both laws was not an accident. Both artificially intelligent organisms and enhanced or new biologic organisms both have the capability to cause widespread damage unless they're confined to specific purposes.

Chapter 89 – Satan's Work

A week after Priya's 26th birthday, she and her friends gathered around a video monitor in Priya's lab to watch the US Supreme Court decide on a case that would determine whether the 25 million new species people in the US (out of 70 million in the world), have the same rights as native humans.

The native humanist movement came about as a way of differentiating people with original human DNA versus those with modified DNA. Many native humanist supporters believed that original human DNA was code directly written by God less than 10,000 years ago. Therefore, any being with alternative DNA could not be human and should not be given the rights of humans.

"What do you think it means to be human?" Sophie said.

"Ask the 9 plus billion humans on this planet, and you'll get 9 billion answers," Priya said. "That's the lunacy of the native humanist movement. Each person has significant differences in their genomes. It's not like some super powerful God hard-coded the DNA of every person on this planet. God would have to do that on every conception. Yeah, they'll say God allowed an insignificant variation, but there's no data supporting any of this. Still, about 30% of the US population think humans were created in their current form less than 10,000 years ago. That number has only dropped about 10% since 2000. Another 30% are unsure. At least the percentage that accepts natural evolution on a 4.5-billion-year-old Earth has risen from 8% in 2000 to about 40% today."

"True, but that's the technical argument. What about the human argument? Do we feel the same as humans feel?" Sophie said.

"I think so. I feel happy on some days and depressed on other days. I get angry, sad and have the full range of human emotions. I do

think I feel them less strongly than the average human though. When old species people describe how they feel about different topics, I don't find myself feeling as strongly about them as they do. Mom notices that too. I'm more of a logical person than average, or I'm emotionally evenly balanced."

"Same here," Warren said. "People get excited about sports teams. Their emotions go up and down with the fortunes of the team. I like sports as much as the next guy, but I don't feel that rush of adrenaline, or whatever it is they get when they watch sports."

"Typical guy response," Priya said. "What about how you feel about other people? Do you feel strongly for or against them?"

"Sure, I can feel strongly about people, but I don't know if I could fall madly in love. You have to put someone on a pedestal and idealize them in order to fall in love. You have to be mad. You have to feel anxiety and tension and a full range of other emotions to be in love. That's not me."

"Typical male response," Priya said and smiled. "Don't you think Sophie?"

"Oh yes. He's human. We should've used him in this Supreme Court case to prove we're human. Also, I've seen you get anxious. Around certain people."

They laughed. Warren tried to smile.

"I think we're humans with a few improvements," Pablo said. "Legally, human rights were given only to members of the old human species because they were considered the highest life form, the most sentient. In other words, humans have the most rights because they're the most advanced species."

"But that doesn't apply in our case," Priya said. "We're at least as sentient, if not more so than the average human. We're not a lesser species. If anything, according to that paradigm, we should be getting more rights than humans."

"Tell that to the native humanists who think they were created in the image of God," Pablo said. "You can't get more perfect than that. They don't think we should have the 'God-given rights' that original

humans have. Some of them think we're like biological androids. Like we're an artificial life form. God didn't create us."

"Over 99.8% of our genome is untouched," Priya said.

"Yeah, but that 0.2% are in crucial areas for intellectual development," Sophie said. "You have to admit we have an edge."

"We have a small edge, but we still have human feelings," Priya said.

"It's a big edge," Warren said. "We can do things most average people can't do. We still have our human faults, but most of us are a prodigy at something. Some of us are prodigies at many things. We have emotional intelligence too. Also, most of us don't buy into pseudoscience or urban legends as easily as regular people. We don't rush to judgment based on little or no valid information. We don't fall prey to hoaxes. And we're more compassionate to all people compared to old species humans. Pree, when we were in danger, you could have killed specific groups of humans in the hundreds of millions with your organisms, based on their genetic characteristics, but instead, we went underground for seven months with no hope of ever coming out again. Fortunately for us, V exploded at the right time. We were within our rights to defend ourselves. It could've been genocide."

"It could still happen if we don't get our rights back," Priya said. "70 million sounds like a vast number, but it's still a small minority. That's less than 0.8% of the global population but look at the numbers. All we have to do is wait. 60% of all babies born each month have our DNA. That percentage is rising slightly every month. People want us as children for their own families even if they don't want us as adults in society. Eventually we'll be the majority, so we just need to survive until then."

"Ugh," Priya said as she watched the news monitor. "Survival won't be easy. We just lost the case."

"Yeah, by a 7-4 margin," Pablo said. "They keep stacking the court with native humanists, so we never had a chance. Even if they didn't force-add those extra two justices, we still would have lost 5-4."

"We need to get our people on the Supreme Court," Sophie said. "Since justices have unlimited terms, our people could serve for over

100 years, even 200. Pablo?"

Don't look at me. But yeah, just by our long lifespans, we would always have a majority. Of course, before that could ever happen, they would impose some sort of a handicapping rule against us to erase that advantage."

"We lost," Priya said. "We're not human. What does this mean for us?"

Pablo shook his head.

"It means they can do anything to us. Hate groups can protest and destroy our buildings and only get a scolding. Even though there are laws against that, the police won't strongly enforce it. They could put us back in the salt mine again. Take away our voting rights. Kill us. Who knows?"

"I'm thinking of those kids we saw," Priya said. "They have no rights. It will be a long struggle for them."

"And for us too," Sophie said. "If we live to our life expectancy, we still have over 270 more years to go."

"Yes," Priya said. "But fortunately, in about 90 years, at the rate the births are going today, we'll be in the majority. Let's figure out a strategy to survive until then."

"We're running out the clock," Warren said.

"What do you mean?" Sophie said.

"It's like in sports when you have the advantage, so you slow down the game and let the clock run out in order to survive and win."

"Yeah, something like that," Priya said. "The problem is the team with the disadvantage usually gets desperate and tries all sorts of crazy things to win. Only occasionally do they win."

"This is simple arithmetic," Sophie said. "Everyone knows we'll become the majority if things continue as they are. They're going to try something desperate."

"They did already," Priya said. "Fortunately, there aren't enough prisons and money to keep us all locked up. Though there are salt mines."

“I mean something more desperate than that,” Sophie said. “Check out this article I read this morning. I found it on a native humanist website.”

Sophie put the article on the video screen for them to read.

“Why are you reading this bologna?” Warren said.

“You know what they say. Keep your friends close and your enemies closer,” Sophie said.

“Isn't that quote from that ancient Chinese general? Or was it Machiavelli?” Pablo said.

“No,” Sophie said. “It’s from the old movie, ‘The Godfather.’ Regardless, we all need to study and understand what our enemies are doing. That's what Sun-tzu, Machiavelli, Kabirdas, and others observed.”

“Look what the article says,” Priya said. “We were created in God’s image. Therefore, anyone altering our DNA is trying to be above God and was driven to act by Satan himself. We cannot allow anyone to think they're above God's law.”

“What about correcting birth defects? Does God want them? Are they saying the Omanji were driven to act by Satan?” Warren said.

“Yes,” Priya said. “The same goes for parents who have new species children. Look here where it says Satan must be resisted and rebuked with every ounce of our being. And here, where it says mutants are the result of the devil’s work.”

“It gets worse,” Pablo said. “Further down, it says we must erase Satan’s work from this world. If we don't, we’re colluding with Satan. Then it says those who collude with the devil, are going to hell for eternity.”

They eventually finished reading the 10-page article. They found many others like it.

“People take this stuff seriously. They really think God wants us dead,” Priya said.

“And it's their duty to make us dead, or else they will be punished by God,” Raven said. “How can the human mind get so twisted? These

are otherwise intelligent people I would assume."

"I don't know, but we need to do something about this," Priya said. "A deluded human is, well you know."

"There are laws against killing people," Sophie said. "These aren't the dark ages, but on second thought."

"Yeah, exactly," Pablo said. "Fortunately, there are laws on the books regarding animal torture and abuse. We're at least animals."

"I don't think it will be clear cut," Priya said. "Some of these people are crazy. We need to have bodyguards and more physical security where we live and work."

"That won't help us against Supreme Court decisions," Pablo said.

"True," Priya said. "We need to do other things to defend ourselves legally. That's your job."

"The good news is, the families of our children will be more likely to vote in favor of our rights," Pablo said "You know how it is when an anti-gay family has a gay child? Sometimes that makes them change their minds."

"True," Priya said. "That should shorten the amount of time before we get our rights. More of us are born every day."

They walked out onto the fifth-floor balcony with a view overlooking the park across the street. Hundreds of protesters walked about, holding signs urging people to remove Satan's work from the face of the Earth.

"There's our enemy," Raven said.

"Yeah," Priya said. "Ignorance."

Chapter 90 – The Rights of the Few

Over the next several months, protests for and against Priya and her species intensified. This was especially true at college campuses around the world with ground zero being across the street from Priya's lab at Arboretum Grove in Palo Alto.

"They're throwing Molotov cocktails again, "Priya said.

"Some things never change," Sophie said. "Most of them are the same people who break windows after their local sports team wins the championship. The rent-a-mob. They're out there to cause trouble. Yeah, I see legitimate protesters out there too, on both sides."

"I hoped my economic plan to help displaced workers would calm the situation," Warren said. "Even the US Congress and Senate approved it."

"It helped, but this isn't a logical subject," Raven said. "This is fueled by emotions. When you read their signs, you'd think the entire world is falling apart."

"For many people it is falling apart," Priya said. "The good old days were never that good, but they're never coming back. It's been like that for 250 years, but especially now."

"Now they're firing teargas," Raven said. "I feel I'm the cause of this."

'We're all responsible in a way," Sophie said. "But we didn't cause this. It was happening before we got abducted. The Omanji modified our DNA. Then humans stole our DNA and made babies with it, there was no turning back. Millions of people want our babies. It's like that with many species. When a desirable genetic change shows up, it usually wins."

"Human extinction was inevitable anyway," Priya said. "People have been making changes to our DNA for a few decades now. Yeah, not as dramatically as the Omanji did. First people got to choose the sex of their baby. Then they were able to screen for and later eliminate

various birth defects. Then we improved our immune system. Then we eliminated some genetically predisposed diseases. We reduced our cancer rates. We've made hundreds of small improvements to our genome. Eventually we would have figured out how to make our life spans increase and how to become more intelligent and talented."

"People need to learn to embrace change," Raven said. "It's a change for the good. Just think of all the wars and genocides that happened because of ignorance and greed. We're not perfect, but odds are, the world will tend to be a more peaceful and enlightened place because of the improvements to our genome."

"Human beings have been sick and tired of human behavior for as long as people have been able to write," Priya said. "People should be happy that so many negative human traits have been edited out of our DNA. At least partially."

People began throwing rocks at the riot police. They responded with more teargas.

"They don't look happy," Warren said. "We're being too idealistic about this. Do you think once our species takes over, the world will be a better place?"

"I'd like to think so," Priya said. "We consider more information before coming to conclusions compared to the average old species person. We're still mostly human though. I bet we'll have our problems. Remember when Gul destroyed his new breakaway Omanji colony because of arrogance and being too smart for his own good? We may have Guls in our future. Imagine what a super smart person with deluded or bad intent could do to the world."

"Or by accident," Raven said.

"We'll have to become more connected, like the Omanji," Priya said.

"We're already connected," Raven said.

"I mean the new species kids," Priya said. "There are now 65 million of them and they have no implants. Wait till they start programming."

"Or doing genetic engineering," Sophie said. "We only have a few

years before they start changing the world."

"The laws are way behind the times, even if we didn't exist," Pablo said. "Technology has been ahead of the law for a few decades now."

"Now my heart is racing," Sophie said. "What will these kids do?"

"The same thing we were doing," Priya said.

"But it's like you said. What if a few of them are genetic engineering prodigy psychopaths?" Sophie said. "How can you stop someone from tinkering around with hazardous technology in their garage? How will we know ahead of time, the difference between a brilliant invention and a potential extinction event?"

"We already have laws against people making nuclear weapons in their basement," Pablo said. "We'll have to extend those laws to other possible scenarios."

"But it's hard to hide physical nuclear weapon development in your house," Sophie said. "Priya and I work with tiny amounts of compounds in a small lab. The chemicals we use are mostly harmless and available anywhere. It's the knowledge we have that could be dangerous. How can you control knowledge?"

"The Omanji did it by connecting everyone," Priya said.

"But that goes against our individual freedoms," Warren said. "Bok rebelled for that reason."

"Yeah, but then he connected everyone in his new colony anyway," Priya said.

"But in a more open way compared to the elders," Sophie said. "Bok and everyone in his colony still have individuality."

"We need to talk to Bok about this," Sophie said.

Several hours later, Priya and her friends got together in her lab and contacted Bok.

"I'm so glad you want to talk to us," Priya said. "You've stayed

away from us for a while now."

"Yes, we're isolating ourselves so your species can evolve on its own. We've already done enough damage. Even us being on this planet causes damage. We're evaluating other places to go. Somewhere outside of this solar system. Soon, you'll be inhabiting nearby planets. We want to give you space. However, habitable planets are exceedingly rare. Even though a billion Earth-like planets in our galaxy can support life, only a small fraction of those have the proper requirements for us to live comfortably. We may go back to Oma. There is a small part of the planet that is habitable, but there are almost 100 million who remained behind. They're unconnected and dangerous. Plus, we're trying to avoid the Singleton."

"Oh yeah, what's the latest on that?" Priya said.

"They have 50 small drone-like devices near Earth at a Lagrangian point and several dozen others in other nearby locations including the Moon. They're monitoring us right now. We're hoping if we ignore them, we won't trigger some harmful event."

"Like what?" Sophie said.

"They could unpack and build an entire new singleton on Earth or any nearby planet if the drones were given the capability. That's only a small probability because a singleton on Earth could be in competition with the original Singleton. The drones could contact the Singleton with a 558-year delay. That may trigger a response in 1,116 years at the minimum."

"I agree. Don't cause trouble." Priya said.

"What about my robot that almost became a singleton?" Raven said. "I wonder if the Singleton noticed."

"It noticed. We watched that situation closely," Bok said. "Your emergent singleton never became dangerous enough for us to take action, but I hope you learned a lesson."

"Yes," Raven said. "We've been studying your experiences and we'll try not to make the same mistakes. No more creating AI that can get out of the box. Though individual people may try."

"Or biologic lifeforms that could escape either," Priya said. "We're

still having problems with those rats. We almost had them down to zero, but they keep coming back."

"The biggest problem will come from misbehaving individuals and groups in your two human species," Bok said.

"Yes," Priya said. "It will be difficult to get everyone to connect with each other. As you know, we value our individuality."

"You must balance freedom and individuality with the needs and protection of the many. I'm still fine-tuning that within my colony."

"How do we get people connected when we don't have implants," Priya said.

"Your development is unbalanced at this point. On Oma, we developed techniques for genetic manipulation at the same time we developed techniques for implants and other monitoring and communications. So, they all became effective at the same time. In your case, your new species genetic evolution is ahead of your technological development. That's our fault. We shouldn't have changed your genetics so significantly, but now you have a problem because dangerous technologies could be developed without a means to manage them in society. Even the old species humans are to the point of developing extinction-level technology."

"What can we do?" Priya said.

"You need to educate the children while they're young to behave cooperatively. You need to change human sensibilities so everyone can live in the new society that will evolve quickly in the next 20 or 30 years. It will be a more severe change than when humans shifted from an agricultural and religious society to an industrial and less religious society."

"That took 200 years," Warren said. "This is starting now, and it won't take long. I don't know how we can adapt that quickly. We're still having trouble adapting to an urban society."

"Some of this change will be natural for your new species children," Bok said. "It's been difficult for old species humans to adapt because they remained genetically the same, while conditions changed. These new species children are genetically distinct from their parents.

They'll have different interests and varying ways of interacting with each other. The old species will have more difficulty adapting to the changing environment and sensibilities."

"We're looking out the window at protests right now," Pablo said. "People are having trouble adapting and not much has changed yet. I can't imagine how it will be when things really change."

"We can assist in non-disruptive ways," Bok said. "We've already disabled all nuclear weapons and potential nuclear weapons we discover. We can assist in discovering research work that could lead to extinction level events or mass destruction. I don't think we can catch them all. You'll have to begin work right now to lessen the chances."

"We've already done research that almost led to mass destruction," Raven said. "Accidentally of course."

"Yes," Bok said. "If your information and robotics technologies were more advanced, a developing singleton might have been unstoppable. Your singleton didn't have the resources available to subsume this planet."

"So that was just a practice run?" Raven said.

"Yes, a taste of things to come as humans say," Bok said. "Learn from it or you'll suffer the same fate as us. Or the fate of those dead planets."

"Yeah, six dark ages over tens of thousands of years doesn't sound appealing to me," Priya said. "That reminds me, do you still communicate with Zon and other Omanji? Are they still going to Gliese 581 g?"

"Yes. And it's getting more difficult to communicate with them every day. They're accelerating to near the speed of light from our perspective over the next 10 to 20 years. If I were to send them a message right now, I would have to wait two years for a reply. A year from now, I'll have to wait about 4 years for a reply. That gap will increase as they get further away and their speed away from Earth increases. Gliese 581 g is larger than Earth and orbits a star smaller than the sun. However, it's not completely in tidal lock as we first thought. It's like Oma, but with a more favorable ocean to continent configuration. It's about 20 light years away. We detect no

technological life forms but many less evolved species."

"Will you ever see them again?" Priya said.

"I don't know. We've considered rejoining them, but our differences were too great even while here on Earth. We would have the same problems if we joined them again. Eventually we'll become a distinct species from them as we evolve in separate ways."

"You said you were thinking of leaving Earth. Where would you go?" Priya said.

"We haven't decided but there are a few candidates. We'll let you know if we decide anything. We should never have come to Earth. We didn't consider the human species to be advanced enough to merit consideration."

"Thanks for saying that," Priya said. "Sometimes the human species doesn't get along very well, but we were making progress until you came. Now everything is messed up, but this would have happened eventually. For me personally, I'm glad to be who I am now. I can't imagine going back to who I was."

"Me too," Raven said.

Warren and Pablo agreed.

"I'm glad to know you Bok," Priya said. "My mom feels the same way. Many good things have come from your arrival."

"Thanks. I've learned a lot from humans. The most important thing is to value my individuality. It's hard to balance the rights of the individual with the rights of a society in a high technology environment. The Omanji went too far in the direction of protecting society at the expense of the individual. To put it in human terms, their motto is to be better safe than sorry."

"You speak of the Omanji as though it's another species," Priya said.

"I feel like I'm a member of a distinct species from them. I'm sure you know the feeling."

"I do," Priya said.

"I need to go now," Bok said. We'll continue this discussion

later."

"Definitely."

They disconnected.

Priya and the other 25,000 members of her species began work to instruct teachers and family members of the modified children on how to raise them to live in a highly cooperative and interactive society. The social engineering of a new species began.

Chapter 91 – The Long Game

Priya celebrated her 27th birthday with her family and friends at her new house in the Santa Cruz mountains.

“I can't believe it's been 11 years since we were abducted,” Priya said.

“It feels like 100 years to me,” Nisha said. “So much has happened, but there hasn't been as much work for astrobiologists since they arrived. The sense of adventure in the profession has worn off. I used to be the center of attention. Now you guys are. You've been so busy that for you, time has flown by. For me, I've watched things happen from afar and it seems like forever since they took you from us.”

Tears ran down her cheek.

“Sorry, I can't help myself.”

Quinn held her.

“It's okay Mom. I’m still here. Getting abducted was the best thing that ever happened to me. Well, not the actual abduction. And um, not the part about people wanting to kill me. I'm happy with who I am today.”

Priya put her arm around Nisha.

“Things will be better, you'll see.”

“I just want things to be calm,” Nisha said. “I want peace. Everything is out of control.”

“Yeah, will the protests near your office stop?” Quinn said.

“I don't think they will. The old species won't go down without a fight.”

“You're human,” Quinn said.

“I think the parents and family members of the new species realize there's not much difference, yet there is,” Priya said. “It's enough. You see me as someone who's good at genetic engineering, but I'm still your daughter. To people who don't have one of us in their family, we’re the enemy. They think there's no advantage to us existing. There is but they don't know it yet.”

“I've read papers about the new species kids,” Amy said. “Is it true they're as smart as you guys?”

“The kids we met are precocious,” Priya said. “Most of them score high on a wide range of intelligence tests. Especially when you include things like music, science, or emotional intelligence. They’re smart, but different than us.”

“They ask lots of questions,” Sophie said.

“Yeah, they'll be good programmers,” Raven said.

“Are they all like that?” Amy said.

“Not all of them,” Priya said. “They seem like normal kids other than each has a few things they're good at, but they're not good at everything. In the class of 25 we saw recently, there were about 5 prodigies. That’s much more common than less than one in a million in the noMod population. One was outstanding at chess. A few were musical and mathematics prodigies. Most of the other kids were simply curious about everything. They were only five years old but all of them could read and write complex sentences. They ask questions that fourth or fifth graders would ask. They all seemed socially adapted. They got along with each other. I think society will be better when the kids become adults.”

“Are they developing physically as well as they are mentally?” Amy said.

“No, they look like four-year-olds,” Priya said. “They're small for their age. It's strange to see kids look young but act so old.”

“They’re not perfect, but they seem normal and well adapted,” Sophie said. “If you had never seen an old species five-year-old, you wouldn't think these kids were unusual.”

“They're developing slowly like we are,” Priya said. “I'm 27 but

I'm still not ready to date anyone yet."

"Um, me neither," Warren said.

"Yeah, right." Sophie said.

They laughed.

"I wonder if I'll ever be a grandmother," Nisha said.

"Don't look at me," Sanjay said. "I don't want kids. They're too much trouble."

"Maybe someday Mom," Priya said. "We'll see."

"Can I prick your finger," Nisha said. "That's one way I can become a grandmother. It won't hurt a bit."

"Don't even think about it!" Priya said.

Nisha smiled at Quinn.

"This young generation, I don't understand them. They're going to wait till they're 50 to have kids."

"No Mom, 60. I don't want to rush it."

"What's the age range you can have kids?" Quinn said.

"From the research we've done, it's somewhere between 30 and 70," Priya said. "The Mod kids will likely have kids starting at 40 until about 100."

Quinn raised one eyebrow.

"I know, it's hard to believe but it's true," Priya said. "Those of us who were abducted at older ages have already had kids. They didn't revert back, maturity-wise, like I did."

"That means we may live 200 years after having kids," Raven said.

"Those will be our retirement years," Sophie said. "The kids will be out of the nest."

"The good news is, Social Security will have no problem being funded for a while," Warren said. "All the taxes these kids will be paying won't be used by them for over 200 years. Or never. We'll have 200 years to save for retirement. These kids will never want to retire. I

know I won't."

"Me too," Priya said. "I like discovering things. That's my hobby. I want to do my hobby as long as I live."

Sophie and Raven nodded their heads.

"Me too," Amy said. "Now that I have my mathematics PhD, I want to use it."

"I feel the same way," Nisha said. "But I'll probably retire in 15 years when I'm 75."

"Yeah, then she'll have nothing better to do than to bug you to have kids," Quinn said.

They laughed.

"Hmm, well maybe I'll have a kid when you're 80. I do want you to have grandkids."

"80?"

"Mom! I'll only be 46. That's too young to have kids."

"Warren, you're being awfully quiet," Sophie said.

Warren smiled.

"I have no comment."

"Smart guy," Pablo said. "You don't have to say anything."

"Spoken like a true lawyer," Sophie said.

"Regardless of generation or species, women still rule." Nisha said.

They gave each other high fives.

Warren looked intently into Priya's eyes.

"Will you marry me?"

"Um, what?" Priya said. "You? I'm not ready."

Pablo gave Warren a high-five. Priya shook her head.

"I knew you were kidding."

"Men still rule." Pablo said.

“Pablo, what do you think about the latest Supreme Court decision about your rights,” Nisha said. “You can't vote. They're trying to get your childbearing rights revoked again. You can't run for public office. It's all been stripped away.”

“It's depressing. It'll take a long time for us to gain our rights. I knew we'd lose. There are seven native humanists on the Supreme Court out of 11 justices. President Varder is also one. The majority of both houses of Congress are native humanists. They’ll always side in favor of what they call the ‘real’ human species. The only way we’ll get our rights back, is for the new species to outnumber the old species.”

“How long will that take?”

“Let’s see,” Priya said. “Before we were abducted, about 12 million babies were born each month in the world. That rate has been flat for decades. Now, about 3 million new species babies and 9 million old species babies are born each month. Most are illegal, but who can stop it? Especially when government officials have new species babies. A year ago, it was 2 million versus 10 million births per year. It's hard to extrapolate, but if you assume this trend continues, in 4 to 8 years, an equal number of new species and old species babies will be born. 20 years after that, those babies will be voting hopefully in at least equal numbers. In about 30-50 years after that, there will be more new species humans in the world than old species. In about 60 to 90 years, we'll be able to overturn the Supreme Court and both houses of Congress. It will be like that in most other countries too. A tipping point might happen earlier. Sometimes a movement won't budge and then suddenly resistance collapses.”

“That's a long time for me, but not for you,” Nisha said.

“Yeah, we'll have to wait them out. We just need to survive until then,” Priya said.

“The problem is, they're getting more desperate because they understand this trend.”

“Now there are 95 million new species kids,” Sophie said. “What can they do about that? They already tried to spay and neuter us like dogs. Then they tried to lock us away forever. What else can they do?”

“There is one other thing,” Nisha said. “They almost did it last time, but you were saved by the chaos and depression caused by V.”

“Exterminate us?” Priya said.

“Yes.”

“In most countries including the US, they have the votes to do it,” Pablo said. “We've been monitoring the houses of Congress and other places and there's been a lot of talk.”

“The protesters talk about it too,” Priya said.

“They may try again,” Pablo said.

“This time we may not escape,” Warren said.

“They only rounded up the 25,000 of us in this country,” Priya said.

“Yeah, but they rounded up millions of new species children in some other countries,” Pablo said. “Thousands of children were killed.”

“But now they would have to kill 95 million new species children and possibly their families too,” Sophie said. “That's impossible. Especially when that number goes up by 3 million per month.”

“People can be creative when they feel threatened or want to gain power,” Priya said. “The old species has a solid record of massacres and genocides. Why not make it one more? They could legitimate our genocide to future generations as being in self-defense to preserve humanity.”

“What could we do in our own self defense?” Sophie said. “We've tried different things, and nothing permanently works.”

“We could set loose another V,” Raven said.

“Haven't you learned anything?” Priya said.

“I know. I'm just kidding. We would at least survive to watch the Earth get resurfaced. But seriously, we need to do something that will be effective. They could have killed us down in that salt mine. Who would even know?”

“I think we have two choices,” Priya said. “We could develop

systems to physically defend ourselves from attack. Or we could distribute our wealth as we get it and buy their favor. We've done some of that, but if we did a lot more, it may pacify them. Then they won't be so angry and fearful."

"Let's do some experiments," Sophie said. "We can start with those protesters across the street. They're the most agitated and violent. They would make excellent test subjects. They've been shipped in from all over the world to protest us."

"Buy them out?" Warren said.

"Why not?" Priya said.

"They may take the money and run," Warren said. "Still, it's worth considering."

They spent the rest of the day talking while looking out over the timeless Santa Cruz mountains as the summer ocean fog flowed through the valleys like a soft river. Nisha, Quinn, and Sanjay decided to stay a few at weeks Priya's house to enjoy the beaches and city. The next day, Priya and her friends met at Priya's lab to discuss their plans. Amy considered working for Raven, so she came along.

"The crowds are getting bigger," Amy said. "They've doubled in the past month."

"And they're more aggressive too," Sophie said.

"I think they're getting funding from the native humanists," Warren said.

"What should we do?" Pablo said. "They have the law on their side."

"We need to meet with their leaders," Priya said.

"They say they don't have leaders," Pablo said.

"They may say that, but every crowd has leaders," Priya said.

They walked across the street and blended in with the crowd. Nobody noticed them as one speaker railed against the new species.

“We need to do something. It's now or never,” the speaker said. “If we wait, our species will go extinct, and the mutants will take over. We’ll be enslaved and treated like animals. Like animals. We'll be put onto reservations in the desert. They're evil and disgusting. They’re unnatural. Evil. They’re an abomination against God. An abomination.”

The crowd roared their approval.

“Yes. I hear you,” the speaker said. “Their numbers are growing by the minute. By the second. Every month, millions of them are born. Millions. They're spreading like locusts. The families raising them are no better than cockroaches. They’re our enemies too. They're traitors to our human race. We need to get rid of all of them. The kids, the families, every one of them. Before it's too late.”

“This speaker has a third-grade education,” Sophie said. “He keeps repeating himself. That works on the gullible.”

“Almost half the old species population likes this kind of base rhetoric,” Priya said. “It's an appeal to emotion and ignorance. I’m going to talk to him right now.”

“Don't.” Sophie said. “He and his thuggy posse will try to kill you.”

“We have to do something,” Priya said. “Their strength is growing by the day.”

“Let's wait and figure out what to do,” Sophie said. “This is too dangerous.”

They spent the next few hours listening to several long angry speeches. Then they walked back to Priya's lab. After several attempts to contact the speaker the following day, they finally reached him and he invited them on his podcast called “Saving the World for God.”

Hi Priya, “Welcome to the show.”

“Hi Sean, thanks for having us,” Priya said.

“This is a waste of time, but I want everyone to hear evil.”

“You think I’m evil? Why?” Priya's said.

“Because I'm talking to the devil. I'm have you here to find out what you want. I want you guys to leave the Earth for good. Why don't you leave with your bug eyed cham-aliens?”

“Why do you think I'm the devil? I'm doing things to help people. I'm a good person.”

“That's what Satan would say. He does this to test us. He offers us pleasures and then later we’ll go to hell for accepting them. Satan brought those aliens here to tempt us with their technology. They did the devil's work. You're Satan's evil child.”

“Don't I look like a normal young woman?” Priya said.

“Yes. You’re physically cute. That's what Satan wants us to believe. He takes the form of a beautiful and harmless looking young woman to tempt us. You're a temptress.”

“Forget this religious superstition. Not everyone in your audience is religious. Why are you afraid of us? We've done you no harm. We wish to make the world a better place for everyone.”

“Your goal is to make the God-created human species extinct. I don't have to believe in Satan or religion to see the writing on the wall. It's happening every day. The conclusion is inevitable unless we do something to stop you and your kind from taking over the world.”

“What can I do to convince you we mean no harm?” Priya said.

“Stop reproducing. You’re flooding the Earth like vermin.”

“How can I do that? I can't control what other people do.”

“Speak to them telepathically and tell them to stop. We know your powers.”

“Powers? I'm not some superhero from a fantasy novel.”

“We know what you can do. You can talk without speaking.”

“That's only because of our implants. The children being born now have no implants. They’re normal human beings.”

“They're not normal either. They’re mutants. They have unnatural abilities. They want to take over the world.”

“Honestly, I can't control anyone. I can only talk silently to the other 25,000 of us who have the implants. We're a small minority.”

“No. 95 million around the world is not a small minority. It's 1% of the world population. That number is rising every day. It will be more than 50% in 40 or 50 years. Stop this now and leave this planet.”

“I can't stop them. I don't have control over them.”

“I've heard what you can do. You can stop them if you want, but you won't.”

“Don't we have the right to live a normal life just like you?” Priya said.

“You have no rights. You're not human. The Bill of Rights is for humans, not you. The Supreme Court, Congress, and the President agree with me.”

“Look at me. Stop turning away. Look closely at my face. I'm human just like you. You have nothing to worry about. Can't you see that?”

“That's how Satan operates. With temptation, but I'm strong and I won't succumb to evil. You will die. I'm ending this conversation now. There’s nothing to discuss.”

He disconnected Priya and continued his podcast, painting Priya and the new species kids in the worst light.

“That guy’s a nut,” Warren said.

“This is what we're up against,” Priya said. “He's right. I want guys like that to go extinct.”

“You know you can't reason with a deluded mind,” Sophie said. “Giving them more information has no effect. Why bother?”

“I wanted to see whether this was a religious thing or something else.”

“It's a mix,” Raven said. “He mentioned Satan, but he understands the trend. The trend favors us, but short-term, it also favors the desire in people like him to get rid of us and the new species kids.”

“He's right about one thing,” Amy said. “Your species will make the old species go extinct.”

“I guess so, but people like him have the weapons,” Priya said.

“This could get more dangerous. I wish Bok would help us,” Sophie said.

“I think he wants nature to take its course,” Priya said. “Yeah, I'm sure the Omanji knew our genes would escape into the general population, and cause a mass-extinction. We’re on our own now. Let's talk more about this tomorrow.”

Priya returned to her house to have dinner with her family. She told them what happened that day.

“What do you guys think?” Priya said. “I don't know what to do.”

“In my profession, I see how species compete in nature,” Nisha said. “The strongest and most resourceful species usually wins. This situation is no different.”

“You make it sound so dry and scientific.”

“Humans are not above the laws of nature. That may sound unsentimental, but it's a fact. There's no easily projected winner. The old species is militarily stronger, and the new species is more resourceful. The combination of those and other variables will tip the balance either way.”

“You're always trying to make everything into an equation,” Quinn said. “What about the human element?”

“When it comes down to a battle for survival, I think the human element will be far down the list of important considerations. That guy Pree spoke to today is a concrete-thinker. He has a winner take all mentality. In his mind, the old species must reestablish dominance. There is no room for any other competing species.”

“It sounds like we’re nothing but animals,” Sanjay said.

“That's what we are,” Nisha said. “Humans are smart animals. We’re subject to the same laws of nature as any other species.”

“What should I do,” Priya said.

“This is a long game,” Nisha said. “The next 50 years are critical, but the game will only be over when the last old species or new species human dies or is no longer relevant.”

“We’ll be extinct,” Sanjay said.

“Would that be such a terrible thing?” Nisha said. “Was it a terrible thing that the Neanderthals went extinct?”

“No, because we’re here now,” Sanjay said.

“Right,” Nisha said. “Many Europeans are two or three percent Neanderthal. They live on in hundreds of millions of people. If humans did not emerge victorious and survive over Neanderthals, there would likely be no advanced society here on Earth at the present time. Neanderthals had more muscle than humans and needed more calories. They could not compete in lean times. Even though I’m old species, I wouldn’t be upset about our extinction if it led to better things. I’ll be dead anyway. Sometimes I think half the population is crazy. They believe in unproven things and deny reality. They make laws from unproven beliefs. I'd like to see that bred out of us.”

“Sean the crazy speaker today disagrees,” Priya said.

“That's where survival of the fittest comes in. This is a battle between his ideas and yours. You currently have the intellectual edge, but he has the military edge.”

“The guys with the guns always win,” Priya said.

“Not always in this hi-tech era. Innovative ideas have a way of sneaking in to make the difference. You may lose battles, but your ideas may win the war.”

“I need an innovative idea.”

“Or 10.” Nisha said.

Chapter 92 – Biologic Warfare

The next day the protests grew larger. Priya could see them across the street as she arrived at her office at 5 a.m. She received an alert from her company's newly patented VectorDetect system.

"Warning: Unidentified genetically engineered airborne variant of the Marburg virus has been detected entering air intake vents in several locations in this building. Vents are closed. Air intake is terminated. Vector isolation and analysis is in progress. All employees must stay away from this facility until further notice. Employees in the building must go to the isolation room at once. Small numbers of viral particles may have entered the building. Interior scanning is in process. End of transmission."

Priya silently contacted Sophie who was heading to work.

"This week isn't getting off to a good start. You saw the message, right?"

"Yeah," Sophie said. "This is not a common virus in California. It causes hemorrhagic fever, and you can bleed out of various parts of your body and die a horrible death."

"Let's meet at Raven's lab to figure out what to do. It's untouched by any virus. Our employees have been alerted to stay home today. I'll contact Raven, Warren, and Pablo. They need to be there."

An hour later they met in a conference room at Raven's lab.

"I'm getting the results of the analysis," Priya said. "The virus entered simultaneously through several air intake vents. The vents were immediately closed. A small amount of the virus may have entered inside. We're checking on that now. This happened at 4:59 a.m."

"That sounds intentional," Pablo said.

"Do you think someone planted it?" Warren said. "They might

know you get to work at 5 a.m."

"It's too much of a coincidence to be random," Sophie said. "I bet those protesters had something to do with it."

"It gets worse," Priya said. "This is a genetically engineered variant. The analysis shows it's designed to attack cells containing a specific genetic sequence found only in our DNA. Old species humans are immune. This is intended for us."

"It's extra virulent too," Sophie said. "This thing could kill us within a day after exposure to a small number of individual viral particles."

"Yeah, we might have been dead by tomorrow if we unknowingly walked into that office and it was not detected," Priya said.

"Have you reviewed the surveillance videos?" Pablo said.

"Not yet. Let's have a look, starting at 4:55 a.m."

A large screen dropped down from the ceiling.

"I don't see anything," Warren said.

The video forwarded to the first sign of movement.

"Look at the top of the screen. It's a drone," Priya said.

"It's flying over our air intake vents," Sophie said.

"Freeze it there for a second," Priya said. "It's spraying a vapor from a vial into the vent."

"And into that vent too. It's going around to all the vents," Sophie said.

"They know what they're doing with their drone," Raven said. "The route was pre-configured and it's executing the plan. This was not hand operated. It's too efficient."

"It only took a minute. This is a professional operation," Priya said.

"Yeah, especially considering what it delivered," Sophie said.

"They've taken this to the next level," Priya said. "They want to exterminate us and get away with it. My analysis shows this virus

would also be deadly to the 95 million new species children. We expect a 90% mortality rate if left untreated for one day after infection. The victim would suffer no symptoms until it's too late to stop it."

"As soon as the robot UV cleanup is complete, we need to get to work on a vaccine," Sophie said. "We now have the virus."

"We need to let the authorities know about this," Pablo said. "It's attempted genocide. They could be planning this worldwide."

"No, we can't tell anybody," Priya said. "This is intended for us. If it works, they'll use it on all the new species kids. This is a decapitation strike. Chop of the head of the hydra, as what's his face said in Congress. This comes from the top. Right now, we have a slight advantage because they don't know we know. They don't realize how effective our system is at detecting airborne vectors. They think we're getting sick right now. They're hoping we'll be dead tomorrow. We will all carry virus detectors from now on."

"This is like a war," Warren said.

"It is a war. They declared it today," Priya said.

"Don't we have a meeting today with the CDC?" Sophie said.

"Yes. Let's pretend we're getting sick during the interview. Then people will think we didn't detect the virus."

"Good idea," Sophie said. "Let's make it seem like all of us including our employees are sick. No need to fake the bleeding for now. That would come tomorrow if we were infected."

"Meanwhile, we'll set our agents off to work on a vaccine," Priya said.

They put their plan into action. Days later, they made it appear as though the only reason they survived the deadly virus was because they acted fast since they work in a bio-medical laboratory. Over the next several days, they gathered information and developed a vaccine while several dozen large scale attempts were made to infect groups of new species children around the world. Pablo's team presented their data to the CDC and several intelligence agencies. Video from Raven's pursuit drones, which followed the infection drones to their points of

origin, clearly showed who was responsible and how they executed their plans. Despite warnings about the virus, over 5 million new species children were infected around the world over the next two weeks. Even though Priya's lab was able to create, manufacture and distribute millions of doses of vaccine at the end of the first week, 250,000 new species children died. More would have died, but a commonly available antiviral vaccine slowed the progression, giving them enough time to distribute the new vaccine. The old species family members of the new species kids were emotionally devastated, but physically unharmed with mild symptoms.

Graphic images of new species children bleeding out of their eyes and ears went viral. A group of radical native humanists were arrested in several labs scattered around the world. The top-level people escaped conviction. A month later, Priya and her friends moved their laboratories to a more secure location in the hills above Palo Alto. They met there the day after the arrests were made.

"I'm so glad they caught those guys," Priya said. "Or at least the scientists who did it."

"Do you think they have most of them?" Sophie said.

"I doubt it," Raven said. "Native humanist organizations have over 1 billion members worldwide. I'm sure they're planning new surprises for us right now. New species kids are still being attacked everywhere. There will be copycats. The top-level guys are untouched of course."

"The one good thing that came out of this disaster is we have more support now," Pablo said. "Children bleeding through the eyes got their attention. About 50% of eligible voters in the US support the restoration of our rights. Families with new species kids are becoming more politically active."

"They have higher than average incomes," Warren said. "They vote at higher-than-average rates."

"We have a stalemate," Priya said.

"I'll take it," Sophie said. "If we can survive long enough to

become the majority."

"I think we can," Raven said. "But the other 50% believe all sorts of conspiracy stories and outright lies about us. They think Amy is a traitor. It doesn't matter how much data you present and how carefully you explain how they're wrong, they won't listen. Almost half the human population has this odd character trait where they have trouble distinguishing between fact and fallacy."

"They must realize by now we're not going to die from that virus," Priya said. "They'll try again."

"What if you guys were in the building when they released the virus?" Raven said.

"We have detectors outside the vents. They run quick analyses for anything about to enter the system. The vents were closed. Some viral particles got in, but not enough to do us any harm."

"But if they do it to us out in the open, we could be in trouble," Sophie said. "One deep inhale of a vapor on the street could do us in."

"Yes. Until this phase is over, we'll have to stay away from the public. We need more security," Priya said. "The vaccines will help."

"It's going to be a long phase," Pablo said. "Society is divided 50-50 on what to do about us. They were against us 40-60 until the virus attack. So, the trend favors us for now, short-term."

"There's got to be a better way to gain public approval besides our children being massacred," Priya said.

"We're the innocent victims in this attack," Warren said. "People sympathize with victims. I think we need to present an image of being harmless and non-threatening. There will always be people threatened by us, but we need to reduce their numbers to tip the balance. I think we need to promote our children's talents. Everyone likes cute and talented kids. I'm starting to see lots of videos of them skillfully playing musical instruments, chess, even tennis. Their parents are proud of them. That's harmless, right?"

"It should be, but many old species people will see their talents as a threat," Priya said. "We need to present them as normal, non-threatening children. We need to stop uploading those videos showing

the virtuosity of the kids."

"I see," Warren said. "They're already banned from playing sports and other activities with old species kids."

"Yeah, but showing five-year-olds performing algebra equations will bring up more resentment," Priya said. "We need to play them to a stalemate. For decades. We need to show that society will not be destroyed. We need to show our human side."

"I still don't see what the big deal is," Sophie said. "We're still human. I don't feel much different than before. I can do a few things better, but I'm still me."

"We keep saying that, but we need to let people know," Priya said. "Right now, we're getting negative publicity. Most podcasters talk about us taking away jobs and hoarding all our money. They vilify us, even though we've been on all the shows too many times to count. Maybe we're deluded about feeling not much different than before."

"You guys are different," Amy said. "I've seen it from the start. You guys blow me away every time. I'm embarrassed by the stupidity of so many people. Maybe it's good if you replace the old species."

"Maybe we're oblivious to reality," Priya said. "I feel the same."

Amy shook her head.

"You're not the same. You really are super geniuses, like I've said all along," she said. "I can feel the gap between us widening. But when I compare the new and old species, extinction of the old species seems inevitable. I want enlightened people on Earth, not warring superstitious, ignorant, lunatics who can't think logically."

"That's severe," Priya said. "We're going in circles."

"But it's true," Amy said.

"I'm seeing more offenses being committed against the new species kids," Pablo said. "Not just in the US, but everywhere."

"That's what I'm talking about," Priya said. "We need our rights back."

"We're working on it." Pablo said. "If we can't get them back, they can do anything to us."

“And they will,” Priya said.

Chapter 93 – Unintended Consequences

Another year passed.

“I'm 28 and I still can't vote,” Priya said as she blew out the candles at her house with her family and friands.

“They don't mind taking our taxes though,” Warren said.

“And our rights,” Pablo said. “Our best legal defense has been to invoke animal cruelty laws.”

“I came up here hoping to see what the best and brightest minds are doing,” Nisha said. “But you sound like a bunch of unemployed coal miners down at the local pub.”

“They're depressed,” Amy said. “Depressed savants.”

“We’re sick of it, Mom. It's open season on us. People blame us for losing their jobs when artificial intelligence and robotics were already taking away millions of jobs and creating almost as many as before we were abducted. It would have happened anyway. Half the population can't seem to understand a simple sequence of events. Or cause and effect. People attack us physically and online and they don't get charged with anything. Our kids are banned from going to public schools.”

“Paid for by our taxes.” Warren said.

“Yeah, we know,” Sophie said. She smiled.

“I keep repeating that because it's unfair. We pay all this money and create technologies to help people, and then we’re excluded.”

“You know life isn't fair,” Nisha said. “The old species hasn't been fair to other species. The Omanji weren’t fair to the human species. The advantages you guys have, aren’t fair to the old species. And they're not fair to you.”

“OK,” Priya said. “But it seems nothing we do works. People are still racist against us. Species-ist? We don't have rights. It doesn't

matter what you tell people; they won't change their minds about us. About 40% support us, 40% want us to go extinct, and 20% go back and forth."

"One thing we have going for us is countries can't agree about what to do with us," Sophie said. "Not at the UN or anywhere else."

"Yeah, it's like the AI arms race," Raven said. "No country wants to ban us from reproducing because then the other countries will get an advantage."

"But that guarantees old species extinction," Priya said. "It's not logical."

"Evolution doesn't care about logic," Nisha said. "When one group has an advantage in the ecosystem, they prevail. Human society is divided up into countries and cultures. It's an advantage to each country and culture to have new species kids in them even though it's a long-term disadvantage to the old species as a whole. The family structure is your advantage. The new species is favored in the old species family ecosystem. As they say in sports, run out the clock."

"That's what we've been saying," Priya said. "But it seems like it will take forever. Well, we're thinking 40 or 50 years to get enough votes to get our rights back. If we can survive that long."

"Yeah, they keep trying to kill us off," Sophie said. "Then we hide."

"They're trying to isolate you," Nisha said. "Isolation creates new species. That's another unintended consequence."

"Do you think Bok and his group will become a new species from the Omanji?" Priya said.

"Yes, they're isolated. The two groups may not meet again for centuries, if ever. If they ever meet, they may still be able to reproduce but they may not want to, due to their differences. They each might modify their DNA in distinct ways, making new species."

"We're going to have an earthquake in about 90 seconds," Raven said. "A big one."

"At least we have a warning, thanks to your company's system," Priya said. "Where will it hit?"

“A few miles west of the Golden Gate Bridge, right on the San Andreas Fault.”

“I hear the air raid sirens in the distance,” Sophie said.

“Get ready. The fault line runs a few miles from here. Put the plates in the sink quickly,” Priya said.

They rushed to secure things that might fall. Nisha alerted Quinn back home in Pasadena, though it would not be felt there. Priya's kitchen cabinets automatically locked shut because of the alert. Her exterior natural gas line turned off. So did all major gas pipelines across the Bay Area. The solar and wind electrical grid continued to operate. Freeway signs alerted drivers to slow down or pull over to the side of the road immediately. Gates closed at several toll bridges going across the Bay. Motion dampening systems activated in the tallest buildings.

“The system is estimating 10 to 40 feet of horizontal movement in most areas between Mendocino and Monterey Counties.”

“How big is that?” Sophie said.

“The 1906 earthquake moved between two and 32 feet horizontally north to south depending on location. Most areas around here slipped between 10 and 30 feet.”

“What's that noise?” Sophie said.

“That's the sound of the fault rupturing,” Raven said. “Get under the table and hold on.”

The ground shook slowly for about 5 seconds.

“That wasn't bad,” Warren said. “I feel a little dizzy though.”

“It's like the one we had in Pasadena last year,” Nisha said.

“The system is alerting me that we just felt a foreshock. There was one before the 1906 earthquake also. Hold on, the big one is coming,” Raven said.

“This one is louder,” Sophie said.

“I'm getting dizzy again,” Warren said.

“Look out the window, the trees are swaying like seaweed in the

ocean," Priya said.

"There's a dust devil swirling out of that dry crack in the dirt," Raven said.

"It's like being on a carnival ride," Warren said. "It's kind of fun."

"Here it comes," Raven said.

"That wasn't it?" Warren said.

A large tree branch snapped and crashed to the ground just as the big plate glass window shattered. Water sloshed violently out of the pool. Plates and dishes rattled in the cupboards and the sink.

"OK, not fun," Warren said. "This is going on forever. How long will it last?"

"The 1906 earthquake lasted about one minute," Raven said. "We're only 30 seconds into this."

"I feel like I'm going to be sick," Warren said. "I have vertigo. How much longer?"

"Maybe another 20 seconds."

"What's that popping noise?" Sophie said.

"That's the rock layers cracking," Raven said.

They held on for another 20 seconds. The movement slowed but continued.

"It's like we're on top of jelly," Priya said.

"Rock may seem rigid, but it's flexible over long distances," Raven said. "Plus, we're floating on a thin crust of rock on top of molten lava just a few miles down."

"Is it over?" Warren said.

"I think the big part of it's over," Raven said. "But there will be aftershocks. For days or weeks. The first estimate was an 8.5, centered 6 miles west of the Golden Gate. That's slightly larger than the 1906 earthquake."

"It must've been bad in the city," Priya said.

We're 30 miles away and there was no way we could stand up.

How much damage is being reported? I remember seeing pictures of the 1906 earthquake. The city looked like it had been hit by a nuclear weapon."

"That was mostly because of the fire," Raven said. "If the gas lines turned off automatically as we had it set up, the fire damage will be minimal. Plus, most power is now electric, and we had much more warning ahead of time. Also, the buildings are more earthquake resistant now."

They cleaned up and monitored the earthquake coverage by local and national sources. Many older buildings suffered structural damage, but destruction was minimal compared to 1906. No major fires happened. By the end of the day, Raven's company, 'A Better Life' was credited for saving 2 trillion dollars in property damage and thousands of lives.

"This good press coverage should help our case," Pablo said.

"I hope so," Priya said. "It seems nothing short of a disaster helps us."

"Yeah, but the conspiracy nuts are out already," Sophie said. "They're saying Raven knew when the quake would hit because she chose when it would happen. They say Raven caused the earthquake to make more money selling her warning systems."

"We donated that system to the state of California," Raven said.

"Facts don't matter to them," Priya said.

"It gets worse," Sophie said. "Japan is putting their order for the system on hold until the confusion is cleared up."

"What confusion?" Raven said.

"Why do unsupported conspiracy stories and ideas get so widely believed so often?" Sophie said.

"Human nature," Priya said. "Even if there is big supporting data invalidating their ideas, their minds are closed. It's always been that way."

"It's the biggest flaw of the old species," Warren said. "I want

nothing to do with it."

"I'm sure you'll have flaws too," Amy said. "Not enough time has passed to know what they are. All 25,000 of you are connected. The 110 million new species kids are not connected. Who knows what they'll do?"

"Here comes another one in about 20 seconds. Hold on," Raven said.

They braced for impact.

"This one is more rolling," Warren said.

"Each one is different," Raven said. "Some will be sharp jolts. Others are slow waves. Many smaller plates are moving independently in different directions."

It was over in 10 seconds.

"That one was centered 30 miles northwest of the Golden Gate. It was a 6.2," Raven said.

"I'm still dizzy," Warren said.

"Stop looking at the ground when they hit. Look to the horizon or out the window," Priya said.

They stayed in place for another minute.

"Whoa! That was a sharp one," Sophie said.

"That was centered about 5 miles almost under the house," Raven said. "It was only a 4.1, but it was so close it felt stronger."

They spent the night at Priya's house, not wanting to cross the fault line at night. The house moved 33 feet to the north, relative to Palo Alto during the quake. For the next several months, they experienced several hundred aftershocks and helped fund aid shelters until life got back to normal. Eventually the Japanese government bought Raven's system. Despite their efforts for the public good, popular support dropped back to about 40%.

Chapter 94 – Closing the Barn Doors

Six months passed since the earthquake. Priya and her friends gathered for their weekly meeting at Priya's office complex in Palo Alto. Life was getting back to normal. Amy now worked in the algorithms branch of Raven's company, specializing in AI decision interfaces.

"Do you know what today is?" Raven said.

"What?" Priya said.

"Today, the oldest new species kids turn seven years old."

"I hear they finished a series of standardized tests in several US states and some countries," Amy said.

"Yes," Raven said. "I read the report yesterday. There are over 130 million of them now. As we know, they're mentally developing quickly. A normal child of that age would be entering second grade, but they're testing in most subjects between the fourth and the eighth grade. About 5% of them are prodigies in specific areas. Several are ranked as grandmasters in chess. Overall, they're far above average in most subjects compared to an old species child of the same age. The lowest scoring kids have Stanford Binet IQs around 120, which is still smart for the old species."

"How are they doing physically?" Priya said.

Raven scanned the story again.

"They're continuing to develop at a slower rate compared to old species children of their age. The seven-year-olds appear more like healthy four or five-year-olds. Most childhood diseases are absent. They play well together and don't get into fights as frequently as old species children at the same age. Occasionally they do, but it's rare."

"How are they getting along with old species kids?" Sophie said.

“Not well in many cases. They're often subject to ridicule. Not always. Some old species kids like playing with them. It depends on the kid, but they're too small to play with old species kids their age. And they're too intelligent to play with old species kids their age, but not always. There is overlap.”

“I hear one of them is doing a biotech start up,” Priya said.

“At age seven?” Pablo said. “We're going to have competition soon.”

“Please don't let them be lawyers.” Sophie said.

“Hey, we're going to need all the help we can get,” Pablo said. “What's wrong with lawyers?”

“They're lawyers!” Sophie said, grinning widely.

“I'm worried,” Priya said. “This will be a lengthy battle.”

“Yeah. Not only are we battling old species intentions, but we also have to watch out for their mistakes,” Raven said.

“What do you mean?” Priya said.

“Didn't you hear? Some old species guy in India was experimenting with a species of Klebsiella flesh eating bacteria in his spare bedroom. He edited something on chromosome two, I'm not sure what, but it escaped containment and has infected thousands of people in his hometown. He was trying to get the bacteria to consume only brain tumors. Like Ian, but it turns out it eats all portions of the brain and ignores all other tissue. It lies dormant in the rest of the body. So, you don't know you have it until your brain turns to mush. It starts with Alzheimer-like symptoms of forgetfulness and dementia. Within a couple of days, the patient is dead. It spreads like influenza.”

“How do they contain it?” Priya said.

“The entire city is under quarantine,” Raven said. “Then there's the Japanese robot disaster.”

“What disaster? Where do you hear about all these things?” Sophie said.

“It's been in the news over the weekend. Haven't you been reading?” Raven said.

“No, we've been working on our stem cell generator,” Priya said. “It's almost done. We told you about it. We'll be able to generate any type of stem cell by taking a small skin sample. Each type of stem cell requires a distinct set of modifications. We’ll be releasing instructions for the most popular 100 stem cell requests in a couple of weeks. Each one requires FDA approval. We only have a few left. The results are stable.”

“Congratulations!” Amy said. “You've been working on that for a long time now.”

“Thanks. Now, what about the Japanese robots?” Sophie said.

“A class of childcare robots suddenly for no reason began protecting children from their own parents.”

“What? That's crazy,” Pablo said. “That sounds like a lawsuit in the making.”

“Yeah, the robot maker is in a lot of legal trouble. Thousands of them began physically fighting the parents while trying to protect the children. They produced electric shocks and other countermeasures to protect the children. A software patch was issued and they're not doing it anymore.”

“It seems the world is becoming a more dangerous place,” Priya said. “Remember the guy who genetically engineered the Ebola virus to infect and kill only Kurdish people?”

“Yeah,” Raven said. “It's impossible to stop these people when they're working in their own houses.”

“And the guys who tried to exterminate you,” Amy said.

“True. The Omanji are right about having everyone connected like we are,” Priya said. “All 25,000 of us knew we were developing a virus to make old species people sick (but only sick) as a way of defending ourselves. If I wanted to kill large numbers of people, and I were not connected, I could do anything I wanted, but what about the new species kids? They won't be connected.”

“Yeah, but they seem like nice kids,” Sophie said. “They're smart and well-adjusted.”

“Yes, but all it takes is a few bad ones to ruin the world,” Sophie

said. “With technology these days, anyone can ruin the world.”

“We’ll have to make laws against those sorts of behaviors,” Pablo said.

“How can you prevent people from doing things in their own homes?” Sophie said. “Some guy makes a virus that kills everyone, but it's against the law? That doesn't help when everyone is dead.”

“Point taken,” Pablo said.

“We need to come up with a way where destructive events can be prevented ahead of time, yet people still have their rights.” Raven said.

“We're getting to that era of mass extinctions Bok warned us about,” Priya said.

“Anyone at any time could put an end to all of us, by accident,” Raven said.

“We need to talk to Bok,” Priya said.

An hour later they connected to Bok on their silent private network via their implants.

“Hello everyone, to what do I owe this pleasure?” Bok thought.

“You’re so polite,” Priya thought.

“I've done more research into human customs.”

“You do good research,” Priya thought. “As a matter of fact, that's what we want to talk with you about. We've noticed a trend among old species humans where scientific experiments are becoming more dangerous. We’re afraid that at some point, something is going to happen that could lead to a major disaster or even extinction. The cause could be from genetically altered organic life, or a bad AI, or something. It could be intentional or by accident. The more we discover how things work, the more dangerous the discoveries become. You warned us about this, but now we get it.”

“You're reaching the inflection point. It's that place on the ascending curve of technological knowledge where it sharply goes up,

leading to unexpected and dangerous results."

"Yeah, like going extinct." Raven thought.

"That's one possible outcome," Bok thought.

"Um, we don't want that outcome." Pablo thought.

"I agree, that would be regrettable," Bok thought.

"I think you need to do more research on human customs," Priya thought. "Human extinction is a lot more than just regrettable."

"I've been monitoring your actions," Bok thought. "I believe you want the old human species to go extinct."

"It's not like that," Priya thought. "I want some human behaviors and traits to go extinct. I want ignorance, superstition, stupidity, and hatred to go extinct. The new species has less of that than the old species."

"I see," Bok thought.

"We're worried that humans and maybe all life on Earth could go extinct because of an accident." Priya thought. "Even the members of your colony might get wiped out by a human accident."

"We're concerned too. We know the day is drawing closer," Bok thought.

"How close?" Priya's thought.

"A local event could happen at any time. A planetary event could happen starting within 2 to 5 years at the current rate of technological advancement."

"We've had some close calls already," Raven thought.

"Yes Raven, you almost caused one. Your group of 25,000 would be more dangerous than all old species humans at this point, but you're connected, which lowers the risk."

"We learned our lesson," Raven thought.

"But we're worried the old species won't learn the lessons, and countries won't agree on what to do about it," Priya thought.

"That is a grave concern," Bok thought.

“We need your help,” Priya thought.

“I know, but we don't want to interfere. We've already done enough of that.”

“You've set us on this path,” Priya thought.

“Most of the problems we’ve observed lately originated from the old species,” Bok thought. “But I agree in the future the new species will invent dangerous things.”

“What can we do?” Priya thought.

“More oversight will be needed.”

“People won't agree to that. We like being free,” Raven thought.

“Yes, but you have regulations regarding new drugs and other technologies. You agree to those rules. You must extend their reach in a firmer manner.”

“I don't see that happening,” Raven thought. “I don't like ‘Big Brother’ looking over my shoulder while I'm working.”

“Big Brother? Oh, I see. Unfortunately, you need to get over this feeling. Otherwise, unintended consequences of technology will cause a mass extinction.”

“I don't know if we can get used to that,” Priya thought.

“I've studied your history,” Bok thought. “Could you imagine people from 400 years ago living in a densely populated modern city with skyscrapers? Would they feel comfortable driving at high speeds in self piloting vehicles with thousands of others nearby? Would they fly in the air in thin metal tubes? Could they imagine getting used to communicating with small devices over invisible airwaves?”

“OK, we’re adaptable, but those changes happened gradually. Now we're talking about major societal changes happening within a few years. How can billions of people with old school sensibilities about personal freedom and individuality, developed over centuries, suddenly adapt to a huge amount of oversight from governments they don't trust?”

“We did it, and so can you,” Bok thought.

“Yes, but you had six dark ages over a 50,000-year period where are you almost went extinct more than once. We want to avoid that,” Priya thought.

“I hope you can, but that's part of the evolution of an advanced species. You must pass through this phase. If we do it for you, you won't appreciate what it takes to evolve. Then you'll go extinct anyway.”

“We have a history of closing the barn doors after the horses have escaped,” Priya thought.

“Processing. I see. You're afraid people won't act until it's too late.”

“Yes”

“Your species needs to learn when to close the doors exactly at the moment the horses think of leaving but keep them open otherwise. If you don't, you’ll go extinct, as we've observed on other planets. We discussed our findings with you earlier. Do you remember?”

“Yes,” Priya thought. “In our local galactic neighborhood, only the Omanji made it through the inflection point. Barely. You discovered other species that didn't make it. One resulted in that singleton that's monitoring us right now.”

“We made it by connecting with each other. Your species will hopefully find your own way.”

“Can you help us?” Sophie thought.

“Not without enslaving you and forcing you to behave as we deem necessary. If we set down the necessary rules for your survival, do you think humans will abide by them if we don't enforce them?”

“No,” Priya thought. “Getting people to agree to anything is like herding cats. Everyone goes in their own direction. I see what you mean. We have to figure this out on our own.”

“Yes. We won't let you destroy the planet because we live on it too, but we can't stop your society from collapsing due to a lack of cooperation about how it plays with its newfound toys. Have I answered your questions?”

“Unfortunately, yes,” Priya thought. “We need to save ourselves. We'll contact you if we have any other questions. Say hi to Beedee for us.”

“I will. Be well.”

They disconnected.

“The barn doors are open,” Priya said out loud.

“Yeah, and the horses want to leave,” Sophie said.

“It's only a matter of time. Stop lights are rarely installed until someone is killed. What are we going to do? Wait for the deaths to pile up?” Raven said.

“We need to raise awareness,” Warren said.

“Thousands of articles have already been written about this over the past few decades,” Priya said. “Nobody does anything about it. As it was with global warming.”

“But those articles were written about hypothetical future events,” Pablo said. “Now it's happening for real.”

“True, but it seems humanity needs to have a near death experience before it will do anything to save itself,” Priya said.

“Hopefully, it won't be a full death experience,” Raven said.

Chapter 95 – Biological Arms Race

Priya, her family, and friends gathered at her house for her 29th birthday.

“I'd like to make it to 30,” Priya said.

“Don't be so dramatic,” Nisha said.

“I'm not. It seems like every week somebody tries to kill us off.”

“Priya’s right,” Amy said. “Yesterday, we hacked into a native humanist server. Several of us pretended to be native humanists for two years so we could hack in. We managed to infiltrate the IT departments of several NH groups. We overhear them communicating freely. We use drones too. There are many ways to kill people and they openly discuss killing us.”

“I know they have 1.5 billion members, but I thought the hard-core native humanists were a fringe organization,” Nisha said.

“They used to be,” Priya said. “But it's becoming easier for them to speak freely now that a native humanist is the US president. Even in public at their rallies, there are posters supporting killing us. They say it's protected free speech. The government doesn't stop them.”

“We've tried everything to stop them,” Pablo said. “All our appeals are rejected, to the Supreme Court. The ‘shouting fire in a crowded theater’ argument is ignored. They think there's no risk, and free speech should be protected. There are now 170 million new species kids in the world, as old as eight. That's less than 2% of the world’s population. The Supreme Court thinks there are too many of us to be in the category of a protected minority group. They don't think kids would ever be intentionally attacked, even though they have been.”

“Yeah,” Priya said. “A few days ago, we were attacked again.”

“What happened?” Nisha said.

“There’s an outbreak of the newest H1N1 virus variant in Brest

France. That was one of several starting places for the Spanish flu pandemic in 1918, along with the US Midwest. By another amazing coincidence, only new species kids are affected this time."

"Old species people aren't affected?" Nisha said.

"No. At least they're not sick yet. Over 300 new species kids are in the hospital. That's most new species kids in that town. None of them are old species. This is not a coincidence. It's a bioterrorist attack on us."

"But nobody calls it bioterrorism," Pablo said.

"Can you look at the virus to see what's been done to it?" Nisha said.

"We have people there now," Priya said. "Soon we'll know whether this vector was engineered to attack only us. We're sequencing the genome now."

"Have they quarantined the area?" Nisha said.

"Of course not," Priya said "It's only attacking us. They want it to spread."

"Who taught you to be so skeptical?" Nisha said.

"You did, Mom. You taught me how to gather significant amounts of independently validated information before making judgment. We see the data before us."

"It's intentional," Sophie said. "I just got word. The genome was engineered to affect only new species people, though it can be spread by the old species. It could also be extra deadly in new species people compared to the original H1N1 virus. It's an intentionally enhanced variation of the original Spanish flu virus that killed about 70 million people starting in 1918."

"Have our team run the genome through the vaccine analysis algorithm," Priya said.

"Already on it," Sophie said.

"Good. I'm issuing a statement to all new species families in the world to shelter in place."

“It might be too late,” Raven said.

“Why do you say that?” Priya said.

“There's been a lot of air and tube travel in the past few days since this started.”

“Still, I'm going to issue the statement to slow it down.”

“The first new species child just died from the virus,” Raven said. “Here's a picture.”

“That poor girl,” Nisha said.

“This is murder,” Priya said. “We need to find out who did this.”

“I’ve created several agents to track down any developments the minute they happen,” Amy said.

“Is the CDC doing anything about this?” Nisha said.

“No,” Priya said. “The US government told them to do nothing. Their latest statement says they're reviewing the situation.”

“I guess they don't think it's dangerous,” Warren said.

“At least not to them,” Priya said. “My gut is telling me they’ll take no action to stop the vector from entering the US and elsewhere. France is taking no action to stop flights leaving the area. This looks like intentional genocide to me.”

“A second kid just died in France,” Amy said. “There are several new outbreaks in Spain, Italy, China, and other places. Thousands of kids are being taken to local hospitals. I'm not sure if it's the same vector, but it's only affecting new species kids.”

“A new species kid just died of the flu in Germany,” Sophie said. “We need to do something now.”

“Sorry Mom,” Priya said. “We need to go to the lab to work on a vaccine. I wanted to talk to you about the IPO since we vested you shares in Genomaly, but that will have to wait.”

“It's okay. I studied the 1918, and 2020 pandemics. This could spread quickly. Go, now!”

Priya and Sophie convened all employees for an emergency meeting at the Genomaly lab and got to work on a vaccine. By the end of the day, there were over 2000 known cases of the new species variant of H1N1 in over 30 countries. There were 40,000 additional cases of influenza yet to be identified. The death toll had risen to 40. Priya and Sophie worked until 2 a.m. and fell asleep in the lab. Many employees did the same thing. The sun rose quickly, filtering into Priya's office on the fifth floor.

"I didn't get enough sleep," Priya said. "What are you looking at?"

"The news, it's bad," Sophie said. "There are now over 200,000 total cases of influenza. 36000 are known to be from the genetically engineered variant."

"How many kids have died?" Raven said.

"Over 300."

"I'm checking our network," Priya said. "About 50 of us new species adults have it."

"It's going to take over a week to get this vaccine ready for manufacture," Sophie said. "Akna, Jamilla and their teams are testing it now."

"Have any old species people been affected?" Priya said.

"Well, they're carrying it, but none are getting sick."

"Hold on, Mom's calling," Priya said. "Hi Mom."

"Hi Pree. I just spoke with the CDC. They're meeting to develop a plan to combat the virus."

"Do they want to stop it?"

"Of course they do."

"I don't know," Priya said. "They've known about this for several days, but nobody is taking action to stop it. People still travel to and from the infected areas. It seems like they're intentionally letting the thing spread."

"Well, all I know is they told me they're canceling flights into and out of the US, as well as interstate flights. All high-speed tube travel

has stopped. Other countries are taking similar action."

"Now that the horses are out of the barn, they'll close the door and claim they tried," Priya said.

"You're so skeptical," Nisha said.

"After what they've done to us, of course I am."

"They've discovered the virus in San Jose," Sophie said.

"And in LA and other places," Raven said. "When I run the numbers, it's accelerating and spreading quicker than the Spanish flu in 1918 when adjusted for the small population of the new species."

"That's because the virus is designed to be more aggressive and infectious," Priya said. "Now, airplanes and tubes have spread it everywhere."

"I'm starting to believe you," Nisha said.

"About what?" Priya said.

"About their intentions," Nisha said. "They spent several days before acting. Somebody must want it to spread."

"Told ya," Priya said. "I'm not a conspiracy nut, but it's obvious what's happening. When those bioterrorists did that virus attack on Paris last year, the entire city was quarantined within two hours. They took that seriously because old species people were getting sick and dying. These bioterrorists know what they're doing."

They disconnected from the call to get to work.

Within a week, the vaccine was ready, and distribution begin. Priya, Sophie, and Warren fell sick for two days, but the vaccine worked quickly. Within two months after that, the vaccine was distributed to most of the 175 million new species people. New cases quickly dropped to near zero. However, out of the 5,000,000 new species kids infected, 750,000 were dead. More than 2,000 of the 25,000 who were originally abducted also died. Priya and her friends attended many funerals during those terrible months. 2,000 empty holes were left in their social network."

A few months later, they met at Priya's lab to go over the results.

"I think we have it under control," Priya said. "We lost so many, but I don't think we'll lose more."

"It looks that way," Sophie said. "But now there are some cases of old species people dying from it."

"Yeah, I read about that today," Warren said.

"We're doing analysis on the virus now from a deceased old species individual," Priya said.

"The results are in," Sophie said. "It's mutated. At least in the individual that died."

"I think it's worse than people realize," Raven said. "In the past few days, I'm seeing search results going up where people are searching for terms like, 'virus vaccine.' I think old species people are getting sick."

"How many?" Warren said.

"Judging by the volume of searches, it looks like millions more than average are getting sick every day," Raven said. "I can't tell how many are sick from the mutated virus, but I think most of the new cases are from the mutated virus."

"Where are they located?" Pablo said.

"All over the world," Raven said. "In the past hour, all major airports have ceased operations."

"See what I mean?" Priya said. "They didn't do that for us. No old species people have died yet from the mutated virus, and yet they've stopped all flights."

"Not anymore," Sophie said. "The first officially confirmed death of an old species person by the mutated virus just happened in Australia. It's all over the news now."

"When I run the numbers, news coverage is far more intense than it was when we got infected," Raven said.

"Of course," Priya said. "When it affects them, they care a lot

more."

"That's human nature," Pablo said. "People care more when it directly affects them. They're working on a new vaccine. Will your vaccine work on old species people?"

"Not perfectly. There are too many genetic differences between our two species. A new vaccine will be made," Priya said.

"I see more reports of old species people dying now," Raven said. "I think it's spreading. You should make a new vaccine for them."

"It's tempting not to," Priya said. "What have they done for us?"

"Not much, but—"

"Yeah, we'll make a vaccine," Priya said. "This one has momentum behind it."

Priya, Sophie, and the rest of the researchers at Genomaly got to work. Within a week, they had a viable vaccine. A week later after testing, they began mass production and distributed the vaccine formula to drug companies around the world so they could mass produce it. During that two-week period, over 50 million people became infected with the virus and 500,000 were dead, with increasing numbers dying each hour. Hospitals around the world became overwhelmed with patients. The stock market crashed.

It took four months to get the vaccine distributed to every person on Earth. By that time, 75 million old species people were dead. The perpetrators were still at large.

Chapter 96 – 30-Year-Old Teens

Priya blew out the candles.

“I made it to 30!”

“I wasn't sure you would,” Nisha said.

“I wasn't sure if any of us would,” Sophie said.

“60 million people didn't survive,” Priya said. “I thought by the time I was 30, technology would make the world such a wonderful place that the old problems would go away.”

“Me too,” Nisha said. “I'm 64 and I'm still waiting. I hope you guys can save us.”

“I don't know about that,” Raven said. “I read this morning about that new species kid in Belgium. Did you hear about that?”

“No,” Priya said.

“The kid is nine years old, but he looks like an old species kid that's about six. That's normal for our species. He's a biology prodigy. He developed a hormone stimulant to make himself look older. He gave it to a bunch of new species friends at his school.”

“What happened?” Nisha said.

“The stimulant triggered hormone production in their pituitary glands, and they started growing quickly. Some of them are over 6 feet tall. It took months to figure out how to stop them from growing.”

“Some of these new species kids will be trouble,” Nisha said. “I'm reading stories like that every day. Sometimes, their intellect grows faster than their maturity. Anyone, new or old species, with access to technology could accidentally or intentionally ruin everything. We know about the Omanji. The latest pandemic might force them to make laws, finally.”

“People are blame us for everything,” Priya said. “A lot of this would've happened without us, but human nature likes a scapegoat to

shift blame. They tried to blame us for the pandemic."

"They're still trying," Sophie said. "The guys responsible for that mutated H1N1 pandemic virus are not being charged with bioterrorism with a weapon of mass destruction. They're being charged with a simple violation of the genetic modification act. Their defense lawyers claim they were acting in defense of the human species. So, they were convicted of modifying an organism without a license and an approved GMO creation plan."

"60 million people are dead and all they get is a slap on the wrist?" Priya said.

"Yes," Pablo said. "Their excuse is the virus mutated after they modified it. They didn't directly create the virus that killed those millions of old species people."

"What about the 2000 of us Mods and the 750,000 new species kids who died by the virus they did create?" Priya said.

"We still don't have human rights since they don't consider us to be human," Pablo said. "Also, they're claiming it was an accident."

"No way," Priya said. "It took thousands of careful modifications to that H1N1 genome to get it to target us so specifically."

"Yeah," Pablo said. "That's a weakness in their argument we can exploit."

"This is outrageous," Priya said.

"Eventually we'll get our rights back, you'll see," Pablo said.

"Every time somebody tries to wipe out an invasive species by using other species, it backfires," Amy said. "Like when they introduced the mongoose to Hawaii and other sugar cane growing islands to get rid of the rats that like sugar cane. It backfired. The mongoose made other animals go extinct, and there are still rats on the islands."

"They tried to exterminate us like rats, and it backfired," Priya said.

"Are we an invasive species?" Sophie said.

"We are to them," Priya said. "At least to those who don't want

change. They think change is subversive to the status quo. There are 190 million new species kids now. It's an invisible invasion."

"Yes, walking down the street, you'd never know anything was changing," Amy said.

"Hi Oyuun," Priya said as she opened the front door. "Come on in. I was hoping you could make it."

"Are you ready to launch the Proxima Centauri b probe?" Sophie said.

"Yes, tomorrow is the day. Everything looks good. The antimatter pods are already in orbit awaiting the join to the ion drives."

"Why did you put the antimatter pods into orbit first?" Priya said.

"To avoid an antimatter explosion," Amy said. "They used a high-altitude jet/rocket aircraft to gradually lift the pods into orbit. That's less risky than including them in the rocket liftoff, which could explode. Those little pods each contain more energy than 100 large nuclear weapons. We don't have the fail-safe antimatter containment matrix like the Omanji, so we have to be careful. The probe needs all that energy to travel the 4.2 light years to Proxima in only 25 years. That includes deceleration."

Oyuun agreed with a nod of his head.

"I don't know if I'll live to be 31," Priya said.

"You'll live to be 300 no problem," Amy said. "I'll be long gone by then. Unless you fix me up with a new genome! Oyuun, what do you think you'll find on Proxima b? It's larger than Earth, but it's orbiting that small red star. It probably gets blasted with radiation, right? It's a flare star."

"Yeah, if there's no magnetic field, it gets blasted. It may be like a larger, slightly warmer version of Mars. It seems to have more water than Mars, so it may have life, but it's tidally locked, so one side is completely frozen, and the other side gets baked. There may be locations on the edges of the sunny side where life might survive. It may be an eyeball Earth. That happens when the one spot on the planet where Proxima is shining straight down, is warm but not too hot, and the rest of the planet is frozen. Or it's a doughnut Earth, where the

eyeball is too hot, but twilight around the edges is exactly right.

“Maybe it's a good fixer upper for Bok.” Priya said.

“Yeah, and it’s in a good neighborhood,” Amy said. “It’s quiet, yet only four light years from the nearest Hyperloop.”

They laughed.

“Better than Venus,” Raven said.

“What was Bok thinking?” Sophie said.

“He's young,” Nisha said. “People, I mean when you're young, you do impetuous things. Right Pree and Raven?”

“Um,” Priya said.

“Nice weather today, don't you think?” Raven said to Priya.

“Oh yes, not a cloud in the sky. The forecast looks good too. We could use some rain though.”

Nisha shook her head.

“Yeah, whatever. Just go light on the global mass extinctions. Okay? I want to live long enough to see my grandchildren.”

“Neesh don’t bug her,” Quinn said.

“Okay. Okay”

“Mom, I'm too young! I'll be ready in 20 or 30 years.”

“20 or 30?”

“Okay 15, but that's young for us. Right Raven?”

“Oh yeah, I'm not having kids until I'm at least 50 or 60.”

“Then we also need to find someone,” Priya said. “We have limited choices. Fortunately, the Omanji abducted the same number of girls as boys.”

“Um,” Warren said. “Yeah, the weather is perfect for a barbi, don't you think Pablo?”

“Yeah, let's go.”

“Don’t worry guys, you have nothing to worry about.” Priya said.

Sophie gave a high-five to Sophie. Amy stared at the floor.

“Sorry Amy. I know it's different for you,” Priya said.

“It's okay,” Amy said. “It's not your fault I'm old species. My clock is ticking. I'm 30. I only have a few years left to have kids. You could still be having kids at 90 when I’m a great grandmother, assuming I'm still alive.”

“I hadn't thought of it in such graphic terms,” Priya said.

“Look at us,” Amy said. “You guys look 18 and I look 30. Yeah, I look good now, but being around you guys makes me realize life is short. I'll get over it. Comparison is the killer of joy.”

“Sorry,” Priya said.

Sophie put her hand on Amy’s shoulder. Amy patted her hand.

“It's okay. Let's get the barbecue going,” Amy said. “I shouldn't be whining. I have great friends and a distinguished career.”

“Okay,” Priya said. “Now, who’s that guy I saw you walking with the other day?”

“Oh, just a friend,” Amy said.

“Hmm, a friend you seem to like,” Priya said.

“A lot.” Sophie said.

“I thought you two didn't care about guys.”

“Not much,” Sophie said.

“Maybe a little,” Priya said.

“Oh, a little? This is new,” Amy said.

“Well, I am 30, which feels emotionally like 16 for the old species, but anyway back to you. You remember 16? Tell me about this guy.”

“Hold on,” Amy said. “This is a momentous change. You've had little interest in guys in the 14 years since you were abducted.”

Priya glanced at Warren across the room and back to Amy.

“Oh,” Amy said. “Anyway, he's just a guy I know. I'll explain

later."

Warren heard part of the conversation and raised his eyebrows at Pablo and Oyuun.

"Um, let's get the barbi going."

"Good idea. I'm getting hungry," Pablo said.

"Me too," Oyuun said.

The guys walked outside into the shade under one of Priya's mature live oak trees. The scar from the earthquake-broken branch remained. Warren opened the barbecue grill lid to start auto clean.

"What was going on in there?" Pablo said.

"I think she likes me," Warren said.

"Duh. What are you going to do about it?" Pablo said.

"I don't know. I don't want to wreck our friendship."

"We're supposed to be smart," Oyuun said. "But I don't know what I'd do in this situation."

"It appears the Omanji didn't give us smarts in all areas of life," Pablo said. "Are you going to sit there and do nothing? You know, I just may have to ask her out myself."

"Okay. Okay!" Warren said. "I'll do something."

"What?" Pablo said.

"Fine, I'll ask her out."

"It sounds like you don't want to. Do you?" Pablo said.

"Yes. I've always loved her."

"Really? I've seen no evidence."

"Lawyers. Anyway, I do. I didn't feel ready."

"Do you now?" Oyuun said.

"Well, I am 30, but I feel mixed up. We were old species until we

were 16. We liked girls, but then after the abduction, the interest went away," Warren said.

"Yeah, we all felt that reverse aging thing," Pablo said. 'But now I guess the 23,000 of us survivors are aging normally for a 300-year lifespan. Hopefully, the new species kids won't go through this. Anyway, so you'll ask her out?"

"Yeah, but I'm nervous. I'm used to joking around or being professional around her. Here she comes."

Priya opened the patio sliding door. The hot dry air made her close it behind her.

"What are you guys talking about?" Priya said.

"Nothing much," Warren said.

"If it's nothing, why haven't you started the barbecue?"

"Oh, let me go get the veggies ready," Warren said.

"It's okay, we'll do it," Pablo said, patting Warren on the back as he and Oyuun walked inside. Priya waited for the sliding door to close.

"Okay, what is it?" Priya said.

"It's nothing. We were just talking."

"I can tell it was something by your body language. And you muted your thought-conversation."

Warren smiled.

"Nothing gets by you, does it?"

"No. Now let's have it. You guys are up to something."

Warren gulped.

"Well."

"Well what?" Priya said, crossing her arms.

"Pablo thinks I should ask you out."

"Hmm. What do you think?"

"I told him I would."

“That doesn't sound convincing. Do you want to ask me out?”

“You sound like Pablo. Uh, yes, I do.”

“Well then.”

Warren took a deep breath.

“Okay. Priya, would you like to go to Drake’s Beach and have dinner tomorrow? I know a great Mexican place in Marin. We could go there after. Just you and me?”

Priya scrunched her face and held it.

“Hmm, I'll think about it.”

Warren diverted his eyes towards the pool.

“Okay, take your time. I didn't mean to—”

“Warren? I'm kidding.”

Warren smiled.

“I knew that.”

Priya put one hand on his shoulder.

“This is hard on all of us. It's like we're 30-year-olds stuck in teenager bodies, but we've been through a lifetime of experiences already. We run these adult companies and people try to kill us. We'll be okay, you'll see.”

“I hope you're right. So um, is that a yes?”

“Duh.”

“Why does everyone keep saying that to me?”

She smiled and studied the oak tree branch.

“I can't imagine why.”

The conversation did not escape the attention of those inside.

“What's going on out there?” Nisha said.

“They're not getting the barbi going,” Quinn said.

“No. I mean what are they talking about?”

“Oh, he's asking her on a date.”

“How do you know that, Mr. oblivious to this sort of thing?”

“I can tell. He's feeling like I did when I asked you out the first time.”

“Oh, that's right. In that class I had to take to fulfill my arts requirement. We were doing that project together and you said you had a question. Then you spilled paint on me.”

“I was a little distracted.”

Nisha smiled.

“Really?”

“Okay, I was anxious. I didn't know if you liked me.”

“That's the Mr. Oblivious I know and love.”

“Anyway, that's what's going on out there,” Quinn said.

“I think you're right,” Sophie said.

“Yeah,” Raven said. “He's nervous. I've never seen him like that.”

“Except when we had our first classes together. Remember?” Sophie said.

“Yeah. You noticed he was nervous talking to Priya.”

“It's good to see the new species has some of the same problems the old species has,” Nisha said.

“We do,” Sophie said. “We're still human.”

“Yeah, just with a few upgrades,” Raven said.

They continued to watch Priya and Warren talking. Sophie noticed Pablo studying them outside.

“Pablo, you're being quiet. You were talking to Warren.”

“I have no comment.”

“Me neither,” Oyuun said.

“Lawyers,” Nisha said.

“That's my line.” Sophie said. “Those slick talking lawyers.”

“Um, I better get the veggies ready, there’s no robot today. It’s

taking the day off," Pablo said, as he walked out of the room, smiling.

They continued to watch Priya and Warren.

"I think she just said yes," Amy said. "I used to bug her about dating, and she kept telling me she wasn't interested, but look at her. I think that's changed."

"Shh, here they come," Nisha said.

Priya opened the sliding door with Warren close behind. The group looked the other way, pretending to be talking. She crossed her arms, hiding her excitement. She noticed their odd behavior.

"What?"

Nisha turned around.

"Oh, hi Pree. Is the barbi ready?"

"I saw you guys in here."

"Yes, technically we are here in this room," Pablo said as he walked in from the kitchen with the veggies.

"Lawyers," Priya said. "Anyway, I could see you guys in here gossiping."

"We weren't gossiping," Sophie said.

"No? Then what were you doing?"

"We were talking about how things go, that's all," Nisha said.

"As in, 'how are things going outside?' I bet you were."

"Well maybe," Nisha said. "You were getting animated out there."

"Yeah, and you put your hand on his shoulder," Amy said.

"I have no comment," Priya said, trying to keep a straight face. "How's that Pablo?"

"That's more like it." Pablo said, "Guys, let's get the barbi started."

They walked outside, closing the sliding door behind them. Quinn stayed inside.

"So, what did she say?" Pablo said.

“She said ‘Duh’ like you.”

“Told ya!”

“I guess I didn't have anything to worry about after all.”

“Before the abductions, think of all the things you ever worried about. How many of them did you actually have to worry about?” Pablo said.

“Few. I'll have to learn to not worry about things as much. Unless they try to kill us again.”

“Yeah, that might raise a few red flags.”

Warren put the veggies on the grill.

Amy watched from the living room, making sure they didn't come back in. She grabbed Priya’s hands.

“OK, so what happened?”

“Nothing.”

“Your dad said he asked you out.”

Priya glanced over at Quinn and raised an eyebrow.

“How did you know?”

Quinn smiled.

“We old species folks aren’t as dumb as we look.”

“Who would have guessed?” Nisha said.

Priya debated keeping quiet. She stared at the floor, but eventually gave in.

“OK fine. He asked me out.”

“It's about time,” Amy said. “It took him over 14 years. And you too.”

“We weren't ready,” Priya said.

“You look ready now.” Amy said.

“So do you. Now tell us more about that guy.”

Amy smiled.

“Oh. Um, on second thought, we shouldn't be bugging Pree. We should be more considerate of her feelings.”

“I'll tell if you tell.” Priya said.

Amy stood up and pointed outside.

“Warren is burning the corn on the cob. I better go help.”

“Good try. I'll take care of it. They're not the best cooks, but I'm not letting you off the hook.”

Priya opened the sliding door and closed it behind her. They continued watching the commotion outside.

“That was a close one,” Amy said.

“You could have taken one for the team,” Raven said.

“I guess so, but we can all tell what happened. Right Quinn?”

“Isn't it obvious?” Quinn said.

“Listen Mr. know it all,” Nisha said. “Your track record on this topic is not exactly spotless.”

Quinn smiled as he watched Priya douse the burned corn on the cob, and accidentally Warren, with water from the hose.

“All I know is I'm batting a thousand today.

Now will you look at that? You new-species people aren't good at everything.”

“That might be true. At least for the guys,” Raven said.

They all laughed as they watched the comedy unfold outside. The rest of the evening passed quickly. Her friends left at midnight. Her family stayed in the guest rooms. Priya didn't get to sleep until 2:30.

Chapter 97 – New Species First Date

The next morning, a thick early morning summer fog bank blanketed the coast. It was sunny as usual above the fog at Priya's house.

"Dad, are you ready for your pancakes?" Priya said as she added several more to her large stack on the platter.

"Sure, I'll take six."

"Mom?"

"Three please."

Sanj?"

"I'll have eight."

"You guys are hungry this morning."

Priya put two pancakes on her plate and poured a little real maple syrup on top.

"Is that all you're having?" Quinn said.

"Yeah, I'm not hungry."

"I know why," Sanjay said. "You're nervous because of your date today."

"No."

"Yes, it is. Look at your smile," Sanjay said.

"This is your first date, isn't it?" Quinn said. "You've never mentioned going out before."

"Yeah. It's weird because I'm 30 years old, but I haven't wanted to date. I feel out of sync with where I should be at this point in my life. I still feel 16."

"That makes sense," Nisha said. "If you're going to live to be 300, you're actually starting to date a little early. 300 is over three times the

average lifespan. Old species people start dating around 16. So, you should start dating when you're maybe 40 or 50, if the ratios stay about the same, but you were modified when you were 16. Things are out of sync."

"I think the new species kids will have their early growth spread out two or three times longer," Priya said. "The oldest kids are 10 now. They look to be 5 or 6, so that's faster growth than the rate suggested for a 300-year lifespan. We'll see what happens."

"Don't get any ideas though," Nisha said. "I want to be a grandmother before I turn 100."

Priya poked at her pancakes.

"Don't worry Mom."

"So where are you going today?" Quinn said.

"To Drake's beach and later to dinner."

"I love that beach," Quinn said. "Don't forget to go far to the right side to see the sea lion colony. Don't get too close though. They'll chase you down. There's a nice wind sheltered spot near the sea lions next to the cliffs. Go there."

"Those sea lions get stinky," Sanjay said. "Speaking of getting too close, when is Warren coming over?"

"Now I'm not going to tell you."

"You can tell me," Nisha said.

"Fine. He's coming over at 11. Don't make a big deal about it. Okay? He's shy."

"I noticed that," Nisha said. "He gets anxious around you."

"That's what Sophie says."

"It's true," Quinn said. "We noticed it yesterday and other times. He seems brave in public or when people try to kill him or lock him up, but he's anxious around you. I was telling your mom I felt that way around her at first."

"Really?" Priya said.

“Oh yeah. He was shaking,” Nisha said.

Priya raised an eyebrow at Quinn.

“What can I say?” he said, shrugging his shoulders.

Priya smiled.

“Okay, I gotta get ready.”

Warren knocked on the door at exactly 11:00.

Quinn watched him arrive on the 3D virtual monitor hovering over the kitchen table. He got up to answer the door.

“Yep, he's anxious,” he said.

“Dad, get away from the door.”

Priya ran around Quinn and opened it.

“Hi Warren. Let's go before the paparazzi get in our faces.”

“Hi everyone,” Warren said.

“Come on Warren. We're going to be late.”

“For what?”

“Come on.”

“All right, all right. I'm coming.”

Nisha and Quinn waved as they drove away. He turned off autopilot. They both turned off their devices to avoid distractions.

“Why didn't you let me say hi to everyone?”

“They were bugging me. So, I wanted to go.”

“What were they bugging you about?”

“They said you were anxious around me, and other stuff.”

“Oh.”

“Are you?”

“Um.”

“You are. Aren't you?”

“Maybe a little.”

“Why? Warren, we've known each other for over 14 years. We've seen each other or at least talked nearly every day. We've been in the same detention cell together. We survived together. We almost died together. You weren't anxious then.”

“Yeah, but this is different.”

“No. It's still the same me.”

“The situation is different. We’re on a date. It's my first date. Before we were either joking around with our friends, building companies, or trying to stay alive.”

“Okay. Don't think of it as a date. We're just going to the beach like any other day.”

“I'll try.”

Priya grabbed his shoulder.

“No. Do, or do not.”

“Okay. It's just another day. I'm just talking to any random person. It's nobody that I— Um.”

“That you what?”

“Nothing. When's the last time you been to Drake’s Beach?”

Priya looked out her window to the sky and shook her head.

“Sophie’s right. Okay, you can change the subject.”

“What is she right about?”

“It doesn't matter. Anyway, it's been years since I've been to Drakes Beach. It takes so long to get out there even though it's not far away.”

“It's my favorite beach. It's so isolated. If you walk from the parking lot for 30 minutes, there's nobody around.”

They drove through the city and over the Golden Gate Bridge into Marin County. Soon they were driving up Mt Tamalpais.

“It looks too cold and foggy to go to the beach,” she said.

“We'll see. Wait until we go up and around this bend.”

He rolled down the windows.

“Whoa, it's totally clear,” she said. “I forgot it does this. I can feel it getting warmer.”

“It does this every time. Look down.”

“I can't. It's a thousand feet straight down. It makes me nervous when you're driving manually. Can you switch over to autopilot?”

“It's OK. It's only 700 feet down.”

“Very funny Warren.”

“I'll drive slowly. I don't trust it on these curvy roads. I promise I'll be careful.”

He drove for another few seconds.

“Okay, I'll switch it on.”

She patted him on the shoulder.

“Thanks. Sorry I'm such a baby.”

They slowly drove to the east peak summit, pulling over to let faster cars go by. They hiked the summit loop.

“It's amazing how warm it is up here and how cold it is down there,” she said. “The fog is flowing like a liquid.”

“It's often like this up here. It's one of my favorite places to be. Especially in the dry season when it's like this.”

“Yeah. It doesn't seem real. It's like we're on another planet. We don't need to go to another one.”

“I'm glad we don't have to leave Earth like the Omanji.” he said.

“Me too.”

They ate lunch and enjoyed the panoramic view. Then they traveled down the spectacular winding roads of Mt. Tam to Stinson Beach, and through the coastal grasslands and redwoods all the way

out to Drake's Beach.

"Finally, we're here," she said. "Let's go to the right. Daddy says there's a sea lion colony out there."

"Yeah. It's gotten bigger over the past few years even though sea levels have risen. See where the cliff collapsed?"

They walked for a while, saying nothing while the fog cleared up.

"Do you think there are beaches like this on Oma?" she said.

"I doubt it. It's too windy and the ocean is too deep. The waves are huge. They wash away any sand that forms. Oma doesn't sound like a good planet to live on."

"Yeah. At least for humans. The gravity is too strong. It's too hot. They have that red sun. Everything is too extreme. At least for humans. But Earth is not good for the Omanji either."

They continued walking in silence for a while.

"Can you imagine if everybody on Earth had to leave this planet and move 20 light years away?" he said.

"I would be sad to leave. This is our home planet. It's where we belong. Sometimes I'd like to go into space. Well, I did. We did, but I mean on my own power."

"We'd have to do a lot of packing before leaving."

"Yeah."

They smiled, took off their water shoes and kept walking on the soft flat sand.

"Warren?

"Yes?"

"Do you want to hold my hand?"

He smiled.

"Sure."

They walked another 10 minutes without saying anything.

"I like this," Warren said.

She raised an eyebrow.

“I hope so. Do you feel anxious?”

“A little. I'm not used to this.”

“It's okay. Me neither. You’re different around only me and away from the others.”

“Really? How?” Warren said.

“You're quiet. And very polite. You don't show this side of you around other people.”

“That's my public persona.”

“Yeah. You’re always talking and joking around. You don't have to do that all the time. You can be quiet around me. Like you're doing now.”

“People like it when I talk a lot. I think I entertain them. I've always been this way. Even before the Omanji came.”

“I've noticed my personality is the same too. I just learn more quickly. Are those the sea lions, out where the beach curves?”

“Yes. We have about another mile to go.”

They walked the entire mile in silence. Nobody else was within visible range. They reached the sea lion colony.

“Whoa, they are stinky.” she said.

“Yeah. Check that out. I don't think that beach master likes us here. Let's go behind the cliff to get out of the wind and away from that big guy.”

They set out a blanket and ate lunch. Sea lions squabbled over prime territory. They talked and watched a pod of whales breach offshore, out of season. Eventually they fell asleep. The cliffs slowly cast their shadows over them.

“How long were we asleep?” she said.

“Two hours. I guess we needed it. How much sleep do you need each night?”

“About six hours.”

“Me too. I need less sleep than I did before we were abducted.”

“Yeah, I've noticed that,” she said. “It's after five already. I guess we should start walking back to the car. It takes over an hour. I'm getting hungry.”

They packed up and began walking.

“You seemed pensive. Do you feel that way around me now?” she said.

“A little, but not as much.”

“Why?”

“I'm not used to being in one-on-one situations like this. I like you though. I always have.”

“How much?” she said. “A little or a lot?”

“A lot.”

“Liking me makes you feel anxious? It was that way when we first met. Wasn't it?”

“How did you know? I hoped you didn't notice.”

She smiled and stepped around a sand dollar. Then she picked up a perfect walking stick and playfully shook it at him.

“I'm very observant. Don't you try to get anything by me!”

“I won't. I know better than that.”

“Good! Now hold my hand. That will make you less anxious.”

They continued walking for a while, avoiding piles of driftwood.

“It's working,” Warren said.

“You're not as anxious?”

“A little, but not like before.”

She shook her head and smiled. Eventually they made it back to the car. The rising tide cut them off, so they had to wait for outgoing flow so they could run across the lower spots. Priya was hungry so they went straight to his favorite Mexican place in Sausalito.

“This is the best view,” he said.

“Yeah. Plus, the sea lions swimming around here aren't stinky. So, why do I make you nervous?”

“You're not going to forget, are you?”

“No. I have a super memory. I don't forget anything.”

“Now I'm really anxious.”

She smiled.

“Get over it. Now, why? You don't get anxious around other women.”

“You're different.”

“You're verbose about every topic, but not this one. Why?”

“I'm having a tough time explaining. I want to explain it though.”

“I guess the Omanji didn't upgrade your emotional neural network.”

Warren looked down at his veggie enchilada.

“I didn't mean to make you feel bad,” she said. “You really are different one on one. If we were with our friends, you would have zinged me back.”

“I'm just feeling quiet right now. I have these feelings.”

“That you've been bottling up for 14 years?”

“But I wasn't ready,” he said. “You always said you weren't ready. This is confusing.”

“We’re supposed to be super geniuses, as Amy would say. We'll figure it out. The Omanji modified us at a critical time in our emotional development.”

“Yeah. Time feels condensed and stretched out simultaneously. We're fast in some ways and slow in other ways. It's like being dizzy all the time.”

“Maybe you don't know how you feel about me,” she said.

“Oh, I do.”

“How?”

“Now I feel anxious again,” he said.

“It's okay, you can tell me.”

“Well, I've always loved you. There, I said it.”

“They were right!” she said.

“Who?”

“Sophie and Raven. This all makes sense now. They noticed you were anxious when you first talked to me after our first class. Remember?”

“How can I forget?”

She smiled and looked at a sea lion’s head as it popped up.

“How cute,” she said. “Um, you and the sea lion. I feel the same way. Always have. I hid it because I wasn't ready. You were anxious because you had feelings for me, even then?”

“Yeah,” he said, playing with his rice. “I wasn't ready, but I didn't want to lose you either. So, I stayed around you. I guess that sounds dysfunctional.”

“We're all dysfunctional Warren. How can we not be, after what we've been through? I'm a little more ready for this now. We can take our time. We have 270 years.”

“If they don't kill us first.”

“True, but momentum is on our side. There are now 200 million new species kids. Their families are on our side. Congress is split on what to do about us. They need us.”

“But they want to kill us too,” he said. “Now that's dysfunctional.”

“They don't want to go extinct. All species are ephemeral. Even our new species. Something will take our place someday.”

“Yeah, but what?”

“Hopefully not a singleton!” she said.

“Are these ‘the good old days?’”

“I don't know, but I do know today is a very good day.” she said.

He looked down at his empty plate.

“You're shy. That's so cute. I've never seen this side of you.”

He smiled.

“I have many sides. I can handle a super genius like you.”

“Oh, can you? We'll see.”

They shared a piece of chocolate cake as the sun set behind them. The city towers caught the last light as the cool fog rolled in under the bridge deck. They walked along the path near the bay much of the way to the bridge and back in the Moonlight. They arrived at Priya’s house just before midnight.

“Thanks for the best day ever.” she said. “I better get into the house before everything turns into a pumpkin.”

“He grabbed her hands, reached over, and kissed her.”

“You're so bold! This is side of you I haven't seen.”

“Sorry, neither have I.”

“It's okay. We'll figure it out,” she said.

They laughed. She got out of the car and leaned in.

“Yeah, the best day ever. See you tomorrow at the meeting.”

“Definitely.” he said. “Can we do this again?”

“Definitely!” she said.

She closed the car door, waved, and walked into the house, trying to contain her smile.

“Oh. Dad, I didn't think you'd be up so late.

“I’m hungry, so I'm just getting some granola.”

“The granola is over there, not next to the window.”

“Well, I heard a car.”

“A car? You're worried about me, aren't you?”

“I've always been worried. Remember your first bio-camp?”

“Oh yeah. I was 9. We made a vaccine that year.”

“You fell out of a tree onto a rock.”

“Yeah, that was embarrassing.”

“We had to meet you at the hospital. I was so worried. My heart was beating out of my chest.”

“That was just to get your heart in shape for the Omanji.”

Quinn rubbed his forehead.

“Nothing could get me ready for them taking you from me. I don't know how I survived that.”

“And you weren't even the one being abducted. You were more worried about me, than me.”

“Probably.”

Nisha walked in from the guest room.

“I thought I heard talking. What's happening?”

“Oh, we're just reminiscing,” Quinn said.

“How did it go?” Nisha said.

“We had a wonderful time. He's shyer and more thoughtful when he's not with everyone else.”

“Was he anxious?” Nisha said.

Priya nodded vigorously.

“Oh yeah. I didn't realize how much. It's funny how people change under different circumstances.”

Nisha glanced over at Quinn.

“That's the truth.” she said.

“I wasn't that bad,” Quinn said. “Um, anyway, it sounds like a new species date is like an old species date.”

“I guess,” Priya said. “It's my first, so I have nothing to compare it with. We talked about everything, even though was anxious. Sometimes I was too, a little. He said he loved me and always has.”

“Really?” Nisha said. “But he's shy in one-on-one situations. How did you get that out of him?”

“With a crowbar.”

“Poor guy,” Quinn said “He doesn't know what he's getting himself into.”

Priya smiled.

“Dad! Okay that's it, I'm going to sleep. Good night.”

“Good night Pree,” they said.

Chapter 98 – The Inscrutable Singleton

The next morning, they gathered at Raven's drone lab. Raven wanted to show off her company's latest creation.

"So, what happened yesterday?" Sophie said. "You turned off all your devices."

"Yeah," Raven said. "I tried to contact you all day and you never replied. What were you two doing?"

"Nothing," Priya said. "We just went to the beach and had dinner and came back."

"Is that it?" Amy said. "You two were gone a long time."

"Warren, you don't have to answer," Pablo said.

Sophie gave Pablo the stink eye.

"You lawyers are always trying to hide things," she said. "Spit it out Warren."

"Like Pree said, we went to the beach and ate dinner."

"What else?" Sophie said. "No counseling Pablo."

"Not much. We saw the sea lions."

"Yeah, they were stinky," Priya said, squinting at the light streaming through the window. "We saw the fog too. It was flowing like a river."

"Yeah, we know about the fog," Raven said. "It's the stuff we don't know that we want to know."

"OK fine, you win," Priya said. "Oh. Raven, is that your new drone outside the window?"

Raven didn't look out and stared at Priya.

"Stop trying to change the subject," Raven said.

Priya pointed to the window, shaking her finger.

“I'm serious!”

“Good try. My drone is out there but it's not flying yet. Not until I activate it.”

“Then what is that?”

Everyone turned and looked out.

“That's not mine,” Raven said.

“Then whose is it?” Priya said.

They walked hesitantly to the window, staring at it intently. The round object, about 1 meter in diameter, hovered motionless in the air about 10 feet away from the eighth story window. It moved closer. Its jets made aggressive hissing noises. They backed up a bit.

“Are you sure that's not yours?” Sophie said.

“I'm sure,” Raven said. “I've never seen anything like that. Not even from the Omanji.”

“Let me contact Bok,” Priya said. “He might know.”

Several seconds later Bok connected.

“Hi everybody. How are you doing today?” Bok said.

Priya connected the monitor to the conversation so Bok could look out the window with them.

“We’re fine,” Sophie said. “But we’re wondering what that is.”

He studied it for several seconds.

“It's not one of ours,” he said. “Let me do some image linkage. Hold on.”

They stared out the window in silence. The object hovered motionless about four feet from them. An unknown sensor array extended outward, pointing toward them.

“It's from the AI-1 Singleton,” Bok said.

He waited for a reply but there was none.

“Are you okay? You’re not responding,” he said.

“We're trying not to move,” Priya said. “It's too close. What will it

do?"

"Unknown," Bok said. "We haven't examined all data regarding AI species number one. We avoided engaging it on Oma. It never entered into such close proximity with an organic life form. This is unanticipated behavior. We left Oma just as those drones arrived. My advice is to do nothing. I will search for more information."

Bok disconnected. The object continued to extend sensor appendages from its hard-silver spherical body. The arms moved, pointing in all directions as though examining everything. Then it quickly moved up against the glass, striking it with a hard click. Priya and her friends recoiled backwards in response, waiting for the glass to break. A crack appeared.

"I don't like this," Priya said.

"Me neither," Raven said. "This is not the demo I was looking for."

"Where's your drone," Sophie said.

"On the ground. For the demo, I was about to make it come up to our level here on the eighth floor. I turned it off for now. It has lots of Omanji-like technology in it."

"Oh great," Priya said. "It's cutting the glass. Let's get out of here."

They exited the glass enclosed conference room they called the fishbowl. They closed the door behind them and watched.

"It's trying to get in," Pablo said.

"Maybe we should get out of here too," Warren said.

"You guys are such wimps," Priya said. "Don't you think Sophie?"

"Totally. What are you guys afraid of? If you've seen one antimatter powered Singleton drone, you've seen them all."

"Warren? What are you doing?" Priya said.

"I'm shorting the stock market. As much as I can."

"Why?"

“Because this is something new and dangerous. We don't know what this thing might do.”

“Oh. Me too then,” Priya said.

They spent a few minutes silently getting their finances in order while the drone entered the conference room and explored it. Hovering with small blue jets of hot ions emitting in rapid short bursts from many exhaust ports. It had no magnetic drive.

“It's turning toward us again,” Priya said. “Let's get out of here.”

They walked quickly to an exit door and down the evacuation stairwell to ground level. Raven instructed all employees including Amy to go to the safe room in the basement. Soon, everybody gathered there and watched the drone inspect the offices.

“What will it do to us?” Amy said.

“We don't know,” Priya said. “It's from the AI-1 Singleton. Bok told us to leave it alone. He's investigating it now.”

“Why is it here?” Amy said.

“I don't know,” Raven said. “It may be interested in our technology since we’re making drones here and we’re technologically ahead, compared to other drone makers. The one outside is our latest and greatest. I should bring it in.”

“Or you could leave it outside,” Amy said. “The Singleton drone might ignore it if you keep it dormant. I don't want it following your drone inside.”

“But if it exits out the same window it entered, it will spot my drone on the ground directly below. Maybe it’s planning on doing that. I'm going to move it to a safer location.”

While the Singleton drone continued to inspect the offices, Raven commanded her drone to activate via the network with her thoughts. It made faint sounds as it lifted up about 10 feet. They watched on the holographic monitor in the safe room.

“Impressive,” Priya said. “What can it do?”

“Lots. This is the first time a drone has ever—”

“Where did the Singleton drone go?” Sophie said.

“It's right there,” Raven said. “Oh, it was there.”

Raven frantically searched through the dozens of videos feeds coming from all cameras in the building.

“It's outside. It has your drone.” Priya said.

Before they could say another word, the Singleton drone disappeared while holding Raven’s drone between claw-like appendages.

“How did it do that? It was just in my office.” Raven said. “That’s my best done ever.”

“That was your best drone ever,” Warren said.

“Yeah, I don't think you're getting it back.” Pablo said.

“It's so weird,” Priya said.

“What?” Sophie said.

“I wasn't afraid.”

“Me neither,” Raven said.

“I was,” Warren said. “That thing could have killed us.”

“Scaredy cat,” Priya said.

“Then I'm fraidy cat,” Pablo said.

Priya rolled her eyes at Sophie and Raven.

“Guys.”

“Really.” Sophie said. “You guys are supposed to protect us.”

“Yeah,” Raven said. “So much for male chivalry.”

“Where's Amy?” Priya said.

“I'm here,” Amy said, hiding behind a table with a group of other employees.

“What are you doing back there?” Priya said.

“I thought we were going to die. Those things always kill people in the movies. It's from that dead AI planet 558 light years away.

Kepler-186 f? It killed whatever life form created it."

Silence.

"Sorry Amy," Priya said. "It's okay now. We're used to things like this."

"I see your point Amy," Sophie said. "This is different than the Omanji. It might have no morality, taking what it wants and not caring about anything else. We don't know what it is."

"Yeah, and you guys are joking around," Amy said.

"Sorry," Raven said.

"Raven," Sophie said. "You're the AI robotics expert who almost made a singleton. What could it do?"

"Anything."

"What does that mean?" Sophie said.

"I mean, whatever you can imagine, it could probably do."

"Like?"

"I don't know if I should say," Raven said.

"Go ahead," Priya said.

"Worst case?"

"Yes."

"It could unpack a new singleton and resurface this planet. Or do it without a singleton."

"What are you talking about?" Warren said.

"Remember how the Omanji had drones that could make other drones which could make more drones?"

"Yes."

"This thing may have the capacity to do that until the entire surface of this planet is consumed and re-ordered to serve it. The Omanji had limits put on every device. We don't know the limits of the Singleton devices."

"That doesn't sound good," Pablo said.

“It's not. My guess is this device detected us testing our new drone yesterday. It may want to know if it has competition.”

“What happens if it thinks it has competition?” Priya said, as she contacted Nisha.

“My guess is it will eliminate serious competition,” Raven said.

“Us?” Sophie said.

“Yes,” Amy said. “All lifeforms work to eliminate competition. Artificial life could do the same.”

Nisha connected.

“What is being eliminated?” Nisha said.

“Hi Mom,” Priya said.

“Hi Pree. What's this about being eliminated?”

“Oh, it's no big deal. A Singleton drone visited us just now.”

“The AI-1 Singleton?”

“That's the one. Here's the video.”

Nisha watched for several minutes.

“I can't believe how calm you guys were.”

“Me neither,” Amy said. “You should have seen them after. They were joking around about it.”

“You should take this seriously. Do you know what it could do?”

“Yeah Mom. Raven told us. We’re not joking around anymore.”

“It took my drone,” Raven said.

“I missed that part,” Nisha said.

“It happened really fast. We didn't see it until we did a replay,” Priya said. “What do you think?”

“I'm not an expert on artificial intelligence, but I know about life. Life does whatever it takes to survive and expand. We may call this thing artificial, but it took over an entire planet and sent probes all the way to the Oma and then Earth. It wants to survive and expand. It’s examining Raven’s probe right now. If it considers her probe

dangerous, who knows what it would do."

"If it considers?" Warren said.

"Yes. This is small organ in an enormous organism. Like Raven's singleton. It's detached by 558 light years from its parent mind. Don't underestimate it just because it's not organic. It doesn't have the restrictions the Omanji placed on their AIs. Hopefully, it has restrictions created by the Singleton. The Singleton wouldn't want competition from another singleton."

"What should we do?" Priya said.

"Let's talk to Bok again," Sophie said.

Soon they connected.

"Have you found out anything else about AI-1?" Priya said.

"We're still examining the database. But we found some interesting things."

Nisha listened while watching Raven's security monitors.

"What did you find?" Nisha said.

"It's back," Priya said. "I've seen lots of Omanji drones, but this is different."

"Yeah, it doesn't look like the Omanji's," Raven said. "It doesn't have that reflective surface and you can see all the appendages. It's more mechanical looking. The jets are brighter. More like something we would make someday. It's looking for something."

The drone rummaged through the offices, opening drawers by force with its claws. The jets blew things around the room. It didn't attempt to break any passwords. It used brute force to open things."

"It's working its way to the storage room," Raven said.

"What's in there?" Priya said.

"That's where we keep our drones. The door is super secure."

"It's trying to open it," Sophie said.

The drone used a laser to cut the latches on the solid steel door in five seconds and entered the storage room.

“So much for security,” Raven said, switching the monitor to show the storage room.

“It's fast,” Priya said.

“It knows what it's doing too,” Sophie said.

“Yeah,” Raven said. “It's picking only my best drones.”

A flash lit up the room with a red glow.

The holographic monitor went dark.

“What happened?” Nisha said.

“I don't know,” Raven said. “My proximity detectors indicate it's still in the drone room. Oh, not anymore.”

“Where is it?” Priya said.

“It's not in the building,” Raven said.

“How could that be?” Pablo said. “We just saw it in the drone room. That's six levels below where it entered the building. All the other doors are locked, right?”

“Yes, the building is under complete lockdown,” Raven said. “Let me see if I can track where it went.”

“What's that explosion?” Priya said. “It sounded like a sonic boom.”

“It exited out the same opening where it entered on the eighth level,” Bok said.

“How do you know,” Nisha said.

“I'm tracking it. It's now entering orbit. That boom was the drone exiting the atmosphere.”

“That was fast,” Raven said.

“That drone is faster than any Omanji drone I've seen,” Bok said. “I would like to capture one.”

“How could you?” Raven said as she reviewed the external camera video. “It's so fast. See? There it goes, with a bunch of my drones.”

“How did it take so many?” Amy said. “It's not holding onto all of them. Maybe there's some magnetic attraction.”

They walked up to the second level and into the drone storage room.

“It cut through that door like it was butter,” Raven said. “It's hot in here.

“Ugh, it got the one I was working on,” Amy said. “There goes three months of arduous work. But I can make a new one fairly quickly now that I have the plans.”

“It blasted your surveillance cameras,” Priya said.

“That explains that flash of light we saw before the screen went dead,” Raven said.

“That thing knew where your cameras were,” Nisha said. “It understands monitoring systems. Bok, how advanced are these drones?”

“We still don't know all the capabilities. They're more agile than Omanji drones. They exhibit more independent thinking. That makes sense because they’re cut off from the Singleton by 558 light years. The Singleton may have figured out a way to allow independent thought without the drones becoming dangerous to its survival. The Omanji have yet to develop this capability. That's why we restrict our intelligent devices. Every time a one exceeds the intelligence limit; it becomes dangerous to us.”

“Where did it go after it took the first drone?” Raven said.

“We tracked some activity to a crater on the north pole of the Moon,” Bok said. “It may be heading there. We’ve detected drones traveling from that lunar location to an asteroid you call 912 Maritima, in between Mars and Jupiter.”

“I know that one,” Amy said. “It has a very low rotation rate of 55 days, it orbits the sun every 5.5 years, and it's about 80 km wide.”

“You still know everything” Priya said.

“I still wish I were like you though.”

Priya smiled.

“Bok, why would they choose this asteroid?” Amy said.

“Because of that slow rotation period. It's large, so they can hide in the interior. They must need the minerals.”

“How many Singleton drones are there?” Nisha said.

“We know of 103, but the numbers are increasing, or we may be discovering more that have been in this solar system for a while. Each one emits a unique signal. This particular drone has been to the Moon and back 15 times in the past three days.”

“Whoa. You think my drones are now on the Moon?” Raven said.

“Soon, and for a brief time. Then they'll be taken to 912 Maritima for further examination. That is its base of operations.”

“This is depressing,” Raven said. “If I try to make another drone, they could steal that one too.”

“What about the Omanji remaining on Oma?” Nisha said. “How are they dealing with these drones from AI-1?”

“Since Oma is 23 light years away, I don't have the latest information. Several months ago, transmissions from Oma became sporadic. Now we're detecting nothing. Just before the transmissions ended, we received messages indicating AI1 drones were multiplying and attacking targets on Oma. This information is 23 years old. I feel anxious about what happened there.”

“They could do that to us,” Sophie said.

“That's possible,” Bok said. “However, I think as long as we don't pose a threat, we will be OK.”

“We?” Nisha said.

“Yes. All Omanji and humans on the Earth.”

“Do you feel you're with us?” Nisha said.

“Yes. More so every day. We've integrated a positive human character traits into our society. Individuality and freedom being two of them. The Omanji used to have these traits, but in our species, they lead to disaster as you know. However, with adjustments these traits were added to our distinctiveness. We’re making improvements to our

society every day.”

“It's back, get out of the way.” Raven said.

“It's going into the drone storage room again,” Amy said.

“This is a different drone than the last one,” Bok said. “They often work in small teams.”

“And there it goes,” Raven said as she monitored her exterior security video.

They ran back to the storage room.

“There's nothing left,” Amy said. “All our work is gone. We’ll rebuild.”

Chapter 99 – Extinction, Inevitable

Several months passed since the Singleton took Raven's drones. Priya celebrated her 31st birthday with her friends and family.

"This is like the good old days," Priya said.

"Yeah," Nisha said. "Instead of Zuma Beach, it's Santa Cruz."

"Blow out the candles," Sophie said.

"I'm getting too old for this," Priya said. "There are too many candles."

"You say that every year," Sophie said.

"No, I don't!"

"Yes, you do," Amy said as she recorded a video of the occasion. "What are you going to do when you have 300 candles?" Amy said

"I better increase my lung capacity," Priya said. "I'll be an old lady by then."

"I'll be long gone by then," Amy said. "Will you miss me?"

Priya turned and hugged Amy.

"You're making me sad. I'll miss you. We all will. We'll always remember you as the smart one."

"I still don't know if I want to live 300 years," Warren said.

"Why not?" Amy said. "I would."

"I don't know what it will it be like in 300 years. It's hard enough to psychologically adapt to changes during a 90-year lifespan. But 300 years or more? I don't know."

"Yeah," Sophie said. "Imagine being born in the year 1700-something and you're still alive today. I'd be in culture shock."

"I think we'd adapt," Priya said. "Our minds are flexible enough

to handle change like that. Especially over such a long time. One year leads to another with only minor changes from year-to-year. We'd be fine."

"Maybe," Amy said. "But my grandmother will never get into a driverless car. She doesn't trust them. She doesn't understand the popular music or art. She won't travel in a Hyperloop. She would never allow her mind to be directly connected to a collective network. She doesn't trust automated assistants in her house."

"I don't know if I would either," Quinn said.

"Don't mention this outside this picnic table, but maybe it's good that some of the old species is on its way out," Priya said.

"What a mean thing to say," Amy said. "You want us to go extinct?"

"Not all, but they still want to kill us," Priya said. "Nothing has changed. They don't care about us at all. They just want us for our money."

"Not everyone," Amy said.

"I know. But a lot of them want us dead. There are other reasons too. They keep falling for all sorts of rumors and stupidity. Many can't think logically. They're aggressive. They start wars. I'm sick of all that."

"That's true, but you talk about it as though it's us versus them," Amy said.

"We have a right to live also." Priya said. "Every day they seem to come up with a different strategy for killing us. Fortunately, there are about 230 million new species kids now. They can't kill us all, but they try."

"Yeah," Sophie said. "I can't believe the oldest are 11 now. I hear they're more peaceful than old species kids."

"I hope so," Amy said. "I think the Omanji edited your genes to reduce aggressiveness. I've noticed that with you guys. You're less aggressive than my old species friends. Can you imagine super geniuses like you being aggressive?"

“I can’t,” Nisha said. “One peaceful Priya is enough for me.”

“She has her moments though,” Sanjay said. “She still gets frustrated with me, but not like she used to before she was modified.”

Priya shook her head.

“I’ve always been a quiet and peaceful person.”

Sanjay smiled.

“Sure, Pree.”

“Where's Bok?” Pablo said. “I thought he was coming today.”

“I'll contact him,” Nisha said. “He's been having trouble, but he wouldn't say what.”

They connected.

“Bok, I thought you’d be here by now.”

“Sorry. I can't make it. The Singleton is trying to get into our systems.”

“What’s it doing?” Raven said. “Is it trying to take your drones like it did to me?”

“Yes. We have an energy shield in place, but it's trying to get through. The more we resist, the more interested it becomes.”

“Maybe you should let it check you out,” Raven said. “If it thinks you're hiding something, who knows what it would do.”

“We’re debating that now. We've been getting information from Oma. Those who stayed behind in their colony resisted the Singleton drones. The Singleton destroyed several facilities and continues to attack. The drones are multiplying.”

“That was 22 years ago because of the speed of light,” Priya said. “I wonder what's happening now.”

“We can't know,” Bok said. “We don't have faster than light communication. I don't think the Singleton does either. It's getting information at the same time we do. What happened on Oma might be what’s causing this new interest in us.”

“That's depressing,” Raven said.

“What do you mean?” Sophie said.

“I mean, ever since it took our drones, it showed no interest in my company whatsoever. I guess my drones weren't good enough.”

“Consider yourself fortunate,” Bok said. “The Singleton can get aggressive when it wants to. It brute-forced its way through the energy shields on Oma. Then it took our best technological developments. I’m afraid it may do the same thing here. We've seen larger drones hovering around lately, just like on Oma. Of a new configuration.”

“Larger drones?” Raven said. “How much larger?”

“The original Singleton drones are about 1 m in diameter. These new drones are 20 m in diameter. We think they were constructed in this solar system on the asteroid, 912 Maritima. They're bigger but just as nimble.”

“Where are they now,” Raven said.

“Several of them are on the ground outside my colony, near the tower where we make our drones. Periodically, they activate and try to force their way through our shield. They push against it and turn red-hot. Then they return to the ground and deactivate. Compared to what happened on Oma, they’re only using 5% of the power they used there. So far.”

“Maybe you should let them have some of your drones, so they don't feel threatened,” Raven said. “Maybe the word ‘feel’ is inaccurate, but you know.”

“We might let them in, but it may see us as a threat once it knows our capabilities. I think that's what happened on Oma,” Bok said.

“That's possible,” Raven said. “But I think there’s a 100% chance they’ll see you as a threat if you don't let them check you out. Let it check you out? Is it an ‘it,’ or a ‘them?’”

“Consider all Singleton drones to be part of a single entity,” Bok said. “Like a tentacle. It's forcing its way in right now. I have to go. Sorry.”

Bok disconnected.

“What happened?” Sophie said.

“I think it broke through his shield.” Nisha said.

“Here, we can watch it on Bok’s video feed,” Raven said.

She unrolled her monitor under the picnic bench canopy. The summer sky was brilliant, so she turned up the brightness.

“This feed over here looks like it has the best view.”

They watched for several minutes.

“Why are they turning red when they go through the shield?” Sophie said.

“There must be a lot of energy involved,” Amy said. “It looks like the outer hulls of those drones get hot, but they cool off once they're inside.”

“I don't know how they're doing it,” Raven said. “Remember when the Chinese exploded nuclear weapons against those Omanji shields and not much happened?”

“Yeah,” Priya said. “I can't imagine anything defeating Omanji technology. But they did. With brute force. The drones must have a lot of antimatter energy to focus on a small part of the shield.”

They watched for 20 minutes while the Singleton drones entered and exited the towers in Bok’s colony, making colorful ripples in Bok’s shields. A few minutes later, Bok dropped his shields. Once the Singleton drones finished gathering the samples they wanted, they disappeared into the upper atmosphere, ahead of sonic booms. Several hours later, Bok contacted them while Priya had a dinner barbecue with her family and friends back at her house in the Santa Cruz Mountains.

“What happened?” Nisha said. “We watched your video feed.”

“It took samples of our technology. It will soon know all about us and our capabilities. It’s trying to break into our computer networks, but so far, they have failed. They’re good at mechanics, but not networks.”

“It didn't even try to get into my network,” Raven said. “I guess we're no threat.”

“Consider yourself fortunate,” Bok said. “The Singleton damaged the infrastructure on Oma for those who stayed behind. They fought the Singleton, but it killed no Omanji. That was 22 years ago, but we're getting the news every day, just 22 years late.”

“What can we do?” Nisha said.

“It's best to do nothing,” Bok said. “When you don't resist, it won’t do anything. It just wants to know if you’re a threat.”

“What if it thinks you are a threat,” Raven said.

“I don't know, but at the least, it will disable the threat and leave everything else alone. Other possibilities are less palatable. I'll speak with you all later. We need to assess the damage.”

They disconnected.

“Less palatable. That a wonderful way to put it,” Priya said. “What can we do about it?”

“If Bok can't do anything, neither can we,” Raven said. “I have a bunch of new drones ready. Hopefully, they won't get stolen again.”

“The Singleton hasn't stolen anybody’s drones but yours and Bok’s,” Warren said. “In a way, it’s paying you the ultimate compliment for a human.”

Raven smiled.

“I wish it would complement someone else.”

“The Singleton has done one good thing,” Pablo said.

“What’s that?” Sophie said.

“It made us forget about the problems in the world. The first category six hurricane to ever make landfall in Florida completely destroyed Palm Beach yesterday and we’re worried about the Singleton.”

“Well, the Singleton is a bigger threat to the planet than a super hurricane,” Nisha said. “So were the Omanji for a while. They made us forget about the radioactive terrorist attack, the mutation pandemic, the AI banking takeover.”

“Don’t forget the European war that almost happened because the

Omanji disabled all nuclear weapons," Quinn said.

"Yes," Nisha said. "We used to think our problems were so big until bigger ones came from outer space."

"What about the AI singularity that was supposed to happen by now?" Oyuun said.

"Singularities don't happen in real life," Raven said. "When things double every three years, it looks like the graph will go straight up after 20 or 30 years. But day by day there's not much change. Nothing has exploded yet."

"Well, we did have some explosions like the banking thing," Warren said.

"And the AI bio engineering debacle," Priya said.

"And the AI lawyer debacle," Pablo said. "Remember how automated lawyers provided better defense than human lawyers? The judges couldn't keep up with the perfect arguments on both sides. We may need AI judges."

"Why trust an AI judge? Humans are bad enough." Sophie said.

Pablo gave her the stink eye and smiled.

"Yeah, but there's been no super-intelligent AI singularity takeover like they predicted decades ago," Raven said. "We have no robot overlords yet."

"Except for the Singleton," Nisha said. "We don't want a new singleton happening here. Right Raven?"

Raven played with her food.

"Right?"

"Um, yes," Raven said.

"Maybe the Singleton will prevent our extinction," Priya said.

"True, unless it causes it," Raven said. "But our technology hasn't led to any singularity except for mine. We've had mini AI singularities though, like the AI takeovers of various local systems. I'm glad the Omanji gave Bok the technology to stop nukes and delivery systems from working. Imagine AI getting hold of them."

“Me too,” Amy said. “It’s one less way we can kill ourselves. We still have bioterrorism though. I think over the next 300 years, one thing after another will be automated until our lives are taken care of and we only make top level decisions.”

“Yeah,” Priya said. “It's already happening when we let an automated system make decisions for us and we don't understand how the decisions are made. We just know their decisions are better because big data tells us they are better.”

“Exactly,” Amy said. “On a different topic, I have an announcement to make.”

“What is it?” Sophie said. “Are you getting married to that guy you avoid talking about? We’ve only seen him a few times.”

“Well, not yet, but maybe.”

“Then what is it?” Priya said.

Amy played with her fingers.

“Yes?” Priya said.

“Well, I’ve decided that when I’m ready, I’m going have a new species baby using your new procedure.”

“Which one?” Sophie said.

“The one where the egg from me is fertilized by my old species husband like normal. Then the new species modifications are made to the fertilized cell, so the baby has two natural parents raising it. So, it’s a more natural Mod child. Like the ones the new species kids will be having someday when they grow up.”

“Congratulations.” Priya said, as she hugged Amy. “This is a new procedure, but it’s working perfectly now that we’ve isolated all the changes the Omanji made to our DNA. Just remember they’ll be adolescents from age 20 to 40. Since the oldest new species kids are now only 11, we don’t know what a typical new species adolescence looks like.”

“Oh.” Amy said, scrunching her face.

“What will you name it?” Sophie said.

"Well."

"Spit it out!" Priya said.

"I want a girl. I'm thinking of Sopriya, after you guys."

They all smiled.

"Very diplomatic," Sophie said, nodding her head.

"Yeah," Priya said. "Sophie is first, but my whole name is there. It's a perfect blend. I like it."

"When I'm gone, I want you guys to be her family. Promise?"

"Promise." Sophie and Priya said at once.

"Speaking of kids," Nisha said.

"Neesh," Quinn said. "You said you wouldn't bug her."

"Mom, I'm only 31. I won't be ready to have kids for another 20 years. Ask Sanjay. He'll be ready soon."

"Don't look at me." Sanjay said.

"20 years? I'll be 85," Nisha said.

"10 years then?" Priya said, looking at Warren.

"Don't look at me." Warren said.

Priya turned to Sophie. Amy and shook her head.

"Guys," Priya said.

"Yeah, they're still guys," Amy said.

They giggled.

"I resemble that remark," Pablo said.

"Do you want to have a kid," Sophie said.

Everyone turned to Pablo.

"Me? Don't look at me either."

Raven glanced at Oyuun.

"What?" Oyuun said.

"Maybe we should look around for more suitable boyfriends,"

Priya said.

"Yeah, I think you're right," Sophie said. "We have over 12,000 Omanji-modified fish in the sea."

Raven nodded her approval.

"Um, we're just kidding," Warren said.

"We'll see," Priya said.

Quinn turned to Nisha.

"Some things never change," he said.

"So it seems," Nisha said. "Okay Pree, how about five years?"

"Mom, I still don't think I'll be ready then. Amy, promise me you won't bug your new species kid about having a baby. You see what happens."

"I won't. I know I may never see my grandchildren. If adolescence lasts 20 years after a 20-year childhood, I may not want grandchildren anyway."

"True," Priya said. "Too much work."

"How do you know so much about motherhood?" Nisha said.

"She's a super genius, remember?" Amy said.

"Oh, yeah that's true. Okay, how about by the time you're 40? I'll be 74."

"Mom."

Warren's cheeks turned red as he played with his food.

"Okay, just checking." Nisha said.

"To get back to your topic Amy," Priya said. "Maybe we can extend your lifespan so you can watch your child grow up and see your grandchildren," Priya said.

"How? I'll have to be at least 100 if I live that long."

"Well, we can already generate new organs with your stem cells. So that gets you over 100 right there if your other systems hold up. We're now able to modify the DNA in individual cells like the Omanji

did with us."

"I'll be your first human test subject." Amy said.

"Really?" Sophie said.

"Well, it sounds dangerous."

"We've tripled the lifespan of our smart rats. We see no unusual side effects. We can't modify every one of our trillions of cells like the Omanji, so we're replacing some cells in critical locations such as the immune system."

"What about me?" Sanjay said. "I want to live forever."

"We're still working on your autism," Priya said.

"Put me on the list too," Quinn said.

"It looks like you're going to have a few new customers," Nisha said. "Count me in. Am I too old?"

"No," Sophie said. "This slows down the aging process at any age. But I don't know about reversing it. We'll see."

"If this doesn't work," Amy said. "Promise me again that you guys will be family to my child when I'm gone."

"Promise." Priya and Sophie said at once.

Nisha looked into Quinn's eyes.

"Will you still love me when I'm old?"

Quinn smiled.

"I do."

"Very funny. You know, I bet the Omanji never guessed," Nisha said.

"What?" Quinn said.

"That taking a few thousand humans as pets would lead to the voluntary extinction of our species. The old species birth rate is dropping quickly."

"We're not extinct yet," Quinn said.

"Yeah, but it's only a matter of time," Nisha said. "Neither are the

Neanderthals extinct in a way. They live on in a part of our genome. Humans will live on too. When you walk down the street, little has changed in the past 15 years, but everything has changed. Pree, can you pass the Broccoli? I want to keep my old species body alive as long as possible."

"Sure Mom. I want you to live forever. I want us all to live forever."

Chapter 100 – Epilogue – Happy 300th!

Priya and Sophie accepted the lifetime achievement award in genetic engineering, in a ceremony at the historic Genomaly headquarters building in Palo Alto. They celebrated the award and Priya's birthday, with family and friends at Priya's rebuilt house in the Santa Cruz mountains. Her first house was destroyed a few decades ago in the great fire of October 2305.

"Blow out the candles," Sophie said.

"I'm getting too old for this," Priya said. "300? There are too many candles."

"You say that every year," Sophie said.

Priya shook her head.

"No, I don't."

"Yes, you do," Sopriya said. "Here's a video my mom made on your 31st birthday. You said it way back then, even before I was born."

They watched the video for several minutes. Priya started to cry.

"I miss Amy."

Sopriya teared up.

"Me too," Sophie said. "Amy was so smart and full of life. She was our best friend."

"Yeah," Priya said. "I feel like she was just here a few days ago."

"Mom died over 150 years ago," Sopriya said, wiping away some tears.

"I know, but the years pass by more quickly as you get older," Priya said.

They continued to watch the video for a few minutes. Nisha playfully hugged Quinn.

“Look at Mom,” Priya said, tearing up. “She looks so young. I still miss her, and Dad and Sanjay. I wish I could go back in time and hug them again.”

She stopped to compose herself.

“I’m glad we were able to extend Mom’s and Dad’s life long enough to see their grandchildren grow up. I can’t believe they’ve been gone for almost 170 years.”

They continued watching.

“Warren, you look young too,” Priya said. “Look at your wild hair.”

“And you look like a little girl. Well, we were only 31 going on 16. What did we know? When are the kids coming?”

“They should be along in a few hours,” Priya said.

“I hope so. This is a big birthday.” Warren said.

“It’s not as big as 100 or 200,” Priya said. “After a while, a birthday is just another day. Your 300th is coming up soon Sophie.”

“Don’t remind me. Why do people make such a big deal about birthdays?”

“For legal reasons,” Pablo said.

“You think everything is for legal reasons,” Sophie said. “When are our kids coming?”

“Later this evening.”

“What about your kid?” Sophie said to Raven.

“When did he say?” Raven said to Oyuun.

“He’ll be here later too.”

“That’s okay,” Priya said. “It’s just us. Like the good old days.”

“These days are the good old days,” Raven said. “There were so many problems back then. Things are much better now.”

“I know,” Priya said. “When our extra-long lives were in front of us, and future was unknown. It was like an adventure. But yeah, people aren’t trying to kill us anymore.”

“That’s because the people trying to kill us are nearly extinct.” Warren said. “There are only a couple million of them left and 15 billion of us.”

“I like the peace and open space,” Sophie said. “No wars. No delusional beliefs based on nothing. We can travel to any place on Earth without fearing for our lives. More people but no urban sprawl.”

“Yeah, the good new days,” Raven said. “We can thank the Omanji for our megacities and more open spaces. Bok is coming, right.”

“Yeah, soon,” Priya said.

They continued watching the video.

“There’s the oak tree in the backyard of my old place. I don’t know how it survived the fire. It looks much bigger and more picturesque now than 269 years ago.”

“That’s when you know you’ve lived a long time Oyuun said. “When you live for a substantial portion of the lifespan of an oak tree.”

“Tell me about it,” Raven said. “Look at us back then. We looked like we were on top of the world.”

“Yeah, but we had tough times. Somehow, we survived,” Oyuun said.

“Barely,” Raven said. “How many AI singularities? How many attempts on our lives?”

“Yeah,” Pablo said. “How many attempted rewrites of the US

Constitution did we survive? Eight or nine?"

"Ten I think," Sophie said.

Priya raised an eyebrow.

"Well," Sophie said. "When you're around a lawyer for 269 years, you remember lots of odd things."

Priya smiled.

"Apparently so."

They continued watching the old video.

"Warren, are you glad you made it to 300?" Priya said. "You didn't like the idea back then."

"I'm all for it now. How did we ever feel happy, living for only 90 or 100 years? That's too short."

"Yeah, but not for our teeth," Priya said. "I've had two sets of new teeth from tooth bud implants because they wore out."

"That's true," Raven said. "The Omanji thought of almost everything, but human teeth wear out every 120 years no matter how long you live."

"I can't imagine growing old and dying at 100," Sophie said. "Just when you're getting smarter and wiser, you die. Every time a wise person dies, that information is lost forever. That's a loss for society. Now we have lots of older and wiser people, but they're not stuck in the past. They still help society. We don't have the rigidity of having lots of older people."

They continued watching.

"I think we adapted to change pretty well considering how different life is now," Priya said.

"On Earth." Sopriya said. "You've never even been to Mars."

"There's nothing interesting there. Just a few microbes deep

underground that aren't much different than what we have on Earth anyway. Anyway, it's too volatile ever since Mars declared independence."

"Admit it aunty Priya," Sopriya said. "You're afraid of outer space."

"I am not. Who wants to live underground while your bones thin out?"

"Then why is it that every time you have a chance to take a trip, you somehow get out of it? I can understand you not wanting to go to Proxima Centauri or further out, but still."

"I've been busy," Priya said.

"You missed our trips to the Jupiter Moons and the rings of Saturn. The incredible Europa geysers. Smoggy Titan. Even several trips to Mars. You won't even go to the Moon or the space stations. You don't like auto-music. You don't use the auto-labs."

"Well yeah," Priya said. I want to understand how something works before I use it. Nobody understands how any of those auto-things work. AIs make the best decisions about medical care, and most other things, but we often don't know how they came to those decisions. We blindly accept them. We often don't know why cars stop for no reason or a scanner orders a procedure on you for no reason. Usually even the doctors can't tell you why. We go along with these invisible decisions for our entire lives. As for not going on your trips, okay, being weightless freaks me out. But I'm no Luddite. I like the new mind-music and the dry bathing. I use the auto-lawyers and the home physicians."

"But AI makes better decisions than we do," Sopriya said. "At least for most things. It's not like the old days when my mom made

this video and she had to figure out everything herself."

"I guess it's hard to adjust to change. It sneaks up on you over such a long time," Priya said.

"People still work and have careers," Sopriya said. "It's more about guiding our agents now."

"I know," Priya said. "Each person now does the work of hundreds of super smart people. I just like getting my hands dirty. Running those tests myself and all that stuff. Working at the root level."

"Even back in our day, most things were automated," Sophie said. "We didn't have to sequence the DNA manually. Over time, more of the mundane things have been automated, and now we just do the top-level things. We knew this would happen even back then. Software programmers back in 2040 didn't understand how their vibe code was converted into machine language."

"We've built each layer of complexity on top of the old," Sopriya said. "Then we climb on top and make the next layer. We just know the lower layers work, like those old-time programmers."

"You're so analytical," Priya said. "Just like your mom. Look at her."

She teared up again as she watched Amy in the video laughing.

"I'll never get over her being gone."

She wiped her tears away as they continued watching.

"Amy knew back then what AI would do," Raven said. "But we didn't know how it would shape our lives. We design and build our own houses with no expert help. We do our own health care with no doctors usually unless surgery is required, which is mostly done with robots."

“Genomaly is automated,” Sophie said. “It develops drugs and genomes on its own now. We just monitor it.”

“Yeah, but we still need the advanced knowledge to guide it,” Priya said.

“Remember the old energy companies?” Oyuun said.

“Yeah, they made sea level rise by two feet before it dropped back a foot,” Raven said. “Only because you figured out the fusion conundrum and solar and wind power got cheaper.”

“I figured it out by setting two AIs against each other to solve some problems. Even though the AIs solved them, I knew what needed to be solved. You did that with your drones.”

“True,” Raven said. “They learned from each other, but I don’t know how they did it. That helped when we had to move that asteroid that would have hit Earth about 50 years ago.”

“Yeah, what would we do without AI?” Sophie said.

“We’d be back in the dark ages,” Pablo said. “Or extinct by an asteroid impact.”

“Yeah, the age when we had real human lawyers.”

Priya said.

“I resemble that remark.”

“We know,” Sophie said, smiling.

Bok landed in Priya’s front meadow. Priya’s front door monitor recognized him, let him in. It guided him to the back-yard barbecue.

“Bok. I’m so glad you could come,” Priya said.

“I barely made it back in time from our Titan base,” Bok said. “Beedee won’t be back for another week. She needed to make some adjustments to the heating units. She’s always working on something. These days I like to relax more.”

"Me too," Priya said. "Even with a long lifespan. I feel like I'm 70 in the old paradigm."

"You're still beautiful," Warren said. "You don't look a day over 200!"

They laughed and continued watching Amy's old video.

"Oh yeah, Bok, you couldn't make it to my 31st birthday party because the Singleton was forcing its way into your colony."

"I was worried about the Singleton," Bok said. "It could have done anything it wanted to us. But now it just sits out there watching us."

"For 269 years it's been doing almost nothing," Raven said. "I guess time doesn't matter to it. It just waits for threats and eliminates them. So far, I guess we're still no threat."

"Fortunately for us," Bok said. "We might not be here otherwise."

"Speaking of survival, I just finished my latest survey of Earth-like planets," Raven said.

"What did you find?" Sophie said.

"Within a 5000-light-year radius, which totals 1/10th the diameter of the galaxy, there are about 600 million stars. That's mostly in our part of the Orion arm. We see about 50,000 Earth-like planets in or near the habitable zone of their stars. We're estimating about 50 of those would be suitable for us to live on."

"Why so few?" Sophie said.

"Remember how the Omanji had to move? Part of the reason was the chaos that was happening, and AI-1. But a big part was they had trouble breathing our atmosphere. Even with perfect temperatures and other factors, atmospheres vary so greatly that we could comfortably live on only about one out of every thousand Earth-like planets. Even

Oma has a caustic atmosphere for us."

"We still have trouble breathing on Earth, despite our modifications," Bok said. "The Omanji finally found a good planet. But we're having trouble finding another one."

"The closest planet for humans we've found is Kepler 62-f. But that's about 1200 light years away. We recently made it to Proxima Centauri which is only 4 light years away. Only microbes there. We have a long way to go."

"How many planets we know of have life?" Sophie said.

"Right now, we're guessing about 2000 have life based on atmospheric readings. At least 50 seem to have or had intelligent life, but we're too far away to know for sure."

"That correlates with what we found," Bok said.

"There's -"

"We know," Priya said. "There's hope for us yet."

They laughed.

Priya walked over to the big old oak, running her hands carefully over the pebbled bark.

"I can't tell where it got burned. Or where the branch broke in the earthquake. It healed itself. I want to live as long as this tree."

"They can live to be over 600 years old," Raven said.

"Sounds good to me."

"I don't know if I would want to live 600 years." Warren said.

"Why not? I would," said Sopriya.

"You said that about 300 years ago, and now you're glad," Priya said.

"Yeah, but 600? That's too long," Warren said.

Priya smiled.

“Warren, I want you to live forever. I want us all to live forever! I have some ideas.”