

Chapter 10

That day started surprisingly normal. Olirian's food fabricator malfunctioned, and he'd had to eat his breakfast cold. His neighbors argued as they rode down the lift, and the traffic lanes were busy, which meant he was nearly late arriving to work. No one would care, not today, but it was a matter of pride for Olirian to be punctual.

"Oli! Wait up," someone called as he exited his hover.

"Cutting it close, Jof," he answered, waiting for him to catch up before heading for the entrance.

The statistical analyst grinned. "Couldn't sleep, so getting up was hard. Can you believe it? The day's finally here!"

Olirian returned the smile. "I know. All those years of work are finally going to pay off."

"Hey, Annie," Jofre greeted the guard as they entered. "The universe is changing today."

The guard waved back, then stared ahead.

Jofre called the lift. "What are you doing until it all starts?"

"I need to check on a simulation I left running. I also want to take another crack at the Arsinian Project; I think I worked out how the nucleotide assembly works."

"You're working? On today of all days? Come on, you need to celebrate."

"The celebration's later, when the announcement's made." Olirian smiled and entered the lift. "I'll be there, don't worry. I am not going to miss watching it being loaded."

Jofre gave a theatrical sigh. "And here I thought all you sovereign types were only interested in partying and having fun."

"I do wish you'd stop bringing that up."

"Come on, you guys have more credits than anyone except SpaceGov itself. Why are you here, toiling among the masses with the rest of us? I just don't get you sometimes, Oli."

"Because some things are worth more than all the credits in the universe, and this is certainly one of them."

"At least join me and Eveline; we're going to have a pre-party celebration."

Olirian shook his head. "How you can have sex with her, considering who you're married to, I'll never understand."

"No woman can keep up with *The Jofre*." He grinned. "It keeps the marriage interesting. You should try it. Don't all you so—"

"Please stop. It isn't because I'm from a sovereign ship that I'm a hedonistic animal. Only one of the Sovereign Families is like that."

"Any chance you can score me an invite?"

"No," Olirian replied flatly. "And I'm going to pass on cheating on my wife."

"Fine, but at least drop by for a drink."

The lift's doors opened, and they exited.

Olirian sighed. "Fine, but only if you can promise me the two of you will be dressed."

Jofre smiled. "We'll be dressed, no worries there. I can't promise what state the others are going to be in though."

"Please tell me you aren't planning an orgy."

"I'm not planning anything, but I have invited a bunch of like-minded people."

Olirian eyed Jofre. "There's only a hundred and fifty-three people in the company. Just how many of them are willing to put their livelihood at risk for sex?"

"More than you think, and it isn't like anyone's going to be working today. Today is a party day."

"You are so looking to become one of those statistics you study, Jofre."

The man grew thoughtful. "The ratio of people who lose their jobs for having had sex, versus what happens to those who never relax even a little. You know, that might be worth looking into. Can I set up recording instruments in your labs? I think you'd make the perfect first subject for the 'work-obsessed' side of the research."

"You have fun," Olirian said as they reached the door to his lab. "I won't tell Brian what you're up to if I run into him. I have work to take care of."

"Live a little!" Jofre yelled as he kept going.

I've lived plenty, Olirian thought as he entered his lab. *This is about other people living.*

As he did every morning, he powered on the machines and had them run their calibrating sequence, then he checked on the progress status of those he'd kept running.

Once he'd gone through every one of them, he sat at his terminal, unlocked it, and was bombarded by messages. At a glance, all of them seemed to be about the party. Brian's message reminding everyone that even on this momentous day, work had to go on was lost in the sheer volume of people who'd sent him reminders to attend the party. Wasn't anyone planning on working today?

He found three messages that had nothing to do with parties. One from a coworker looking for an update on the analysis he'd asked Olirian to run on the organic molecule he'd built. He replied with the results that had compiled through the night.

The other was from another researcher, at another company he was corresponding with. He saved that to his datapad to read when he had the time, and the last was a request from his wife to call her. Which he did.

"Hello, Olirian," she said, smiling at him. "You're looking well." As with every call before, her tone was friendly, but cool.

"And you are looking as lovely as always, Satina." Olirian simply looked at her. Her bronze skin, her pale blue eyes, her long black hair. How he couldn't wait to go home to her. "How are you? How is everyone?"

"Missing you, as always. Wishing you'd put an end to this insanity you insist on pursuing."

He stifled the sigh. "Satina, you know this isn't insanity. It's a chance to change the universe."

The tone cooled a few degrees. "You're a Prian, Olirian. What do we care of the universe when we have our ship?" Her tone softened. "Come home, do your research here."

"Soon, Satina. This isn't something I could have worked on in isolation. I had to work with people who think like me, who think beyond the hulls of the ship. I have to stay until it's all done, but it shouldn't be long anymore—a couple of weeks at most for us to shut down everything here, maybe a month."

She did smile then, and Olirian was amazed at how much more beautiful she looked. "I did fall in love with you for the unbound optimism you have. I just wish you could have been content unleashing it here, at home. The children miss you."

"Soon, Satina. Soon I'll go home, and I'll never have to leave. The universe will no longer have a need for a bio-geneticist anymore. The only job I'll have then will be to be a father and your husband."

"Then we'll eagerly await your return."

"I love you, Satina," Olirian said, wishing he could convey how much that was true just with his voice.

"And I too, Olirian," she replied with only a hint of sadness in her voice as she terminated the call.

"And you think I'm ever going to be willing to put this at risk for a fling with Eveline, Jofre?"

Thinking about Satina, holding her, spending time with his children, and grandson, and granddaughter—she'd be two or three by the time he returned—he brought up the result of the simulation and all thought left.

"Casualty result, 100%"

That couldn't be right. His sample had been a million people over a hundred fifty years. At worst he'd expected one percent to die, and that was simply because he thought there were deaths so catastrophic that Salvation wouldn't have anything left to repair, like someone flying into a star, or falling into a vat of molten metal.

For everyone to die, the problem had to be with how he'd programmed the simulation. Maybe he'd made a mistake when he'd coded in Salvation?

He brought up the simulation, looked through the code, found Salvation, and confirmed it was correct. He checked the communication logs. It was possible that an infection had carried over when his random population sample came in, and that had thrown off the simulation? No, there were no abnormalities in the data transfer.

A glitch? The only way to check for that was to rerun the simulation, so he ran it. Not wanting it to take all day, he checked the mainframe for any unused processes he could borrow, and found so many of them, he suspected Jofre had been right and no one but him was working.

He limited it to a quarter of them; he wanted to be able to see what happened. He kept his attention on how the subjects were affected. The group was a randomized sampling from the planetary census. Bramolian Six had over seventy million people, so his sample was diverse; it even included a handful of aliens.

Within days of being infected, all instances of health-related problems stopped. Visits to hospital and clinics ended. Each time one of the subjects was injured, the name flashed in red and the tally went up. If someone became sick, the name flashed green. If someone died, the name was grayed out.

Over the first year, names flashed on and off in red. The tally went up close to two million. No name flashed green even once. Sickness had been eradicated. One person had died.

He paused the simulation and brought that person up. A woman, Talia Durain, supervisor at the Triscalic Power Plant. The plant had been sabotaged by protesters belonging to "Save the Universe", a group who believed that the use of anti-matter drained the life of the universe, speeding up the approach of its final death.

The explosion vaporized the complex as well as half of Triscalic City itself. Just under three million dead, the simulation's statistics informed him, but of them only Talia had been in his sample, so they weren't tallied. Being vaporized would make it difficult for Salvation to do its work. He unpaused the simulation.

The injury tally kept climbing, speeding up so that by the end of the fourth year, it hit one billion. As people realized they were almost impossible to kill, they took less and less care to be safe. Jofre had brought up that concern, but the consensus was that as the novelty wore off, people would go back to living normally, and that included taking the usual precautions. After all, not dying from an injury didn't mean you didn't feel the pain of it.

In those four years only five people died, each in an incident that didn't leave a body for Salvation to repair.

Year five passed with no death. Six saw one. Seven, two. Eight, none. Year nine brought three, which Olirian considered a statistical anomaly, but year ten had ten deaths. Eleven, two-hundred. Twelve, six-thousand.

He sat stunned as the death toll went up faster and faster until the simulation ended halfway through year fifteen. "Casualty results, 100%."

He shook himself and brought up the causes of death. A variety of health failures.

That was impossible. Salvation was supposed to keep that from happening. He brought up random DNA strands to see what had happened to them. They were all ripped apart.

That...that couldn't be right.

He set up six simulations to run concurrently, using every one of the processes available. He gave each a different starting pool, not from Bramolian Six but starting each on a different planet.

He watched as the pattern followed the first simulation: no sickness, a rise in injuries, a fall back to the norm, the occasional death, and then mass death. The simulation he started on Gradovic lasted the longest, twenty years. Each DNA strand he looked at was damaged beyond repair.

He forced himself not to panic. He needed to find the reason why. The simulation couldn't account for something outside its parameter, like someone attacking the virus directly in an attempt to corrupt it. So the triggering event had to be something normal. No, for it to happen in every simulation, it had to be mundane. Was it possible there was some ordinary thing all of them had forgotten to take into account?

The stress group was composed of sixty-eight researchers, the largest team in the company, because Brian understood how vital it was that Salvation be put through all the tests that could be imagined. The team had even tried to get Salvation to mutate, but their design was so stable that over the universe's lifespan, it

hadn't changed at all. It was impervious to change.

Or at least, it should have been.

He wanted to get Brian, inform him of what he'd found, but without being able to explain why it was happening, what good would it do?

He ran a new simulation, and this time he brought up twelve subjects out of the million to monitor directly. He watched as they got injured, had accidents, lived their lives. He watched the list of events, looking for a common thread, something they all went through that could have triggered the fatality event.

He watched them die over three years. Heart failure, kidney failure, aneurysm, something the simulation simply marked as "generalized failure".

He brought up one man, Brody Kalvert. He was twenty-one when he was infected with Salvation, thirty-three when he died. He'd lived a normal life, gotten a statistically average number of injuries, and then simply died.

He ran a new simulation, different planets again to ensure an entirely new pool of subjects. He focused on one of them, Felicity Ray-Drummond, a mother of two at the moment she was infected. And he looked at every aspect of her life throughout the simulation. Thirty screens documenting everything.

He couldn't follow everything—there was just too much to look at—but he caught something on her DNA screen. By the time he was able to bring it up in focus and pause the simulation, three years had passed and she was dead, her DNA unraveled.

But now he had all that information to look at. He rewound the simulation and let it play, looking only at the DNA screen. He watched as Salvation attached itself to the DNA, became part of it. Immediately it began making repairs. Felicity had been in her fifties when she was infected, and within days, her body behaved as if it had undergone a thirty-year rejuvenation treatment.

Salvation detected injuries and boosted the healing ability of the body to deal with them. Within minutes, anything minor was dealt with. Within hours, everything was dealt with.

There was a change to the DNA.

He paused the simulation, brought it back to that moment, found the altered strand. He looked at the other screens, searching for a trigger, but there was nothing. She was sixty-three by then, it was the middle of the night, she was sleeping, normal REM cycle, her diet was normal, there hadn't been any sexual encounter that day.

Possibly this was a random mutation. He moved the simulation forward one day. The change was still there. He looked at the year; she'd been infected with Salvation for thirteen years. He let the simulation run its course and watched as more and more changes happened on the DNA, none of them corrected. On year fourteen, she died of pulmonary failure.

Why hadn't Salvation fixed those changes? It knew what the baseline was—it was the first thing it did—so it should bring everything back to that when a mutation occurred. He looked at the mess represented on the DNA screen. How had Salvation allowed that to happen?

He rewound the simulation and watched it go. When that first change appeared, and stayed, marked the start of the process, whatever it was. He watched more changes appear and stay. The system didn't give any reasons for them. As far as the simulation was concerned, they were normal.

When the change marked as a mutation registered in Olirian's staggered brain, two years had passed. He went back and watched. The change happened, the system marked it as a mutation, and Salvation fixed it, but not to the baseline—to the damaged version it had been before it mutated.

Olirian tried to swallow. The only way that could happen was if Salvation thought the damaged strand was the baseline, but that was impossible. Salvation couldn't change what the baseline was.

Or rather, it shouldn't be able to.

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