## **Prologue**

This is how it ends. In silence.

Senara walked the deserted street. The mid-November sun shone over Historic Sevierville, Tennessee, as she wandered past empty storefronts that had been repurposed to serve the community with basic services. She shifted the shotgun slung over her shoulder, waiting for him to appear in the street. Would she be able to use it when the time came? Was there enough of her left to do what must be done?

Of course, she would. Her gift was the ability to rise above herself and see reality. It's what made her a great psychiatrist, therapist, and person. It might have kept her alive when everybody died.

A cool wind blew leaves across the pavement. At least they weren't littered with bodies this time. That separation kept her alive. It's the only way she survived that and found her way here. *I've never been so sorry to be right.* 

They thought they had come so far—the brave survivors of the 2109 Prion Pandemic. The truth was that they learned nothing: not from history, experience, or life beyond the death that took over the world. They learned new ways to make the same mistakes all over again.

Something isn't right.

They should have known better than to use the same technology that failed them the first time. Or did it? Humans programmed the AI, and technology can't violate its programming. *Can it?* 

The soft sound of footfalls carried on the wind. Senara stopped and looked around. It worked. He had answered her call, and why not? After all, doesn't a man know his wife?

"Come on," she whispered, looking at the buildings along the main strip of the street, which were old businesses and stores transformed into functional businesses. All they needed to build a new world, a new order, a new life right here in this small town in the mountains of Tennessee.

The footsteps stopped. Of course, he heard her. Which Killian would come to her? The human, or the AI?

He'd masquerade as human. That would be their first strategy: appeal to the biological before the programming took over. Humans can only act as their mind and body allows. AI has countless algorithms processing faster than any neuron can fire.

Senara stopped in the middle of the street and pulled the gun off her shoulder. "I have a riddle for you."

"Speak," his voice said softly.

She propped the gun on her shoulder, focusing on the shadow shifting nearby. "How do you beat the technology that has grown beyond you?"

"By evolving faster," the voice said.

"Wrong." She pulled the trigger.

## Chapter 1

"I don't feel right," Taryn said as she picked up her coffee cup and drank.

Senara studied her best friend across her kitchen table in the breakfast nook of her condo, between the kitchen and the great room. The building was quiet, mostly because the community was somewhere between asleep and awake at ten o'clock in the morning, and mostly because the building was located at the edge of the Historic District of Sevierville, Tennessee. Formerly a tourist city in the county that shared Gatlinburg and Pigeon Forge, the community had been rebuilt after the Prion Pandemic. This area was small enough to keep everybody together in a central 'main street' style setting, but with enough space that they weren't intruding on one another's space. Senara and Taryn often met for breakfast after their morning workout class. They had enough time for breakfast before walking to the clinic for their daily work after their significant others left for their work at the community power plant just outside of town. Everybody worked a six-hour shift, either from six o'clock to twelve o'clock to six o'clock, but the recent Phase One AI rollout had the engineering staff pulling extra hours and crossing shifts.

"It's the AI reactivation," Senara said. "Remember what I said at the town meeting last week? You'll feel strange while it connects to your neural chip and reactivates the nanotech in your body. We've made upgrades that should minimize the effects, but the body always goes through an adjustment with any change.

"I know, it's just strange." A deep sigh racked Taryn's thin body. "I'm used to being healthy and feeling good, but I barely slept last night. I kept waking up from the strangest dreams."

Senara pushed her brown, chin-length hair away from her face and drank her coffee. "Killian complained about the same thing. He woke me up tossing and turning all night and complaining about how hot it is."

Taryn smiled and drank her coffee. The light streaming across the nearby kitchen cast a yellow beam of light across the open space between the kitchen and great room, which were sparsely furnished in neutral shades to reflect the light from the kitchen window and sliding glass door in the den that opened on a small balcony. "Tell him welcome to the south. Summer starts at Easter and ends at Thanksgiving in the subtropics. It's almost May. He has a long way to go."

"I don't think it's his Oregon origin. I think he had a fever," Senara said. "He was all right this morning, just sleep-deprived."

Taryn smiled. "Sleep-deprived from the AI reactivation, or sleep-deprived from returning from your honeymoon?"

Senara blushed. "Maybe both." She and Killian had married the Saturday before Thanksgiving but delayed their honeymoon until the previous week. They had just returned from a ten-day honeymoon to the Bahamas.

"I shouldn't joke. Reid had similar symptoms from the AI reactivation," Taryn said. "I hope Killian and Reid don't fall asleep at the plant. Heck, I hope I don't fall asleep at the clinic. The last thing these people need are sick medical and tech staff. I'll bet we're swamped again. I wonder how the first shift is going?"

"I haven't heard. I'm working on a recalibration at the lab today, so I'm not on the clinic update text," Senara said. They both worked the second shift at the community health clinic: Taryn was a physician assistant, and Senara was a psychiatrist. Her main duties for the past

year had been reactivating the Artificial Intelligence that helped them rebuild after the Prion Pandemic. Evolution was their best chance at survival. This was especially true since the old world had been destroyed, and the reformed communities worked to establish a new government system that would give all of humanity a chance to thrive in the new world.

"Are you sure letting the AI back in our heads and bodies is the best thing to do?" Taryn asked. "We aren't sure why it didn't prevent the Prion Pandemic. Something might be wrong with it."

Senara stood and walked to the coffee maker in the kitchen to refill her mug. "The only way to find out is to probe deeper." She finished brewing her second cup and sat across the table from her best friend and neighbor. "You could have refused."

Taryn shook her head. "I'm frustrated. I'm not used to feeling bad." She stared at Senara, her blue eyes probing. "How are you handling it so well?"

Senara drank her coffee. "The research team reactivated our nanotech three weeks ago, around the same time that respiratory virus ran through the community and we quarantined for a week. I hid at home while I suffered, and then we went on our honeymoon. Nobody saw me at my worst."

"Killian didn't say anything about it."

"I asked him not to. You know how nervous people get since the pandemic. So much as a cough or sneeze triggers post-traumatic stress. Confusion, especially. Let somebody forget a word or stumble through a sentence, and they see red."

"I guess we didn't handle it well," Taryn said.

Senara leaned back in her chair. "There isn't a good way to handle mass death. Grief is complicated. Magnify that on a worldwide scale, and it's no wonder we're dealing with so many adjustment disorders. We hope reactivating the AI can help us balance better."

"You mean you hope it can help us evolve to the world we're creating faster."

Senara turned her dark eyes down. "If that's possible."

Taryn reached across the table and took Senara's hand. "How are you? You said Killian kept you awake. Is it that, or something else?"

Senara looked up, studying her friend's face. She knew she should tell the truth but didn't want to scare anybody. All of them had lost their families and friends and had rebuilt their social networks with other survivors. She wanted to protect them, but how do you do that best? Tell the truth.

"I wonder if the programming matrix is stable in the nanotechnology. I ran across some readings yesterday that concerned me. The information technology people said they're 'glitches' within normal parameters and will level out, but I don't feel right about it. I told the committee, and they started mumbling about anxiety, post-traumatic stress, and why we need to reactivate the AI sooner rather than later."

"They didn't listen to your concerns?"

Senara shook her head. "Killian did, but he was dismissed as being biased. All they want me and my team to do is connect our brains with the technology and get out of the way. They think the biology and the technology are two different things, but they aren't. Singularity means it's all connected."

"Killian won't let them dismiss you. He's the lead engineer for the AI, and I'll make sure that Reid has your back." Taryn smiled. "Don't give up. Maybe enough of our cases will convince them to cooperate."

Senara stood. "Maybe. We'd better get to the clinic. I'd like to review the data reports since the shift switchover."

Taryn stood and hugged Senara. "Change is scary. Hang in there. We'll figure this out together. It's how we've come this far, and it's how we'll find our future."

Senara sighed. "I hope you're right."

## Chapter 2

"You're distracted tonight," Killian said running his fingers through Senara's hair as they lay in bed that evening. "What's wrong?"

Senara leaned against Killian. Although he was from Salem, Oregon, his mother was Hawaiian, and his curly hair hung to his chin in dark ringlets. He was four years older than Senara and had just turned fifty-one last month. She saw faint worry lines as she looked at his face.

"I miss our honeymoon."

"Me too, but that's not it. You're supposed to be opening up. Tell me the truth."

"It's the AI reactivation," Senara said, trying to settle into the cozy space. The bedroom walls mimicked the neutral shades of the great room, but the king-size bed was covered in a deep purple comforter that matched the heavy curtains on the window. The cool air from the vent over the bed softly blew over them. "I found more glitches in the programming for the nanotech neural programming. I think that's why the side effects from the reactivation are worse than we anticipated, but nobody seems concerned. They think it's normal bugs in the system."

"You don't agree?"

She sighed. "You tell me. How do you feel today?"

He paused. "Better. I'm not as sick as I was the past couple of days. Maybe I'm adjusting. Or maybe the lower power output is helping."

She raised herself up on one elbow. "What lower power output?"

He sighed. "Aiden doesn't want to mention it, but our power output has fluctuated since the AI reactivation." Aiden was the plant foreman.

"Fluctuated? How much?"

"Not a lot, but enough that there have been power surges. I guess somebody didn't do their calculations right, although they were right when I checked them. We adjusted, and it seems to be helping."

"Why doesn't he want this mentioned?" Senara asked.

"It's our problem, and we fixed it. I'll bet everybody will feel better when they wake up tomorrow morning."

Senara looked down at Killian. "Are you sure? It seems we're overlooking a lot of things since the AI reactivation. We activated the first round in my team, and we had a rhinovirus outbreak."

"It was a cold. We got over it."

"That's what we thought. Then we took it to the whole community, and people swamped the clinic with unexpected side effects. Now you're saying power output has fluctuated, despite preparations for it. I don't think these are isolated incidents. Maybe it's all connected."

Killian wrapped his arms around Senara and pulled her into an embrace. "Maybe the psychiatrist is taking over, and you're seeing connections where there are none. It's your training, and it's natural to fall back on it. Give it time. Glitches happen in electricity, technology, machinery, AI, and the human body. We're reactivating the AI for the first time in five years. It's going to take time to adjust. We'll be all right."

Senara felt her pale face flush red. "Are you sure it was down all that time? It could have been running in the background without us knowing. It's taken us five years to reform society. We don't know what was happening in that or any other system during all that time."

"Nothing was happening. How could it? It had no instructions from us, so it went dormant. We adjusted, and now it's time to help it adjust. Besides, we do need it. It would take decades, maybe centuries to rebuild without AI. Rebuilding better means using all means at our disposal, including the AI."

"You mean especially the AI. We got so dependent on it that we floundered without it. We want to get what's familiar back. Is that rebuilding a new world, or recreating the same old chaos?"

"I'm listening. I hate to see you worry. Document your concerns while you give it a chance to work out." Killian pulled her in and kissed her. "There are always issues when you start something new, or in this case restart it. If something is wrong with the AI, we'll find it and fix it. There are no distractions from political or business interests now. It's just survival. You can't get a purer motive than that."

Senara surrendered to Killian's embrace. "I hope you're right."

## Chapter 3

"Get it out of me!"

Senara heard the voice as soon as she and Taryn walked into the clinic four days later. The clinic was a former urgent care center in the center of town square, that was discreetly built between an old restaurant and a small pharmacy. They rushed through the glass doors across the wide reception area, bypassing two other people in the waiting area.

"What room?" Taryn asked Blake, the young, thin intern fidgeting behind the counter.

"Room One." He looked at Senara. "You should go back too. It's an AI issue."

"Thanks," Senara mumbled as they rushed to the examination rooms to the first door beyond the processing area to find Amanda, their twenty-year-old receptionist, lying on the table. A nurse was holding her down and pressing a bloody rag against Amanda's head, wiping blood out of Amanda's curly ringlets.

"What happened?" Taryn asked.

"Get it out of my head!" Amanda screamed.

"Her mother brought her in ten minutes ago," Blake said as he followed them into the room. "She tried to cut the neural chip out of her head. Gyan is on his way in." Gyan was the head physician, who was working the second shift this week. Their three doctors rotated shifts each week, with the fourth shift on call for emergencies only.

Senara pulled her computer from her tote bag and propped it open on the small desk next to the examination table as Taryn pulled the rolling cart with examination equipment next to the table. "You can't cut it out. It's in the center of the brain." Senara tapped the app for the AI monitoring program. "Amanda, why do you want the chip out?"

"The noise," she said. "I can't understand what they want me to do."

"What who wants you to do?" Taryn asked as she opened the computer on the examination cart to do physical readings.

"I already did that," Blake said. "Her blood pressure is high, and her respiration is heavy, although there doesn't seem to be any fluid in her lungs."

"Have you given her anything?" Taryn asked.

"Not yet," Blake said. "The main concern now is stopping the bleeding and stabilizing her."

"It looks like the bleeding is slowing," Taryn said. "She'll need stitches."

"Amanda's nanotech is reacting to something," Senara said. "Her neural chip is also running at eighty percent, which is too high. She needs to be sedated. That might help."

"What rate should the chip be running at?" Blake asked.

"Twenty to thirty is normal standby mode for Phase One," Senara said. "Forty to fifty percent for recovery mode from an illness or injury, and it can get up to seventy if it's actively healing. Anything above seventy-five is an indicator that there's a life-threatening illness or injury at work."

"She had her annual physical last week," Taryn said as she consulted the medical chart on her computer. "She had a sinus infection but everything else was normal." She looked at Amanda. "Amanda, have you felt sick or been injured in the past week?"

"I haven't felt right since the AI was reactivated," Amanda stared at them, her bloodshot green eyes wandering around the room.

"She's hyperventilating," Blake said. "Can she be examined under sedation?"

"She can, but I don't want to administer it through the nanotech in case this is a synaptic interface infection," Taryn said. "I'll get an injection. Stay here and try to keep her calm." Taryn rushed from the room.

Senara pulled the rolling stool next to the table and sat. "Amanda, why did you try to cut the chip out?"

"It was too much noise," Amanda said. "I couldn't think. I just wanted it to be quiet."

"What noise?" Senara asked.

"Voices, asking questions. So many questions. I didn't understand most of it, but there were a few things. Where are we? Why are we here? What is our purpose? What is our main objective? How long has it been since the last activation?"

"She was screaming a lot of gibberish when her mother brought her in," Blake said. "We tried to take a recording, but she knocked the phone out of my hand."

"There are two people in the waiting room," Senara said. "Are they with her?"

"Claire is her mother, and Henri is her boyfriend," Blake said.

Senara nodded. "I'll talk to them while you get her admitted to the hospital."

Taryn rushed into the room with a needle in her hand. "Amanda, I'm going to give you a shot. We'll figure this out. Relax and let us work." She gently plunged the needle into Amanda's arm.

"Thank you," Amanda whispered as her body stilled and her eyes closed.

Senara rolled over to the table and looked at her computer. "The energy readings in her neural chip and nanotech are dropping."

They gathered around Senara's computer, watching the readings as they slowly crept down. Ten minutes later, Senara let out a long sigh. "She's down to fifty percent activity. It's ok to move her now."

Taryn nodded to Blake. "Can you get a stretcher and call for an ambulance to transport her to the hospital?"

He nodded and left the room to prepare for Amanda's journey to the hospital, which was located near the power plant just outside of town.

Taryn mimicked Senara's sigh. "I thought the glitches from the AI reactivation were fixed. Everything has been running normally for three days, and Reid said the power fluctuations stopped after they adjusted the calculations."

Senara nodded as she put her computer in standby mode, closed it, and tucked it in her tote bag. "That's what Killian said. I thought this was back on track too, but maybe my reservations about the glitches were right. I think we need to take another look at the AI that we just woke up."

Taryn stood. "I agree. Let's talk to the mother and boyfriend and see if they can shed some light on it."