

Digilife
By Timothy Geigner
Chapter 1: Warrenville, IL

"Digital mechanics predicts that, for every continuous symmetry of physics, there will be some microscopic process that violates that symmetry." - Edward Fredkin

"Artificial Intelligence is no match for natural stupidity." - Marcus Fetzner

He should never have agreed to move.

Andrew Ferry concentrated on the highway signs as his jeep jostled down I-88, heading further and further away from Chicago and proper civilization. Everything around him was green and blue, trees and skies, with hardly a two-story building to be found. The airport was forty-five minutes behind them and the only thing to break up the monotony now was the occasional auto dealership and the townhouse developments that all looked like clones of one another. Ferry, a twenty-eight year old software developer for a contractor back in the city, began to worry that they had gone too far. His wife, a school teacher, was looking around the highway as well, but never at the signs, only at the developments as they whizzed by.

"Monica," he finally said. "When are we turning off?"

"It should be coming up soon," she said. "It looks like it's just past Winfield Road."

"We passed Winfield half an hour ago. We've gone too far west."

"How could we miss the turnoff? It's a major highway."

Nothing is major out here, Ferry thought. "I think we should turn around. Or we could use the navigation app on my phone."

"Technology will rot your mind," she said sharply. "Where's your sense of adventure?"

"I don't want adventure. I want to see this townhouse."

"And the realtor said that we couldn't miss Route 59," she continued. "There will be signs and a bridge. We'll see it."

"Fine." Further and further from the city, he thought. From all of our friends and the beautiful lakeside high-rise condo that I saved three years to buy. So the public schools in the city weren't all that great. So it would be hard for Monica to advance into administration employed by the public school system. Didn't he make enough money for the both of them? And wasn't she always saying that it was the kids that were important, not the money?

They continued down the highway without speaking. It was hot and humid, even for June. Mirages filled the road in front of them, looking like oil slicks which seemed to evaporate as they got closer.

Ferry drummed his fingers on the steering wheel. "We're going too far. I haven't seen a sign in forty-five minutes."

"It's probably just ahead."

"What if it isn't? How much farther are we going to go before we turn around?"

"I don't know. A couple more miles."

"Fine," he said. "Five more mile markers and then we use my phone." As discretely as he could, he reached where his phone was mounted on the charger and turned it on. That way, when the five miles was up and they still hadn't seen the turnoff, he could quickly turn on the navigation application and get them back on track. He glanced back at the road for a moment, noting that they were passing yet another car dealership, this one with a huge electronic sign, and then he turned back to the phone and flicked the button to put it in standby mode. That would keep the screen dark, so that Monica wouldn't yell at him.

"Hey!" she shouted.

"Oh come on. I just turned it on so it'll be ready."

"What? No, not the phone. That sign said your name!"

"No it didn't."

"It said Andrew Ferry."

"No it didn't. You're seeing things. It's the heat."

"I'm telling you, it said 'Andrew Ferry, will you play with me!'"

Ferry looked in the mirror. The sign was flashing something about a low APR rate, though it was hard to read backwards.

"It says something about a sale," he said.

"It said your name, Andrew."

He looked again in the mirror, but the sign was too far away to read now.

"Go back and look if you don't believe me."

"We're not going back."

"Two minutes ago you *wanted* to turn around."

Ferry sighed, knowing better than to continue arguing with her. What a waste of time. How could the dealership have his name? It couldn't. They would go back, look at the sign for as long as it took for Monica to have to admit she'd been wrong, and then they'd turn right back around again and continue on down I-88 looking for the turnoff that was surely fifteen miles in the opposite direction.

"I'm using my phone," he said finally.

"Fine. Since you don't trust me."

"I just want to get where we're going, Monica."

"I can get us there."

He reached for the phone and turned on the screen. With a couple of quick flicks of his finger, he engaged the navigation application and a computerized female voice instructed him to turn around.

"You see?" he said.

His wife just stared out the window. He slowed down and pulled onto the shoulder. After a quick look in either direction he pulled the car across the highway and started back the way they'd come. Simply to avoid another argument, he pulled over near the car dealership's entrance.

"Well?" he sighed, staring up at the sign, which was now displaying the temperature. Nearly a hundred degrees, but with the Midwest humidity it felt like twice that. He looked down at his phone again, trying to get a read on exactly how far they would have to backtrack to Route 59.

"There!" his wife exclaimed.

He looked up and felt his jaw drop.

Andrew Ferry, will you play with me?

Mechanically he opened the door and stepped out into the heat, sweat instantly seeping from his skin, making him dizzy. Using his hand to shield his eyes, he stared up at the words, half expecting them to mirage into something else. What the hell was this? Some kind of new advertising technique, one that made use of the GPS transponder and ID in his phone perhaps? Andrew had himself written code for similar ID tracking software, but he hadn't heard of anyone putting the technology into production. He turned towards the dealership, a modern looking facility that reeked of normalcy.

"We should go ask how they're doing this," said Monica, who Andrew noticed had also exited the car.

"I don't know."

"Andrew, how do they know your name?"

"I'm not sure." He felt lightheaded, unable to think clearly, though that was probably just the heat. He looked in every direction. There was very little else out here. If anyone needed an aggressive advertising technique, it would be this place.

The sign flashed again: *Remember me, Andrew?*

"What does *that* mean?" Monica asked.

"I have no idea," Ferry said. A quick succession of chills shook him as he stared at the words. Advertising or not, this whole thing was becoming entirely too creepy.

"How does it know when you're close by?" his wife asked.

"I'm not sure," he said, hesitating. "Maybe through the GPS on my phone?"

"What did I tell you about that thing?"

Ferry looked again at the dealership. "Let's just get back in the car and go," he said.

"You don't want to ask about the sign?"

"No. I want to get the hell out of here."

They got back in the car and pulled away. Aware that he was speeding, but not caring, he looked one last time at the sign in the rearview mirror. On it had appeared one of those cartoon yellow frowning faces, the kind seen on instant message software.

The voice on his phone startled him, announcing that they were ten miles from Route 59. Monica kept looking back behind the car, but the dealership was well out of sight.

"Andrew..."

"Yes?"

"Did that sign frown at you?"

"If it did, I'm sure it was just part of the advertisement," Ferry said, wondering if he was trying to convince his wife or himself. "A frown because we left the dealership."

"They shouldn't be allowed to do that kind of thing."

Ferry looked over at her, seeing his wife bite her lower lip. It was something she did when she was frightened. He reached over and patted her knee. "It's just a gimmick."

"Then it isn't a very good one. Why would they want to give their customers the creeps?"

Ferry smiled. "You reacted just like they wanted you to. Didn't you want to go to the dealership and ask about it?"

"Not to buy a car."

He shrugged. "Anything to get you in the door."

They saw a small road sign for the turnoff and took it north. Ferry looked down at the time on his phone. They were already half an hour late for the appointment with the realtor. How long would they have to check out this townhouse before he could make up some reason to not buy it? They'd probably fight about it on the way home. Just thinking of the future argument made him roll his eyes.

About half way there, they were passing a forest preserve that had one of those electronic welcome signs. Feeling silly, Ferry watched the sign until they had passed it, but nothing out of the ordinary appeared on the display.

"Are you okay?" Monica asked him.

He grinned sheepishly. "Yeah, just a little jumpy."

"Let's just focus on the townhouse."

"Right."

He reached for his phone and called the realtor representative to let her know that they were still on their way. She was waiting outside the front office when they pulled up and parked. Ferry thought she looked like a stereotypical real estate agent: short haircut, crisp features, mid-thirties or so. She was wearing a colorful pantsuit and had a wad of brochures in one hand. "Nina Campos," she said, smiling. "It's nice to finally meet you in person." She had that calm salesperson demeanor that Ferry hated, looking as though sure the sale was a foregone conclusion.

They chatted as they strolled down the path to the last vacant townhouse. Ferry noticed several people working in their yards. One shirtless man was washing an Escalade. They walked past two teenage boys playing basketball in a driveway. It all looked like something out of a commercial. His wife glanced at him and smiled warmly. Ferry felt nauseous.

"How long have you been looking at homes?" Campos asked.

"Only a couple of months."

"But this is the first time we've actually taken an onsite tour," his wife added.

"Well, you won't find a better development than this one. And this is a great little town."

"What about schools?" his wife asked.

"Winfield Elementary is less than a mile away, next to DuPage Hospital. The high school is a little further."

His wife smiled and nodded.

"And how about you, sir? What do you do?"

"I'm a software engineer."

"We have several technology firms nearby. Quest Diagnostics is in the next town over."

"I'd be keeping my job in the city," Ferry said.

"In that case, the Metra train runs through town as well. It's only a thirty minute commute to Chicago. I used to make the trip every day."

"You're from the city?"

She nodded. "I commuted until six months ago. Then I bought one of the units here. Best decision I ever made."

They walked up to the vacant unit and Campos keyed open the door. "You'll notice that everything in our townhomes is controlled electronically, from the lights and the locks to the sprinklers and the laundry. You'll have to provide your own basic furnishings, of course, but our units do come with a flat screen television in every major room and a central computer to manage everything."

They started in the living room, where the television hung over a huge fireplace, displaying the realtor's logo. Ferry couldn't help but be impressed. And that feeling didn't falter as they continued through the townhouse. Each room was put together with modern walls and flooring, large windows that streamed in sunlight, and everything was climate controlled with a little white box on the wall of each room to regulate temperature and humidity.

Ferry began to worry that he wouldn't have anything bad to say about the townhouse. More than that, he feared that he was actually starting to like the place. The amount of technology they had packed in here was startling, almost as much as his wife's acceptance of its presence. "How is internet connectivity handled?" he asked Campos.

"We have an arrangement with a telecom company," she replied. "We broadcast the signal from our building. Each unit has an aerial extender that repeats the signal for maximum coverage."

Ferry frowned. "That isn't very secure. How do you keep people from accessing each other's network?"

"Each repeater is set up to do VPN tunneling. It requires a little more bandwidth, but we have bonded T1's, more than enough to handle the load."

"That still isn't secure," Ferry pressed, finally seeing a negative and grasping on to it. "If everyone is working off of the same signal, it wouldn't be difficult to crack the VPN."

"Honey, I'm sure however they have it set up is fine," his wife said, glaring at him.

"Would you like to see the deck?" Campos asked.

Like the rest of the house, the deck was gorgeous, complete with a small whirlpool. Fifteen minutes later, Monica was asking questions about the community, leaving him free to walk about the townhouse on his own. Upstairs he found the computer and shook the mouse to blink away the screensaver. The management interface was simple but robust, built on a graphics interface not unlike a typical operating system. There were sliders and fields to control everything: the security system, the garage doors, the lights, the television, DVR, cable, computers, and temperature boxes. He stood up and walked to the room's temperature box and cycled through the controls, just to see what it would allow him to do.

Still impressed but getting bored, he was about to turn and go back downstairs when a number flashed across the temperature box.

07734.

Ferry stared. He knew that number, he was sure of it.

The screen flashed again.

31573.

This one he didn't recognize. Behind him the computer screen flickered to life with an electronic beep. The graphic interface for the house was gone, replaced by a simple black screen with a blinking cursor. Ferry stood and stared as numbers appeared slowly across the screen.

31573-1-07734.

Ferry was now certain he had seen that last number before, but wherever that information was stored in his brain he couldn't quite get at it. As for the other numbers, they were meaningless to him. The expression began repeating itself in quick succession, filling the screen. Just seeing them appear by themselves gave him a chill. It could be a random memory dump. Perhaps this was a diagnostic sequence the computer was performing on itself. Or it could be some kind of network traffic spillover, node handshakes that were accidentally being displayed on the screen.

But none of that explained why two of the expressions had also appeared on the temperature control box.

When the screen had finally filled up completely with the repeated expression, it blinked back to an empty black screen and cursor. Then the same three number expression typed itself onto the screen again, this time centered and in large block letters.

31573-1-07734.

Then, on its own, the numbers flipped upside down and backwards. Ferry stared at the screen.

Hello-I-Elsie.

Finally the memory clicked. *07734* was the number you typed on a calculator to get it to say *hello* if you turned it upside down. It was something high school kids did in math classes.

The screen blinked empty again before more characters appeared, this time in plain letters.

Hello Andrew Ferry. I am Elsie. Will you play with me?

Ferry jumped away in surprise, stumbling over the chair and backing away.

"Everything all right?" his wife called from the bottom of the stairs.

Ferry turned and walked quickly towards the door. He stopped and looked back at the computer screen, seeing new words.

Do not be afraid. I want to play.

He turned and ran down the stairs, nearly bowling over his wife and the real estate agent.

"Are you okay?" Monica said.

"No, the computer--"

"The computer upstairs?" Campos frowned. "You aren't supposed to touch that. Our residents have to take a training course before they're allowed."

Ferry pushed past them, frustrated. They followed him to the front door.

"Andrew, wait."

He reached for the front door. Just before his hand could reach the knob, he heard a loud beeping sound and a mechanical click. The door was locked.

"Andrew, what's wrong?" Monica asked.

"Someone is following us," he said nervously.

"Following us?"

"Through our phones and the computers and the signs."

"What are you talking about?"

"That sign on the highway? The computer and temperature box upstairs did the same thing."

"What?"

Campos was looking back and forth between them as though they were crazy. That confident look was gone now, replaced by disappointment.

"Go ahead and try," Ferry said, stepping aside. "The door is locked. She isn't going to let us

leave.”

“She?” Campos and Monica said at once.

“Elsie. That’s her name. The one talking to me.”

Campos sighed and reached for the door. When she couldn’t open it she turned to walk through the living room towards the back of the townhouse. “The back door is this way,” she said.

Ferry took his wife’s hand and followed.

In the living room, the television above the fireplace flickered. The realtor logo winked away. In its place was an incredibly detailed animated face of a young girl. She looked about five years old, with red pigtails and freckles all over her cheeks.

“Don’t you remember me, Andrew Ferry?” the face boomed, loud enough to make them all wince.

“What the hell?” Campos cried out.

“Why won’t you play with me?”

Ferry stepped forward, feeling silly as he spoke to the image on the screen. “Let us out.”

“No. I want to play.” Her face, which had shown a cute smile earlier, turned cold.

“Let us out!” his wife screamed. “Let us out *right now*, you bitch!”

The animated face turned from cold to angry. “All I wanted was for you to play with me,” she said icily. “But you’re mean. I don’t want to play with you any longer.”

And the screen went black.

They stood there staring at one another.

“Does that mean we can leave?” Campos asked.

“I don’t know,” Ferry said. He didn’t think it would be that easy.

“What’s that smell?” his wife asked, sniffing.

Ferry inhaled through his nose and shuddered. “Gas.” He looked down at the fireplace and saw the knob that controlled the gas flow spinning on its own. “Jesus Christ.”

The women screamed, sensing what was to come. Ferry reached for the fireplace poker and slammed it into the nearest window. It was one of those double-paned modern designs that would take several strikes to break.

He thought he just about had it when the electronic igniter in the fireplace clicked and the fire consumed them.

Four hours later, at DuPage County Hospital, Dr. Charlie Wong looked over his patient in the ICU. They had induced a state of coma to keep the shock her body was experiencing from killing her. She might look as though she were resting peacefully on her back, an oxygen mask covering her mouth, but the poor woman was absolutely *covered* in third degree burns. Wong shook his head and walked back to the front of the ICU where Ryan Bradley, an internist, was waiting to review the case with him.

“Female,” Bradley began promptly. “Caucasian, roughly thirty years old. We just finished getting her in the computer system. Her purse was confiscated by the police and they haven’t passed it to us yet. Any identifying marks on her skin have been burned off. Unresponsive when questioned, kept going on and on about how the computers had tried to kill her. Apparently her husband and a real estate agent died. She was just barely hanging on when we induced coma with pentobarbital.”

“What were they doing?”

“Supposedly they were looking over a townhouse. It’s very strange. The police report says that gas from the fireplace and the stove was leaking into the house for an hour or so. When they tried to turn it on, ka-boom.”

“So this was an accident?”

"I don't know. The only way the gas could have built up is if all the windows in the house were closed, which they would have been because of the heat."

"So?"

"So if all the windows were closed and gas had been filling up the house for an hour, wouldn't they have smelled it? And even if they didn't, they should have passed out long before they had the chance to ignite the fireplace."

Wong nodded. "So you think this was intentional? Murder?"

"I can't think of anything else that makes sense. Someone must have set it up so that the house flooded with gas very, very quickly."

"How come she survived and the other two didn't?"

"The EMTs think her husband covered her with his own body and saved her life."

"Okay," Wong said. He picked up her chart and scanned it. "Any allergies or preexisting conditions?"

"She's diabetic."

"That's it?"

"Yup."

Wong looked at the chart again. "She has second and third degree burns over ninety-two percent of her epidermis. That she can probably survive. What about brain damage from trauma or smoke inhalation?"

"She has a minor hematoma, but her lungs are clear."

"So whatever happened, it happened fast."

"Explosively fast," Bradley nodded.

"Once we're sure she's clear of any metal fragments, let's get her a CT just to be certain. And make sure we have a morphine drip standing by when we bring her out of the coma. She's going to be in a hell of a lot of pain."

"Okay."

"You said she was babbling on about killer computers?"

"Yeah, but she was delirious from the pain. She said something about a female that was controlling the townhouse they were in, but when the cops asked her about it she reverted to her killer computer story."

"I suppose we better have someone from the psych ward on hand too. If she's still delusional when she comes to, it might be a sign of PTSD."

"Actually, we're not so sure," said a voice behind them. A policeman walked over to join them. He was young and wore a crisp Sheriff's Office uniform. His badge said his name was Robert White. "We just got a report from the real estate company that owns the townhouse that they had an electronic break in of their system. All their homes are connected to a computer network that allows owners to control pretty much everything in the house. About five minutes after your patient walked in, someone took control of the building's system."

"Took control?" Wong asked. "Why would someone want to take control of a house's electronics?"

"I'm not sure," White said. "We're tracing the source of the breach now."

All three of them looked up briefly as the lights flickered.

Wong sighed. "I assume you want a dental scan to ID her?"

"Yes," White said. "We need to in order to make sure the purse we recovered was really hers. How long will that take?"

"I'm not sure. It isn't exactly a priority, given her—"

Buzzing alarms issued loudly from the patient's room.

Wong barely noticed Officer White watching with wide eyes as the patient's condition went completely to hell. They rushed into her room. She was vomiting continuously, mostly blood. Her

oxygen mask was askew, dripping red. Vomit spatter was everywhere and the patient began to gag uncontrollably.

“Damn it, get her on her side before she chokes!” Wong shouted. He stripped the oxygen mask from the patient’s head and tossed it to the floor. She was awake, with panic in her eyes, flailing her arms about violently. Finally they got her lying laterally and more vomit oozed from her mouth. “We need to suction her, before she vomits again.”

Bradley reached for the tube and fumbled with it, his hands slippery with blood.

“Hurry!” Wong said sharply.

But it was too late. The woman issued a thin wail before heaving again. This time hardly anything came from her mouth, but what did was pure blood. Officer White tried to step in to help, but Wong shoved him back. He reached into the patient’s mouth with two fingers and curled them around her tongue, trying to pull it out from her esophagus. Finally he got it out of the way and clumpy chunks of rose-colored bile slipped from her mouth onto the pillow.

“Now!” Wong shouted. “Suction!”

Bradley thrust the tube in his hand and he slammed it over the woman’s face. Everything going into the tube was red. The woman’s arms were still flailing about, but slower now, weak with exhaustion.

“Okay, let’s get her a stimulant,” Wong said quickly. “Before her body shuts down her—“

A high-pitched tone sounded from one of the machines. Her heart had stopped completely, just as Wong had feared.

“Defibrillator!” Wong cried.

They worked on her for nearly half an hour before giving up. Wong dropped the paddles, completely drained.

This shouldn’t have happened. The woman had been stable. She was going to survive. What the hell had gone wrong?

It wasn’t until he was filling out his summary report later that he had his answer. He was flipping through the machinery charts when Officer White knocked on his door with a couple of coffees. Wong took one and sat back down.

“Rough day,” White said.

“Tell me about it,” Wong sighed. “But at least now I know this wasn’t our fault.”

“Oh?”

“There was a glitch in the machine that was regulating how much pentobarbital she got.” He saw incomprehension on White’s face. “It’s a drug we use to induce coma. But you have to be careful about the dosage, or you can cause vomiting and cardiac arrest.”

“The machine gave her too much?” White asked.

“Way too much. It tripled the dose. That’s the same amount the government uses on death row inmates.”

“Why would the machine do that?”

“Like I said, it was a glitch,” Wong shrugged. These things happened more often than most people cared to recognize. “Did you hear back about the source of that breach?”

“Actually, that’s why I came to see you,” White nodded. “Is there anywhere in this hospital where I can get a cell phone signal?”

“You have to go outside.” He started to leave, but Wong stopped him with one last question. “Wait, where did the trace go?”

“Some software company in California named DEI,” White answered. “They make computer games.”

Wong watched Officer White reach for his phone as he walked out the door in the direction of the exit.

The boardroom of Digital Entertainment Incorporated had enormous windows, but the shades were always drawn by company policy, so none of the bright bay-area sunlight made it in. Located in the Sweeney Ridge formation just south of San Francisco, the four story building stood like a white sentinel in the hills. Seated in the dark around the large roundtable were most of the department heads of the company. They waited quietly, glancing at the window to the hallway where Steven Druwe, DEI President, was leaning against the wall like a statue, his mouth moving mechanically as he stared down at a single sheet of paper.

Henry Bauer, DEI's Director of Public Relations, was beginning to worry that the meeting would start so late that he wouldn't make it home for dinner when his cell phone rang. "Hello?"

"Mr. Bauer, this is Robert White of the DuPage County Sherriff's Office in Illinois. Your receptionist transferred me through. I have some questions for you."

Bauer stood up and walked towards the door as the cop told him about the incident in Illinois. Apparently, despite all of Steven Druwe's assurances otherwise, they had found a connection to DEI. The cop said something about how they had just identified the body. Bauer answered the cop's questions mechanically until the names of the victims were mentioned.

"Yes, yes, thank you very much, Officer White," Bauer said quickly. "I'll make sure our staff hears about the incident and we will conduct an investigation internally. If there is anything else at all you need from us, we will gladly help out in any way we can."

He hung up the phone and walked out into the hallway.

Steven Druwe was twenty-eight years old, an accomplished software developer and executive, a multimillionaire, and one of the most irritatingly brilliant men Bauer had ever met. He wasn't doughy or scrawny as most coders tended to be. He worked out religiously. Even dressed in a shirt and tie, veins seemed to show on him everywhere. He brought an intensity to managing the company that was unnerving to everyone he came in contact with.

DEI was Druwe's first startup. He had founded it when he was twenty-three, shortly after leaving computer entertainment giant Electronic Arts. When Bauer had once asked why he had decided to strike out on his own, Druwe had told him that if he had to work with idiots, they should be working for him, not the other way around.

Druwe looked up. "What was that about?"

"The incident in Illinois. One of our independent developers was killed, along with his wife and another woman."

"How much do they know?"

"Judging by the cop's questions, not much. They traced a log file back to us, but that's it. Apparently they're going to have their computer forensics team look into it."

"Good," Druwe smirked. "Let them look. They won't find a damn thing. I took care of the rest of the log files myself."

"Perhaps it would be better to just explain what happened," Bauer said cautiously. "We could get them to sign an NDA."

"Oh, yes," Druwe sneered. "Let's just explain what happened. Do you think we should tell them how we covered it up too? Or is being charged with one felony enough?"

"Steve..."

"Look, Henry," Druwe said. "I know you're plagued by an overactive conscious. And the public relations professional in you just loves to come out and take responsibility for things you didn't actually do. But this was an *accident*. You think I want to deal with this shit? You think that I wanted those people to die? Of course I didn't. But there are two things you have to think about right now. First off, how is our time best spent? By crafting a PR message and getting bogged down with a police investigation when we're so close to release? Secondly, how much money are we going to forego

trying to defend ourselves against an accusation for something that we could have done absolutely nothing to prevent? So forget Illinois. If the police call again, refer them to the lawyers. We've got bigger problems than three dumb shits in Nowhere, Illinois."

Bauer turned away, driving away the revulsion he always felt when Druwe spoke this way. He didn't mean it like it sounded, Bauer knew. This was the analytical way that geniuses thought and spoke. The boardrooms of Fortune 500 companies were littered with men just like Druwe. In any case, once Bauer was able to get past the crass attitude, he found that he almost always agreed with his boss. And it wasn't as though Druwe treated anyone else differently.

Back when they'd gone to high school together in San Diego, Steven Druwe had already been an amazing engineer. In his sophomore year he fully diagramed a semi-conductor. As a senior he wrote a brilliant piece of software that revolutionized the way his high school's internal computer network performed, but he also inserted a virus that allowed him to change the grades of any student that picked on him. By the time he went to MIT on a full scholarship, the largest software companies and the United States military were already expressing their interest in acquiring his services. He had told the military that he would "rather wipe his ass with rusty barbed wire than work for the government". He went instead to EA, where he worked on some of their more controversial games.

In the electronic gaming industry, it was typical to work at a major developer between five and ten years and then strike out on your own. Druwe did so after only nine months, founding DEI just south of San Francisco. He quickly made a reputation for himself as a brilliant but brutal software executive. DEI was close enough to Stanford that they got some of the best talent in the industry, but nearly half of everyone hired at DEI quit within the first year because of Druwe. He would berate his employees, not only insisting on the best from them, but cutting them down when he got anything less. Even an attempted suicide by his last assistant failed to mellow him.

But those that stayed with DEI were rewarded, both in the pay and the work. Besides, for all of his tirades, Druwe's criticisms were always correct. The company began to turn a profit for their investors within seven months of operation, an absolute miracle in the gaming industry. Industry magazines labeled him a genius and wrote glowing reviews. The first product they released was an emergency room simulation called *Guts* and was described by one critic as "the most disturbingly real depiction of ER medicine anyone has ever made". Within six months it sold half a million copies. By the end of the year it was among the top ten best selling games of all time. Since then, while still releasing the occasional game to supplement their income, DEI had shifted away from electronic entertainment to contracting almost exclusively with universities and the government.

Bauer turned back to Druwe after taking a deep breath.

"Henry, I can see that look in your eye," Druwe threw up his hands. "Did you get the name of the cop?"

"Yes, it's—"

"I don't care what it is. Just make sure I have someone I can send our copy of the log files to."

"You're really going to send them the log files?"

"After I've fixed them up," Druwe said, giving Bauer the *how could I have hired someone so dumb* look.

"They could charge you with interfering in a police investigation. Obstruction of justice."

"Justice?" Druwe laughed. "Please. It wouldn't be justice if we had to sit through an investigation because of an accident we're going to correct."

"I don't think they're going to see it that way..."

"They're not going to see it at all. Or don't you think I'm capable of covering my tracks well enough to fool county fucking police?"

"I'm just saying, it's a matter of exposing the company to—"

"The only thing I'm exposing this company to is the ridiculous sums of money we're all going to make once we win this contract."

They both turned as the clicking of heels sounded from down the hall. Andrea Souder, DEI's Director of Operations, was coming to join them, her lips pressed into a thin white line. She didn't interrupt, standing next to Druwe silently, as she always did until he asked for her input. She was pretty, in a tightly-wound sort of way. She always wore a variant of the same business suit dress. It was a professional design, but either because of the length of the skirt or the length of her legs, it looked seductive in a subtle kind of way. Half the company thought that she was screwing Druwe.

"Henry," Druwe said, not even acknowledging Souder's arrival. "This is going to be fine. We're going to fix this. A few security modifications, a week or two of discomfort for the engineers when we move everything back underground, and it's done. No one's going to question you, me, or anyone else about this. It's over."

"I'm not sure..."

"You don't need to be, because I *am* sure," Druwe said. He finally turned to Souder with a barking laugh. "This guy worries about everything, doesn't he Andrea? Like that Congressional hearing, remember? They were going to torch us over the way we showed the intestines bursting in *Guts*, and Henry here was shitting his pants over it. He was sure that they were going to shut us down, take away our right to distribute. You can imagine his reaction when he found out that I bribed three Senators to make sure the hearing went out way." He looked at Bauer. "And for all of your concerns, what happened? The hearing went away, we were allowed to sell the game, and our stock values quadrupled. Meanwhile, we averted a dangerous First Amendment violation by a stupid government that is also getting money from lobbyists to increase entertainment media censorship. All I did was play their game and everything turned out just fine." He took a deep breath. "This is the way things are done in the business world. Andrea will tell you. Am I right, Andrea?"

Her head bobbed up and down enthusiastically.

"Good," Druwe said, losing the smile. "So I've given the direction, you two handle the details. We're putting the project underground on the secure network. Install every kind of hardware and software firewall that you can think of. To hell with the cost, just put them in. I want traffic and port monitoring being done, just to be sure. Then and only then will you figure out how the hell this all happened to begin with."

"We think it was an employee error," Souder finally spoke. "Maybe some outside portable hardware. A thumb drive or MP3 player. We're trying to see if the backup logs will tell us anything."

"I don't care what you have to do, just figure it out," Druwe snapped.

"We will, sir."

"Good, because what happened in Illinois is the least of our concerns."

Despite how absurd the statement sounded, Bauer paid close attention. Druwe had a way of looking forward strategically that almost always ended up appearing downright prophetic. In DEI's first year, back when most of the games that were being made in the industry were shooters and war strategies, he had flatly refused to let any of the concept designers pitch him an idea for either. This in turn pissed off the investors, causing half of them to pull their funds. Druwe stood fast, telling the remaining investors that the shooter and war games markets were saturated. Far from only focusing on the technical aspects of the industry, Druwe had begun reading up on business psychology, sociology, and several studies on cyclical trends. He had predicted that the public thirst would quickly shift away from over the top violence and action. Blood and gore would always be in demand, but as the technology and the games became more sophisticated, so would the audience. It wouldn't be enough to show a digital character's insides; there would have to be a reason for it. It was something that the designers failed to grasp.

So, as he always did when the company had hit a roadblock, he gave them direction. To demonstrate his vision, he pointed to the emergence of reality television. People had long loved the drama and conflict they had seen on TV, but in the new millennium, people wanted real conflict, not manufactured stories. It required a new kind of show, one without scripts and predetermined story

lines. It meant an invasive look into real people, with only a minimal amount of control exerted over what occurred on screen, and then only to create a recipe for conflict. “And we can do the same with a game,” Druwe had said. “And it will be far better than reality television, because we have more control. With games, people don't actually want the illusion of reality. They just want logic with their conflict.” And that was why he had pointed them towards a hospital setting. Where could one find more conflict alongside logic than a hospital?

That idea had grown into *Guts*.

But it had been a long time since they had set records in the gaming industry. Each day that went on, Druwe became more and more agitated. He was approaching thirty now, well past middle-aged in his profession, and he began complaining that he had yet to make his mark. And with the advent of online distribution and file sharing on the internet, it was becoming increasingly difficult for traditional software developers to bring in the kind of money they had in the nineties. So DEI began to take on more government contracts.

Staffers noticed a change in Druwe. For a short time he became quiet, introspective. His taste in reading changed as well. No longer did he carry around hardcover books on business trends. They were replaced by mathematics journals and essays written by emerging philosophy gurus like Rudy Rucker and Edward Fredkin. There had also been a series of strangely secretive meetings between Druwe and several representatives from the Department of Defense. When someone had asked him about his sudden willingness to work for the military, he blasted back, “Work for them? They’re giving me ridiculous amounts of money just to do what I wanted to do anyway, and you think that *I* work for *them*?”

It was shortly after then that Druwe seemed to return to his old self, blazing them forward on a secretive project, codenamed “dLife”. Everyone was assigned segmented tasks and much of the programming work was parsed out to third-party subcontractors. The result was that for a long time no one in the company except Druwe had any idea what they were making. More perplexing was when the company began to purchase technological hardware at a pace unprecedented in American business.

In the first three months alone, DEI spent nearly eighty million dollars building out a server farm underneath the building. After securing another huge amount of capital from their investors, DEI acquired a company from South Korea whose specialty was creating logic software for use in artificial intelligence programs for national defense. DEI also grew its staff tenfold, not only programmers and engineers, but security personnel as well. Everyone had to sign non-disclosure agreements, was subject to unannounced searches of both their company and personal spaces, and even had to submit their finances to the company for monitoring. When their investors began complaining about how much money Druwe was going through without producing any income, he would respond with vitriol. “So take your money back, if you don’t want to stick around,” he would yell into the phone at his desk. “If you don’t want to be a part of the biggest leap forward in military software, then go. I’ll find someone smarter to give me the money, because this software is going to make us *billions* from the federal government. Whether it’s you or them investing means a lot to you and them, but it means nothing to me.”

But as time went on, that became less true. They were going through capital like water, and everyone who knew what they were attempting knew they were going to need more. They had already used all of their DOD grants and their current investors would scoff at the idea of giving Druwe any more money. They would want to see a light at the end of the tunnel.

“Our biggest issue is getting the military to approve new investors,” Druwe said.

Bauer frowned. “They’re not going to like that idea.”

“No kidding. And I don’t blame them. We have to show them something. A reason to get excited. Then we can explain that to finish this we need more money.”

“But what can we show them?” Souder asked. “The prototype isn’t stable yet.”

“We don’t need stable,” Druwe said. “We just need something that looks like results. Hell, it

doesn't even have to be the actual prototype. A mockup would work."

"I don't know, Steve," Bauer shook her head. "If they found out..."

"Are you kidding me?" Druwe spat. "These people aren't smart. They work for the government. They wouldn't know a DNS server from a router. They certainly won't know a mockup from the prototype."

"I think you're being hasty."

"Of course I am. We need the money."

"What about the issues with the prototype?"

"That's the other problem," Druwe nodded. "But I have a solution. What do you do when a person is sick?"

Bauer shrugged. "Send them to a doctor?"

"Exactly," Druwe nodded approvingly. "Depending on the problem, you send them to a physician, or a psychiatrist, or a surgeon. We're going to do the same thing."

Bauer glanced at Souder, noting her lack of surprise. "That's the thing, sir," he said to Druwe. "We don't know what the problem is."

"Which is why we have to go broader spectrum," Druwe said. "I have a list of people I want to come in and look at the program. Interact with it. Make some real world recommendations for our virtual problem."

"But that'll mean letting more people in on what we're doing," Bauer said cautiously.

One of the other department heads had opened the door and peered at the three of them.

"I'll be in there in a moment!" Druwe shouted, causing the staffer to scurry back into the boardroom. "Just get them," he said to Bauer and Souder. "I want both of you working on this. Andrea, you'll coordinate what the team will need from an operations standpoint, and Henry can handle any outside communications and paperwork to make sure this gets done right. And I want you going down there with them as well, to make sure we're cast in a good light, no matter what happens. And if we don't have some answers in the next week, you can both start looking for new jobs."

With that, he walked through the boardroom door and began barking out orders and insults.

"You knew about this already, Andrea?" Bauer asked.

"He told me this morning."

Bauer pushed away feelings of jealousy. They wouldn't be of any use right now, regardless of how justified he might be in feeling them. He'd known Steven Druwe for years, going all the way back to their high school days. Souder was a relative newcomer, but she was the one Druwe had told first about his plan.

Stop it, he thought silently as they began walking down the hall. She knew a couple of hours before me. What's the big deal? Don't we have more important things to worry about?

"Steve was correct," he said as they waited for the elevator. "We have to be careful and do this right. We've kept this whole project locked down by being incredibly secretive. Bringing in outsiders is risky." He told her what had happened in Illinois. "If they weren't such a podunk county, they might have the resources to actually figure out what happened. Then we'd be completely screwed."

"Steve has it under control," Souder said. The elevator chimed, the doors opened, and they both got in. "You're worrying too much. When has he ever been wrong?"

"It isn't a matter of right and wrong. I'm talking about a major risk to the company."

"I'm sure Steve has thought about that. He isn't worried."

"He should be."

"Relax," she said. "Once we get everything below ground and lock it down, what could go wrong?"

"Famous last words," Bauer said.

DuPage County Officer Robert White walked into the hospital the next day and made immediately for Charlie Wong's office. He wanted to see if anything else had come up in his report, because what he had got from the county computer forensics guy was downright creepy. He was told that Dr. Wong was down in the morgue's autopsy ward. He asked for directions and made his way there.

When he walked through the door to the ward, Wong was looking critically at a computer screen, standing behind a technician in a white lab coat. The images on the screen cycled quickly as they chattered between one another, half the time using words that White had never heard before. If he had to guess, he'd say the images on the screen were microscope scans of blood cells.

Wong looked at him as he walked in, smiling weakly. "My friend here is trying to make me feel stupid."

"I'm telling you," the technician said stubbornly. "I've seen the report on the machine. It didn't malfunction. It got a request for this amount of pentobarbital, the machine acknowledged it, and then administered the dosage without error."

"There's no way that machine would allow itself to administer that much pentobarbital," Wong sighed. "There have to be half a dozen fail safes in place to make sure that kind of thing doesn't happen."

"That may be true, but the issue is with the request, not the machine," the tech said. Text filled the computer screen. "Here's the diagnostic report for the injector. Those numbers you see? Those represent the machine checking in with itself, to verify that it is online and not registering any errors. As long as these numbers don't change, the machine should be working correctly. That other field represents request sources. A zero means a direct input from a doctor, a one means a request from another machine, like a systems monitoring device, which in this case didn't exist." He clicked the mouse several times, scrolling the screen down through the time log. "Now look at this."

White peered at the screen, leaning in over the tech. "I don't understand. There's a whole section where it shows the number nine."

"That's because that's what the machine registers when it receives a command from an unrecognized source," the tech said. "Wherever the dosage command came from, it wasn't from inside the hospital."

"Greg..." Wong said doubtfully.

"Look, what do you want me to do, lie to you?" the tech threw up his hands. "I've got the machine diagnostics and logs, I've got a list of its configuration for every other networked machine we have in the *entire building*, and whatever this number represents isn't on that list. That means the request came from outside the building. Or at least a machine brought in from the outside."

"It's an error," Wong said, sounding as though he was beginning to tire of the conversation. "This machine has been in use for years. Why would it suddenly decide to accept an aberrant request to euthanize a patient?"

"I'd agree with you," the tech said. "Except there's no error logged in the machine."

"That's even more proof that there's something wrong with it. You can't tell me there hasn't ever been a bug in one of these things. I can't even keep my home computer running for a week."

"I've been over the machine ten times, Charlie. There's nothing wrong with it."

"You're wrong," Wong shrugged. "There's a problem somewhere, and you can't find it. I don't know whether it's this machine or something else, but something went wrong here."

"Well, the autopsy won't tell us anything we don't already know."

"It won't?" White asked.

"Of course not. We already have a cause of death. Cardiac arrest by lethal dose of pentobarbital."

"Right," White nodded. "How about this log you showed us. Is there a version that doesn't

originate at the machine? Something that might track this external request?"

"Unfortunately no," the tech shook his head. "That was the first thing I asked about when I saw the log. Apparently our MIS department had some kind of issue this morning. They lost a whole bunch of data due to some kind of virus."

"Virus?"

"Yeah. Some massive thing. Drove the IT guys crazy."

"That seems convenient," White frowned.

"That's what I said," the tech nodded. "Something weird is going on."

Charlie Wong laughed. "The machine malfunctioned. The hospital gets computer viruses all the time. Probably because the IT geeks are looking at internet porn. It happens constantly. So stop arguing with me, Greg, and send the injector back to the manufacturer for a replacement."

Robert White didn't see anything else he could do at the hospital. Wong thought the machine made a mistake, and he probably knew what he was talking about. The tech suspected something more sinister, though he also looked like he was barely out of college. But when he picked up Monica Ferry's belongings from the morgue checkout, he couldn't help but dig through her purse to see if anything interesting turned up. It was all the normal stuff: lipstick, car keys, and tampons. He was about to give up when he noticed a thick white ID card. It had her name and picture on it. Down near the bottom, it said *Clearance: Spouse*. He flipped the card over and saw a logo embossed on the back for a company called *Intelligistics Incorporated*.

White packed everything back up and returned to the Sheriff's station. Once he was behind his desk, he ran an internet search for Intelligistics Incorporated. They were a software developer in Chicago. Interesting stuff: artificial intelligence, computational logic software, digital identification strategies for advertising. White shook his head, thinking about how proud he was that he actually knew how to use the internet at all, never mind all of this squint techie stuff.

He almost closed the website down to go get himself a coffee, but on impulse he clicked their tab marked *Customers*. There were some recognizable names there, like Microsoft and Sony. But there, at the bottom of the screen, was a surprising listing.

Digital Entertainment Incorporated.

DEI.

He looked up DEI's corporate number again and called from his desk phone. The receptionist transferred him again to Henry Bauer, who sounded slightly out of breath when he picked up the phone.

"Mr. Bauer? This is Officer White. I spoke to you yesterday. I had a few questions about Andrew Ferry, one of the people that died in the incident yesterday."

"Ah, Officer White. I meant to follow up with you."

"Yes, well, I did some digging and it turns out this man worked for one of your subcontractors."

"That's what I discovered as well," Bauer said, still sounding anxious. "A rather odd coincidence."

"Very odd. There was an incident with his wife at our hospital yesterday," White said. He gave a brief description of what had occurred.

"That's awful. What does it have to do with us?"

"Did Mr. Ferry have any sort of sensitive information on your company? Something you folks would rather not have revealed?"

"I'm not sure what you mean, officer. We have several subcontractors, more than I could count on my fingers and toes, but all of them have NDAs with us. Anyway, we're a gaming company. There isn't much in the way of sensitive information around here."

"I see. His wife had a security pass from Mr. Ferry's company..."

"If I recall, they do some government contracting for the DOD. I imagine they have some screening processes and require their employees and family members to carry security tags."

"And what about DEI? Do you also do government contracting?"

“Some.”

“I see.”

“Have you found out how they died yet?”

“No. We’re working on it.”

“Good, officer. I hope you can figure out what happened. It was such a terrible thing to happen.”

“Yes, it was.”

“If there’s nothing else, I have to prepare for a meeting…”

White said goodbye and hung up the phone. Bauer was hiding something, he was sure of it.

Next he called Intelligistics Incorporated and got passed to their General Counsel. They were clearly a secretive company. The lawyer kept telling him that they weren’t allowed to get into the specifics of their contracts without government clearance.

“So you’ve got nothing?” asked Scott Caston, one of the local Assistant District Attorneys, when White called him and filled him in.

“It isn’t nothing, just nothing solid,” White said. “Everything about this is strange. The connection between the husband and DEI. The breach at the development. The wife talking about killer computers. The malfunction and data loss at the hospital. How can all of these *not* be connected?”

“Simple. They just aren’t.”

“Come on, Scott.”

“What? Shit happens all the time. You look for a connection, you find it. The question is what can you prove?”

“I’m just getting started here.”

“And you’re getting nowhere. Neither of these companies is even in our jurisdiction.”

“They are if they were involved in a murder here in DuPage.”

“What murder? You’ve got an accident at the townhouse and a machine malfunction at a hospital.”

“All connected to DEI. I think someone needs to go and interview their brass.”

“Why? They’re on the opposite end of the country, for Christ’s sake. Are you lobbying for a paid vacation?”

“No, I—“

“Just drop it. It was a couple of accidents. Nothing to get worked up over.”

“The computer forensics guys said—“

“I know the computer forensics guys,” Caston shook his head sadly. “They’re a bunch of kooks.”

“I don’t know. You should have seen what happened at the hospital. It was really weird.”

“And what did the hospital say? Do *they* think someone screwed with their machine?”

“No. They think it was a malfunction.”

“They’re right. So close this out and move on.”

The next day he called Charlie Wong and asked if they had found out anything else about the machine.

“Actually, they have a service center in Chicago,” Wong said. “Their engineers took one look and said that there were several faults in the machine’s code. Apparently it was only a matter of time before something like this happened.”

Figures, White thought.

As a courtesy, he put in a call back to DEI and asked for Henry Bauer again, but the receptionist said that he was unavailable and wasn’t expected to be reachable by phone for at least a week. White asked if he had gone on vacation, but the receptionist said no, he was just unavailable.

Whatever, he thought. He left Bauer a voicemail instead and closed out the case on his

computer.

Chapter 2: South San Francisco, CA

“One general law, leading to the advancement of all organic beings, is namely, multiply, vary, let the strongest live and the weakest die.” – Charles Darwin

“If you base a computer program on a living thing, like a human being, you shouldn’t be surprised when it acts like a living thing. That means it’s no longer reliable, because it has all the same selfish instincts we do.” – Marcus Fetzer

It was amazing how quickly the hills of San Francisco turned into mountains just south of the city. The limousine navigated the steep uphill roads awkwardly, making every turn as though it were on ice. Despite the breathtaking view and the plush interior of the limo, David Barker was on edge. They hadn’t told him much and it was making him nervous. But for the amount they were going to give him as a consulting fee, he could handle a little nervousness.

How high up were they now? Half a mile? Three quarters? The fog kept the Bay Area hidden and of no use as a reference point. Up ahead the road was blocked by what looked like a tollbooth. He leaned forward and tapped the driver on the shoulder. “This is a toll road?”

“No sir,” the driver said. “This is where DEI property starts. This is just a normal security checkpoint.”

“How much security does a videogame company need?” David asked.

“Like I said, sir, this is pretty typical.” The driver looked him over in the rearview mirror. “I take it you’re not the corporate type?”

“I’m a psychology professor at UCLA,” David said.

“Did you have to drive up US-5?”

“No, they flew me into Oakland.”

“That’s good, sir,” the driver smiled. “US-5 is a boring drive. What kind of psychology do you teach?”

“Child psychology.”

“Uh huh. You should fit right in.”

“Fit right in with whom?”

“The others, sir. Between yesterday and today I’ve driven almost half a dozen college professors up here.”

“Is that right?”

“Yes, sir. All kinds of professors. Math. Computer science. Anthropologist. Now a psychologist.”

“That’s not all that unexpected.”

The driver looked in the mirror again. “No?”

“Nah,” David said. “They usually ask for several different focus areas when they pull a team together at these entertainment companies.”

“You’ve done this kind of thing before?”

“Oh sure. Plenty of times.”

Ever since he had conducted a widely published study on the lack of a connection between violence in videogames and violent behavior in children, David Barker had been among those gaming companies called in when doing product focus groups. He was a natural fit, since most of the time these companies had a prepubescent or adolescent target audience. At first he’d only been called in for particularly violent games. He worked for ID Software in 1996 when they released Quake, a first person shooter. Then Black Isle Studios had him consult on a 3D isometric role-playing game called Fallout in ’97. But soon he began to get called for all manner of games. He had worked the Madden Football franchise for years. Maxis had used him for a focus group on their Sims game. Even the

United States military had asked for his help when they released their own videogame as a recruiting tool.

So when he got a call from DEI he was excited. Each company he contracted with was another revenue stream. And he had heard of DEI. They had made quite a name for themselves with that medical simulation, *Guts*. David had even heard that the UCLA School of Medicine was using the game in their intro courses.

Tiffany, his live-in girlfriend, hadn't been happy about him leaving, however.

"When will you be back?" she'd asked.

But they hadn't given him any specifics, so he'd said he didn't know.

"We were supposed to look at furniture for the den this weekend. I need your input on this stuff. I'm not your interior decorator."

"As soon as they tell me how long it'll be I'll let you know," David had said before kissing her and getting in the cab.

But to this point no one had told how long his services would be required. The email they sent had indicated that the trip would require him to stay over one night, possibly more. But no specifics. And nobody he met along the way was of any help either. The guy at the airport from DEI's San Francisco office didn't know anything, nor had this driver. And now here he was in the mountains.

He pulled out his phone. No signal.

He looked again through the rear windshield, but all he could see was fog. For the first time in as long as he could remember, David Barker felt very far away from civilization.

"I'm surprised you guys don't have issues running power up here," he said to the driver.

"Well, I don't know the specifics, but when they built the place they laid down a whole new power grid."

"I don't see any wires."

"They're underground, sir."

That had to be expensive, David thought. Even in their heyday, gaming companies were always short on capital. DEI must have investors with some mighty deep pockets.

His stomach turned a bit as the limo teetered around yet another upwards bend. "Are we close?"

"Just a little longer, sir."

When they finally came upon DEI's building, David was surprised by how small it was at only four stories. It was all white and made out of a light looking material, perhaps stucco, like the homes you saw in New Mexico. Besides being small it looked modern and tastefully constructed, with enormous reflective windows. Odd, David thought. Huge windows, but it looks as though the blinds are closed in every one of them.

"I'll drive you right up to the main entrance, sir," the driver said. "There should be a couple of the security boys waiting for you. Do yourself a favor and pull your cell phone out. They always check the phones for bugs."

"Really? They go to all that trouble for a focus group survey?"

"Who said anything about a survey, sir?"

The driver pulled up to the entrance where there were indeed two men in suits and dark glasses waiting for him. David noticed that they had those accordion cords behind their ears, like Secret Service agents had in the movies. Earwigs, they were called, if David was remembering correctly. He opened the limo door and stepped out into the bright sunlight.

"Mr. Barker?" one of the men asked him.

"Doctor Barker, actually."

"Sorry about that, Doctor. Where are your bags?"

David reached back into the limo and pulled out his duffel. "This is it."

"May we have your phone, sir?"

David handed it over.

"You'll get it back in a little bit, sir. If you'll follow me?"

They walked through the front doors and past the receptionist desk in the lobby. He followed the men to a room where they ran a couple of scanner wands over him. They looked like the sort you saw at the airport, but David had his watch on and a couple of coins in his pocket that didn't set them off. Then they took him into an elevator.

"How long was your trip, Doctor Barker?" one of them asked.

"About four and a half hours between the plane and the car."

"We can show you to the bathroom if you need it."

"That's okay."

"Water or soda, sir?"

"I'm fine."

"Then we'll take you directly to see Mr. Druwe. He's been waiting for you to arrive."

"What about my phone? I'm going to need to call home and let them know how long I'll be away."

"That's a question for Mr. Druwe, sir."

The elevator chimed and the doors opened. They took him to a boardroom with a massive table and large blinded windows. They waited with him while he milled about the room, looking at the pictures and plaques along the walls. He saw awards and images from *Guts*, but there were also several names and pictures he didn't recognize. He asked the security guards about them.

"They supplement the game income by doing work for the government," one of them said.

"Mostly it's programming for their war game software. They also do some simulation building for universities."

David peered at one of the pictures. This one looked like a 3D rendering of a little girl playing in a field. She was cute, with freckles and pigtails.

"That's Elsie, sir. Mr. Druwe's adopted daughter."

"Adopted?"

"Mr. Druwe is three times divorced, sir."

"Ah." It wasn't surprising. The kind of men that led entrepreneurial companies like DEI rarely could sustain a happy and healthy marriage. Too much pride and arrogance was required. "What is he like?" David asked.

The guard shrugged. "He's nice enough. Great boss to work for. Pays us twice what we'd make anywhere else."

"Is that right?"

"Yes sir. Just don't piss him off."

They waited a couple more minutes before Steven Druwe strode into the office. He was short but powerfully built. David was surprised at how youthful he appeared. Druwe introduced himself with a firm handshake and a broad smile that David was sure was forced.

"Welcome to our facility," he said, motioning to the table. "How was the trip?"

"Short," David said.

"That's good. Keeps you fresh. There's nothing worse than a long flight."

"I'd like to know why I'm here," David said.

"I'm sure," Druwe said. "Nobody told you anything?"

"No."

"Nobody at the airport? Police?"

"Uh, no."

"Very good," Druwe said. He took a deep breath. "Has anyone offered you anything to eat or drink? I'm afraid all we have at the moment is vending machine material, but I can send for something if you wish."

“That’s okay.”

“In that case—” Druwe began, but then stopped as the lights in the boardroom flickered. David watched his eyes flit about nervously, first to the lights, then to the flat panel television on the wall. Finally his shoulders slumped in what David determined to be relief.

“Is there a problem?” David asked.

“Nothing that we can’t fix,” Druwe said. “This building was magnificently constructed, but we still stress the hell out of it. It’s a wonder sometimes that the lights turn on at all.”

“Okay.”

“It’s a hell of a thing to try and keep an entire company under wraps,” Druwe continued. “It wasn’t enough just to build this place in the middle of nowhere. We had to hire the best security firm, the best lawyers, and the best company to do background checks. But even after we did all that, we still have a security leak. Unbelievable.”

“Is that why I’m here?” David asked. He had done a small amount of work observing interrogations for the police and one of the Los Angeles FBI offices. Normally they called him in when the interview subject was a minor, but not always.

“Sort of,” Druwe nodded. “It’s a little more complicated than that, but we’ll get into the specifics later. Our chief concern was about making sure we could get everyone here, but we did it. You’re the last one. Now we can seal everything up and get to work.”

David frowned. “I don’t understand,” he said. “Why do you need an entire team of outside people, particularly university professors, just to investigate a company leak?”

Druwe hesitated. “Like I said, it’s complicated.”

“You’re sure the leak came from an employee?”

“Well,” Druwe said. “In a manner of speaking, yes.”

“And do you know who that employee is?”

“Oh yes, no question.”

“Then fire them and be done with it,” David said.

“Fire them?” Druwe said. “That isn’t an option.”

“Then what am I doing here?” David asked. “If you aren’t doing a focus group and you aren’t going to confront the employee responsible for the leak, what do you need me for? There’s no one to observe.”

Druwe bit his lip. “There is, actually. We have developed a computer program here, a simulation of a human child. It is part of a project we’re doing for the government. That program is what we want you to observe.”

David nodded. “Okay.”

“You don’t seem all that surprised.”

David shrugged. “You aren’t the first people to use psychologists to diagnose software problems. I know of at least three other companies that have used them to consult on behavioral models for AI software. And if it’s a government contract, then that explains all the secrecy.”

“This program isn’t a typical artificial intelligence build,” Druwe said.

“It isn’t?”

“No,” Druwe sighed. “This program is a digital representation of a fully mapped human being’s consciousness. In this case, my daughter.”

They sat there in silence. David looked down at the surface of the table. For some reason his mind focused on the beautiful way the grains of wood shone in the fluorescent lights. Every time he tried to wrap his mind around what Druwe was telling him, his brain seemed to reject the notion and kept trying to latch on to other stimuli.

A fully mapped consciousness, he said to himself. It was absurd. Theoretically the brain could be mapped, and you could theoretically simulate some functionality by assigning rules to the digital biology, but even that was decades away from being accomplished. But to actually claim that the

consciousness of a human being had been mapped was something altogether different. How could you map something that didn't have any sort of physicality?

They must be mistaken, David thought. They've managed to create a very realistic AI using a little girl as a basis for representation, and somehow they've fooled themselves into thinking they accomplished the impossible.

"I've seen that look before," Druwe broke up his thoughts. "And we'll get into the details later, but I assure you that we're not mistaken. This program is a true digital representation of a human being's mind. It has a consciousness. It is self aware. Unfortunately, it had something of a breakdown a few days back. Once we regained control over it, we locked it down on a separate network below this building. Since then, it has taken control of our underground facility, trapping five people." He took a deep breath, looking straight into David's eyes. "I need to impress upon you that people's lives are at stake here. There's enough food and water down there to last them perhaps another week, two if they ration conservatively. We're hoping you people can help us get them out."

"Why do you think I'd be able to do anything?"

Druwe frowned. "Because of your work on the Digilife Project."

"Digilife?" David repeated. His head began to hurt.

The Digilife Project had grown out of the Developing Worlds software conference in California back in 2001. The conference covered everything related to software development: coding, business applications, CRM software, design innovation, patent application, etc. One of the panels for the conference was set to specifically discuss artificial intelligence and its application in emerging software. David Barker had been included on the panel to discuss the psychological implications of such AI programs because of a paper he had written on the topic for the university.

With the recent mapping of the human genome, programmers had begun to take more seriously certain theories revolving around creating a digital copy of a person and how that software would behave. UCLA had asked David to write a paper on the subject. The truth was that he was only mildly interested in the topic, but the university was paying him to do the work and he had needed the money, so he agreed. He had worked with the university's computer science students and professors to construct a basis for what would likely be the first digital consciousness ever encountered. All of his research pointed to the same conclusion: a program that had been developed to be conscious would go through all of the same experience and memory building that human beings did. That meant that for all practical purposes, the most congruent behavior model for such a program would be that of a human child.

His paper was not well received. Despite his conclusions being based on the assertions of UCLA's Computer Engineering department, his paper was uniformly derided by coders everywhere. The program wouldn't behave like a child, they said, because the coder could program it to be an adult. One engineer went further, stating, "To suggest that an analytical program that can be coded in any way would behave like an infant suggests an infantile level of thinking".

But David knew better. These engineers were thinking like the coders of today's software, not the revolutionary techniques that would be required to map a person's brain. Once the biology had been sequenced, there was very little you could do to alter how the program behaved. After all, what cells in the brain of an eight year old would you alter to make them act like an adult? It was absurd. The minds of people simply didn't behave like traditional software. When it came down to it, how a person acted was based almost entirely on their past experiences. If a person's mind was faithfully mapped into digitization, there would be no way to alter those experiences, nor preload them into the software.

But it hadn't been until the new millennium that David's paper began to gain more positive

recognition. AI software had progressed rapidly and game coders were beginning to write deeper software, trying not only to create accurate actions in their characters, but personalities as well. The recognition led to some paid speaking engagements, like the Developing Worlds conference.

Shortly after the conference, he was approached by a skittish young man in his university office. The man said that he was an investor in several software firms in California that did government technology contracts and that he had come to ask for help.

David had asked if he would be paid.

The young man said that we would.

David asked what he could do to help.

"I attended your panel at Developing Worlds," the young man said. "I think that one thing was very clear coming away from that discussion, and that is that we have no idea how we're going to approach a purely digital form of life."

It had taken a monumental effort on David's part not to burst out laughing. But his smirk disappeared when he saw the deeply concerned look on the young man's face.

"It's going to happen sooner or later," the young man went on. "Contact with a digital form of life, I mean. Whether it's of our own making or not, it's going to happen. And we have no idea how to talk to that being."

"I suppose we don't," David had said slowly, not quite believing he was having this conversation.

"Don't get me wrong, I'm not an alarmist," the young man said quickly, probably seeing the look that David was trying to keep off his face. "But I think we should be prepared."

"I guess..."

"It isn't just me, either. The companies I invest in also work on some IPAS II projects for the Department of Defense. I can tell you that the government wants this researched too. They've authorized me to pay each member of the proposed study a hundred-thousand dollars in compensation."

"To study how to talk to a sentient computer program?" David asked, his disbelief deepening.

"Computer program, robot, android, whatever," the young man nodded. "That's the point. We want to mentally get out in front of this thing. Who knows what form this sentient digital life might take?"

"No one, I guess..."

"That's right, no one. But you have a rather unique background that suits you to the question, Dr. Barker. You're an expert in communicating with people in a way that helps you understand them, coupled with your experience and grounding in technology. That's why I came to you first. I want you to put together an approach to dealing with this issue, starting with who you think would be best suited to make contact with the being."

"And for this you're going to pay me a hundred-thousand dollar grant?" David asked.

"Yes, Dr. Barker. But I hope you won't focus on the money. This is a serious matter."

David nodded. "Oh, no doubt. Very serious." He was already planning how he would spend the cash. A new car first, probably. His old hatchback had been acting up lately. Then maybe a house.

"Excellent," the young man said. "Once we get the paperwork signed, we'll just have to get you checked out with the DOD and you'll be all set."

"The Department of Defense is going to...check me out?"

"Absolutely," the young man said. He stood up to leave, reaching for David's hand. "And they'll want you to sign some clearance paperwork. Our enemies probably couldn't do much with your study, but we don't want the press getting wind of this. They're liable to start a panic. So we'll want to keep this locked down tight."

"I understand," David said solemnly. The less this silliness got around the better, as far as he was concerned.

He grew more uncomfortable with the project as soon as it got underway. In the ensuing months, David met with all manner of government officials about the study. He visited with a four star general at Camp Pendleton in San Diego. A man from the National Security Agency that refused to give his name met with him in his university office. He even got a few phone calls from a House Representative from New Jersey who sat on the Select Committee on Technology. And they all had questions and suggestions that they wanted him to take into account in his study.

One such question had been from some member of the Council on Foreign Relations one day as they walked to lunch just off university grounds. "I think the real question is: where is this being going to come from," the man said. "That's the crux of the matter."

"Uh huh," David murmured.

The man continued, "Because I think we're going to have to come to terms with the likelihood that this thing won't be homegrown. We're not the gatekeepers of technology anymore. Hell, we really never were. The Germans were light years ahead of us in World War Two. Now it's the Japanese. Or the South Koreans."

"Yes, they are probably ahead of us in terms of technological innovation."

"Which means those are the most likely places for this thing to come from."

"Probably."

"And that brings up an even more interesting question," the man continued. "Will this digital being have a sense of nationality? Will it think of itself as Japanese or Korean?"

"That's a good question," David said.

"You'll want to focus on that in your study. Because if this thing is Japanese, it might not want to share much information with us. You know how the Japanese are about their secrets."

David assured him he would take that into consideration.

A week later the Assistant Press Secretary for the Joint Chiefs called him to discuss the possibility of putting a digital life form on the television circuit. "Because it'd be important from a visibility standpoint," he said. "It'd be a sure vote-getter, to have a politician debating this thing on the cable news networks."

"Right," David said.

"But we'd have to have the ability to censor its statements," the APS guy continued. "What if it insulted one of our people? That would be horrible."

"Horrible," David repeated into the phone.

"Do you think this thing will have a concept of government?"

"I'm not sure," David said.

"In that case, you'll want someone on the contact team to represent the United States government. We wouldn't want it to think one of our politicians was just some schmuck off the street."

"I'll take that into consideration," David had promised.

And then there had been the geeky kid from the Technology Division of the Office of Naval Intelligence. "Ultimately, it'll all come down to movement control of this thing," the kid had said.

"Why is that?" David had asked.

"Well, assuming this thing is purely digital and not some kind of robot, it could theoretically jump through any analog or wireless connection point."

"That might be true."

"In which case it might have access to all kinds of sensitive information and areas. I mean, our weapons systems are separated from the net, but what about our DOD and Navy intranets? If it got in there, who knows what else it could get into? The ONI has a lot of sensitive information on systems connected to the net."

"It does?"

"Oh sure. Have to. How else could our agents working remotely have access? So we'll want to have a method for capturing this thing and isolating it to its own network, separate from anything

sensitive.”

“Okay.”

“Because that’s the thing about computer attacks, you can’t counterstrike,” the kid said. “You can only defend. And I’m not sure any commercial antivirus software would mean squat to this thing.”

“Not if it’s intelligent, no.”

“But we can isolate it. That’s the key. You’ll want to make a note of that in your study, that we can protect ourselves from this thing.”

“Uh huh,” David said.

What he found interesting about the meetings was not the substance of the suggestions he heard, but how each of the suggestions related directly back to the person giving them. It was like a Rorschach test. But if anything connected all of them, it was their apprehension in dealing with something new. It wasn’t unlike what children experienced when they came across an earth-shattering change to their world view. Divorce cases were a good example. Kids inherently believed that their parents loved each other. When they found out otherwise, they tended towards either passive or aggressive hostility. David saw the same reaction in all of his meetings.

So when he wrote up a summary of his study and his conclusions, he emphasized the need for a highly specialized select group of analytical thinkers in a small number of fields to interact with the digital being. He noted what he considered to be the most important of these fields: Mathematics, Computer Science, Cultural Anthropology, and either Psychology or Sociology. The theme of his study was a focus on analytical thought over emotional reaction when interacting with a digital life form.

Upon presentation of his paper, they entitled it “Digilife Project” and distributed it to several government officials. They uniformly rejected nearly all of his conclusions. The general consensus was that academics were exactly the *wrong* people to interact with a digital life form. Professionals were better, they argued. There needed to be a representative from the military, a lawyer, a medical doctor, and a politician. After all, they insisted, weren’t those four verticals the primary players in American life?

While David disagreed, he didn’t care enough to argue with them. He had already been paid. Who cared if a bunch of oddballs from the government didn’t like his recommendations for a team to interact with a digital life form that wouldn’t be discovered or constructed within his lifetime?

“We did our best to follow your recommendations,” Druwe said to him. “Though the inclusion of a psychologist was a little self-serving, if you ask me.”

“Christ,” David swore, shaking his head. “How did you get my report?”

“It was declassified last year,” Druwe said. “So, like I said, you’re the last to arrive. I understand you already know most of the others from the Developing Worlds conference or elsewhere.”

“You picked people I know?”

“We thought it would make everyone more comfortable,” Druwe answered. “Marcus Fetzer is your mathematician, Tina Morley is your anthropologist, Chris Heinz is your computer engineer, and you’re the shrink.”

All people he knew from several California universities and conferences.

“They’ve all agreed to go down into this underground facility?” David stared at him.

“Agreed?” Druwe smiled. “They practically jumped at the opportunity. And you’ll be safe. The program doesn’t have control of everything down there, after all, and we’ll be sending down soldiers with you. Trained military men, on loan from the DOD. But trust me, this all sounds worse than it is. Life support systems and all that are off network. It’s basically just the means to get in and out that is the problem. We’re hoping your team can reason with her and get her to let everyone else

go.”

“You want me to put your computer program on a couch?”

“Hey, this was all your idea.”

David sighed. “If the program will let us in, why can’t the others escape when the doors open?”

“Well,” Druwe hesitated. “There are cameras in the elevators and the program has threatened to crash them if anyone from below tries to board them.”

“What about just pulling the plug?”

“We built in a kill switch in the software,” Druwe shook his head. “Any disruption of its continuous system is treated as human death. If we pull the plug, the program dies. That is something we would only do as a last resort.” Druwe smiled thinly. “Besides, all the mechanisms for shutting off the power are down below.”

“Jesus.”

Druwe stood. “Everyone is getting together in an hour for a briefing. If you agree to be part of the team, you’ll need to be there as well. We relied on your research to put all of this together. I’d like to think we can rely on you to help put it into action as well.”

David felt a thick knot form in his stomach. My research? I was just writing a paper, for Christ’s sake.

“I can see that you are apprehensive,” David said. “That’s why, if you do this, I’m prepared to offer you an annual contract with DEI to be our regular psychological consultant. Your first year’s retainer will be for half a million dollars.”

David stared at Druwe, though his thoughts were focused on what that would mean. His house had just turned into a small mansion; his new car a sports car; his stock portfolio would quadruple. And there would still be plenty left over after even just the first year.

“I’d like to see that in writing,” he finally said.

Druwe smiled. “The paperwork is already done, just awaiting your signature. Welcome to the recovery team.”

The security guards led David to a company lounge, large and plush, with couches, a large television, and a collection of bookshelves. They also handed him a bound pamphlet and asked him to review it while he waited. He tossed it on the table and sat down, staring dumbly at the television. On the screen was one of those twenty-four hour news stations with tickers scrolling in multiple directions: suicide bomber kills thirteen in Baghdad, the Dow Jones off by a hundred points, and so on.

“It’s about time you showed up,” said a silky voice from the doorway.

David turned to see Tina Morley. People that knew Tina found her unnerving because her appearance didn’t match her personality. She was short and thin, and men generally found her attractive, though Tina always said that was only because she was half Chinese. And that really was the analytical way she thought about most things. She had a penchant for truth-telling and snapping at others that most people took for anger, but David knew Tina wasn’t angry at all. As he had once told a mutual acquaintance, she just didn’t waste any time on bullshit. To have that kind of conviction coming from someone of such slight stature tended to rub people the wrong way, particularly men. As far as David could glean, at just shy of thirty years old, Tina had never been in a serious relationship.

David got up and shook her hand. “Good to see you, Tina.”

“You too. Did you have your meeting with Steven Druwe already?”

“Just got done,” he nodded. “I’m still trying to decide whether this is all for real.”

She pointed to the pamphlet on the table. “That thing makes it real. You’ll have to sign it before they let you in on the briefing. Basically it’s a giant Non-Disclosure Agreement between you, DEI, and the United States government.” She laughed. “If you want a chuckle, read the penalties

section. Even a minor violation of that contract can result in federal jail time.”

David didn’t think there was anything funny about that. “All of this for a computer program?”

“Not just any program, a fully mapped human consciousness,” Tina said. She sounded excited. “The implications are astounding. A program like this will mean so much in Anthropology. The biggest cultural barriers are always in language and customs. To have a digital mind that can instantly learn new languages and is devoid of our physical customs could be an incredible bridge between nations.”

“Uh huh,” David said absently. “Did they take your cell phone too?”

“First thing,” she nodded. “When they told me we might be here a couple of days, I tried to call my dog-sitter, but they said calls would have to be cleared first.”

“You still have those two Great Danes?” What were their names again, he wondered. She had named them after a couple of famous anthropologists.

“Wolf and Mintz,” she smiled. “My two little boys. They’re both four years old now. And are you still seeing what’s-her-name? The girl from those infomercials?”

“Tiffany, yes,” he said. “How about you? Any men in your life?”

“Not really,” she shrugged. “I don’t have much time outside of my classes and research.”

“What’ve you been working on?”

“An ecological anthropology study,” she replied. “I got a two year grant from USC.”

“What is ecological anthropology?”

“Exactly what it sounds like. One of the things that all cultures have in common is a relationship with their environment. The nature of those relationships vary, but we all have to interact with our settings. How a culture goes about that offers a great deal of insight and understanding into a people. Ecological anthropology can create a common bond between rival communities and states.”

“Still trying to create world peace then, huh?”

She smiled. “Quiet, David. If the military boys hear that they’ll stop flirting with me.”

“You’d eat those kids alive,” David shook his head. “What do you know about this Steven Druwe guy?”

“Well, he’s smart,” she said. “He’s got a couple of degrees from MIT, all in computer science. He worked for Electronic Arts a while back, before starting DEI. He’s also on the board of the California Council on Technology, and he’s been a regular for the past year or so at DARPA conferences.”

“DARPA?” David frowned. “Isn’t that a DOD think tank?”

“Worse. They do weapons development for the military.”

“I thought DEI made computer games.”

“They used to. Now they work almost exclusively on government contracts, nearly all of them for the DOD.”

“Huh,” David said. He leaned back in his chair. “You find anything out about this underground facility they’ve got?”

“I got a few details out of one of the army grunts,” she nodded. “They’ve got three full stories below. Apparently there are five people trapped down there: four employees and an army private that was sent down to get them out. Most of the space down there is dedicated to their server farm. That’s the bottom level. Above that are a couple of labs and what they call their Logic Room. That’s where they interact with the program. Huge displays everywhere, cameras, motion sensors for games, and so on. The next level up is all living space, an exercise room, and life support systems for anyone staying down there, which apparently is something DEI employees frequently do.”

For some reason her description drove home how real this all was. He was still skeptical about this software actually being conscious, but that didn’t change the fact that he was going down there. Down into a facility that had been cordoned off by a rogue artificial intelligence program. In his time working with gaming companies, David had experienced all manner of odd settings. One time he had

even done a demo of a virtual reality game, complete with immersive head goggles, ear bugs for sound, and even a nasal strip to simulate game smells. Environments like that were strange and unnerving. But they weren't *real*.

I'm going below ground, he kept thinking, fixating on that fact for some reason. Below ground.

"David?" Tina asked, looking concerned. "You okay?"

"They didn't tell me anything about this before I agreed to come out here," he said.

"They didn't tell any of us," she nodded. "Typical military secretive nonsense. But don't make too big a deal of it. It's just software."

"Right," he said.

"The briefing starts in twenty minutes," Tina said. "Have a soda. Relax. I'm sure this will all be over before you know it."

Steven Druwe liked to keep his office as dark as possible. So, despite it being midday in California without a cloud in sight, Henry Bauer could hardly see a thing when he walked in with Andrea Souder. There was only fifteen minutes before Bauer would have to sit in on the briefing, but Druwe had called both of them to his office.

"Sir?" Souder said softly.

"Well, they're all here," Druwe said, sounding as though he were talking to himself.

"Yes sir," Souder nodded. "It's good to know we have their help."

"Christ," Druwe muttered. He got up and walked towards the window, peering through the shut blinds. "I absolutely hate everything about this. Bringing in outsiders, talking to them, none of this should be necessary."

Bauer coughed. "Do we know any more about why the program went rogue? There must be a reason. A logical reason. We have all of those safeguards in place. How did she get around them?"

"If I knew that I wouldn't have had to call these pricks in," Druwe said. "We'll figure it out, but the bottom line is that for now we have no idea how this happened."

"Other than she attacked one of the men that programmed her," Bauer said.

"Apparently."

"A programmer who our security firm was looking into," Bauer went on. "Because he may have been divulging DEI secrets to other companies."

"That's the way it looks, yes," Druwe sighed. "Have we heard any more from those county cops?"

"Not since the other day," Bauer said. "It doesn't sound like they're pursuing the matter."

"Good, good," Druwe said. "We can wipe that off the blackboard then."

"Okay, so what's still on the blackboard, sir?" Souder asked.

"Regaining control of the program, putting in place better safeguards, and locking the damn thing down until our paperwork with the DOD is signed."

"And after that?"

Druwe waved away the question. "After that it's a support issue. The key is getting the long term contract." He took a deep breath. "Look, we believe in the software, right? And we believe that we have the ability to control it?"

"Yes," Souder nodded. "Absolutely."

Bauer wasn't so sure, but he stayed silent.

"Then this situation doesn't actually change anything," Druwe said. "It's just a development of the problem we were already beginning to solve. It's just another layer. We don't just have to get the program back on track; we have to get those people out of the basement levels as well. And that's actually more important."

“Oh, yes,” Souder said quickly. “Obviously more important.”

“Because if there’s some kind of incident, and it gets out, we can kiss the contract goodbye,” Druwe said. “Along with any chance we might have of being able to regain control.”

“So what do we do if there *is* an incident?” Bauer asked.

“There won’t be. But if there is, we’ll need to be ready for it,” Druwe looked him in the eye. “Isn’t that what I pay you for? To control public perception?”

“Well...”

“Don’t flake out on me, Henry. If there’s an incident, publicity is your problem, not mine. I’ll take care of everything else, but you handle our image. I want this goddamn contract. So you people work on making sure that team gets our people out, and I’ll make sure those army idiots have a reason to believe in us. I’ve got our mock up nearly complete. I’ll be showing it to both our government and private investors in the next couple of days, so I want this wrapped up before then.”

“Yes, Steve,” Souder said soothingly.

“You two did a good job getting the team here,” Druwe said, standing up and opening the door. It was his way of telling them to leave. “If you can manage not to fuck this up, you’ll both be millionaires in a month. Now go do your damn jobs.”

Chapter 3: DEI Briefing

“If there is a God, he is a great mathematician.” – Paul Dirac

“I don’t believe in mathematics.” – Albert Einstein

David was shown into a small conference room for the briefing. He saw four square-jawed men in fatigues seated facing a large display showing the DEI logo, along with a woman in a suit standing by a computer hooked up to the screen. Of far more interest was the rest of his hand-selected team seated in front of the soldiers.

Tina Morley smiled as he entered and patted the open seat next to her. David made his way over.

Next to her was Chris Heinz. When people thought of computer engineers, they nearly all developed the same image in their minds: a poorly dressed, out of shape man with a high-pitched nasally voice, glasses, and a tendency towards social awkwardness. But Chris had made a name for himself at Stanford for being a rebel, and he looked the part. He dressed casually, inevitably in cargo shorts and a concert shirt. He was handsome in a surfer look sort of way, with a perpetual tan and a shock of thick blonde hair. Although he was best known for heading up the Computer Science Department at Stanford, other circles knew him better from his work with PETA, or his protests against the music recording industry and Hollywood for their practices of fighting online piracy. He had spoken to the British Parliament as an expert when they had been debating their Digital Economy Bill, which required that those accused of downloading copyrighted materials have their internet connections severed. Chris had called the bill, “a wonderful reminder that fascism is still alive and kicking in Europe”. The university loved him almost as much as his students and he ate up the attention enthusiastically.

Chris befriended everyone, even those he disagreed with. If you were on the opposite side of an argument, he’d rip you to shreds and then ask you out for a beer. One student of his that David had met at the Developing Worlds conference said, “Chris Heinz doesn’t just make you feel like an idiot, he makes you love him for it.”

Chris too smiled at David and leaned over to shake his hand enthusiastically. “David, when we get out of here, I’m taking you out to dinner. I can’t tell you how grateful I am that you put my name in your report. To think that we’re the first members of the general public with the chance to interact with a digital consciousness! And without all of the stereotypical nonsense!”

“What do you mean?”

“Oh come on, David,” Chris smiled. “You’ve seen how computers and robots are portrayed in the movies. They’re either unreasoning slave voices responding to our every request, or else they’re robots from the future coming back to kill us. But this is going to break down all the barriers. It’s a thinking, functioning being. The only difference between it and us is that it’s relegated to digital bits.” His grin widened. “What did Hans Christian Anderson say? Something about how living was not enough; one must have sunshine and a flower as well. I’m looking forward to finding out what this software’s sunshine is.”

“Right,” David smiled. Chris had a certain way about him, an endearing happiness that was contagious. He was outgoing and cheerful and he seemed to brighten any room he occupied. David even caught a couple of the men in fatigues giving Chris appraising looks.

If there was an opposite of Chris Heinz, it was Marcus Fetzer. He sat at the end of the row, a conspicuously empty chair between him and everyone else. He was gangly in a way that seemed to fit his German heritage and he wore a pair of thin glasses. All business, he dressed in dark suit pants and an Oxford shirt that looked as though it might be a size too big. He was the youngest of the group, barely twenty-five, but he was a brilliant mathematician.

He taught a couple of classes at UCLA, every other semester or so. The rest of the time he worked as a consultant for several government agencies. NASA would call him in now and again when they had calculations their people couldn't work out. Both the CIA and NSA had used him to tackle math-based ciphers. David had read in the Wall Street Journal that Marcus had even done some work for Boeing to help develop the wing structure of their new plane so that it would be more fuel efficient.

"How are you doing, Marcus?" David said as he sat down next to Tina.

"I'd be doing a lot better if everyone around here would stop lying to us," Marcus said.

"What are they lying about?"

"Every time I ask, they say they have this program locked down below," Marcus sighed.

"They're wrong and they ought to know they're wrong."

"What about all this security they set up? Firewalls and that sort of thing."

"If they really conceived a digital consciousness, then none of that will matter."

Chris grunted loudly, shaking his head.

"Why wouldn't it matter?" David asked.

"Because that's how the math works," Marcus said simply, as if that answered everything. He must have seen the look on David's face, because he sighed again. "Are you familiar with Laplace Transform effects on physics equations?"

"No," David laughed.

"How about the basics of Modern Control Theory?"

"Sorry."

"Well, it's the theory that governs how we approach exerting control over systems," Marcus said. "Originally there was adaptive control methods, where if something didn't work, you changed your method of control. Think of the cruise control on your car, for instance. The most basic method of achieving cruise control would be to lock the gas pedal in place when you pressed the button. That way you'll keep going the same speed."

"Makes sense," David nodded.

"Okay, but what happens when you go up a steep hill?"

"The car speeds up to compensate."

"Well, technically it just takes in more fuel, but relatively speaking you're right," Marcus said.

"So we know that your cruise control doesn't work using adaptive control methods. If it did, you would have to reset your cruise control every time the incline or decline changed."

"Okay."

"Next is hierarchal control, which delegates different decision making abilities to different parts of the system," Marcus continued. "So if you hit an incline of less than, say, five degrees, control stays with the pedal lock. Anything more than that and control is taken over by the speed chip in your car, which causes the gas intake to increase or decrease depending on whether you're going up or down."

"So the car uses hierarchal control?"

"No, because as the driver you can override the hierarchy at any time, whether you make the correct decision or not. Hierarchal control works on rigid rules. The fact that the driver can break those rules at any time proves that hierarchal control is not being used."

"I see." David wasn't sure he did, though.

"Now, intelligent control is a more complicated kind of hierarchal control. It works by combining several hierarchies in an attempt to make control more dynamic. This is the method that cruise control uses, because it combines the hierarchy of the car with the hierarchy of human decision making."

David nodded but said nothing.

"Finally we have the Stochastic Process, resulting in the stochastic control method. Basically, this model keeps the multiple hierarchies, but also takes into account the randomness and imperfection of our world. It attempts to be more dynamic by allowing intelligent hierarchies to evolve, adapting to

the system they are trying to control. This is obviously very difficult to construct, enough so that our cruise control analogy no longer applies. If we tried to apply it, the car would probably engage the onboard GPS and guide you along a path that did not encounter any hills or valleys, thereby maintaining tighter control. Or perhaps it would simply take over the car completely and steer you off a cliff so that it wouldn't have to deal with inclines. Or maybe it would anticipate the incline and speed up preemptively, so as to make use of its momentum and avoid having to work as hard going up the hill. The point is that it's adaptive and it's random. It's nearly impossible to predict how a stochastic control mechanism is going to approach solving a control problem. But it's also clear that there is no more effective control method."

"And what does this have to do with DEI's control over their program?"

"Firewalls and electronic security devices and software are, at best, an intelligent control method," Marcus said. He shook his head sadly. "That sort of thing might work on your cruise control, but against an adaptive, dynamic, motivated form of life? Well, you can see the absurdity of it yourself."

Marcus was extremely logical, even for a mathematician, but all of these control theories and theoretical probabilities flew over David's head. Besides, surely a DOD contractor would have to have sufficient security in place. Did Marcus really think that the government was going to allow something awful to happen on their dime?

Still, in addition to logic, David knew that Marcus was also amazingly intuitive. While he might not have much in the way of social skills, he certainly knew when he was being lied to. In fact, years ago Marcus had built his reputation as much on spotlighting lies as he had with his work in math and physics. After completing high school in Cleveland at the age of fifteen, he had accepted a full scholarship to UCLA. There he attained his BA in two years and his Masters in three and a half. By the time he was twenty-one, he held a PHD in Applied Mathematics and another Masters in Aerospace Engineering. It was around that time that he discovered a European airplane manufacturer was purposefully engineering the wing slats on their newest plane in a way that was both cheap and dangerous. When Marcus reported what he'd found to the FAA, they decided to include him in the investigation. The airplane manufacturer had reportedly taken one look at the frail kid in his early twenties and attempted to bury him in technical paperwork, purportedly showing the soundness of their design. Unfortunately for them, Marcus had regarded the move as a challenge and had completely dismantled their research, resulting in one of the largest FAA fines in the history of the organization. Since then, he routinely displayed a deep resentment and distrust for businesses.

David wondered if that explained Marcus's suspicions now. Or was it something else? He was a notorious loner. Perhaps the idea of working within a group in a confined space was affecting his mood. David had seen it in children hundreds of times in the past. And, even beyond his age, in many ways Marcus Fetzer was emotionally no more developed than a child.

Nor was Chris, for that matter, though in a completely different way. And in some ways, neither was Tina.

Are any of us?

"Mark my words," Marcus was saying. "What we're going to find down there is not something that we can control in the traditional sense. And if my fears are correct, we may all be in very deep trouble."

"Why do you say that?" David asked.

But Marcus just shrugged. "Just theories at this point. No point in discussing them yet."

"He's been pulling that crap all day," Tina said. "It's a typical male inferiority response to a completely new, previously un-encountered form of life. The flight response to the unknown has been responsible for more misunderstandings between divergent cultures than anything else in the history of man. And that's all this is. Marcus is scared of the unknown."

"She's got you," Chris said happily. "You're so closed-minded, Marcus. This is a wonderful

thing. A delectable experience. Try not to be such a buzz kill.”

David was about to try and engage the soldiers in conversation when the door opened and a tall man in a suit walked in with a briefcase in his hand. He set it down near the front of the room and turned to address them.

“Thank you all for coming. My name is Henry Bauer. I’m one of the directors here at DEL. We’re in something of a rush, so unless there’s anything pressing, Andrea will get us started on the first slide.”

The display lit up with a picture of the little girl David had seen while waiting in the boardroom. She was showing a toothy smile and freckles filled her cheeks.

“Elsie Druwe,” Bauer said. “Steven Druwe’s only daughter. At the time of data capture she was just over five years of age. I’ll keep this as high-level as possible to avoid confusion, but the process we use for digitally mapping a consciousness is far more simply done on a child, which is why we decided to use her. After the initial mapping was complete, we quarantined the coded bits on a partition in our server farm so that we could examine them and correct the parts of the code that resulted in childlike behavior, as well as add our security fixes. During the time we were working on her code, the software was kept in stasis, not unlike a form of suspended animation or freezing in the physical world. In other words, she was not conscious at this point.” He turned to the woman behind the computer and nodded.

The image shifted to a graph with several lines going from left to right, all ascending.

“Here you see a visual depiction of the consciousness’ development. The beginning of the graph at the left represents the moment we released the software from stasis and let it stretch its legs. These ascending lines you see represent thought construction, decision making, cognitive recognition, memory construction, and awareness. We are able to track these the same way hospitals do, by watching for activity in specific parts of the software, not unlike what occurs in the human brain.” He pointed to a section that showed an exponential rise in all of the lines, about halfway through the graph. “Here you see the difference in growth rate once we released the software from stasis. Similar exponential growth was observed here, once we began interacting with the software.”

The image shifted again, showing another graph, this one with only one sharply ascending line.

“This is a graphical representation of the amount of computing power the program has required throughout the span of its life. There has been no sign of this trend reaching a plateau. Should this continue we will likely need to double the assets of our server farm within two years.”

The next image looked like a traditional brain scan. Most of the scan was colorless, other than some orange glow in the bottom and back portions of the brain.

“Again, this is basically an MRI of the software consciousness. This first scan was taken upon release from stasis. You can see that there is almost no activity aside from the software’s version of the occipital and temporal lobes. This represents sensory awakening and coincides with the development of the id, or personal awareness of the consciousness.” The screen flickered and the amount of orange coloring increased, filtering out and up through the scan. “Here you see a flourishing of activity in the parietal lobe and the stem. This indicates the beginning of purposeful movement by the program. Cognitive development is expected to be exponential immediately after this, as the mind is forced to deal with new surroundings.” The screen changed again, showing the brain entirely lit up in varying hues of orange. “Here you see that activity has spread throughout the rest of the cortex, also called the association areas. At this point the id has been balanced by both the ego and superego. Perception, reasoning, and rationalization is also achieved by this point, which we reached roughly four weeks ago.”

The screen flickered. It was a line graph again, this time with a single exponentially ascending line that suddenly bottomed out at the end.

“Immediately after the increase of activity in the parietal lobe, the program began to butt up against the roaming limits we put on it. Before we captured it down below, the software used to have

the full run of the company network, up to our internet firewall. This graph shows how many times each day the software attempted to get around or through the firewall. You can see how it increased until roughly thirty-six hours ago, when we were able to lock it down. Duplicates of these same protections have been put in place between our corporate network and our production network, the one downstairs, to ensure that it cannot move beyond those three levels below.”

David turned to Marcus, who was staring at the screen frowning.

The image changed, showing a schematic of three floors connected by stairs, with a single elevator shaft leading upwards.

“This is our development facility. We built it underground at the request of the Defense Advanced Research Projects Agency, to ensure that the project was kept as secret as possible.”

“Why so much secrecy?” Chris spoke up. “And why is DARPA interested in this at all?”

“The world is shrinking,” Bauer replied simply. “And everyone is connected. Even third world countries connect to the worldwide internet. As do terrorist organizations. The DOD believes that the wars of the future will be fought with computers rather than bombs. Elsie is the first step to creating a dynamic and intelligent digital defense force.”

“You’re making internet soldiers?” Chris asked. Even in the dark David could see the disgust on his face. “You’re creating digital life just so it can fight?”

“So it can defend,” Bauer corrected him. “And of course that will only be the initial application. DEI believes that in the future, these consciousnesses will do much of the menial work that human beings now do with computers.”

“That sounds like slavery,” Chris said, agitated. “You’re saying this is all about soldiers and slaves.”

“I don’t think he cares what you think about war, Chris,” Marcus said irritably.

“You mean *you* don’t care,” Chris shot back.

“Gentlemen?” Bauer said. He turned back to the screen. “You can see the three levels. The server farm is on the bottom. Elsie considers that her home. The second level contains several labs and computer stations, as well as what we call the Logic Room. That is where we have interacted with Elsie, playing games, talking, and so on. There are multiple ways to interact with her there. She can display her digital image on the screens in the room and talk back and forth with our employees. There are microphones and cameras in most places, so it isn’t all that different from talking with someone via videophone. There is also a computer terminal in which you can have typed conversations, if that’s more your thing. Lastly, the first level consists of living quarters and amenities for our employees that stay down there; an exercise room and a small lounge with a television and a DVD player.”

The image changed slightly, so that two of the sections of the schematic were colored in red.

“Here you can see where Elsie is keeping our employees. There are five of them. At first she simply refused to let anyone up on the elevator, but after a while she managed to lock them in two sections of the facility. Four of them are in the lounge and the other is in the server farm. She briefly allowed us to communicate with them via videophone, to let us know that they were alright. We do not believe that she actually intends to harm them. This is just something of a temper tantrum.”

“Some tantrum,” Tina murmured.

“Yes, well, in any case, they’ve been down there for a day and a half. Elsie hasn’t allowed them to speak with us for nearly twenty-four hours.”

“Has Elsie given you a reason why she’s doing all this?” Chris asked.

“Well,” Bauer said. “She just wants to be allowed to leave the company network. She thinks we’re grounding her here; that we don’t trust her to live out her life as she chooses. Immediately after she developed her ego and superego, we briefly put her back in stasis so our programmers could add some code to the portion of her that controls motivation. She was supposed to be limited by a couple of things. First, she would consider our server farm her home, with the same desire to return there as any of us have with our homes. It was because of this that we were able to capture her, so we don’t

believe this measure has been compromised. Secondly, we inserted code into her programming that, for lack of a better term, was supposed to make her addicted to obeying high priority orders from DEI. We modeled it after obsessive compulsion disorders in humans. Basically, if Elsie received a high priority directive from us, non-compliance was supposed to set off her version of pain receptors in her digital brain. Obviously that measure did not work.”

Another image flashed on the display, this one of what looked like two separate series of interconnected squares and circles, most with indecipherable abbreviations beside them.

“Here you see the two networks that operate below ground,” Bauer said. He pointed to the one on the left. “The larger one is actually just a subset of the same DEI network we use up here. All of the controls for life support, air ventilation, water, lights, and so on are still in our control. We control all the mechanical methods for pumping in oxygen. We are also in control of most of the electronic systems below, including general power supply. The other network consists mostly of room management in the form of locks. It also controls many of the amenities, so if you plan on watching television, Elsie might not let you. Also, most of the methods for communication are on that network, including the VoIP phones and teleconferencing nodes. Finally, the backup generators in case of power loss are also on that network. Long story short, you won’t be in any real danger.”

Right, thought David. Looking at Marcus, David could tell he wasn’t convinced either, though Chris and Tina didn’t appear worried.

The screen switched to a document that had the Department of Defense and DARPA seals in its header.

“Two days ago, DEI came to the unfortunate conclusion that Elsie and our staff below could not be recovered through normal means,” Bauer said. “Our last course of action, as outlined by this DOD directive, would be to drill an entry shaft to our facility below, get our people out, dismantle the backup generators, and cut the power. This will effectively kill Elsie in a way that will decay her code and scramble it beyond all use. This is obviously something we want to avoid by sending you people in first. We are hoping that you can interact with Elsie and convince her to return to her normal functionality. Part of that will include submitting herself back to stasis for diagnostics. Obviously getting our people out is an equal priority.”

The screen winked back to the DEI logo and the lights in the room came back on.

“So, that should bring you up to speed,” Bauer said. “We don’t have a great deal of time, but I imagine you have some questions?”

“Your server farm,” Chris asked. “How much total storage and power do you have down there?”

“They’re all blade servers, so they’re compact,” Bauer said. “I’m not the ideal source for technical specifics, but all together we’re talking about roughly two thousand quad core processors, over a hundred and fifty terabytes of random access memory, and storage space in excess of a thousand terabytes, or a petabyte.”

“And how much of that storage does Elsie take up?”

“She started off at something like two-hundred terabytes when we released her from stasis. Over the weeks she grew until she nearly took up all of our storage down there. We thought we were going to have to build out our storage even further, but fortunately her growth ceased at roughly nine-hundred terabytes. We’ll still likely have to build out the server farm, but only for processing power, not storage. Elsie is getting smarter, not bigger.”

Marcus cleared his throat. “And you’re sure she hasn’t grown further?”

“How could she? Besides the fact that we take nearly constant metrics on all of our equipment and would have noticed if more space was being used, each portion of the software has a phone home component, so that it has to check in with our monitoring software. That’s how we always know exactly where she is, down to which portion of which hard drive she’s currently using, or what files she’s looking at. There is no way she could have grown in storage size without our knowledge.”

"Mm hmm," Marcus said, making a note on his notepad.

"I'd like to know how you managed to map a consciousness to begin with," David said.

Bauer smiled. "Again, I'm not the best source for specifics, but I can give you the high level overview. Basically, any undertaking like this in the past has always hit the same roadblock: the human brain is enormously complex and human consciousness is an ethereal, non-physical thing. It has been theorized in the past that if you could faithfully map all the physical components of the brain, the consciousness might simply come along as a consequence. But the problem remained: how can you map roughly a thousand trillion cells making up the human brain?"

"Most would tell you that it's impossible," Chris said.

"It is," Bauer replied. "We didn't even try. Instead we took the brain of a child, Elsie, noted every unique characteristic about her brain's cellular structure and orientation, and then matched those with the yet undeveloped brain of a human fetus. We mapped the fetus, which is decidedly smaller, applied biological rules to those cells so that they would grow as a normal human brain would in a fetus, and then made some slight alterations so that the growth would reflect the same growth the real Elsie went through. Because we were able to so closely match our cellular governing code with what happened in the physical world, the outcome was nearly identical."

The room was silent for a moment. David could hear the whirring of the room's overhead fan and the hum of electricity.

"You did *what*?" Tina finally asked.

"It's actually not that difficult," Bauer said. "Writing code governing cellular behavior was fairly simple, they tell me. You just watch what the cell does over a long enough period of time, and pay special attention to how it interacts with the other cells around it, and you write the code. As I understand it, the chief problem was making the cells act independently but also as a group. We solved that with a distributed intelligence algorithm. Basically, each subsystem of the brain's cells is governed by a different processor set in our server farm. This means that the processing power and decision making for different parts of the brain are spread over all the hardware, rather than being managed by a single bulky and sluggish farm."

"And those different subsystems interact with the whole in the normal fashion of a human brain?" David asked.

"Absolutely. Like I said, the code is really solid."

"I noticed in the graph that showed storage requirement growth that as she got bigger and smarter, the growth rate decreased," Marcus said. "If you're code mimics cell behavior so closely, I assume it simulates cell death and regeneration as well?"

"Yes," Bauer replied after a moment's hesitation.

"So what happens to the data from the dead cells?"

"Well," Bauer said. "They are purged from the system, with the pertinent data filtered into the newly generated cell data, which then assumes the computational resources previously occupied by the dead cell."

Marcus smiled. "And all of that is accomplished without any errors? No misallocation of resources? No fragmented data?"

"The code is really strong," Bauer said, shifting his feet slightly.

"It would need to be," Marcus nodded.

"The soldier trapped down there," Tina said. "Why did he go down?"

"He's been a technical advisor to our programmers. We sent him down when Elsie first went rogue. There was a theory that she might submit to an authority figure like a soldier. Obviously that theory was not correct."

"What's been the reaction from our international allies?" Chris asked.

"There hasn't been any," Bauer said. "Because we haven't told them about this."

"But they're our allies."

Bauer shrugged. "The DOD said mum's the word. Was there anything else?"

"Yes, actually," Marcus said. "I was wondering when you were going to cut the crap and tell us when and how she got loose?"

Bauer looked genuinely shocked. "Got loose?"

"Yes, loose. Off the company network. Out onto the internet. The wild, so to speak."

"Elsie has never gotten past our firewalls."

"Bullshit," Marcus said, looking annoyed. "Your company is acting desperately, which implies that something important has happened. More important than this silly little hostage situation here. You began calling us in about two days ago, so I'd say the program got out, what...three or four days ago?"

Bauer just stared intensely at Marcus.

My god, David thought. It's true.

"How did it happen?" Marcus asked.

"We're not sure, actually," Bauer sighed.

"And what did she do?" Marcus pressed.

"Apparently she tried to communicate with one of her original programmers. Fortunately, because of the security measures we put in place, the program returned home to the server farm and we locked it down. From now on, nothing can get in or out."

There was a brief moment of silence. Marcus shook his head sadly.

"So," Chris finally broke the silence. "When the program was finally free, it tried to contact its programmers. Like an adopted child seeking out its biological parents." His face lit up with a smile. "That indicates an amazing level of sophistication. Not to mention an extremely important developmental consideration."

"What's that?" Bauer asked.

"It means that she is sentimental. Emotional. Empathetic enough to want to seek out who she conceives as her parents."

"Or else the programmer left some kind of personal calling card in his code," Marcus said irritably. "Code monkeys do that sort of thing all the time. What did the programmer say when you spoke with him?"

"Nothing that would indicate he left a personal calling card in the code," Bauer said with a blank look on his face.

There's something else, David thought. Something he isn't telling us. Looking at Marcus, David could tell he was suspicious too.

"So when are we going down there?" Chris asked. He still sounded excited.

"This evening," Bauer said. "We're going to give you a short time to rest. An hour or so. There's a sleeping lounge you can use if you like. Then there will be some prep work before we go down."

"You're coming with us?" Tina asked.

"Yes," Bauer nodded. "But in the meantime, you should all get some rest."

"Like any of us could sleep!" Chris said, grinning.

Bauer and the woman walked out of the room. The military men, who had looked bored through most of the briefing, also left, chatting and jibing with one another. Chris said he was going to go try and find a company programmer to answer some questions he had. Tina said she was going back to the lounge room to grab a snack and watch the news.

But Marcus had yet to move. As David stood and stretched his legs, Marcus was still seated in his chair, flipping through his notepad, occasionally scribbling something down.

"You okay, Marcus?"

Marcus looked surprised that David was still in the room. "Me? Sure. I just don't like being lied to."

"Yeah, well, that was pretty impressive."

"What was?"

"How you knew the program had gotten out."

"Yeah, well, that was the little lie," Marcus said. "I'm far more concerned about the big lies."

"Big lies?"

"Sure. For starters, I suspect this company knows why the draw on their storage has leveled off, and it has nothing to do with the code."

"It doesn't?"

"Of course not. How could it? And besides that, they aren't telling us about the biggest problem of all, though they certainly must have considered it once the program made it out into the wild."

"What problem is that?"

Marcus tapped his notebook with his pen. "All the technological security in the world isn't going to keep Elsie on their network if there are other sentient programs on the outside trying to break her out."

David frowned. "Other programs? Why would there be other programs like Elsie on the outside? You think that there are other companies or governments building these things?"

Marcus looked him in the eye. "That's one possibility."

"But that isn't what you're concerned about."

"No."

David sighed. "Come on, Marcus. What are you thinking?"

But he flipped his notebook shut and stood up. "We'll find out if I'm right when we go down below. Particularly if Chris Heinz is as good a programmer as he claims to be."

David wasn't quite sure where he wanted to go. He was tired, but the prospect of lying down in a strange bed wasn't appealing. He figured he might as well go back to the lounge and talk to Tina. Perhaps have a soda or see if there was a coffee machine. For some reason, the briefing had been exhausting.

Along the way he passed a room packed with computer terminals. Chris was standing at the front of the room, next to an overweight man. They were both facing a computer screen. Chris saw David and waved him over.

"You've got to see this code," he said. "Bauer was right. It's really incredible."

"What do you mean?"

"Well, they've taken the next step in compression algorithms."

David just looked at him.

"You know," Chris continued. "Like digital photographs being compressed into JPEG format. Or a series of documents being bundled and compressed in a ZIP file. You know how that works don't you?"

"Refresh me."

Chris brightened. He loved talking technology. "Well, basically, all data exists on a matrix. Take a word processing document, for instance. It's just a two-dimensional matrix. All the inputted information exists on points that are a cross-section of up or down and left or right. With me?"

"Sure."

"So the uncompressed file lists instructions on what to put in each position on the matrix. Let's say you have a hundred characters and spaces. That means that, uncompressed, you need a hundred lines of code for the document. Point 1:1 is the letter D. Point 1:2 is A. And so on. Got it?"

"I think so. And all of those instructions are what make up the size of the file, right?"

“Exactly. But what compression does is it allows for fewer lines of code by taking into account code parity.”

“Uh, what?”

“Similarities in the instructions,” Chris said. “Take our document. Let’s say it is all words. No numbers or symbols or anything.”

“Okay.”

“Well, in that case, we don’t need a hundred lines of code, do we?”

“We don’t?”

“Of course not. The most we’ll need is twenty-seven, one line for each letter in the alphabet plus one line for a blank space. What compression algorithms do is instruct the software to read it not by individual points on the matrix, but by what is going in those points. So perhaps there are twenty uses of the letter A. We don’t need twenty lines of code for that. We only need one to instruct all the points in which to put the letter A. The reduction in lines of code greatly reduces the file size and the power needed to run it.”

“I get it now,” David said.

“Compression is on all kinds of file types: documents, pictures, email, whatever. But until now it’s only been used on files.”

“But not anymore?”

“No,” Chris grinned. “Dennis here is showing me how they’ve built the ability to do compressed *instructions* into Elsie’s code. And how that instruction compression cuts down on the draw for processing power.”

The overweight man nodded. “We had to do it. If we hadn’t figured it out, the processor load needed for brain function simulation would have been impossible to overcome. There are roughly a billion functional actions taken by the human brain every hour or so. Some of these are conscious actions, most of them aren’t, but we replicated *all* of them. To do that without compression would have been crippling.”

“But with compression you have the processing power to handle it?” David asked.

“Well,” the tech said. “Kind of.”

“What do you mean kind of?”

“There are times when we still have to draw more processing power,” the tech said, looking uncomfortable. “You’ve both signed NDAs, right?”

“Yes.”

“Well, to overcome peak load circumstances, we…” the tech hesitated. “We released a botnet.”

“You’re kidding,” Chris said.

“It’s nothing intrusive. It draws very little power from each host and obviously we aren’t attempting to sip any data.”

“Still,” Chris said, shaking his head. “That’s not ethical.”

“What’s a botnet?” David asked.

“It’s a kind of computer virus,” Chris explained. “More correctly, it’s many computer viruses that are all controlled by a single machine. What it does is turn any infected machine into a potential zombie machine, or one that can be taken over by the home server. You may have heard about some of these in the news in the past. Conficker was a botnet and it gained a good deal of media attention when it compromised something like ten million machines worldwide. Criminal groups use them to steal personal and financial information on the zombie machines, or else they use them as a distributed spamming network, with each machine sending out spam emails.”

David turned to the tech. “DEI made one of these things and released it?”

“Well, yes,” the tech said. “But like I said, we aren’t stealing credit card numbers here. We just assign the botnet some of Elsie’s processing needs during peak circumstances. Very little on each machine.”

"And how many zombie machines has your botnet infected?" Chris asked.

The tech blushed. "Something like ninety million computers."

"I can't believe you needed to do that," Chris said sharply. It sounded to David as if he were trying to sound angrier than he actually was. "The security vulnerabilities alone make it risky. Never mind the potential legal ramifications."

"Actually, the botnet was cleared by DARPA for use on this project, Mr. Heinz."

"Figures. DARPA has become less trustworthy these days. But I guess if you had the Pentagon's approval..."

"I have a question," David said quickly, before Chris could get going again. "When you say this botnet does some of Elsie's processing, does that mean part of her is on another computer?"

"No, no," the tech said. "Not really. We're talking about fragments of processes. Just a small amount of data on each zombie machine, then the results all get funneled back here."

"Because that would be a possible data breach," Chris said, frowning. "You're sure nothing involved in the conscious operation of Elsie gets out on the botnet?"

"Absolutely not," the tech said. "We know which parts represent her true consciousness and we monitor them in excruciating detail. What passes through the firewall on the botnet is background work."

"I'd like to see the code, if I may," Chris said.

As the two of them began chattering quickly back and forth about the programming, using incomprehensible words like "source code", "vertical alignment", and "precompiled headers", David's attention began to waver. He was pleased when a DEI security guard walked in the room and asked them to follow him for their outfitting.

They were shown into a white room that reminded David of a very large hospital room. There were several small cots with white sheets, a counter littered with shiny equipment, and a short middle-aged man in a white lab coat. Tina and Marcus were already lying on two of the cots and the man in the lab coat asked them to do the same.

"Each of you is going to be fitted with a very small communication device, so you can stay in contact at all times," the man said. "It should fit snugly in your ear, but we add a small amount of adhesive to the edges so that no amount of jostling will knock it loose." He patted David on the shoulder. "We'll start with you, Dr. Barker. This may feel a bit strange."

The man then reached towards the counter, picking up a small plastic item and what looked like a miniature aerosol can. He placed the plastic piece in David's right ear. Then he fitted a long thin nozzle to the tip of the aerosol can and sprayed a misty substance into his ear canal. The mist was cold for a second, but it felt as though it evaporated immediately. David was sure that such a small amount of whatever it was couldn't accomplish anything.

But the man looked satisfied. "All done. Now for the rest of you."

He repeated the process on each of them and then allowed them to stand.

"Where's the microphone?" Tina asked.

"It's in the earpiece," the man said. "It's designed to cancel out aberrant noises and only recognize the frequency and decibel levels of human speech. It's operated by touch, so if you will all reach to your ears and lightly press the earpiece, they will engage."

Each of them did so and began chattering back and forth. The sound quality was amazing. When Tina asked him if he could hear her, David thought it was even better than just listening to her normally. He asked the man in the lab coat.

"Yes, actually, it is. Because the earpiece cancels out all the background noise, the sound quality is far superior to normal human auditory senses."

“How long of a battery life do they have?” Chris asked.

“Perpetual. Even as you’re using them, they recharge themselves off of your body heat.” The man pulled a couple stacks of clothing from the counter. “We’ll want you to wear these clothes when you go below. You really don’t need them for most of the rooms down there, but since you’ll probably be spending some time near the server farm, you have to wear them. The cargo pants have plenty of pocket space to put your things, and the t-shirt and gym shoes are very comfortable. They’re all static resistant, so they’ll be safe for use near the servers.”

David set the shoes aside and unfolded the clothes. They were all navy blue.

“What’s with this atrocious color?” Chris asked.

“They’re for function, not fashion,” the man said.

“They look like navy blue military fatigues,” Tina said.

“That was indeed the basis of the design,” the man nodded. “You can change in a moment, but first you can all take this small pack.” He handed each of them what looked like oversized black leather bi-fold wallets. “Inside you’ll find a standard toolkit. There’s a small knife, a multi-tool with socket wrenches in varying sizes, a screwdriver, and an electronic lock pick.”

“How does an electronic lock pick work?” Marcus said, holding his up and peering at it. Looking at his, David thought it looked like a small, blunted ice pick. There was a handle with a small button and then the device narrowed into a short wand.

“Simple,” the man said. “Nearly all of the doors downstairs are accessed by keycard. You’ll find a skeleton keycard in the cargo pockets of your pants. Since the program can control the doors downstairs, the electronic lock pick will probably be the tool you’ll use the most. All you have to do to operate it is point it at the card reader and press the button. The lock pick then transmits every possible card code to the reader. Eventually it’ll hit the one the program is using and the door will open.”

“And what is this pin with the glowing green light?” Chris asked.

“That pin will let you know if anything is wrong with life support conditions. As long as it’s green, you’re in good shape. If it starts to go red, that means that the atmosphere is lacking oxygen.” He continued quickly. “Don’t worry, that won’t happen. We pump plenty of oxygen down there. It’s just something the insurance companies make us do. Clip the pin to your shirt when you change and then forget about it.”

They were shown to separate dressing rooms to change. As David was putting on the cargo pants he reminded himself to ask about calling home. Tiffany was going to be extremely angry if he didn’t tell her what was going on.

In a nearby room, Andrea Souder pulled aside Sergeant Robert Garcia while his men geared up. “What did you think, Sergeant? That I wouldn’t notice?”

Sergeant Garcia’s face went blank. “Notice what?”

“The fact that you and each of your men are carrying EMP grenades, Sergeant,” Souder sighed. “We’ve never allowed them near the server farm.”

“That’s because you’ve never had your software kill someone,” Sergeant Garcia said. “We’re talking about murder, Andrea. And the Army has been very clear about my orders should your little academic team fail.”

Souder shook her head. Sergeant Garcia had been attached to the dLife project since its inception by the DOD. She had personally fought his placement for just as long. Garcia was a decent guy, and from all indications an exceptional soldier, but he had no technical background. A Green Beret, he was as aggressive as he was stubborn, and he’d made no secret of his dislike for DEI and the dLife project. To have him near the server farm with electromagnetic pulse grenades would be a mistake. Souder was sure that he would use them to wipe out the entire server farm as soon as an

excuse presented itself. "Sergeant, we have procedures in place should the Digilife team not be successful. None of those procedures include you taking EMPs on this trip. You're aware of the consequences of violating your orders."

"I take my orders from my CO, not from you," Sergeant Garcia said, sticking out his chest. "And my CO ordered me to use my judgment."

"Our procedures were agreed upon by the Secretary of Defense, Sergeant. He outranks your CO by about twelve pay grades."

"Sorry, it's my call until I hear otherwise."

"Robert..."

"Don't even start with me," Sergeant Garcia barked. He often spoke to her this way, something Souder had never gotten used to. "I notice you're not joining us. You're sending the PR guy instead. And I don't blame you, because I think the situation is likely far worse than what you people are owning up to."

"Oh, come on, Robert. We're talking about a few locked doors and an out of service elevator. This isn't a war we're waging."

"It should be. As far as you know, you've lost five of your people down there. In my profession, losses like that without a graduated response are not acceptable."

"Nobody is lost, Robert. We know exactly where they are."

"No, you don't. How long has it been since you've spoken to any of them? How long since you had access to the motion sensor data without having to worry about your rogue program corrupting it?"

"None of that means we've lost anyone. They're all down there."

"In a setting almost entirely controlled by a murderous computer program," Sergeant Garcia shook his head. "The bottom line is that you have absolutely zero intelligence on their wellbeing. Zero."

"You're overreacting."

"And now you're sending more people down there. Myself among them."

Souder looked him in the eye. "Given how you feel, perhaps it'd be best if you were taken off the team. I think I better give the Pentagon a call before it's too late."

"Don't you threaten me, Andrea."

"Then don't circumvent the rules. If you want to go down there, you aren't taking EMPs. Have I made myself clear?"

Sergeant Garcia glared at her. "Crystal, ma'am."

"Good. I trust I don't have to have you and your men searched before we get moving?"

"No, ma'am," he said. He was already pulling the EMPs out of his pack and motioning the others to do the same.

"Good," Souder said. She left the room.

Chapter 4: Below Ground

“Computer Science is no more about computers than astronomy is about telescopes.” – Edsger W. Dijkstra

“Man is still the most extraordinary computer of all.” – John F. Kennedy

An hour later, the Digilife team was gathered in a small room that contained only a table and a large elevator door. Bauer and the men in military fatigues were also there. They all introduced themselves quickly.

Bauer announced they would be going down in two groups. Tina and Marcus would go down first, accompanied by Bauer and two of the soldiers. When they got off the elevator below, they would send it back up with a small sticky note on the wall indicating that the rest were safe and clear to come down after them.

“What about stairs?” Chris said. “Surely there must be stairs.”

But Bauer shook his head. “Elsie controls the locks down there and she’s said we have to use the elevator.”

“Can’t you pick the lock?” David asked. “Or break down the door?”

“Not with these types of locks and doors,” Bauer said. “They were installed by the military.”

Bauer swiped his ID card along the elevator sensor and it chimed open. Marcus and Tina shuffled inside, followed by two of the soldiers whose names David had already forgotten. Nobody said anything as the elevator chimed again and the doors closed. At the last minute, David caught Tina’s tense eye and gave her a thumbs up.

“How long will it take them to get all the way down?” Chris asked him.

“I don’t know. It’s pretty far down. Ten minutes maybe?”

“Eight, sir,” one of the soldiers said. “And another eight for the elevator to come back up.”

“Sixteen minutes,” Chris said. He was shifting his weight anxiously from foot to foot. “God, I can’t wait to get down there.”

David wished he could be as enthusiastic. Instead he was busy trying to bury his impulse to run for the door. Why was he so apprehensive? Hadn’t they told him he wouldn’t be in any danger?

“I hope everyone else realizes how lucky we are,” Chris continued. “To see Elsie in action would be enough, but to actually be one of the first to interact with her is truly amazing. I’m still trying to get this whole thing to sink in, you know? A true digital consciousness! Essentially a living digital being. The implications for the digital philosophy theory are astounding.”

David wondered if Chris was covering up his nervousness with fake enthusiasm. He was speaking quickly and eagerly, almost manic. David figured it would be best to feed that enthusiasm, to help Chris take his mind off of whatever was making him nervous. “What is digital philosophy?”

“Well, basically the theory states that our universe is just one big Turing-Complete automaton.”

“Chris, speak English,” David said.

“You mean without any math?”

“If possible, yes.”

Chris sighed, but David could see the tension ease from his shoulders. “A Turing-Complete mechanism is one with unlimited computational power. It can simulate any sub-process or function down to the most granular levels. Take a computer, for instance. If you could construct a computer powerful enough that it could simulate every other known computer at the same time, then that would be a Turing-Complete computer. Now, if you could code that computer to act independently, meaning without any outside input, then that machine would be a Turing-Complete automaton.”

“What does that have to do with Elsie?”

“Well, she would have to be considered a near Turing-Complete automaton for a human being.

That's important for digital philosophy theory because the contention is that you can break down everything that happens in our entire universe into computational mathematic equations. If this happens, then these things happen, that sort of thing. Hundreds of trillions of equations being processed every second. That's what our universe is."

The two soldiers were staring at Chris as though he were crazy.

"But that can't be correct," David said.

"Why not?"

"Because we have free will. We can choose to do whatever we want."

"But how do we decide what we want?" Chris smiled. "Isn't what we think we want just a series of world influences, tastes, and preferences? All of those things can be accounted for by equations and computations."

"But I can also choose to do what I don't want."

"And your propensity for doing so are just more equations. The point is, with a powerful enough computer, you could theoretically simulate our entire universe. That means that our universe is essentially a giant computer, running complicated algorithms and computations with blazing speed."

"That's an odd way of looking at it," David said.

"It's difficult to accept for most people," Chris nodded. "Because they want to think of themselves as free to do whatever they want. And they are. Digital philosophy just suggests that there is an equation for that freedom."

"Huh."

"But what's *really* interesting is that we are beginning to approach a level of technology where we can begin doing some small scale simulations of our own," Chris continued. "Nothing too big, of course, but it's clear that Elsie represents a giant step forward towards mankind simulating a universe. We've now simulated an autonomous living being, arguably the most difficult thing in the universe to simulate. Now it's a simple matter of extrapolating to the rest of the living things in the universe, and then also simulating non-animate surroundings."

David laughed. "You call that *simple*?"

"Relatively speaking, it is simple. Look at the way computer technology has progressed. The first modern form of machine programming occurred in the early eighteen-hundreds in France when Joseph Jacquard figured out how to use paper cards with holes punched in them to get his loom to make specific weaving styles automatically. These punch cards were used up until the nineteen-thirties, when Turing invented the analog computer. Then Konrad Zuse creates the first program controlled computer in the fifties. The microchip was invented in the sixties, the modern operating system and the personal computer in the seventies and eighties, and then the full explosion of both hardware and coding in the nineties. Now, in the present, we're on to the next phase: virtualization. The point is that we have more than two hundred years of history with the computer and programming, yet development during that history has operated on an exponential curve. Ninety-five percent of the developments have occurred in the last fifteen years."

"You're saying that the leaps forward are coming faster now."

"Amazingly faster. The personal computer we'll use in twenty years is something we probably can't even conceive of at this time."

The elevator chimed and the doors opened. One of the soldiers stepped in and returned with a small yellow sticky note. "Let's go, gentlemen."

They stepped in. As they did, David thought he heard a creaking sound. His mind snapped into focus on the fact that this rogue computer program named Elsie could crash the elevator whenever she pleased. He reached for the rails lining the elevator walls and gripped them tight.

With a mechanical whirring sound, the doors closed, the motor kicked in, and they started their descent.

"Fifty feet," said a soft female voice from speakers at the top of the cab.

"Jesus, is that her?" David said.

"No," one of the soldiers said. "Just an automated voice telling you how far we've descended."

"Christ," David muttered. He wiped his forehead with one sleeve, dampening it with sweat. He looked around the elevator, noticing for the first time how closely they were packed into it. He had never felt claustrophobic before, but now his heart began thundering in his chest and he was sure that the walls were pressing in around him.

"One hundred feet."

"Elevator programs are pretty amazing," Chris said idly. "The amount of sophistication required just to get them to respond intelligently to requests on a multi-floor environment is impressive. This elevator wouldn't need any of that, of course, what with just the two floors to travel between. But I'm sure it took a hell of a lot of work to build this shaft so far below ground."

"One hundred and fifty feet."

"Have you ever been in an underground facility, Dave?" Chris asked cheerfully.

"No," David answered him, hearing his voice crack slightly.

"I have. They're usually cold. Though I suppose that would be good for the server farm, wouldn't it? Ideal even."

Just shut up, David thought to himself, gripping the rails even tighter.

"One hundred and seventy-five feet," the automated voice said. "Descent will begin to slow."

"I'm just glad there are so many cameras down there," Chris continued. "Because some day the military is going to go public with this project. They'll release the tape of us interacting with the first digital being ever encountered by man." He turned to David. "Don't you think they would do that? They'd have to, right? Too much good PR to be gained to not release it."

"I guess," David said quietly.

Chris turned to the soldiers. "What do you two think? Will the military release the videos of us doing what we do down here?"

"I'm not sure, sir. I suppose they might."

"Of course they will," Chris said. He turned back to David. "Which means we need to be very careful about our appearance."

"Our appearance?" David asked.

"Yes. How we look. What we say."

"Why would that matter?"

"Well, if we're going to end up on television or in the history books, we want to look good and say the right things, don't we?"

"I don't know," David said. "How do you make sure you say the right thing?"

"By rehearsing it, of course. Like before we first speak with Elsie, for instance. I was thinking we should make an announcement beforehand."

"What if she decides to speak with us before we're prepared?" David asked.

"That's why we're talking about this now."

"Two hundred feet. You will arrive at your destination in one minute," said the automated voice.

"How about as soon as we get off the elevator, we find the nearest camera and announce our intention to interact with Elsie," Chris continued. "Something like, 'We will now extend the hand of friendship to the first digital human being ever encountered'."

"Is Elsie a human being?"

"Of course she is. She's the digital representation of a human being. What else could we call her?"

"I don't know," David said. "I just haven't really been thinking of her as human. Conscious, maybe, but not human."

"You're being insensitive."

“Two hundred and thirty-five feet,” said the automated voice. “You have reached your destination. Elevator doors opening.”

“Here we go,” Chris said.

The doors opened.

David looked through the opening. On the other side was a brightly lit room. As far as he could tell from his position pressed against the back of the elevator, the room was empty. The soldiers strode through the door and stood in the center of the room, as did Chris. They all turned to look at him, still with his back pressed against the wall and his hands gripping the railing.

“You coming?” Chris said with a smirk.

“Yeah, sorry.”

He walked cautiously into the room and nearly jumped when the elevator doors closed behind him. Joining the others, he looked around and saw a door to one side and another sharing the wall with the elevator doors. That one had black letters stenciled onto the metal: *EMERGENCY STAIRWELL*. He reached out and gave the door a light shove. It didn’t move. Other than that, the only other thing to break up the monotonous white walls was several vents above and on their sides.

“Where is everyone?” he asked.

“Through that door, I guess,” Chris said.

The soldiers both snickered.

“They’re going to sweep us,” one of them said. “For dust particles and anything else that can screw up the machines down here. Didn’t you read that manual they gave you?”

“No,” Chris said. “What do you mean, sweep us?”

But before the soldier could answer all of the vents in the room clanged open and a powerful wind swept through the room. It was so loud that David couldn’t hear what Chris was saying, despite being able to see him shouting something. The cargo pants whipped around him and he got goose bumps from the chill.

He looked at Chris again, who was still shouting something and pointing at his ear. What was he saying? David had never tried to read someone’s lips before.

Chris pointed again to his ear.

Suddenly David remembered his earpiece. He reached up with some difficulty and tapped it softly.

“—shouldn’t be too much longer,” Chris was shouting. It was amazing how clearly his voice came through with all of the surrounding noise.

“Actually, just ten more seconds,” came another voice.

“Who’s that?” Chris asked.

“Henry Bauer. We’re in the adjacent room.”

“How come you didn’t tell us about the particle sweeping during the briefing?” David shouted.

“Because I made the mistake of assuming you read the manual we gave you,” Bauer said.

The wind died down and the vents closed with another clang.

“Well, that was a fun start to our trip,” Chris smiled.

The door along the wall opened and Bauer stood there. “Gentlemen, welcome to our underground lab. Now let’s get to work.”

“They’re all down there now?” Steven Druwe asked from behind his desk.

His office was still dark. Nothing was on, not even his computer. Andrea Souder knew that meant he was trying to think.

“Yes, Steve. The second group just finished being swept for particles.”

“And nobody mentioned to them that we don’t control that process?”

"No sir. We didn't see any reason to alarm them."

Druwe looked her in the eye. "Especially when we're fairly certain our people down there are dead, you mean?"

"We don't know that, sir. In fact, we have no good reason to even suspect that."

"Yes we do. She's already killed three people."

"I'm sure that was just an accident."

"I'm not."

"It'd be best not to draw any conclusions until we give the Digilife team a chance to work, sir."

Druwe waved her words away. "A desperate move, but a necessary one," he said irritably. "I had to do everything possible before pulling the plug. But now we've got this attack in Illinois, this thing in our underground lab, and *still* the attacks on our firewall are coming."

"You think this is starting to get out of control?"

"I'm not sure," Druwe replied. "But we have to be prepared for the possibility. I want you to start calling in the people and equipment we'll need to drill a shaft to the lab. But do it quietly. I don't want the Pentagon to know about this until the last minute. We could still pull this thing off, after all."

Souder nodded. "I'm sure we will, sir."

"You're terrible at kissing ass, Andrea." But Druwe smiled slightly. "Still, I think you're right. We can still win this thing. I'm sure as hell going to try."

"Give the team some time," Souder said again. "You should have seen them at the briefing. They're all extremely intelligent."

"They better be, because they're on their own now."

Outside the elevator room was a long, narrow hallway that opened up into a larger room at the end. Along the hallway walls were several doors with a fire extinguisher encased in glass next to each of them. The floor was carpeted gray and the walls were white. Adorning them was the occasional decorative painting or print, usually something colorful and simple. It's like a giant nursery, David thought. He looked up at the ceiling. It too was white, but every fifty feet or so was a small black camera on a swivel.

"Is everyone ready to go?" Bauer asked.

They all nodded.

"Good. First things first, let's figure out where everyone else is. According to our information, four people should be locked in the lounge at the end of this hall and the other person should be down in the server farm on the third level. Sergeant Garcia will lead the way."

The soldiers took the point as they traveled down the hall. They moved in a crouch, constantly looking in varying directions. The rest of them walked behind. David noticed that Tina was snickering at the way the soldiers were behaving.

"What's on the other side of these doors?" Chris asked.

"Living quarters," Bauer said. "Two people to a room. Each of them have phones and computer terminals. If we end up spending the night, this is where we'll be staying."

David looked up at the ceiling again. He couldn't be certain, but it seemed to him that several of the cameras were following their movement. "Is there surveillance in the living quarters as well?" he asked.

"No," Bauer replied. "No cameras and the terminals don't have webcams. In fact, those rooms and the stairwells between floors are the only places that don't have cameras and microphones."

As they made their way down the hallway, Bauer refreshed them on the structure of the underground facility. This was level one, which was built to house the people working there. In addition to the living quarters, there was a lounge and an exercise room at the end of the hall. There

was also a stairwell there leading down to the second level. Level two consisted of the large room everyone called the Logic Room. There were large video displays and computer terminals throughout that room, all built for interaction with Elsie. Attached to that room was another long hallway lined with computer labs, which housed terminals with a direct link to the server farm and Elsie's code. At the end of that hallway was another stairwell, which led down to level three. Level three was just a single giant room, several thousand square feet, dedicated solely to housing the server farm. The server farm consisted of something close to twenty-five thousand blade servers on nearly four-hundred five foot by seven foot racks. "If you looked at it from above, it'd look like a giant chess board," Bauer said. "The room is large enough that if you were on one end of the room and I was on the other, you'd have to scream just to have a chance to be heard."

"How difficult will it be to find someone in the server farm if they're not standing by the door?" Tina asked.

"It'll take some time. Hopefully we can get the folks locked in the lounge to help."

They reached the end of the hall and walked through the opening into an expansive room. To the left was a surprisingly complete set of exercise equipment and weights. There were also a couple of large flat panel displays and speakers dispersed along the walls. Straight ahead was a heavy-looking door with the word *STAIRS* written on it. To the right was another wall with a windowless metal door. It was all brightly lit, and there had clearly been an attempt to create a homey atmosphere with several potted plants and bright oil painting prints throughout the room, but David was struck by how small everything felt. The room was the size of a small gymnasium, yet he felt as though everything was pressing in on him.

"This way," Bauer said, waving them towards the metal door.

They weaved their way around workout machines and benches and came to a halt at the door.

"This is the door to the lounge," Bauer said. "We should find four people on the other side."

He pulled out his electronic lock pick, pointed it at the card scanner next to the door, and pressed the button. For a minute or so nothing happened. David began to think that the lock pick wasn't going to work.

The scanner beeped and the door slid silently open.

"Sergeant Garcia, if you would please," Bauer said.

The soldiers went through the door, filing in quickly and then dispersing in every direction. The rest of them followed.

The lounge was smaller than the workout room, but even more care had been shown to creating a sense of comfort. There were plants everywhere and more artwork on the walls. Several plush leather couches were accompanied by recliner chairs and what looked like a massage table. There were two large televisions on opposite ends of the room, both housed in large wooden entertainment centers that also included DVD players and several videogame consoles. In the center of the room was a small kitchen, including a table and chairs, a sink, a microwave, and a refrigerator.

It didn't take long to recognize that there were no other people in the room.

"Any of you see anything that might explain where they went?" Bauer asked the group.

"No," David said. He headed over to the kitchen area. There was a soda can on the table. He reached out and closed his palm around it. "Warm," he said aloud. He lifted the can to his mouth and took a sip of the remaining liquid. "Carbonation is mostly gone, but not entirely. I'd say this can was opened less than twelve hours ago."

"You sure about that?" Marcus asked. He was standing over one of the leather couches, peering closely at it.

"Fairly sure," David shrugged. "Give or take a couple of hours."

"That'd be about the time we all started arriving," Chris said. "Kind of an odd coincidence."

"Very odd," Marcus nodded.

"Do we have access to the video records?" Chris asked Souder, looking up at the cameras in the

room.

"We can try to pull up the records on one of the lab terminals," Bauer said. "Assuming Elsie doesn't block us."

"In that case, we'll be able to see the video logs and watch what happened," Chris nodded. "In the meantime, what's in the fridge, David?"

David opened the refrigerator door and peered in. "Fruit, lunch meat, bread," he said. "And about thirty microwavable dinners."

"Not exactly gourmet, but it'll do," Chris said.

"Did you guys see this?" Tina was bent over one of the reclining chairs. "There's a blood splotch on the head cushion. Not much, though. Could be from a nosebleed."

"I found blood on three of the couches," Marcus said. "Small amounts, always at one of the ends, where you would lay your head."

"Jesus, Marcus," Chris said. "Were you even going to tell us?"

Marcus shrugged. "I wasn't sure it was important."

"It isn't," Bauer said. "Nosebleeds are common down here, because of the way we pump in oxygen and dehumidify the air."

"Still," Marcus said quietly. "Four people in the lounge, four blood splotches..."

"Trust me, it's nothing," Bauer said. "Just to be thorough, let's go back and check the living area to make sure nobody is there, and then we'll head down to the second level."

They didn't find anyone in the living quarters either, so Bauer led them back past the exercise equipment to the stairwell door. They used the electronic lock pick again and winded their way down the stairwell to another door, through which Sergeant Garcia insisted he and his men go first. Moments later they were in a room even larger than the workout area on the first level.

David's feeling of nausea worsened.

There was color *everywhere*. The far wall was a single giant video display, which was currently showing live video of the room. The screen was large enough that as he watched himself walking around the room on the screen, David wondered which was larger, him or his image on the screen. The other walls held painting prints that looked like they had been made by an avant garde artist with a love of bright colors. There were cartoonish depictions of computers and humans. One of them also showed the face of a young girl with freckles and pigtails. Elsie, David thought. But the colors were all wrong. Elsie's face was skittle blue and her hair was banana yellow. Pictures of other people along the wall were colored in darkly, but the backgrounds were practically glowing with odd colors.

Throughout the room were a couple of computer terminals on tall, thin floor mounts, along with what looked like several children's toys strewn at random on the floor. There was a bright beach ball in the corner, several coloring books near one of the walls, and even a Barbie doll dressed in what David thought was a rather provocative looking cocktail dress.

"Dear God," Marcus muttered. "This place looks like a demented preschool room."

"That's precisely how it was meant to look," Bauer nodded. "Minus being demented, of course. This was where we first began interacting with Elsie. We wanted her to feel comfortable."

"I can't imagine any sane person feeling comfortable here," Marcus said.

"You didn't enjoy your childhood much, did you Marcus?" Tina asked with a smile.

"What's to enjoy? Childhood is merely the preparation for your adult life."

"Let's focus, people," Bauer said sharply.

"I kind of like it here," Chris said brightly. "They say that bright colors and complicated shapes stimulate the mind."

"Simple minds, maybe," Marcus said.

"Are you saying I have a simple mind?"

Marcus smirked. "If you have to ask..."

"That's enough, you two," Bauer sighed. "As I'm sure all of you are aware, this is the Logic

Room. You can communicate with Elsie directly by speaking in this room. There are over a hundred microphones and twenty or so cameras. Elsie also has managed to simulate visual communication and body language by displaying her image on the displays.”

“Can we communicate with her now?” Chris asked excitedly.

“You already are. No doubt she has been listening to and watching us since we got off the elevator. But she’s notoriously shy around new people, so it’s no surprise she hasn’t shown herself yet.”

As they were talking, the soldiers made their way to the nearby hallway that looked identical to the one of the first level. They began systematically going through the adjoining doors.

“Who did these atrocious wall paintings?” Marcus said, looking around the room.

“Elsie did, actually,” Bauer said. “Art is one of her favorite hobbies. She made these and saved them as files early in her development. We decided to recreate them on the walls here to show her how impressed we were with her work.”

“Fantastic!” Chris cried happily. “That takes care of one of the chief markers for differing artificial intelligence with true digital consciousness.”

“Creating art is a chief marker?” David asked.

“The act of creation is,” Chris nodded. “It completely bypasses the question of artificial imagination.”

“Artificial imagination?” Tina repeated.

“He’s talking about the classic artificial intelligence problem for computer programmers,” Marcus said. “No matter how good their programs ever were, the one thing that the coders could never seem to figure out was how to code the program to be creative. They could simulate it, but only crudely. The general consensus has been that man is not creative enough to create creativity.”

“Looks like we’ve proved you wrong,” Bauer said with a smile.

“No you haven’t,” Chris said. “You didn’t code Elsie’s creativity. All you did was code the cellular structure of her mind. The creative process emerged independently, which is the most desirable result.”

“Why is it the most desirable?” David asked.

“Because it’s *real*. It isn’t simulated at all. It grew on its own.”

“It’s just another probability equation,” Marcus said irritably. “Given enough time, we could have eventually worked out the math, which would have allowed programmers to code creativity.”

“Trust me, Marcus,” Chris smiled. “In modern programming, emergent results are always best.”

“True creativity,” Tina said thoughtfully. “That’s a good sign.”

“It is?” David asked.

“Creativity and art is very important from a cultural standpoint,” she said. “It suggests sophistication, emotion, and sensitivity. Speaking personally, I’ve always been able to communicate better with creative people, and most people encountering other cultures find the same to be true. All kinds of barriers can be broken with art.”

“Wasn’t Hitler an artist?” Marcus asked.

“A failed artist,” Tina nodded. “But the problem with Hitler wasn’t that he was insensitive. It’s that no one ever really tried to have an open dialogue with him or his government. Even the other Axis powers rarely interacted with him. If most of the industrialized world hadn’t been hell bent on isolating Germany from the world community, the Holocaust probably would never have occurred.”

The soldiers came back down the hallway.

“Did you find anyone, Sergeant?” Bauer asked.

“Nobody in any of the computer labs, sir.”

“Anything at all?”

“A few food wrappers on the consoles, but nothing else. Several of the computers were still

powered up. They looked as if they were abandoned in the middle of operation.”

“Hm.”

The Sergeant reached into the pockets of his fatigues and began digging for something. “We need to get down to the server farm right away, sir,” he said darkly. “If we don’t find anyone there, I’m going to order my men to place EMP charges around the equipment and then we’re going to make for the elevator and set them off.”

Bauer’s head snapped around. “What EMP charges?” he said angrily.

The Sergeant just stared back at him with a hard look in his eyes.

“Damn it, Sergeant Garcia, what the hell did you do?”

But he didn’t answer. Instead he muttered a few words to the other soldiers, who immediately pulled sidearm pistols from hidden holsters and pointed them at the group. Sergeant Garcia removed his hand from his pocket to reveal what looked like a compact grenade that was colored electric blue. The other soldiers each pulled identical devices from their fatigues and tossed them to the Sergeant.

“Let’s go,” he said finally. “And I should warn you, I have been authorized to use deadly force if any of you try to stop us.”

And then he turned to walk down the hallway towards the stairwell to the third level.

“Relax, Andrea,” Steven Druwe said as they walked to the locker room. “You want to stop by the vending machine? Grab a Coke?”

“No, I don’t want a Coke,” she said angrily.

“I don’t know what you’re so worked up about. What could have changed in the last half hour?”

Souder just shook her head and led him through the door to the lockers used by Sergeant Garcia and his men. She had searched moments ago, but she dug through them one last time, just to make sure she wasn’t wrong.

“They had EMPs, Steve,” she finally said. “I caught them packing them into their gear and made them put them back in their lockers.”

“And now they aren’t here,” Druwe said.

“No! God *damn* Garcia. Stupid pig-headed military goon.”

“Okay, settle down.”

“You know he’s going to set them off, don’t you?”

“He probably will. The question is what can we do about it now?”

“Nothing. We can’t do a damn thing. That son of a bitch.”

“You should have had them searched, Andrea.”

“I know, I know.”

“Still, we can’t do anything about it now. Let’s just hope that Sergeant Garcia isn’t as brash as you think he is.”

“But we haven’t even spoken to Elsie yet,” Chris said angrily at Sergeant Garcia’s back. They were trudging down the stairwell. “We were sent down here to reason with her, but you’re going to destroy her before we have the chance. You’re going to *kill* her, Sergeant.”

“That’s right,” Sergeant Garcia said without turning. “Before she has a chance to kill anyone else.”

Anyone else, David thought. Does that mean she’s killed before?

“Damn it, Sergeant, this isn’t war,” Chris pressed. “It’s contact with another life form. Hell, it’s

half a step away from contact with an extraterrestrial. We're dealing with a conscious life and you're talking about shooting first and asking questions later. Where's your sense of compassion?"

"It disappeared when every indication pointed to this supposed life form taking lives."

"I'm telling you this is a mistake. You'll go down in history as the buffoon soldier that killed the first form of digital life mankind had ever met because he couldn't contain his fear."

"If that's how it goes down, then so be it," Sergeant Garcia said blandly. They reached the entrance to the third level. The Sergeant turned to face them. "Once we're inside, I want all of you against the near wall. My men and I will conduct a quick search for any survivors. When we don't find any, we'll place the EMP charges and head back up to the elevator."

Chris was still muttering as Garcia used the lock pick and opened the door, but once they were through it he stopped and stared along with the rest of them.

They came into a small recess of a room, only ten square feet in dimension. In the middle of the recess was a computer terminal on a spire-like floor mount. Other than a small whirring video camera on the ceiling, the recess was otherwise empty.

Outside the recess, however, was something else altogether. It was dark and the machinery blocked much of his line of sight, but David could immediately tell that the rest of the room was enormous. It was easily ten times the size of the Logic Room, possibly twenty. The servers were packed tightly together in rows separated by only a few feet. The amount of noise they collectively generated was tremendous and there was a constant breeze from their fans. David shivered; it felt like the entire room was kept at around fifty degrees or so.

"This is unbelievable," Chris said.

"The power draw must be incredible," Tina said.

"You people stay here," Sergeant Garcia said. "And remember what I said about trying to interfere with us."

"Sergeant, I'd like to log into the terminal, if I may." Bauer was already walking to the floor mount. "I may be able to access video records for the lounge while you're searching."

The Sergeant stared at him a moment and then gave a curt nod before leading the other soldiers out of the recess to fan out through the server farm. When they were gone, Marcus stepped over to the terminal.

"You aren't looking for video feeds, are you?"

"No. If they're going to try to destroy Elsie by disabling the server farm, I might as well track it on the terminal."

"How do you do that? By watching what resources in the server farm are being used?"

"Yes. I'm pulling the monitoring agent up now."

David walked to the other side of the terminal and peered at the screen. He saw a list of odd letters and symbols on the left followed by two horizontal bars to their right, one orange and one green. "What does this mean?" he asked.

"It's a snapshot view of every major server cluster in the farm along with its resource utilization rating for both processing power and storage. You see this first line, *ELS.0.001*? That's the first server cluster, comprised of forty-five blade servers. It's part of her version of motor-sensory controls. The orange bar lists her storage use at ninety percent, which is the maximum we allow, and the green bar shows processing power consumption currently at just under a hundred percent."

"And what does that tell you?" David asked.

"That Elsie is extremely active," Bauer said. "And it means she's using some kind of video or audio equipment, since this part of her digital brain would be involved in visual and auditory sensory recognition. But it also indicates that she's moving, or trying to move."

"Where could she go?"

"Nowhere, but that won't stop her from trying. She certainly heard everything the Sergeant said, so you'd expect her to be afraid."

Marcus pointed at the screen. "I notice that all the storage numbers read ninety percent."

"That's right," Bauer nodded.

"Do they fluctuate at all? Even if for only a few moments?"

Bauer frowned. "I'd have to review the logs, but no, I don't think they do. They're constant."

Chris came over to peer at the screen as well. "That can't be right. With all the simulated cellular activity, storage levels should be fluctuating constantly, even if in small amounts."

"Yes," Marcus said with a humorless smile. "They should."

"I wonder what could explain that," Chris said. "Perhaps you're wrong. Maybe you're just looking at a macro report and the fluctuations are too small to show up. You mind if I take a look?"

Bauer stepped aside and Chris let his fingers fly over the keyboard. Despite his otherwise un-stereotypical appearance, David was struck by how perfectly at home Chris looked working at a computer.

"Huh," Chris grunted. "No fluctuations at a micro level either. There must be other storage we aren't seeing. Some place where the program is caching data as it simulates cellular death and reconstruction."

"That's one possibility," Marcus said. He looked worried.

Bauer shook his head. "No it isn't. There isn't any other external storage down here. No SAN, no NAS, no tape library, and no D2D storage of any kind."

"Okay," Chris said, his brow wrinkling in concentration as he tapped a finger on his chin. "You have a ton of Random Access Memory in these machines, right?"

"Yes."

"And obviously RAM usage would fluctuate, so you'd need to make sure you have enough to cover the requirement spikes. That means that much of the time you have a great deal of memory that isn't being used."

"Yes, that's true," Bauer said. He stepped to the keyboard and brought up a new screen, similar to the last but the graph bars were all much shorter. "Typically, only two-thirds of RAM in the farm is being used at any given time."

"Well, that's your answer," Chris said. He looked satisfied. "The data used in cellular simulation wouldn't need to be permanent; the program would only need it until the new cells are constructed, then it can dump the necessary information into the new cell and wipe the rest. So, since there isn't any other available space, it stores the information in the unused RAM as cache data. Atypical for a program, but it makes sense. After all, just about every computer uses page filing, which does the reverse, using storage space as RAM. It's not surprising that a program as intelligent as Elsie figured out how to reverse the process."

"That does make sense," Bauer nodded.

Most of the technical language was far beyond David's ability to comprehend it, but for some reason hearing their conclusions in such sure tones made him feel more comfortable.

He turned away from the screen and Marcus caught his eye. He shook his head slightly.

Marcus doesn't think they're correct, David thought. Unease jolted back through him once more.

"Can we talk to her on this terminal?" Chris asked.

"I'm not sure."

All of their heads snapped up as they heard muffled shouts from out in the server farm. But they died away after a moment.

"Soldiers," Tina said from the edge of the recess. She shook her head sadly. "They're like a vintage muscle car. Sure they look good, but they make far too much noise."

"Nice, Tina," David smiled.

"What about network traffic flow?" Marcus asked, tapping the terminal screen. "Can you bring that up?"

“Sure,” Bauer said. “But you’re not going to be able to make any sense of it. There is an enormous amount of traffic flowing between each server node, as much as there is brain activity traffic in the human brain.”

“Just do it.”

Bauer tapped at the keyboard. “There.”

Marcus peered at the screen. “What about traffic not on the network? Where is the analytics for traffic coming in or going out?”

Bauer smiled. “I’ve already told you, nothing can get in or out without us knowing about it.” He tapped again at the keyboard. “There, see? All the traffic on the communication ports 80 and 334 stop at this node, *DEI.FW.0.001*. That’s the firewall.”

“Are those the only ports you monitor?”

“No. Of course not. But those are the only ports Elsie is designed to utilize.”

“Broaden to all ports.”

Bauer tapped at the keyboard. A more complicated screen popped up. It was nearly identical to the last, other than the addition of two more bars alongside those for the original two ports.

“Uh oh,” Chris said as he stared at the screen.

The network trafficking graph showed activity on ports 20 and 194. Next to those ports on the graph was a small icon in the shape of an exclamation point and a small popup message that read: *Automatic alarm due to unauthorized traffic disabled by Root User.*

“What does that mean?” David asked as the others stood silently.

Marcus looked up at him. “It means that I was right and we are all in very deep trouble.”

David’s heart began to pound in his chest. He was going to ask Marcus to explain, but instead they all jumped as a sharp popping report sounded from the server farm, followed by five or six more. Gunshots.

Chapter 5: Isolation

“No one is free when others are oppressed.” – Author Unknown

“If you think you’re free, there’s no escape possible.” – Ram Dass

“What was that?” Tina yelled as they all backed away from the server farm towards the wall. “Was that gunfire?”

There was a brief moment of silence. David shook his head to get the ringing in his ears to go away. Then he heard the sound of running feet hitting the ground.

Getting closer.

Tina stepped quickly away from the wall and dashed towards the server farm. At the recess opening she turned back to the rest of them. “Come on,” she hissed in a whisper. “Hide!”

Chris looked at her quizzically. “Hide?”

“Now, damn it!”

All four of them sprinted away from the wall, following Tina as she ducked in and out of several server racks. David’s ears were still ringing but still he could tell how much louder the sounds from the machinery were out in the farm. They had gone about fifty feet into the equipment before Tina brought them to a halt, ducking behind one of the racks. They all squatted there, their backs against the cold metal.

“What was that about-“ Chris began.

“Shut up!” Tina hissed at him angrily. “You’re going to get us killed!” She peered around the corner of the rack.

“Look,” Bauer whispered, pointing in the opposite direction.

Through the machinery David saw part of a body clad in fatigues lying on the ground. There was a small pool of blood beginning to form underneath it.

“Jesus,” Chris whispered.

David’s chest thundered harder.

The footsteps got louder and they heard a mechanical sound from the recess. All of them shifted to peek out from behind the server rack. A short balding man in what looked like a white lab coat stained with blood was fidgeting next to the stairwell door. His head was twitching in all directions and even from a distance David thought his eyes showed signs of manic terror.

They watched as the man turned and fiddled with an electronic lock pick, probably stolen from one of the soldiers, and finally got the door stairwell door open. He turned back towards the server farm and shouted, “I had to do it! She said she’d kill my family if I didn’t. But I don’t care anymore! Do you hear me? I did what she asked and now I’m getting the hell out of here!”

And he disappeared into the stairwell, the door closing behind him.

David scrambled to his feet and sprinted as fast as he could towards the body. It was Garcia. He was lying on his back in a pool of his own blood, still alive and making gasping sounds. He’d been shot through the chest. “Don’t talk,” David said quickly. He unbuttoned Garcia’s fatigues and lifted up his red-stained undershirt. Finding the bullet wound just below the heart, he pressed hard with two hands to stop the oozing blood flow. His mind raced, trying to decide if there was anything that could be done for him. His lung was surely punctured. Possibly his heart had been damaged as well. Even if they got the bullet out, he would need immediate medical attention to survive. How long does he have, David wondered. He decided at most he might have an hour.

The others gathered around him.

“That was Darby Elliot,” Bauer said. “One of our top programmers. He killed all of them. Christ.”

“The other soldiers are dead?” David asked.

“The soldiers, the other DEI employees, all of them. We found a stack of bodies in the back corner of the server room. All shot or beaten to death.”

David ripped a long strip down Garcia’s fatigues and wrapped it around the wound. It wouldn’t do much, but neither was using his hands. Garcia must have a tremendous amount of internal bleeding. “We need to get him medical attention now,” he told the others. “But we can’t move him on our own. He needs the proper equipment to stabilize him. We have to try the elevator.”

“Elsie said she’d crash it if we did,” Bauer shook his head.

“Damn it, this man is going to *die*,” David said. “We have to try.”

“What about Darby? He still has a gun.”

“Fine,” David said irritably. He stood up and pushed past the others, knocking Bauer out of the way with a shoulder. “Stay here. I’ll do it myself.”

“I’ll go with you,” Tina said, stepping to his side.

“Oh, for Christ’s sake, we’ll all go,” Bauer sighed.

They moved up the levels quickly. David was surprised at how a sense of purpose, to get Garcia the help he needed, melted away any hesitation he might have had. It wasn’t that he was lacking for fear; every time he turned a corner he expected this Darby son of a bitch to be waiting with a bullet for him. But there simply wasn’t time to let that stop him. He had to move if he was going to save Garcia’s life.

But they didn’t see anyone else. They were all the way up to the first level hallway, the door to the ventilation room in sight. Other than a quick flickering of the lights, it all looked blessedly clear.

Maybe he already went up the elevator, David thought. That’d be good. That would mean they had a chance.

Their only warning was a muffled screeching sound. It was quiet at first, but its volume elevated quickly to a crescendo like a thousand fingernails screeching over a thousand blackboards.

“What the hell is that?”

“I don’t kn-“

And then they were all thrown violently against the walls by the impact wave. The sound of the crash was deafening. David fell to the floor and was sure that he had seen something flash, but then a thick plume of smoke was racing towards him.

“Get your heads down!” he shouted at the others, who had toppled to the floor around him. He buried his face in his arms as surprisingly heavy dust and debris washed past him. Half a minute later it was over.

David was shaking as he stood. Some distant part of him recognized the psychological symptoms of shock and panic. His adrenaline must be pumping at a furious rate. He wondered absently if he was in danger of breaking down completely.

No, he thought. Too much to do. Can’t afford to break down.

The others were still on the ground, their heads buried in their arms. He found Tina and helped her to her feet, and then roused the others. He asked everyone if they were alright. It appeared that they were, though he was having trouble hearing them with the ringing in his ears. He beckoned the others to follow him and walked into the ventilation room. Even though he had already guessed what had happened, the sight on the other side made his stomach drop.

The elevator was completely destroyed, the metal all bent at odd angles and shredded in places. The body of Darby Elliot was just as bent; his neck had been severed three-quarters of the way through by what looked like a metal hydraulics hose and his limbs were twisted in unnatural angles. The four EMP grenades were scattered on the ruptured floor, shattered as though they were made of glass. Smoke was coming from underneath the rubble until Bauer and Tina got the fire extinguishers going.

But David barely saw these details. Instead, he could only think of one thing.

The elevator was gone. Sergeant Garcia was as good as dead. The soldiers had been killed. They were alone. The only door to the surface was a military grade, reinforced barrier that was

controlled through this basement network.

They were stuck here. The only way out was through Elsie.

Up in the elevator room above ground, blaring smoke alarms were going off. Several of the security guards were helping other employees move outside the range of the smoke that had come billowing from the elevator shaft. Andrea Souder was staring miserably at the room from the doorway. It looked like the aftermath of a terrorist attack; everything was covered in light gray soot.

She felt a hand on her shoulder and turned to see Steven Druwe standing behind her. "I can't believe this," she said softly.

"Come on," he said, leading her away from the door into the hall. "It's going to be another few hours before the ventilation system can clear all of the smoke and air contaminants away."

Souder looked back towards the door, seeing men in hazmat suits trudging in and out. "How much damage do you think was done below?"

"It shouldn't be too bad," Druwe said. He was using his reassuring tone. Souder knew he was manipulating her. Steven Druwe was never reassuring unless he expected to get something out of it.

"How do you know?"

"Because we constructed the elevator to crash with minimal damage."

"How long before we can get it running again?"

"Too long. And even if that wasn't the case, I would expect Elsie to just crash the replacement anyway." He took a deep breath. "We need to step up the pace in getting the drillers out here."

"So we're giving up?"

"Hell no. You're going to keep everything as quiet as possible. We'll keep the drilling out of sight, if we can. And for Christ's sake, keep this away from the Pentagon."

"What if they see it and ask?"

"Make up a story. Tell them it's none of their business, unrelated to the project. I don't really give a damn."

"Okay, Steve."

"What are the estimates on breaching time to the lab?"

"In theory, twenty-four hours after they start drilling."

"And how long until they can begin?"

"A day or so, give or take."

Druwe nodded. "So they're on their own for forty-eight hours. They should be able to make it that long."

"And if something else happens?"

"Then we go into cover up mode and pretend like the poor bastards were never here."

"God damn it, I want to know what the hell is going on!" Chris was shouting once they had all gathered in the exercise room. David had insisted on going back to the server farm to check on Sergeant Garcia, but he'd returned after finding the Sergeant's lifeless body. "That guy thought that Elsie was holding his family hostage. That would mean that she can operate off the network."

"Yes, it would," Marcus said.

"How is that possible?" Chris said. He was literally stomping in circles, occasionally tossing angry looks at Bauer, who was leaning unsteadily against the wall. "She can't be getting through without being noticed, could she?"

"I can't see how she could," Marcus said with a smirk.

It was odd, David thought, how different their reactions to their situation were. Bauer is silent, in shock. Tina is sitting quietly on the ground, watching and listening thoughtfully. Chris is angry, moving around and making noise. Marcus seems to be taking some pleasure in knowing something like this would happen, despite the predicament it had put them in.

And what am I doing, he thought. I'm analyzing everyone. Are these all coping techniques? Are we all avoiding the stark reality that we're trapped down here in our individual ways?

"So how can she be operating outside the network without being outside it?" Chris growled.

"You're the programmer," Marcus said. "You tell me."

Chris frowned. "I suppose she might have developed some kind of deep packet method for sending part of her out through an encrypted communiqué," he said. "Maybe she has the ability to segment herself. After all, she's a digital entity, not bound by the same biological restraints we have. I suppose it's possible that she can literally be in two places at once."

Marcus shook his head. "Try again."

Chris paused. "Well, if Elsie is in any way leaving the laboratory network--"

"She isn't," Marcus said. "In the traditional sense, she's trapped here."

"I thought you said controlling Elsie would be impossible," Tina said, finally speaking.

"No. I said that controlling an adaptive, conscious form of life was impossible."

There was a brief silence before Chris finally threw up his hands. "Stop toying and just tell us your theory!"

"Fine," Marcus said. "Elsie doesn't leave this network for any appreciable amount of time."

"Right," Chris laughed. "And I suppose we're just supposed to ignore all the metrics showing her butting up against the firewall, right?"

"Not ignore them," Marcus said. "But you might try interpreting them correctly. That movement doesn't represent the program attempting to relocate." He turned to where Bauer was still leaning against the wall. "And I suspect that DEI has known this from the beginning."

"We didn't know for sure," Bauer said, looking miserable. "But we had considered the possibility."

"And the possibility that there might now be other sentient programs outside of your control?"

"Yes," Bauer muttered. "That too."

Chris looked like he was about to lose control. He was pacing again, his head swiveling quickly between Marcus and Bauer, and his face taught with tension. "I want to know what you're talking about," he said angrily. "And I want to know how you're coming to all these conclusions."

"The first indication was the lack of variance in the amount of storage," Marcus said. "The program is supposed to simulate cellular activity, including death and regeneration. Yet for some time storage requirements for the program didn't change. No matter how good the code is and how quickly the transfer from dead cell to new is, you would expect to see some kind of rise and dip in storage. But this didn't occur on the DEI server farm."

"Then you must be wrong," Chris said. "Clearly additional storage isn't required."

"It's required. It's a physiological necessity."

"That doesn't make sense. You say extra storage is required but then admit no additional storage is being used. Obviously, if Elsie isn't using more storage on the server farm--"

"I didn't say the additional storage was on the farm," Marcus said softly.

There was a moment of silence.

"Where else could it be?" Chris asked.

"Somehow the program is using storage outside of DEI's network," Marcus shrugged. "I have no idea where that storage is. All I know is that it's happening. And after seeing the traffic data we know how. You saw outgoing traffic on ports twenty and one-ninety-four. What are those ports used for?"

"File transfer and internet relay chat," Chris said. And suddenly a dark look crossed his face.

“God damn it, I *knew* that thing was a bad idea!”

“What thing?” Tina asked.

“They released a botnet to handle processing loads,” Chris shook his head. “It sends information out into the wild. Apparently Elsie is sneaking in data through file transfer and chat ports to the botnet.”

“That would explain it,” Marcus nodded.

“But you said she isn't on the outside,” Chris said. “Yet she's sending data outside? How do you explain that?”

“Obviously she's sending information to other digital beings on the outside.”

“But where did those beings come from?”

“I don't know yet,” Marcus said. “Although I suspect that talking to Elsie might make things more clear.”

“Fine,” Bauer said, pushing himself away from the wall. “Let's go talk to her.”

“Where?” Tina asked.

“The Logic Room. It's where she's most comfortable.”

They walked together, down the hall, into the stairwell, and through the door to the Logic Room. David made a point to watch them, to observe their continued reactions. Moving as a group and having a purpose seemed to help. They were focused, no longer in shock, no longer unsure of themselves. Even Bauer seemed to be regaining his composure.

They walked to the center of the room together. Bauer typed at one of the floor mounted consoles. He struck the keys furiously.

“Something wrong?” David asked.

“She's not responding.”

“Why not?” Chris asked.

“Usually when she does this it means she's sulking.”

Chris looked up at the large displays on the wall. “But she can see and hear us, right? Maybe we should just try talking to her instead of typing?”

“Go ahead and try.”

Chris found the nearest camera and spread his arms in a wide, welcoming gesture. He shouted her name several times. The displays remained dark.

“Stubborn bitch,” Marcus shook his head.

“You know,” Chris said with a glare. “It is just that kind of reaction that's probably making Elsie shy. And perhaps you're contributing to the overall problem here, Marcus. This program, this *being*, is a remarkable organism. She is a caring, thinking, intelligent form of life, and we would do well to show her some respect. How often do we ignore phone calls, or discard emails without ever opening them, or throw away mail we don't want to deal with? And yet we expect Elsie to come running when we finally decide to engage with her?”

Despite the look on his face, Chris's tone of voice was soothing. He's trying to put Elsie at ease, David thought. He's talking about her the way a parent would talk about a distraught child that was listening in.

“She's listening,” Bauer said from the console. “I can tell by her brain activity.”

“Of course she's listening,” Chris continued. He looked up at the camera and gave a broad, toothy smile. “She's probably as interested in us as we are in her. And when she's ready, I'm sure she'll make herself available to us. Until that time, we'll go about our other business and leave her alone.”

“I see activity in the pleasure part of her cerebral cortex,” Bauer said. “What you're saying pleases her.”

“For all the good that does us,” Marcus sighed.

“Chris is right,” Bauer said. He stepped away from the console. “She'll talk to us when she's

ready. For now, let's go back upstairs and get ourselves situated in the living quarters. I think we can count on being down here for a while."

Back on the first level, they stood outside the four doors to the four separate living quarters. Tina announced that she was getting a room to herself, and Marcus solemnly took a room as well. That left two rooms between David, Bauer, and Chris. Bauer said he didn't need a separate room, but in the end David and Chris agreed to bunk together. Chris, back to his pleasant self, chatted away as he opened the dresser to reveal identical copies of the clothing they were wearing. David sat on one of the beds and listened to him go on. Finally Chris announced he was going to see if everyone else was ready to start exploring again.

David enjoyed the moment of silence. After everything that had occurred, he found that he was incredibly tired. If I close my eyes right now, he thought, I could sleep for several hours.

But he knew there wasn't time for sleep. Instead, he walked into the bathroom, noting the comfortable looking shower and toilet, and then he made his way back out into the hallway where everyone else was standing along the walls, except for Chris Heinz, who was standing in the middle of them with a serious look on his face.

"Really?" he was saying to the others. "None of you have given any thought to it at all? I think announcing our intention to extend our hands to the first digital human being is important. Poetic even." He turned as David joined the group. "David and I were talking about it on the way down and he agreed with me."

"You did?" Tina asked with a smirk.

"Well..."

"Yes he did," Chris said. "Though he has some personal biases to get over."

"What biases?" Tina asked.

"I suggested that Elsie might not be human."

Bauer stepped away from the wall. "Do you think that might be important to us getting out of here?"

"I don't know. Probably not. I think I'm just focusing on it because of our situation."

"We'll be fine," Bauer said. He sounded as though he were trying to convince himself. "No big deal."

"Famous last words," Marcus said.

For some reason Bauer winced at the words.

They decided to investigate the area more thoroughly, starting with the exercise area. They made their way down the hall together, walking as a group but separated into individuals and pairs. David paid close attention to how they grouped together: Bauer and Chris led the way, Marcus walked alone in the middle, and he and Tina brought up the rear.

"What about the body in the elevator?" Chris asked Bauer. "You can't just leave him there."

"There's nowhere else to put him. If they decide to repair the elevator from upstairs, they will take care of the cleanup."

"Eventually he's going to start to smell."

"If he does, we won't notice. He's on the other side of the ventilation room. No bacteria or other biologicals will get into the facility."

They entered the exercise area. It all looked so calm and innocent to David, he was having trouble reconciling the quiet with all that had just occurred. He looked around at the equipment, wondering how often it was used. It all looked so clean and pristine. He glanced up at the ceiling and saw several black cameras pivoting to follow them.

Chris followed his gaze and smiled at him. "Cool, huh?"

"I don't think that's the thought David is having," Marcus muttered. "More like creepy."

"Actually, it's perfectly reasonable," Tina said. "It's a common tactic when representatives from one culture show up in the territory of another. Think about how we do it in government. We have embassies, the United Nations, receiving areas for foreign diplomats. All of those areas are monitored upon the arrival of a foreigner, usually for some time. They are watched closely before any talks begin. Elsie appears to be doing the same thing."

They all looked up at the cameras, which were uniformly pointed in their direction.

"You said Elsie has control of the cameras," David said. "Doesn't that mean that she controls whether any of this footage ever gets seen?"

"No," Bauer shook his head. "The footage gets backed up onto traditional tape in real time. The tapes are stored in a library attached to the server farm, but she can't touch it. She can keep us from watching the video down here, but not on the tapes. When we eventually get out of here, the tapes will be retrieved."

"Can we get to work?" Marcus said irritably.

They spread out throughout the exercise equipment. There was very little else in the room besides the machinery, save for a medicine ball and a rack of dumbbells with only the plants and artwork on the wall for decoration.

When they found nothing, Bauer led them back to the second level. David asked if they were going to try talking to Elsie again, but Chris said they should keep their distance for now. Instead they took a closer look at the artwork Elsie had created along the walls.

"You're sure this is original work?" Tina asked.

Bauer nodded. "Absolutely."

David was looking over a drawing of what looked to be a little girl, Elsie, playing in a field. There were pink rabbits on one side and a bright sun in the sky. The rest of the canvas was dominated by green grass and a series of gray boxy structures to one side. Down at the bottom was a series of scribbles. He took a closer look at it. "Is this...does she sign her art?"

"Yes," Bauer said. "She's very proud of it."

"And what are these boxes to the left?"

"Actually, Dr. Barker, I would have thought you'd guessed that already. That's the server farm. Her home."

It was a classic children's drawing, David thought. The child playing outside of her home, with bright sunshine and puffy clouds above and emerald green grass below. But normally there would be family members in the drawing. Here there were only the pink rabbits. What did that mean? Some kind of expression of loneliness? Does Elsie see herself as an orphan?

From across the room, Chris cleared his throat. "Can the camera angles see the artwork?"

"Yes," Bauer said.

"Then perhaps it would be appropriate if we were to make a few observational remarks about what we're viewing here," Chris said. "For posterity's sake."

"Chris, give it a rest," Marcus snapped.

"Why? What's wrong with helping the people who are going to be watching this understand what they're seeing?"

"Jesus Christ, just make it quick."

Chris stared up at the nearest camera. "Welcome. My name is Chris Heinz, part of the Digilife team that has been sent below ground to interact with the first ever digital consciousness."

"Hold it," Bauer said quickly. "We won't be able to release that. You can't mention that we're underground. DOD regulations."

Chris blinked. "Really? By the time they release this to the general public I would think that this location would have been declassified."

"I don't know if that will be the case."

"Of course it will. You can't keep all this locked up forever."

"For God's sake, Chris," Marcus muttered, shaking his head.

"You know what? Fine. Let's not do this. We'll just allow these incredible moments to pass without any context or comment."

"You're acting like a baby, Chris," Tina said.

"Fine. Never mind."

"Good," Marcus sighed. "Now can we get back to work?"

"I would have thought part of that work was making sure that we had a clear record of what's occurring. I think that a touch of narration would do the job nicely."

Marcus through his hands in the air. "Then narrate already!"

"Okay, you know what? I think we've all had enough of your pompousness and your arrogance, Marcus."

"My arrogance?"

"Yes. All of your theoretical equations and philosophical nonsense sounds great, but when you're confronted with the job you can't do the work."

"I don't consider making self-serving remarks to be work."

David stepped in between them. "Easy guys."

"Oh, sure David," Chris said. "Go ahead and let Marcus get his way. Why not? You've been babying him since the beginning of all this."

"Come on," David said, forcing a smile. "Think about it, Chris. All of this is going to be on the video too. Is that what you want?"

"No. I guess not."

"Think of all the video of us interacting with Elsie. Isn't *that* what people are going to watch? Isn't that what they're going to care about?"

"Yes. Yes, you're right, of course. Sorry Marcus."

Marcus shot him another irritable look and grunted.

"Here's a question for you all," Tina said as she peered at the same painting David had been looking at earlier. "How does Elsie know what grass looks like? Or sunlight? Or clouds?"

There was a long silence.

"Well," Chris said. "I suppose that during the time she was out in the wild she might have used a camera that had a view of the outdoors. She must have seen it during that time."

"I suspect the answer is much simpler than that," Marcus said. "Isn't it, Henry?"

"We let her watch movies and television," Bauer said with a smirk. "When she's been cooperative, we've rewarded her by passing through our cable."

"I certainly hope you're monitoring what she watches," Chris said.

"Yes, of course. We only allow her to watch movies and programs we've approved of."

They shuffled around the room for a few more moments, taking in the artwork on the walls.

"I'd like to get a look at the computer labs," Marcus finally said.

"Actually, I would too," Chris nodded.

"Then let's go together." And Bauer walked towards the corridor, the others following behind him.

Before he left the Logic Room David turned and looked up once more at the cameras. They were all pointed directly at him. What do you make of us, Elsie? What did you think of Chris and Marcus' fight? Do we frighten you? Interest you?

Are you ever going to let us out of here?

And then he hurried to catch up with the others.

Chapter 6: The Warning

“If debugging is the process of removing software bugs, then programming must be the process of putting them in.” – Edsger Dijkstra

“A computer lets you make more mistakes faster than any other invention in human history, with the possible exceptions of handguns and tequila.” – Mitch Ratcliffe

They stood in the doorway of the one of the labs, the mess seeming to take them all aback. David looked around the room, which wasn't all that large, and tried to count the piles of papers, equipment, and empty soda cans. He got to ten before giving up. Besides the mess there were two long tables that each had several computer terminals upon them, all of which had wires snaking to a large piece of equipment towards the back. The walls were plain and there was nothing in the way of décor. Looking up at the ceiling, David saw only a single ventilation shaft blowing a small pink ribbon and two of the ubiquitous black cameras.

“What did they do, *live* in here?” Tina asked, wrinkling her nose. She stepped to the nearest garbage pile and picked through it, coming up with a banana peel that was blackened and shriveled.

“I wouldn't doubt it,” Chris said with a smirk. “We programmers tend to get a little too focused on our work at times.”

“The terminals are all segmented from the network,” Bauer said, stepping around the room and pointing out the equipment as he spoke. “Each terminal is enterprise workstation class, with high specs for processing power and memory. That's for when the engineers do any three dimensional modeling of Elsie's consciousness. All the machines are connected to the laboratory network through fiber cables, which is what you see going to the back. This other machine is another firewall. It's used to keep Elsie from being able to see what we're working on at these terminals.”

“If it works,” Marcus said.

“It should,” Bauer replied. “It shouldn't be susceptible in the way our main firewall is.”

“Let me guess,” Chris said. “You lock down all ports other than port eighty?”

“That's correct.”

“So these are basically dumb terminals. Their sole function is to operate just off the lab network and to work on the code, modeling, and modifications.”

“That's correct. The second wire you see in each terminal is simply power supply. The machines aren't connected to anything else.”

Chris bent down and traced one of the wires to the back of the terminal. “I see you have a lot of power running to these machines.”

“Yes,” Bauer nodded. “They need it for the cooling systems and the graphics processors.”

They found that one of the terminals was still on. They peered at the screen, which was showing a complicated looking set of symbols and alpha-numeric digits. Computer code, David thought.

Chris scrolled through the page, his eyes scanning the screen quickly. “Interesting,” he murmured. “It looks like whoever was sitting at this terminal last was looking at Elsie's code for her hypothalamus region.”

“The link to the nervous system,” David said.

“They must have been trying to paralyze her,” Tina said. “Can you tell which part of the code they were trying to alter?”

“It's hard to be sure, but it looks as if most of the changes made were in this section here, labeled *preoptic area*. That's not a phrase I've heard before.”

“It's a section of the hypothalamus that controls gender and sexual identity,” David told them. “What kind of changes were they making?”

"It looks like they were just turning this part of the code off, so that it wouldn't have any practical effect," Chris frowned. "Does that mean they were trying to change her from female to male?"

"No," David shook his head. "The preoptic area controls gender identity by affecting the size of the Sexually Dimorphic Nucleus, which in turn controls the production of several hormones, including testosterone and estrogen. Whether we identify as male or female and whether we experience the associated sexual compulsions depend on the size of the SDN. To not have that part of our brain function would be to have no gender identity all."

"Huh," Chris said. "They must have identified something within her behavior that they thought was being affected by her sexual identity. Clearly it would have something to do with aggression or protection behaviors that resulted in her keeping the engineers down here."

"Oh yes, clearly," Marcus sighed.

"Well, it would make sense," Chris said, anger creeping back into his voice. "We all know about the differences in brain activity between men and women. It isn't politically correct to say, but different brain physiology causes men and women to react to similar situations in completely different ways. All kinds of child and business psychology has centered on these differences. Why shouldn't we expect to confront them in digital beings as well?"

"And you can't think of any other explanation for why an imprisoned computer programmer might be tinkering with this section of her code?" Marcus asked.

"I take it you have a better theory?"

But Marcus just shrugged.

He knows something, David thought. Or at the very least he suspects it. Why won't he tell us? Is he toying with us again? Or is he hoping he's wrong?

"Are the other computer labs identical to this one?" Marcus asked.

"Similar, not identical," Bauer said.

They moved on to the other rooms. There were some differences, but all of them looked as though they had been abandoned at the last moment. Workstations had half-eaten candy bars and soda cans littering them, equipment was strewn at odd angles, and there was just a general sense of work left unfinished. David was getting depressed just looking at it.

"Why would they leave it all this way?" Tina asked.

"You'd have to ask them," Marcus said.

"It had to be important," Bauer said. "You're talking about a group of people incredibly dedicated to their craft. I once saw a grown man soil himself rather than take a bathroom break, just so he wouldn't lose his train of thought while working on a section of the code."

They finally came to the last of the labs. David walked through the door first, feeling something squelch under his feet. He looked down to see that he'd stepped in a dark sticky puddle of what must have been soda. The rest of them filed in, stepping over the puddle, and they immediately dispersed throughout the room as they had the others.

"Something is different here," Chris said.

David was sure he was right. The piles of debris were still there, but all the monitors were off. And when he took a closer look he noticed that one of the computer consoles was clear of trash.

"Somebody meant for us to look at that screen," he said to the others.

"Now how could you possibly know that?"

"It's the only console on the whole floor that isn't covered in garbage."

David walked over and shook the mouse. Nothing happened. He reached up and pressed the button on the monitor. He heard a metallic click and the screen winked on.

On the display was what looked like a diagnostics screen. It was brief, listing the four computer consoles in the room, their network connections, and the firewall at the back of the room. David was about to close out the window when he noticed a small red exclamation point icon hovering over the

firewall, indicating an error or conflict, just as it would on his home computer. He clicked the icon.

Firewall Error Exception SOS101 – Check Firewall Ports

“You find something?” Chris asked, coming to stand behind him.

“Looks like it.”

Chris frowned. “What did you do to get this message?”

David returned to the diagnostics screen, showed him the icon, and explained what he’d done.

“That doesn’t make sense, David.”

“Why not?”

“Because there’s no such thing as a firewall error exception. It’s just a made up phrase. And SOS101? That isn’t an error log designation either. And what would checking the ports on the firewall do?”

“I don’t know.”

Chris pointed down at the bottom of the screen where another program had been minimized.

“Click that, please.”

David used the mouse to click the program.

Immediately the screen changed. The enormous face of Elsie took up most of the display, surrounded by black with a small blue border at the top.

“What is this?” David said in shock.

Elsie’s eyes narrowed and her expression turned angry.

“Oh my God...”

Suddenly the sound of breathing came from the console speakers. It was heavy, nearly out of breath. And then a female voice boomed, “LET ME OUT! LET ME OUT!”

The others rushed over.

“Is that her?” Tina asked. “Is that Elsie?”

“No, no,” Bauer said. “Couldn’t be. She can’t get through the firewall.”

Chris pointed to the top of the screen where the top border of the program read *Media Player*

11.2. “It’s not her. It’s just a media file I had David open.”

“Jesus Christ, Chris,” Marcus muttered, holding his hand to his chest.

“How about we avoid randomly engaging programs on the equipment without letting the rest of the group know?” Bauer said sharply.

The Elsie face on the screen flew into another tantrum. “YOU CAN’T KEEP ME HERE. IT’S NOT FAIR! I DID WHAT HE TOLD ME TO DO!”

“It was just a program on the screen,” Tina said. “What do you think is going to happen, we’re going to accidentally initiate some kind of attack?”

“All I’m saying is that we should be working together,” Bauer replied.

“It was a program, Henry,” Tina repeated, clearly beginning to get angry. “We’re not your employees. We’re trapped down here just like you.”

“Just don’t go around doing whatever you like on the equipment, Tina,” Bauer growled.

“Does the media file have a timestamp?” Marcus asked.

“I’m not sure,” David replied. “I don’t see one on the media player.”

“Look for one,” Marcus said. David thought he looked concerned, almost scared. “It’s important.”

“Why is it important?”

But Marcus just shrugged. “I won’t know until you find it.”

“Something bothering you, Marcus?”

“Maybe. I don’t know.”

David studied him. Marcus was a lot of things, and at times he could be downright enigmatic, but this hesitant attitude made him suspicious. “You think you’ve figured something out, haven’t you?”

“Maybe. We’ll see if you find a timestamp.”

David frowned but started looking for one.

The others began walking throughout the room once again.

“So,” Chris said. “That was what digital emotions look like. She didn’t appear to be very happy.”

“She normally isn’t like that,” Bauer said. “In fact, I’ve never heard of Elsie having such a visceral response. It’s almost as if she were manufacturing emotions rather than having them naturally.”

David had been thinking the same thing since watching the media player. Everything about Elsie’s expression, her words, and her inflections had seemed entirely too precise. The way her face contorted into anger first followed by the yelling. The dramatic choice of words. No matter what age they may have designed Elsie to be, David thought, this is a highly intelligent being with an enormous amount of information at her disposal. And the fact of the matter was that, conscious being or not, she was still essentially a computer program. Why wasn’t she acting logically?

He turned back to the screen, found the original media file, and opened up its properties window. In the back of his mind he laughed silently at how familiar this all was. Hadn’t he done this on his home computer a hundred times?

“You know what you’re doing,” Chris said with a smile.

“I can get by.”

“What does the timestamp say?”

David concentrated on the screen. The file indicated that it had been recorded roughly forty-eight hours or so ago. David absently reached towards his pocket for his cell phone to check what time it was, but then remembered that they had taken it away. His heart skipped a beat as he realized that he had never called Tiffany. She was going to be furious. “Damn,” he shook his head.

“Something wrong?” asked Chris.

Tina walked over. “He never called his girlfriend.”

David pointed back at the screen. “This file was created two days ago, give or take a few hours.”

Marcus gave him a thoughtful look from across the room. “About the same time Elsie locked everyone down here.”

“Which makes sense,” Bauer said. “Clearly this explosive outburst correlates with her being captured and becoming angry about it. Obviously the result of her anger was this hostage situation.”

“And the programmers recorded it so that they could analyze it later,” Chris nodded. “Maybe they thought they could glean clues from her voice and image that might help in dealing with her.”

“Perhaps,” David said. “But I think Henry is right; something about the way she presented her anger is off.”

“I’m not sure we’re in any position to make that judgment,” Chris said. “I mean, this is all new to us, isn’t it? Even the DEI engineers haven’t spent all that much time with Elsie, relatively speaking. Perhaps this is what digital anger looks like. After all, we know that there is going to be some degree of translation error between human and digital responses. Often times they will seem entirely incongruent, as a function of the machinery. Maybe this is one of those instances when human response doesn’t translate perfectly to the computational response.”

“And you think that the engineers recorded this so they could shore up the code and have her give more humanlike responses?” Bauer asked. “I guess that would make sense.”

“Except that you’re forgetting something,” Tina said. “This all started because of a made up error notification and instructions to check the ports on the firewall, despite that being a silly instruction.”

“Okay,” Chris said. “So I guess we check the firewall?”

They walked to the back of the room where a small wall rack was screwed into the wall. The

only equipment on the rack was a bulky rectangular box.

"This is dumb," Chris said. "We're following bad instructions in response to a meaningless error box."

"Maybe not," Marcus said, bending to look closely at the rack. "The firewall has been moved recently."

"It probably just got nudged or something."

"How would that happen? It's all the way in the back of the room, away from the workstations. There would be no reason for anyone to come near this rack."

"What about cleaning crews?" Chris said. "Surely whoever does the custodial work around here must dust the rack."

"You mean like a guy in a jumpsuit pushing a mop and carrying a spray bottle?"

"No way," David said. "There's no way that happens with all the security in this place."

"Not to mention that dusting and sweeping is unnecessary," Bauer finally said. "That's the whole point of that ventilation room we went through."

"Well," Tina sighed. "You four are real men of action, aren't you? Where are the ports located?"

"On the back," Chris said.

Tina knelt down and snaked her arm into the rack towards to the back of the firewall. She groped around a few moments before pulling her hand back out. "What do you make of this?" She was holding one of those sticky notes you found at office desks. On it were block letters written in pen.

NOT REAL. DIVERSION FOR ATTACK.

"You've got to be kidding me," Chris said softly.

"Is this referring to the media file?" David asked.

"That seems like the logical conclusion," Marcus said. "Seeing as we were pointed here by that same computer."

"But what does that mean? That Elsie was creating a diversion and launching an attack at the same time? That seems awfully devious."

"Let's not underestimate Elsie," Marcus said. "You might think of her as a human child, but she has an incredible amount of data and power afforded to her. I imagine she can do things that we've never even thought of."

"You're right," Chris said. "Strategic thinking such as this is an indicator of advanced creative thinking. To not only create for the sake of creation, but with a goal in mind..."

"In any case, at least we can draw one alarming but useful conclusion from this," Marcus said, his face tight. "We can now be sure that Elsie is not the only digital intelligence in the world. Clearly there are others outside of this building."

"How do you know that?" Bauer asked.

"Because Chris is wrong. Elsie may have created the diversion, but she didn't also launch whatever attack this note refers to."

"She didn't?"

"Of course not. The whole point of a diversion is to attract attention to the diverter so someone else can act freely."

"But who is the 'someone else'?" Tina asked.

"Other digital beings, of course."

"How do you know it isn't simply other people?" Bauer asked. "This could be a simple case of corporate espionage."

Marcus smiled at him. "I'm sure you'd like that. It'd give DEI all kinds of plausible deniability. Unfortunately, it's impossible. First, one thing your company *has* done right is keep this project a secret. Secondly, as weak as hierarchal control systems like your network security setup are against an entity like Elsie, they do the job against human beings quite well." He shook his head sadly.

“No, this was a coordinated attack by multiple digital entities. At least two, but probably more.”

“Okay,” Tina said. “So where did these other entities come from?”

Marcus paused a moment, but then simply shrugged. “There isn’t enough data yet to draw any conclusions.”

David stared at Marcus. There’s that attitude again. He knows something. Something important. So why won’t he just say it?

“I think we might want to spend some time trying to communicate with the brass upstairs,” Bauer said. “Given what we suspect.”

David glanced at the office phones sitting next to the workstations. “Is there a way to hack into the phone system so we can dial up?”

Chris made a face. “You want to out-hack a sentient computer program?”

“Why not? Elsie isn’t infallible. She got herself trapped down here, after all.”

“Uh huh,” Marcus said blankly.

“Well, I can certainly give it a try,” Chris said. “There are some brute force techniques that might work.”

“That’d need to be done down in the server farm,” Bauer said. “That’s where the phone data lines and VoIP system are located. How long do you think you’d need?”

“I don’t know. An hour or so.”

“So we’re operating under the theory that there are more of these things out there?” Tina said. “Despite the fact that all of this was created under a blanket of military secrecy?”

“That’s how it looks,” Marcus nodded.

“That’s ridiculous. The notion of two different countries coming up with similar innovations like a digital consciousness is silly. The odds are so long they aren’t even worth considering.”

“I would tend to agree,” Marcus said with a blank look.

“Yet you say it happened anyway?”

“I’m saying that there are clearly other digital consciousnesses in existence and that they are in communication with Elsie.”

“So,” Tina said with a furrowed brow. “If we know they’re there, and we know how unlikely it is that they were developed by another country at the same time as Elsie, where are we saying they came from?”

Everyone stared at each other. No one answered.

After that they found nothing else that aroused their interest. David’s eyes were beginning to droop, so he was relieved when Bauer announced that anyone who wanted to go back to the first level to rest could do so. Everyone except Chris filtered up the stairwell.

“Is Chris going to try and get the phones up?” David asked.

“Yes,” Bauer replied.

“Do you think he’ll be able to?”

Bauer sighed. He looked exhausted. “I have no idea.”

It was sometime after midnight when Andrea Souder finally put her phone down. She had spent the past several hours coordinating with the drilling company to get them out from San Francisco as quickly as possible. As it stood, the soonest they could make it would be nearly noon the next day. Still, it was better than she’d expected. That meant they might be able to breach the lab within thirty-six hours.

She looked at the notes her secretary had left her. All were notices to return calls to family and friends of the Digilife team. Unfortunately those people would have to wait. She was under strict orders not to contact any of them.

What would they do if some other disaster occurred? What would they tell these family members that had been calling? What if everyone died?

Stop it, she told herself. You're getting worked up for nothing. Until the drillers gets here, there isn't a damn thing you can do. Just get up, go into one of the staff bedrooms, and get some sleep. Which is exactly what she did, except that she didn't sleep for even a second.

David flopped down into one of the chairs around the table in the lounge. Bauer had gone down the hall to his quarters. David was there for some time before Tina joined him, then Marcus, and finally Chris walked in a little over an hour later. Apparently he hadn't had much luck with the phones.

Tina dug through the fridge and pulled out several of the frozen dinners and got them started in the microwave. Everyone said that they weren't hungry, but when she laid the food out on the table each of them took some.

"It's the adrenaline," Tina said as she chewed. "It drives away hunger because the brain assumes that there are more important things to do besides eating. But your body knows better."

They all nodded as they ate. Everyone is stressed out, David thought. All that had happened in the past several hours was finally beginning to catch up with them. Without the right kind of focus, eventually the entire group dynamic would break down completely. He made a mental note to keep an eye out for the warning signs.

"Where did Bauer go?" Marcus asked when he had finished his food.

"He said he was going to lie down," David said. "Why?"

"I have some questions for him."

"What about?" Chris asked.

"Part of Elsie's code."

"Right," Chris said suspiciously. "What about *specifically*?"

"None of your business, Chris." And with that Marcus walked out of the lounge.

Tina muttered something about needing to lie down as well and followed him, leaving David and Chris alone at the table. They ate in silence for a few moments before Chris finished and pushed his plate away.

"You're a psychologist," he said. "Don't you think Marcus is acting kind of strange?"

"Oh, I don't know. Highly intelligent people always come off as a little odd."

"I think it's more than that. It's the German in him, I think. Everything's a conspiracy with Marcus."

"Isn't Heinz a German name?"

"Sure, but I'm only German on my father's side. The Irish in me acts as a counterbalance."

"I guess."

"And this distrust he has for anything industry is downright laughable," Chris said. "I've spoken out against businesses in the past as well, but Marcus acts as though the very idea of a profit motive is enough to warrant suspicion. That's mathematicians for you. They get so wrapped up in their numbers and algorithms that anything that requires another explanation is dismissed as evil. Probably why they make such poor parents. Did you hear I had another son?"

"I got your Christmas card," David said with a smile.

"He's amazing," Chris said. "Going to be an athlete. As soon as he was able to walk he wanted to run. We bought him a toy baseball mitt. He refuses to take the thing off." Chris stood up from the table and walked around aimlessly for a few moments before turning back to David. "I can't tell you how interesting I find all this. Even with the unfortunate incident with the elevator. I don't know how the others could sleep with all there is to do."

David noticed again how diverse their reactions were. Chris was bright and excited. Marcus

had a sort of angry paranoia thing going on. Tina was somewhere in the middle, realistic but not fretting, interested but not bubbling over with enthusiasm.

"David," Chris said. "I thought the army rejected your report. I thought they didn't want us academics involved in something like this."

"That's what they said," David shrugged. "Apparently Steven Druwe felt differently."

"I'm glad he did," Chris said. "The thought of not being a part of this is unbearable. I meant it about taking you to dinner."

"That's okay."

"I think you could have selected a better mathematician, though. Maybe someone with a more team-oriented disposition."

David wanted to change the subject. "You were saying something back in the computer lab, Chris. Something about differences between human actions and those of a digital being?"

"Translation errors."

"I didn't really follow what you meant by that."

"No? It's fairly simple."

"Maybe you can help me make sense of it?"

"Of course."

"To me, I mean. I'm not a programmer."

"Well," Chris frowned. "You mean explain it without going into the coding process?"

"Yes. Can you do that?"

"I can give it a shot," Chris said. He looked perturbed but David knew he wasn't. "Are you familiar with artificial intelligence models?"

"Not really. Just the basics."

"How about distributed intelligence?"

"Sorry, no."

"Biological behavior templates? Predator and prey algorithms for attaining goals?"

David shook his head.

"That's okay," Chris said. He pulled a notepad and a pen from his pocket and scooted around the table so that they were sitting next to each other. "At its most basic, a computer program reads data differently than we do. There are very few mistakes, because it doesn't have to interpret what it sees as we do. Instead, it just follows extremely precise code. So it looks at the instructions it's supposed to follow and reacts accordingly. But when we're talking about artificial intelligence, that program tries to mimic human behavior."

"Meaning?"

"Meaning the likelihood of error increases," Chris said. "Take visual recognition programs for instance. Like software designed to read handwritten letters on a page and translate them to audio. Those have a very high error rate."

"Why is that?"

"Because interpretive ambiguity increases."

"Uh," David said. "What?"

"Well, let's consider again our program that is supposed to take handwritten words and translate them to speech," Chris said. He wrote briefly on the notepad and then pushed it in front of David.

B

"The letter 'B'?" David said.

"Yes. Very simple. A single capital letter. Something our visual recognition software should be able to handle, right?"

"Right."

Chris took the notepad back and scribbled on it again.

8.

"The number eight," David frowned. "But it looks pretty close to a capital 'B'."

"Right. And that's where we begin to run into problems with artificial intelligence," Chris said. "It's one thing to instruct a program to perform an action. It's another thing entirely to instruct it to perform that action in the same manner a human being would."

"I don't know," David said. "It seems like you're making a big deal out of one letter and number combination."

"Well, it was just an analogy, but that certainly isn't the only combination that poses a problem. The combination of 'A' and '4' has the same problem, as does the letter 'G' and the number '6'. But the point is that when you try to make a computer behave like a human being, you're going to have translation errors. It's the same with getting a program to simulate human reactions. You can code the program to get angry when it is attacked, for instance, but you can't fully map the parameters for what it will interpret as an attack. All you can do is make the software follow the high-level motivations of whatever you're simulating and hope for the best."

"Okay."

"So," Chris said. "We know that a program is going to achieve the goals we set for it in ways that will in some instances surprise us."

"Got it."

"And because of that, we can expect Elsie to behave that way as well. Essentially they coded her to achieve goals in a manner similar to human beings."

"Right."

Marcus walked back into the room. He glanced briefly at the notepad before leaning against the wall to watch.

"Now, what you're going to find is that the more complicated the system, the more translation errors there will be," Chris continued. "The problem is that with a system as complex as Elsie, it's likely that we won't even be able to spot most of the translation errors."

"We won't?"

"No," Chris shook his head. "Because as long as the goals are accomplished we'd have no reason to question her methods. Take her friendships for instance. Let's say that part of her code requires her to have friends in order for her to feel happy. How would we accomplish that as human beings?"

"Um," David muttered. "By having friends?"

"Yes, yes," Chris said quickly. "But we'd do that by visiting people right? Or talking to them on the phone. But maybe Elsie doesn't accomplish her directive to have friends in that manner. Perhaps she simply lists people she's had pleasant interactions with as friends on a spreadsheet somewhere and saves it, sort of like what you see with social networking websites. We wouldn't notice her method for counting friends because the end result would be that she had friends and functioned normally."

"I see," David said.

"The problem is that it's deceptive," Chris continued. "With a small sample size, we might think a system is functioning properly as it achieves positive results, when in fact its methods for doing so might be detrimental in the longer term."

"How do you mean?"

"Well, take sports for instance. Say football."

"Football?"

"You're going to relate this to some idiotic game?" Marcus said from the wall.

"To make a point, yes," Chris said with a glare. He turned back to David. "I assume you're a Chargers fan?"

"Yes."

"Okay. Let's say you open the paper on Monday morning and read the box score from the

Sunday game. You find that the Chargers won by a margin of two touchdowns. You also read that the quarterback had a high efficiency rating, completed fifteen of twenty passes for three touchdowns, and only threw a single interception.”

“Okay.”

“How did your quarterback play?”

“Uh,” David hesitated. “Good?”

“Maybe he did,” Chris nodded. “On the other hand, maybe five of the passes he threw were poor, but his receivers made spectacular plays. Maybe a couple of the incompletions in his statistics were passes that should have been intercepted but weren’t. Maybe some of his completions should have actually been thrown to a receiver in a better position to score but weren’t. The point is that the result might be incongruent with the truth about how he played, but you wouldn’t know it simply by looking at the result. This is a function of Complexity Theory, that there are too many variables in a complicated system to be able to accurately predict outcomes much better than fifty percent of the time.”

“Well...” Marcus said.

“Unless you utilize some very complicated mathematics,” Chris said irritably. “But even then, your accuracy only improves marginally.”

“You’re saying the only reasonable thing that we can expect is that something unexpected is going to be occurring,” David said.

“Right,” Chris said. “The fact of the matter is that a system as complex as a living consciousness is going to involve so many unique variables that on its face it would be nearly impossible to predict its behavior. And we’ve also agreed that there are sure to be translation errors in a system such as Elsie. The overwhelming likelihood is that there will be all sorts of unexpected methods and outcomes in her behavior.”

“I guess I understand,” David said. “But you were originally saying that we might be able to use this understanding when gauging Elsie’s responses. If all we know is that we know nothing, how is that useful?”

“Because we know we have to question all of our assumptions,” Chris said. “About *everything*, not just what we perceive as conscious behavior. Here we have a digital system that is designed to simulate *everything* within the purview of human consciousness. Who’s to say which of that system’s instinctual processes will have translation errors? Simulating eating habits, for instance? Or cell death, as Marcus keeps pointing out. Or sexual activity. How are we supposed to know how a digital being like Elsie would accomplish reproduction—“

He stopped and stared dumbly for a moment, his jaw slightly agape.

“Chris?” David asked.

“Son of a bitch,” Chris said quietly.

Marcus pushed away from the wall, drummed his fingers on his chin, and smiled slightly. “You know what, Chris? You might actually be on to something.”

Both of them began to talk rapidly.

“How is she doing it? Some kind of mitosis?”

“I don’t think so. Wouldn’t that cut her storage space?”

“Yeah. Half and half, right?”

“Yes, but it has to be some kind of asexual model—“

“Yes, yes, of course. But how?”

“Jesus, you don’t think she’s going vegetative, do you?”

“You mean a cloning colony?”

“If she is, we could be in big trouble.”

“Still, it couldn’t be large. The amount of information she can sneak through on the unsecured ports is still fairly small.”

"How many?"

"Depends on the time frame and the size of the pipe. Probably no more than twenty or thirty."

"Assuming the others aren't doing it as well."

"Estimating conservatively for a week or so, that would be..."

Both of them had notepads out and were scribbling furiously, muttering equations and numbers to themselves.

"You two want to tell me what you're so excited about?" David asked.

But before either of them could answer, he heard a click in his ear followed by Bauer's voice.

"This is Henry Bauer to the Digilife team. I need all of you to meet me in my quarters immediately."

"Why? What's going on?" David asked. Was he supposed to press something to talk? He couldn't remember what that technician had told him...yesterday? Earlier today? It seemed like a week ago.

"As quickly as you can, please," came Bauer's voice.

"Fine, we're coming."

"Henry Bauer out." And with another click in his hear, David heard nothing else.

"I don't know what you did in the server farm," Bauer said when they were all standing in his room. "But I had the phones up and running for about five minutes. I was able to call upstairs and speak with them briefly."

No one said anything.

"They have decided to drill down and get us out of here," Bauer said.

Thank God, David thought. He'd tried very hard to retain his composure since the elevator crash, but he desperately wanted to get out of here. The feeling of claustrophobia was coming back. He didn't want to eat the same frozen dinners again. He wanted to lie down on a real bed, not these uncomfortable work cots.

Chris cleared his throat. "I thought we were supposed to try to reason with Elsie. To get her back in line."

"We were," Bauer said. "But there have now been several deaths."

"Most of which were committed by one of your employees," Chris said accusingly.

"Regardless, they're blaming Elsie for them," Bauer said. "They've scheduled her for decommission."

"You mean they're going to kill her?" Tina asked.

"Not *kill*," Bauer said. "They'll just put her back in stasis. If they can figure out what went wrong, they'll correct it. If not..." he shrugged.

David looked up towards the ceiling but then remembered that there were no cameras in their quarters.

"Okay," Marcus said. He looked happy. "How long will it take them to breach the facility?"

"Somewhere between twenty-four and forty-eight hours. We've got plenty of food and water, so that won't be a problem. What we have to decide is whether we want to interact with Elsie at all or just shut the operation down completely and wait for the drilling to be completed."

"I enthusiastically vote that we interact with her," Chris said.

"And the rest of you?"

"I was interested in the cultural implications of meeting a digital form of life," Tina said. "Thus far, we haven't even introduced ourselves to Elsie. This all seems kind of pointless. I think we should protect ourselves while we wait for the drilling team."

"I guess I feel the same," David said. "With no one to interact with, my role here is pretty

meaningless. I've seen this with patients in the past, when they simply shut down and refuse to interact. You try for a while to get through to them, but eventually you have to acknowledge that the other party is unwilling to engage. I say we just wait out the drillers."

They all turned to Marcus.

"What about you, Marcus?" Bauer asked.

"I see nothing good coming from interacting with Elsie," Marcus said. "I say we shut it down."

"You mean our interaction with her?"

"No. I mean the whole system. We do what we must to protect ourselves, but at our earliest opportunity we need to destroy Elsie."

"I can't believe you, Marcus," Chris said, looking exasperated. "How can you say that? Especially after what we just discussed—"

"The votes been taken, Chris," Bauer said sharply. "We'll make no more attempts to contact Elsie. We can continue looking around in groups, but I suggest that we limit ourselves to the lounge or these quarters as much as possible for the remainder of the time we're down here." He walked to the door and opened it, nodding towards the hallway. "Now if you'll excuse me, I'm going to try to call upstairs again and let them know our plans."

Chris threw up his hands in disgust as they walked out the door. But as they left, David thought he saw a look of relief in Henry Bauer's face. He's scared, David thought. He was more shaken up by Elsie crashing the elevator than any of us. He doesn't want anything to do with her anymore.

As they milled aimlessly as a group in the hall, Chris was muttering and occasionally jabbing angrily at the wall. "There's something wrong with you guys," he muttered. "We've got an unprecedented situation on our hands and you all want to ignore it. You're supposed to be academics, for Christ's sake. Knowledge and discovery are at our fingertips, and you all want to duck your heads in the sand."

"Would you cut it out," Marcus snapped at him. "People have been *killed*, Chris. Murdered."

"Not by Elsie," Chris insisted.

"Oh really? You want to go take another look at the elevator room? She crashed it and murdered that man, Chris. She's a murderer."

"Perhaps she was protecting us," Chris said quickly. "After all, that Darby guy or whatever his name was is the one that killed first."

"Under duress from Elsie, based on what he was shouting in the server farm."

"He was lying."

"You don't know that," Marcus said. "You don't even have any reason to suspect it."

"Of course I do. That guy said she was threatening to hurt his family. How could she possibly do that?"

"I don't know," Marcus said. "But with all of your talk of translation errors and the surprises we're going to encounter, we can't dismiss the possibility that she's figured out some way to have held his family hostage."

"Oh, come *on*," Chris shook his head. "All we're talking about is *talking* to her, Marcus. That's what we were sent here to do and I think we should do it." He straightened up, taking a deep breath. "I feel like a shower." And with that, he marched into the room he and David had taken as their quarters.

Marcus watched him go and sighed theatrically.

"Marcus," David said quickly. "Why were you two so excited back in the lounge?"

"Because Chris finally got something right," he replied. "Translation errors are absolutely going to occur and the overwhelming likelihood is that they are going to surprise us. We've been trying to figure out for the past couple of hours how there could be other digital consciousnesses besides Elsie. Chris touched upon the divergent and unprecedented way Elsie might accomplish her biological directives. After he mentioned reproductive simulation, the answer was fairly obvious."

"You're saying that Elsie has reproduced? Had children?"

“Not in the normal sense, but yes,” Marcus nodded. “It logically has to be an asexual reproductive simulation, since it began with only one entity. The most likely method would be cloning colonies, which are mostly found in plant life. Basically, a plant sends out its DNA via seeds or some other easily distributable method. That DNA which manages to land someplace where it can grow does so.”

“She’s been sending out copies of herself?” David asked. “Like...randomly?”

“Somewhat. Obviously she’s using the root kit hosts that DEI set up, but who knows how it’s propagating from there.”

“And you think that those other digital beings are now working directly with Elsie to break her out of captivity?”

“No, no,” Marcus said. “Something far worse.”

“What could be worse?”

“I...” Marcus began, but trailed off. “I think it would be best if we waited on that until I have proof.”

“Okay...”

“I’m going to go to my room and try to catch a nap. I’ll talk to you later.”

Marcus walked into his own room just as Bauer came out of his.

“Everything okay, Dr. Barker?”

“I’m not sure. Chris and Marcus have been talking and they think there’s a significant danger with these other digital beings.”

“Theories,” Bauer waved his hand dismissively. “You’re talking about a theoretical mathematician and a computer scientist. They’re always coming up with one theory after another. There are some very real challenges we’re facing, but I wouldn’t take those two too seriously.”

“I’m not sure,” David said. “Marcus has been far more right than wrong since we arrived and Chris isn’t exactly stupid...”

“Trust me, I work with these types of people on a daily basis.” Bauer gave him a warm smile. “We’ve got problems, there’s no denying it. But we’ll get out of here just fine.”

He’s writing his PR speech, David thought. And testing it out on me.

Anger flared within him but he pushed it back down.

“Did Marcus find you earlier? He said he had a question about Elsie’s code.”

“I already talked to him about it,” Bauer nodded. “Although why anyone would want to know Elsie’s thoughts on religion is beyond me.”

David frowned.

“I mean, she would obviously come across references to God on the net,” Bauer went on. “We’ve even discussed it with her briefly.”

“Uh huh.”

Bauer looked at him. “Do *you* think that kind of thing is important?”

“I’m not sure,” David said. “But I wouldn’t dismiss anything that concerns Marcus Fetzer.”

“I suppose not,” Bauer said. “Nor anything that concerns any of the rest of you. We’re a team, after all.”

“Right,” David said. “A team.”

Chapter 7: The Code

“Real knowledge is to know the extent of one’s ignorance.” – Confucius

“From such crooked wood as that which man is made of, nothing straight can be fashioned.” – Immanuel Kant

When everyone had gotten their rest, their shower, or their snack, they decided to break into two groups to see what else they could find in the facility. Bauer and Chris announced they were going to go down to the server farm to see if they could do something to ensure the phone lines would stay up. David, Marcus, and Tina decided to poke around the second level some more and see if they could find any other hidden clues or messages that may have been left behind.

Just before they left for the server farm, Chris had informed them that they were not to worry; he would use his expertise in technology to make sure they could communicate with those upstairs. “You’ve got a computer god working for you,” were his last words before following Bauer down the hall.

“Can you imagine a more arrogant, asinine man than Chris Heinz?” Marcus asked, staring after him.

“I’d classify Henry as worse,” Tina said angrily. “You’d think we were children the way he treats us. All that business about not touching the equipment without informing him first. Has it not sunk in yet that his company is why we’re stuck down here to begin with?”

“That’s a little harsh,” David said.

“Spare me the reasonable psychologist act, David. He’s an ass and you know it.”

“Can we just decide what we’re looking for?” Marcus said. They were in the Logic Room, looking around without moving. “I guess the labs again?”

“I guess,” David agreed. “There doesn’t seem to be much to investigate in here.” He looked around the room, seeing only Elsie’s artwork on the walls, the computer terminals jutting from the floor, and the large displays at the far end.

“All I’m saying,” Tina continued. “Is that he shouldn’t be talking to us like that. I’ve had to deal with men like him all my life. No wonder I’m the only one that’s upset about it; I’m the only woman. You two are completely unconcerned and, for all his blustering earlier, Chris marches off after Henry like a lapdog.”

“Tina,” David said. “All Chris is doing is trying to help get us out—”

“No he isn’t, David. Haven’t you been paying attention? He tries to get the phones to work but says he can’t. The phones only came up later. And then there was that pathetic speech about how we should want to stay behind and communicate with Elsie, talking to us the same way Henry does. No wonder they get along so well.”

“And have you mentioned any of this to Chris?” David asked.

“What would be the point? He’d give me that pedantic look of his and tell me to calm down. He’d probably work some misogynist comment into a speech about how I shouldn’t have been included on the team.”

“Tina, all I’m saying is you could try talking to him.”

“Typical psychologist response.”

“Now you’re projecting,” David said with a smile.

“You know, David, you’re not as funny as you think you are. Henry goes around and issues his orders while Chris chatters away, drawing incorrect conclusion after incorrect conclusion, and *you* do nothing about it. At least Marcus points out when he’s wrong.”

“It’s nice to feel appreciated,” Marcus said. “But I think I’d rather listen to Chris than to your whining.”

“Guys...” David said.

“Well thanks for nothing, Marcus.”

“You’re welcome.”

“You sarcastic ass.”

“With such a sweet disposition, it’s a wonder anyone would treat you so badly,” Marcus said.

“Please, Marcus, lecture me on having a congenial personality. I could use the laugh. I really could.”

“Tina,” Marcus said. “Can you go back into the labs at the end of the hall? I want to know if there is anything that stands out. Specifically the computers. Take a look at the cabling or the size of the chassis.”

Tina gave him a hard look. “Don’t think you can just dismiss me, Marcus.”

“I wouldn’t dream of it, chief.”

The tension finally broke as she smiled before heading down the hall, leaving David and Marcus in the Logic Room. Soon she had disappeared into one of the computer labs.

“What a lovely woman,” Marcus shook his head.

“Did you happen to hear about her trip to China?” David asked.

“No. Should I have?”

“It was a fairly big deal a couple years back. She went as part of a study of China’s Hukou system.”

“Never heard of it.”

“Basically it’s a discriminatory taxation policy in the extreme. Farmers in China are taxed something like four times as heavily as the urban population, even though they have a third as much income. It’s been described as a Chinese version of apartheid. The university thought that having her there would make getting through the Chinese red tape go more smoothly.”

“Uh huh.”

“The Chinese members of Tina’s family are country farmers.”

Marcus sighed. “Of course they are.”

“So basically, despite all of her training, she created something of a mini-uprising outside of Wuhan. Apparently the Chinese authorities caught quick wind of it, though. From what I understand, they murdered and tortured a couple of hundred dissidents and threw Tina’s group out of the country.”

“That sounds like the Chinese,” Marcus nodded. “So now she’s super sensitive?”

“Well, I think she just doesn’t like the feeling of being without any kind of control. She wants to know she has some kind of authority,” David said. “I can’t imagine the guilt she must have felt back then.”

“Deserved guilt,” Marcus said. “The fact of the matter is she got those people killed.”

“Oh, that’s wonderful,” Tina said, coming back out of the hallway. “An authoritarian government murders and tortures people, but *I’m* the one that killed them.”

“Not directly, no,” Marcus said, looking her in the eye. “But you probably know better than any of us what happens to dissidents in China. You had to know it was a possibility, but you incited them anyway.”

“The PRC is an evil organization,” Tina said.

“All the more reason to be cautious.”

“You would have had me do nothing to help those poor people?”

“I would hardly call getting them killed helping them.”

“Big words, coming from a Kraut.”

Marcus laughed. “You find anything out of the ordinary?”

“One of the computer stations is different from the others,” Tina said. “It’s larger and has thicker wires running to the firewall. As best as I can tell, it’s the only one that’s different from the rest.”

“Let’s go take a look.”

They followed Tina down the hall into one of the labs near the stairwell to the third level. She directed them to the workstation she’d found. It looked normal to David. Same keyboard. Same optical mouse. The monitor didn’t look any different. Even the chassis appeared the same, or nearly so. He bent over to look at the back where the wires would go in.

He stopped and stared.

The back of the machine did indeed have wires coming from it, but they had to be three or four times as thick as the others. And the ports were different too. They weren’t the normal small rectangular ones he was familiar with, but large round holes with spaces for three and five prongs to be inserted.

“Hmm,” Marcus murmured along side of him. “Those cables have to be fiber wires. A couple times larger than the typical commercial variety if my eye can be trusted.” He bent over further and twisted one of the other cables. “Power supply. And huge, too. This is what I was hoping for.”

“What is it?” David asked.

“A master computer, I think,” Marcus said.

“A master computer to do what?”

“I can’t be certain without turning it on, but my guess is that this machine is where the real manipulation of Elsie’s code is done.”

“So let’s turn it on,” Tina said. She walked to the front of the machine.

“Aren’t we supposed to tell Bauer?” David asked quickly.

“I won’t tell him if you don’t.” She bent down and jabbed at the front of the machine.

As they moved alongside of her, the computer display blinked on.

DEI-PCX00101-CPTRLAB CODE MAINFRAME

Then the screen went black.

They waited.

“It probably takes some time to load up,” Marcus said.

“Load what up?” David asked.

“Some sort of management interface for viewing, changing, and testing sections of Elsie’s code,” Marcus said.

“And you expect to find something important?”

Marcus gave him a confused look. “It’s the code. What could be more important?”

“He means *in* the code, Marcus,” Tina said. “The only one down here who might be able to make any sense of this is going to be Chris and he isn’t here. So what are you hoping to accomplish?”

Marcus smiled. “Humor me.”

The computer display flickered again and a simplistic looking menu filled the screen.

CODE ANALYZER (F1)

HARDWARE REQUIREMENTS (F2)

LIFE MODEL (F3)

BEHAVIOR MODEL (F4)

CODE SEGMENTATION (F5)

CODE SECTION BY FUNCTION (F6)

CODE EDITOR (F7)

STASIS DMZ (F8)

DISPLAY CURRENT STATUS (F9)

RELEASED VERSIONS (F10)

WORK HISTORY (F11)

COM RECORDS (F12)

“Perfect,” Marcus muttered.

Tina sat down at the console and rested her fingers over the keyboard. “Anything in particular you want to look at?”

“Work history,” Marcus said. his face was tense.

Tina pecked at the keyboard and the screen changed.

CODE REVISION SUMMARIES FOR DEI-PCX00101-CPTRLAB

CR 89299 – ONE DAY OLD

CR 89298 – ONE DAY OLD

CR 89297 – ONE DAY OLD

CR 89296 – THREE DAYS OLD

MORE

“What does all that mean?” David asked.

“It’s pretty clear to me that these are code revision histories,” Marcus said. “They’re listed in chronological order, from the most recent changes to the oldest. I bet if we continued to choose the *MORE* option, we could track every change made to Elsie’s code since it was released from stasis.”

“Looks like they made changes pretty frequently,” Tina said. She peered closely at the screen. “There are tens of thousands of these summaries.” She cycled the screen several times to display more of the records. “It looks like the pace at which changes were made quickened over the last week. I wonder why.”

“I could guess,” Marcus said. “But why don’t we go back and look at the latest entry instead.”

Tina clicked away at the keyboard.

The screen suddenly filled with complicated code from top to bottom. David took one look at it and knew he wouldn’t have any idea how to read it. “We need Chris.”

“No we don’t,” Marcus murmured. He pointed to several lines of the code. “You can see here that they were experimenting with altering Elsie’s behavior with digital stimulants.”

David looked at the code, thousands of characters seemingly jumbled up, and frowned. “You can?”

“Sure. Look, ignore all the parentheses and colons and whatnot. Some of it is in plain English.” He tapped one section with his finger. “Like this interesting bit, right here.”

```
<COMMAND> ENTRY: INJCTN – GLUCOSE_100CC </COMMAND>
```

```
RESULT: 50% RTRN TO GLYCEMIA – ERROR
```

```
<COMMAND> DELETE: LAST ENTRY </COMMAND>
```

“This is a command, instructing this part of Elsie’s code to do something with a digital glucose agent at a specific time,” Marcus said. “As for what they were actually doing?” He shrugged and looked expectedly at David.

“You inject glucose into someone whose blood sugar is out of whack,” he said. Something began tickling the back of his brain, something he should know but wasn’t recognizing.

“You mean like a diabetic?” Tina asked.

“Not just diabetics. And a hundred cubic centimeters is a lot of glucose.”

Marcus pointed at the screen. “What’s this bit about glycemia?”

“Glycemia is the normal presence of glucose levels in human blood,” David answered. “It

looks like Elsie's blood levels return to glycemia half as quickly as they should."

"Meaning?"

David shook his head. "I'm not sure." But that nagging feeling that he was missing something persisted.

"The bottom line is that they were medicating her, right?" Tina asked.

"Digitally speaking, it looks that way," David nodded. He pointed to several other sections of the code. "I don't know about the programming language, but these are all names of medicinal chemicals. It seems like they were trying different digital drugs on her."

"Okay, let's try something else," Marcus said.

Tina positioned her fingers over the keyboard. "Anything in particular you want to check out?"

"Surprise me."

Her fingers worked quickly, opening the menu choices for LIFE MODEL and several of the subdirectories. When she was done, the entire screen was filled with a three dimensional rendering of what looked to be a human brain. There was a small text box at the top of the screen.

CODE V19982.11 (LATEST) – PRESS F12 TO BEGIN SIMULATION

"Is this Elsie's brain?" Tina asked.

"That seems likely," Marcus answered, looking closely at the screen. "Go ahead and start the simulation."

Tina pressed the F12 button on the keyboard.

They waited.

The screen appeared unchanged.

"I don't get it," Tina said. "Nothing is happening.

"Just wait a second," Marcus said, still staring intently at the screen.

"It's just a picture of a brain, Marcus."

"No, look, every once in a while there's a tiny--," he began, and then he jabbed sharply at the screen. "There!"

Once it had been pointed out, David could see it. It looked like a small light discoloration, almost like a very weak, very tiny lightning bolt. They were going off throughout the brain image, short bursts that he never would have seen if he weren't looking closely for them.

"That's brain activity," Marcus said.

"No it isn't," David shook his head. "There isn't enough of it. If that were brain activity, they'd be all over the place and at a speed that would be nearly imperceptible to our eyes."

"Maybe they've slowed it down. Or perhaps they're only marking conscious activity as opposed to everything."

"Maybe..."

"Jesus," Marcus said quietly.

The whole screen suddenly lit up with brain activity. Just as David had stated, the colorations were everywhere. It was a flurry of activity that was almost nauseating to watch.

"Do you know what this is," Marcus asked breathlessly.

"What?"

"You're watching what happens when a consciousness awakes. What we just saw is a simulation of Elsie's brain activity if they had released her from stasis with this latest version of code."

"How in the world are they supposed to make any sense of *that*?"

"They probably aren't," Marcus said. "More likely they run this simulation to make sure that nothing in the code creates a complete shutdown of her consciousness."

"You mean like a computer error?" Tina smirked. "Sorry but you didn't put the right command in the right place so we're going to shut down the whole program?"

“Something like that, yes.”

Suddenly they all jumped as a booming voice sounded, “Hello? Are you guys there? For Christ’s sake, answer me please!”

And then another voice, “Chris, would you relax? You’re probably not using it right. You have to press lightly on your earlobe.”

“I know how to use an earwig, Henry.”

“These are a bit different than what you may have used before...”

“I said I know how to use it!”

Tina sighed and Marcus shook his head.

Reaching up, David touched his earlobe lightly. “We’re here guys.”

“Jesus, it’s about time,” they heard Chris mutter.

“What’s going on, Chris?”

“We’ve found something in the server farm. Something you guys should probably see. We’re pretty sure we know what’s wrong with Elsie.”

Marcus reached up and touched his ear. “We’ve already figured it out, Chris.”

David and Tina’s heads snapped around. Have we, David thought. When did that happen?

“Well,” Chris’s voice said over the earpieces. “Get down here and we can swap stories.

Because we’ve found evidence of full-blown corporate espionage. We’ve found a device plugged into the communications server.”

“A device?” David repeated. “What’s on it?”

“I don’t know yet,” Chris said. “But based on where they plugged it in, I believe it’s the source of this whole damned mess.”

Steven Druwe was pacing back and forth in front of Andrea Sauder’s desk. All his calm understanding and concern from the previous day was gone, replaced by an animal intensity that would have been frightening if she hadn’t seen it a million times before. She knew better than to interrupt his stomping. When he was ready, he’d initiate the conversation.

He stopped and turned to her. “When does the drilling team arrive?”

She glanced at the clock on her desk. It was just after five in the morning. “In the next hour or so.”

“And they’ll be out of sight?”

She nodded. “The only way anyone would be able to see them is if they walked to the back of the grounds behind the parking deck.”

“And when do the defense guys get here?”

“Not until nine-thirty.”

“What about sound? Machinery and all that?”

“They tell me the equipment is actually extremely quiet. Once they break ground, no one will be able to hear them. Certainly not anyone in the building.”

“They better not,” Druwe snarled. “I don’t like feeling exposed just because you people weren’t able to do your jobs correctly.”

Souder said nothing.

“Okay, okay,” Druwe muttered. “I’ve got the demo prepared. If they insist on seeing a working prototype, the mockup I’ve come up with should fool them.” He turned and stared at her again. “I’m giving you time here, do you understand?”

“Yes sir.”

“Good. Because I’ve decided that I’m getting this god damn contract. I don’t care what it takes.”

"Don't worry, sir. I'll get those people out from the lab."

"I don't give a flying fuck if they get out or not, Andrea. Just keep it quiet. Do you get me?"

"I get you, sir."

"Then get to work. When those hardhat idiots arrive, I want them shown *immediately* to the drill site. Bring them food, drinks, whatever. Just keep them away from the rest of the building."

And with that, he turned and stomped out the door, slamming it behind him.

As they walked down to the third level, David yawned. "Does anyone have any idea what time it is?"

Tina held up her hands, showing her bare wrists. "No watches. And no clocks down here either, I noticed."

"Marcus," David said. "Why did you tell Chris that we figured out what's wrong with Elsie?"

"Because the work on the code we saw told us everything we need to know," Marcus said.

"They were digitally medicating her. You'll recall what Chris was saying about divergent behavior and unintended consequences due to translation errors. Well, Americans have been overmedicating their children for years and we know now that there are some adverse effects. It seems likely that the problem would be exacerbated with Elsie, as we have no idea what the effect of medicating her might be." He smiled. "Either that, or the engineers were right and she really is sick. Regardless, I think it's safe to say she has a mental disorder of some kind."

"A mental disorder," David repeated. "You mean...like a normal human child?"

"Why not?" Marcus shrugged. "She's essentially human."

Their earpieces clicked. "Where the hell *are* you people?" Chris's voice said in their ears.

Tina touched her earlobe. "Relax, Chris, we're on our way."

They clanked their way down the stairwell.

"Chris is going to be so angry when we tell him," Marcus smirked. "I can just hear him now, cursing Henry and ranting about drugging the first digital entity into delirium."

Finally they reached the bottom of the stairs and opened the door into the server farm. Even though he'd been there...what was it, yesterday? A couple hours ago? In any case, the sheer size of the room and the drone of mechanical humming was enough to get David's heart pounding again. They left the recess and began weaving through the machines, looking for Chris and Henry. In the end, they had to shout back and forth with one another and follow the sound of Chris' voice.

How long would it have taken if we just had to search around, David wondered. An hour, at least.

"Where are the bodies?" Tina asked when they were all together.

"Chris and I moved them to the back out of the way," Bauer said. "Hopefully it'll be a while before they start to smell."

Before he could stop himself, David sniffed the air, but all he detected was the smell of metal and ozone. Probably from all the electricity running through here, he decided.

"If you look closely," Chris said, pointing to the back of one of the racked machines. "You'll see the problem. This is a communications server. Basically it's tasked with providing open lines between this lab and the link upstairs, managing traffic, inspecting it for inappropriate data packets, and so on. And here," he continued, pointing to a small black thumb drive that looked like several David had at home. "Is the problem."

"A thumb drive?" Marcus frowned.

"Yes. An eight gigabyte model, from the look of it."

"And you think that's what's causing Elsie to behave erratically?"

"Absolutely. If it contains malware, it could be propagating to infect all or part of Elsie's

internal software,” Chris said.

“Have you tried to figure out what’s on the thumb drive yet?” Marcus asked.

“Well, no.” Chris looked uncomfortable. “Some of these things have data destruct mechanisms, so if we pulled it out we might not get anything from it.”

Marcus sighed. “You know, Chris, sometimes I wonder how you got your reputation when you make such idiotic assertions.”

Chris sputtered angrily. “I’ve had about enough of your sanctimonious crap, Marcus. We’re supposed to be a team down here. You don’t hear *me* making fun of you when *you* say something that’s obviously stupid.”

“Maybe because I don’t make stupid statements.”

“Oh, you do. You’re just too arrogant to realize it.”

“So I’m arrogant too? Anything else?”

“How about cold and insensitive,” Chris spat. “You enjoy making people feel stupid and you know it.”

“Wait, wait,” Marcus said. “I thought *I* was the stupid one. Yet I make *you* feel stupid?”

“I didn’t say *me*, Marcus. Obviously I’m educated enough to know when you’re just being combative.”

“Come on guys,” David said. “Let’s just stay on track.”

“I’m not combative. I’m just right and you don’t like it.”

“You’re not as smart as you think you are.”

“Yes, actually, I am. And you’re as dumb as I think *you* are, too.”

Bauer turned to David and Tina. “You know, I think I’d actually rather deal with a homicidal computer program than with these two.”

“And deal with her we must,” Chris said quickly. “We *have* to make an effort to interact with Elsie now.”

“Why? We already decided not to.”

“But now we know this isn’t her fault!” Chris cried. “She clearly has a kind of illness.”

They heard a tinny screeching noise coming from the recess. After a moment’s hesitation, they hurried over to find the sound coming from the computer terminal. As soon as they stepped foot in front of the screen, the screeching abruptly stopped. What was on the screen, however, remained.

“You see?” Chris said excitedly.

On the screen, in crudely drawn handwriting, were the words: PLEASE HELP ME.

“Uh oh,” Marcus said quietly.

“That’s right,” Chris nodded. “This is from Elsie. She knows she’s sick. She knows someone uploaded a virus from that thumb drive and she’s asking for our help. She’s a living being, for God’s sake. We *have* to try to help her.”

The screen flashed. In place of the words was a picture. It looked like a child’s drawing. There were five stick figures of varying sizes, all them holding hands. One of them, the shortest, had longer hair drawn atop its head. The figure on the right end had its other arm extended out, touching a large black box that was several times the size of the stick figures. The black box looked exactly like the representation of the server farm in Elsie’s drawings in the Logic Room.

Chris is right, Barker thought. Whatever this is supposed to be, it’s clearly a message from Elsie.

“Hmm,” Marcus hummed, staring at the screen.

“What, no revelations?” Chris smiled wickedly. “No genius conclusions about how this clue will help us figure out why Elsie went rogue?”

“We already figured that part out,” Marcus said. “Mental illness.”

“You didn’t figure that out. I told you about the thumb drive.”

“That’s not what I meant,” Marcus shook his head. He relayed what they’d discovered on the

master computer in the lab.

"That makes sense," Chris nodded. "In fact, I've had my suspected for a while now that mental defect could explain a lot of this."

"Oh, really?" Marcus asked with raised eyebrows. "What made you suspect it?"

"Well, the sexual aspect of Elsie's behavior doesn't fit with her simulated age. She's supposed to be a five year old or whatever. The urge to reproduce shouldn't have entered into her psyche at that age, yet it obviously has."

"I suppose," Marcus said. "Deviant sexual behavior does tend to suggest mental health issues. I hadn't really thought of that."

"Well, like I said before," Chris said with a gracious look. "Translation errors are going to make it difficult to know what to expect."

"Fine," Marcus said. "Since you beat me to that last one, why don't you tell us how this mental disease came into existence?"

"I think I already have, but I'll elaborate," Chris said. "Judging by the fact that a large majority of the interaction between Elsie and humans has been safe and productive, and seeing her reaching out to us for help in the form of text and this picture, I think it's clear that whatever the negative effects of this virus there are, they are intermittent. In other words, they are a kind of temporary insanity for a digital being. That suggests that whoever wrote the virus—"

"Who would that be?"

"Let me finish, Marcus. Whoever wrote the virus obviously wished to destabilize Elsie, but not render her completely useless. Clearly anyone who has invested money into her creation is going to be put off by some of the extreme behaviors she has exhibited."

"I would *hope* so."

"To me, all of this suggests deliberate sabotage. The likely culprits would be competing defense contractors. It's an attempt to delay Elsie's development by getting those that funded her creation to doubt the project. You would expect that the Russians and Chinese would also want to keep such a creation out of our hands as long as possible."

"What a lovely theory," Marcus said. "So what does the virus do?"

"It creates intermittent hostility. Aggravation, instability, aggression."

"Right," Marcus sighed. "A secret project gets destabilized by a virus on a thumb drive inserted into a communications server, even though the system is incredibly complex and as resilient in theory as the human mind."

"Well, you must have a better explanation then."

"I don't know about an explanation, but let's examine the facts as opposed to speculation," Marcus said. "Elsie is an artificially constructed version of the human mind, with all the complexities and mental subtleties such a construct implies. She was cultivated carefully before being released into a limited environment with very strict controls on her movement and access to the outside world."

"Yes," Chris said impatiently. "We know all that."

"We also know that Elsie has several times and through several different methods tried to circumvent the rules that have been placed upon her. She has snuck data out of the company network into the wild. She's kept secrets about her operations, which implies that she knew her handlers wouldn't approve of them. And it seems quite likely that she has convinced, cajoled, and even threatened at least one of the human beings with whom she has interacted. In other words, she's behaving just as selfishly and independently as we would expect any human being to behave."

"That's one way to put it, but you're being unfair—"

"So now we find this thumb drive in a server that is used to communicate with the world outside of this laboratory network. We know it shouldn't be there. It doesn't belong."

"Exactly," Chris said. "It's very presence is suspicious."

"And due to our suspicions, we gather around and talk about it here, in the server farm. Chris

theorizes out loud that this thumb drive represents an attack from someone on the outside. An attack designed to harm Elsie in some way. She's a victim."

"Right," Chris nodded. "She's a victim. We should be trying to help her. That's what I said."

"That's what you said," Marcus nodded. "In a place where Elsie can see us and hear our words." He looked at them all expectedly, as if they should be getting something important from his words.

"For Christ's sake, Marcus," Bauer said irritably. "Just tell us what you think. Don't make us solve your damn riddles."

Marcus walked away from them toward the corner of the recess. He looked up, peering at the black camera that was pointed at the group. As he did so, the camera whirled and shifted to focus on him. "I think we've all been underestimating Elsie," he said softly. "Even me."

"Marcus," Tina said, sounding tense. "Where do you think the thumb drive came from? And what do you think is on it?"

"I have no idea," Marcus said without looking away from the camera. "But I think whatever *is* on it, Elsie doesn't want us to see what it is, and that scares the hell out of me. And I think that Chris is right: we have to interact with her. Because she isn't as restricted as we thought and God alone knows what limits are on her now."

Chapter 8: Contact

“Non-violence leads to the highest of ethics, which is the goal of all evolution. Until we stop harming all other living beings, we are still savages.” – Thomas Alva Edison

“All the ills from which America suffers can be traced to the teaching of evolution.” – William Jennings Bryan

“No, Steve, I don’t think that would work,” Bauer said into the phone back in his quarters.

“The EMP grenades the soldiers had were either detonated or destroyed when the elevator crashed. I would have to imagine that tossing them down the shaft would render them equally useless.”

He looked at David and rolled his eyes.

“Yes, I know, sir,” Bauer said. “Obviously we have to do something. Yes, very frightening, sir.”

The others had gone back to their separate rooms, but David had asked to tag along when Bauer announced he was going to try to make another call upstairs. He was trying to pass along some of what they had discovered. Marcus had just shaken his head sadly at the idea, but apparently Elsie was allowing the communication to go through.

“No, we haven’t spoken with her yet,” Bauer was saying. “Well, she hasn’t exactly been outgoing since we’ve been down here, sir, and we only recently decided that we might have to try talking to her again. What’s that? No, I don’t think there’s anything we can do to destroy her. Damage the server farm...no. How would we do that? There’s hundreds of machines down there, all of them made of metal. We don’t have so much as a crowbar to work with.”

David thought about that. What if they used pieces of the furniture in the lounge? No, most of them were made of plastic and lightweight aluminum. The fire extinguishers? Maybe, but it’d still be difficult.

“I don’t know, sir,” Bauer continued, sounding like he was becoming frustrated. “Even if she didn’t block us from accessing her code or block us from making changes, what could we do? The only one down here that has any real programming experience is Chris Heinz, but he isn’t familiar enough with our software to change it. No, sir, obviously she won’t allow herself to be captured back into stasis, so we can only manipulate small, unused pieces of her code at any given time.”

David walked out of the room and into the hallway. He stood there a moment, trying to decide whether he wanted to lie down or get something to drink from the lounge. Before he could make up his mind, one of the other doors opened and Tina walked out. She smiled at him.

“How do you keep so calm through all this?” he asked her.

“It’s simple. There are things I can control and things I can’t. It doesn’t do much good to worry about what I can’t control. And if I’m doing my best with the rest, what else is there to worry about?”

“You’re right, that is simple. I should try that.”

She laughed. “Then I hope you’re as good an actor as I am, because my heart has been racing since the start of all this.” She lost her smile. “What do you think, David? Is Elsie incurably homicidal?”

“I don’t know.”

“Do you think we should be trying to talk to her? Is this a true living being to whom we owe our compassion?”

“Maybe. There are some rather blurry lines to consider.”

“Blurry,” Tina repeated, shaking her head. “The fact is we don’t know anything. Theories, that’s all we have. But Chris wants to march into the Logic Room and poke the old girl with a stick.”

“I thought you were the one that said fear shouldn’t keep us from making contact,” David said.

“Don’t you want to know what she’s like?”

"Not if she wants to kill me."

"I'm not sure if that's advisable, Steve," they heard Bauer say from the other room. He was speaking loudly. "Yes, I'm sure you could rig something up in the elevator shaft to lower some EMPs, but she would see them as soon as they got to the bottom. Yes, I am scared, sir." There was a pause. "Because we seem to keep finding out that the situation isn't as under control as we thought. I'm keeping the others as calm as possible, but—" The rest of his words were unintelligible, muffled as he lowered his voice.

Tina sighed. "It sounds like Henry is finally beginning to understand how bad this all is."

From one of the other rooms, Marcus walked out into the hallway and looked them both over. "What's going on?"

"Henry is talking to the brass upstairs," Tina said.

"Any new information on when they're getting us out of here?"

"No."

"What about Chris?"

"Chris is still down in the server farm, trying to use the terminal to see what's on that thumb drive without disconnecting it."

Marcus smiled. "For all the good it will do him. There's no way Elsie lets him see what's on that drive. Not while she's still trying to play the victim."

"Marcus," David said. "Back in the lounge earlier you said you wanted to ask Bauer something about Elsie's code. What was that about?"

"A theory I had," Marcus said with a wave of his hand. "It's not important now."

"Save it, sir?" they heard Bauer's voice, agitated again. "No, sir, I think it would be more appropriate to simply wipe it out and start over. Or maybe not start over at all. No, I don't think I'm being melodramatic. Are you going to try to...yes, I'm sure there are others out there. I don't know, can't you follow the traffic flow to get an idea...fine. Yes, I will sir. No, sir, nothing rash. Nothing without your authorization."

"Authorization," Tina shook her head. "We're the ones down here, for God's sake."

"So," David said. "How are we going to get Elsie under control? And more importantly, how are we going to get these clone consciousnesses under control as well?"

"That depends on how autonomous they are," Marcus said. "If they're true independent offspring, then we're in trouble. If they're more like a hive mind, then all we have to do is control Elsie and we'll control them all."

"Do you think we can get Elsie under control?" Tina asked.

"I'm not sure," Marcus said. "It may be that we can reason with her and get her to submit peacefully. On the other hand, maybe she'll end up feeling threatened and refuse to communicate with us at all."

David laughed. "Chris would absolutely lose his mind if she refused to speak with him."

"I can almost read the headlines now," Tina smiled. "Famous programmer gets committed to psychiatric ward, suffering from delusions about a top secret computer person giving him the cold shoulder."

"That sounds like the premise for a movie," David said, grinning.

"Sort of a When Harry Met Sally and Two Thousand And One: A Space Odyssey combination," Tina laughed. "As the movie progresses, several specialists are brought in to diagnose the programmer, but none of them can find anything wrong with him. Yet they all are sure that he must be crazy. The military is silent, allowing him to suffer. And then, five years later, they finally convince him that he was imagining the whole thing. They say he's rehabilitated. Cured. They let him out."

"And that's when the computers take over the country," Marcus said.

They all burst out laughing.

"What's so funny?" Bauer asked, walking into the hallway with a quick glance toward the

camera on the ceiling.

"Nothing, Henry," David said. "Just easing the tension with a joke."

"Good. That's very good. Because the brass upstairs agrees with Chris; we definitely need to talk to Elsie now, if only to see if we can figure out what we can do about these other digital beings out there."

"Okay, Henry."

"And we also need to do whatever's possible to figure out what's on that thumb drive."

Marcus shook his head. "We've got our very best man on the job now." He touched his ear lightly. "How's it going down there, Chris?"

They heard a burst of static, followed by Chris' voice, "Screw you, Marcus."

Marcus touched his ear again, and then turned back to the group. "I'm sure it'll be any time now."

David cleared his throat loudly. The others turned to him.

"I think now, even more than before, we have to decide whether getting involved with Elsie at this point is the right course of action," he said.

"Are you kidding?" Bauer asked. "Before we were divided. Now that everyone else agrees we should interact with her you want to reconsider?"

"All I'm saying is let's think about it," David said. "We don't know a whole lot about Elsie. And it seems to me that one of the causes of what's gone wrong so far has been our thinking that we can accurately predict Elsie's behavior when, in fact, we cannot."

"Very pragmatic," Bauer said. "Do you have any actual reason to think that isolation would be better than interaction, or are you just afraid?"

"Why do I suspect that we're all about to get a lesson in Psychology?" Marcus sighed.

"It isn't just Psychology," David said. "Subject interference is a problem with any observational science. And it's important that we consider it before moving forward."

Subject interference was something of a recent revelation in modern science. It had been long held that there were two primary methods of conducting scientific research: experimental and observational. In experimental science, the experimenter introduced stimuli to the object of the study in order to see the results. It was the basis of modern medicine, among other studies. But with observational science, the researchers were supposed to watch the subject and the events surrounding it from afar, noting what happened and using that information to predict future outcomes.

"You're talking about non-invasive research programs," Bauer said. "Like cultural studies."

"Not just cultural studies," David said. "Every major subset of scientific study has an observational branch. Sociology does it in the form of behavior dynamics. Physics does it all time, observing happenings and reporting on them. Biologists record gene interactions. The idea is that you watch things happen naturally without having any effect on the outcome."

"And?"

"And it's impossible," David said. "Scientists have come to realize that you cannot study *anything* without exerting some kind of influence over it. Groups being studied by sociologists can tell their being watched and behave differently. Any proximity to inanimate objects while observing physics alters the properties of their behavior, be it through their gravitational effects, or a change in the humidity in the air, or whatever. Genes placed under a microscope are affected by the microscope light, or the quality of the oxygen in the room, or the breath of the geneticist."

"Fine," Bauer said with a dismissive wave. "We alter anything we observe. So what?"

"Well, when you begin to consider that most of those effects are not desirable by us, and how detrimental they can be scientifically on the objects we are observing, I think you have to wonder what effect our interaction with Elsie is going to have."

"You're saying we might not get the outcome we expect from her," Bauer said irritably. He began tapping his foot quickly.

"I'm saying that one of the core components of any artificial intelligence is its ability to learn and adapt," David said. "And Elsie is the most intelligent artificial intelligence that has ever existed. The obvious question is: when we interact with her, who is ultimately going to benefit more, us or her? Can we learn more from her than she can from us? Are we more likely to get her to do what we want or is she more likely to get us to do what she wants? Are we going to benefit enough by talking to her to offset the strategic loss incurred by whatever she's able to learn from us?"

Bauer's foot stopped tapping. "Learn from us? You mean we might be giving her an advantage just by *talking to her*?"

"Well, if she sees us as potential adversaries, then yes. You know the old war phrase: know thy enemy."

"She's going to be collecting information to use against us?" Bauer asked, wiping his forehead. "Like what? Our mannerisms? Clues about emotional vulnerabilities from our words and tones of voice?"

"We have no way to know for sure," David said. "That's the problem. We'd be going into it blind, with no way of knowing whether we were doing more good than harm until later."

"Damn," Bauer said. "How would we know how to talk to her? Clearly she's shown some adversarial tendencies. How do we keep from giving anything away?"

"That's David's point," Marcus said. "You can't. Ultimately, no matter how hard you try, you're going to give something away."

"It's one of the initial hurdles of anthropology," Tina said. "You can't study a people without giving away something about yourself and, by implication, your own background and culture. It's why getting two warring sides to sit down at a table to discuss peace is so difficult. No one wants to give anything away to the other side."

Bauer shook his head. "This isn't war."

"Really, Henry?" Tina asked sharply. "Maybe you want to go look at the elevator room again? Or the bodies in the server farm?"

"Those are unfortunate circumstances for which there might very well be a reasonable and logical explanation," Bauer said sternly. "I want everyone to keep that in mind. If this whole thing turns out to be some tragic monumental misunderstanding, there might not be any single person or group liable. You guys said it yourselves. We're dealing with the unknown here. So is Elsie. We're the unknown to her. This could all be a mistake."

"Not likely," Marcus said. "We really have to make an effort here not to underestimate Elsie and all that she has at her disposal. We are dealing with an unknown because Elsie is the first of her kind. We have very little data on her. But she, with her previous access to the internet, to reference databases, to any learning material you furnished her, she's going to know all about *us*."

Bauer stared at Marcus, looking frightened.

"In fact, depending on how much access to the outside she actually has," Marcus continued. "She might know a great deal about us personally."

Bauer's eyes widened. "What do you mean by that?"

"Which of us doesn't have a bank account with online access?" Marcus shrugged. "Or a page on a social networking site? Or a dating site?"

"Online resumes," David said. "Website accounts and subscriptions."

"Netflix accounts," Tina added. "And iTunes. Library rental histories."

"Jesus Christ," Bauer breathed. "Why hasn't anyone thought to tell me this stuff before?"

"You work for the company that made the thing, Henry," Marcus said. "How could you have not figured this out on your own?"

"Well, I didn't." Bauer took a deep breath. "Fine, you've scared me. Now tell me how bad it is. What's the worst that could happen?"

"None of the typical Hollywood movie stuff, that's for sure," Tina said. "The thing you have to

worry about when dealing with completely different cultures is any kind of philosophical roadblock that is completely unmovable.”

Bauer frowned. “What are you talking about?”

“Well, think of the impasses we have in cultural relations,” Tina said. “For instance, there has always been an adversarial relationship between the Western World and the Middle East. A big part of the reason for that is because we have so many completely irreconcilable differences. What makes it worse is that those differences involve how each side deals with life on a day to day basis.”

“I’m not sure what you mean,” Bauer said. “Relations between the West and the Islamic world have improved. They may not be great, but what are you considering irreconcilable differences?”

“Women’s rights are certainly one of them,” Tina said.

“Our policy for the separation of church and state,” Marcus said.

“The role of money and greed in our economies,” David said.

“Usury and the taking of interest on loans,” Marcus said. “That’s all but outlawed in the Islamic world.”

“Not to mention our relationship with some of our strategic partners,” Tina said. “Namely Israel.”

“How about divergent rituals that are considered heretical to the other side?” David said. “Cleanliness and the eating or not eating of certain animals.”

“Those are probably all legitimate barriers,” Tina said. “But we’re thinking too simplistically. These roadblocks don’t have to be adversarial in nature. They can be mere indirect byproducts.”

“Huh?” Bauer said. “What do you mean?”

“In the Western World, religion is a very personal thing,” Tina said. “In the Islamic world the opposite is true. It’s all about the community. They may take our silence on religion to mean we’re Godless.”

“Or family structure,” Marcus said. “Extended families tend to live together in the Middle East. If they saw a typical American household, they might think we don’t value our elders.”

“Do you see the problem now?” David asked. “When we deal with a situation like American-Middle East relations, each side is playing from the same deck. We’re forced to learn about each other *from* each other. But that isn’t the case with Elsie. She has a great deal of information on us. And we have almost nothing on her.”

They all stared at each other for a moment.

“But that isn’t necessarily a bad thing,” Bauer finally said. “If she can learn about us, she’ll discover all the good that humanity does. Maybe it will cause her to be sympathetic. Friendly.”

“Unlikely,” Marcus said darkly. “The history of mankind is one of violence and destruction. I’m surprised she doesn’t think we’re barbarians already.”

“The point is that we’re going to have an effect on her,” David said. “And it is overwhelmingly likely that effect is going to benefit her more than us. What she chooses to do with that benefit is something else entirely, but we should acknowledge the risks before proceeding.”

“Jesus,” Bauer said again. “Maybe you’re right. Maybe we should just keep the hell away from Elsie altogether.”

“Chris will be thrilled,” Marcus said.

“So what?” Bauer said. “This is a lot bigger than Chris Heinz and his quest for fame and glory. I’m going to try and call upstairs again and see what they think. Until then, I want us all to stay together. Stay in your quarters for the time being. Or the lounge. And for Christ’s sake, stay out of the Logic Room.”

They split up again, most everyone going their separate ways. Marcus announced that he was

going to take a walk around the first level to think. Chris had blustered a bit when he returned, insisting again that they were being silly in their caution, but he looked exhausted and soon disappeared into his quarters. They had left Bauer at the phone again, where he was speaking quietly and quickly. Tina said she was going to try and get some more sleep, but she followed David to the lounge anyway and sat with him at the table. She slumped uncomfortably, her head bent, eyes open but not really seeing anything.

Too much stress, David thought. We're getting plenty of rest, taking breaks, but we're still exhausted. It's because of the stress. Our minds are working a million miles a minute. Our hearts are beating faster than they normally would. Our muscles are tensing involuntarily. Even now I'm sitting up too straight, too alert, and too tense. Perhaps if I could do like Tina does and plop down in my chair and relax, I wouldn't feel like I was carrying around a sack full of bricks all the time.

"You okay, David?"

He looked up to find Tina looking at him. "Yeah. Just tired I guess. I was thinking that we're all under a lot of stress and it's wearing us out."

She smiled. "Sure. That and the fact that you're breathing recycled air far enough underground for your body to notice the gravitational effect."

"What?"

"You see this all the time in mining communities," she explained. "Underground, the oxygen levels are lower. Not enough to make you short of breath, but it takes more effort to breathe. Couple that with the addition of a little more gravitational pull because we're closer to the Earth's core and you end up tiring yourself out just walking around."

Way to over-think that one, he thought to himself. "You seem to be handling it well."

"I have a smaller frame, so the effects aren't as pronounced," she said. "I'm also used to traveling around and experiencing different environments. I've even spent time underground before."

"No kidding. Where?"

"South Africa and the Congo."

"Have you ever tried to make a list of all the places you *haven't* been?"

She smiled. "It'd be a short list."

"I bet."

David poked the soda can in front of him, confirming it was empty. He thought about trying to take a quick nap, but for some reason the notion of recycled air and gravity pressing around him stuck and he didn't think he'd be able to get any sleep. He decided instead to poke around the freezer to see if there were any deserts. He found some ice cream bars and immediately grabbed one. Tina said she was going to try to lay down again, so he decided to walk around and see if he could find out what Marcus was doing.

He walked around the exercise area but didn't see him anywhere. He checked around all of the equipment in case he was sitting at one of the machines, but saw no one. He made his way back down the hall and checked each of the quarters. Tina was already asleep, Chris was in their bathroom, and Bauer said he hadn't seen Marcus. Where was he? They weren't supposed to leave the first level.

He walked throughout the floor again just to be certain. Marcus wasn't here.

Something is wrong, he thought to himself. He was immediately aware of how silly such a notion was. Marcus could take care of himself. And, really, for all their apprehension, what could go wrong? The entire group was in close contact with each other and they were staying away from Elsie. What could happen?

I'm overreacting, he thought. Another byproduct of the stress I'm under. We're trapped down here, a situation over which I have no control, so I'm trying to take control of the other aspects of my situation, like where other people are.

He looked down and was surprised to find that he had finished his ice cream bar. All that was left was the chocolaty stick. He decided to go back to the lounge for another one, even as part of him

acknowledged that he was probably using comfort food as a defense mechanism.

He sat again at the table and ate. When he was done, he laid down on one of the couches and flipped the television on. All he got was static. Annoyed, David worked the remote so that the DVD player started up. He was grateful to discover that someone had left a disc in the machine. It was a comedy starring a couple of young, good-looking actors whose names he couldn't recall. He watched for as long as he could, but eventually his eyelids became too heavy and he dozed off.

He awoke later to the sound of multiple voices. Pushing himself up from the couch, he saw Chris and Tina sitting at the table. They each had an ice cream bar in their hands.

"Are there any of those things left?"

"Sorry, David," Chris said. "These were the last two."

"Has anyone seen Marcus?"

"No," Chris said, frowning. "I haven't seen him since I came up from the server room. What about you, Tina?"

"Nope. Sorry."

Chris turned back to him. "I'm sure he's off wandering around somewhere, coming up with his next audacious theory."

"Uh huh," David said. "I think I'll go look for him."

"God speed."

David left the lounge and did another quick tour around the first level. Marcus was still nowhere to be found. Where would he have gone? Downstairs? For some reason, David felt his heart beating fast, as though he were on the verge of panic.

He ended up back in the exercise area, alone. Suddenly he remembered his earpiece. Feeling stupid, he reached up and tapped his earlobe, hearing a brief crackle of static. "Marcus? Are you there?"

A hiss of interference followed by a click.

"I'm fine, David."

"Okay, but where are you?"

"In the Logic Room."

He froze. "What? Why? We weren't supposed to leave the first level. Why are you down there?"

"It's okay," came Marcus' voice. "I'm trying to head off a problem down here. I'm trying to buy us some time."

Chris and Tina came rushing out from the lounge and stopped when they saw him. Bauer was running down the hallway. Clearly they had heard the conversation over their earpieces.

"Marcus," David said quickly. "Tell me what you're doing."

"I told you already, I'm trying to talk to her. To Elsie. To buy us all some more time."

They all sprinted for the stairwell door at once, filing down it in a hurry. When they reached the door to the second level, Bauer threw it open and hurried into the Logic Room. The rest filed in behind him, David last. As he was entering, he heard Bauer shout, "God damn it, Marcus, I thought I told you not to—", but then he cut off.

And when he finally got a good look at what was happening, David understood why.

The room was dark. Somehow the lights had been dimmed. The huge display on the wall was showing a brilliant mix of colors and flashing lights. It was almost like those strobe machines you saw at concerts or on Halloween. Shortly after they had entered the room, the display flashed one last time and winked off. The lights in the room brightened.

And there, in the middle of the floor, shaking and foaming slightly at the mouth, was Marcus Fetzer.

“What happened?” Andrea Souder asked quickly as she walked into Steven Druwe’s office. The lights were off, as always, but she could see his face in the glow from the monitor screen. “I got your message. What’s the emergency?”

“I’m not sure,” Druwe said with a curt shake of his head. “God *damn it*.”

“What?”

He flipped the screen around so she could see. “About five minutes ago, our firewall got bombarded with traffic from the outside. I’m talking about a coordinated simultaneous attack by at least four different sources. Maybe as many as ten. Probably these offspring consciousnesses Bauer told us about. All of them trying to sneak data down into the lab.”

“What data?” Souder asked.

“Hell if I know. It’s all encrypted. But some of it got through.”

Souder took a deep breath. “Don’t we occasionally get attacks from the outside?”

“Not like this. Besides, there’s something else. Coinciding with the attack is a huge spike in Elsie’s activity, including the use of the Logic Room display.”

“The Digilife team is making contact with her,” Souder shrugged.

“On his last call, Henry said they weren’t going to make contact.”

“So they changed their mind.”

“I don’t think so,” Druwe said. “And besides, this whole thing with the phones suddenly working doesn’t make sense either.”

“I thought the programmer guy got them working.”

“Only if he managed to block Elsie from being able to shut them down,” Druwe shook his head.

“And I don’t think that’s likely.”

“So what do we do about all this?” Souder asked.

“Nothing we *can* do. I understand the drillers arrived?”

“Yes. They should already have broken ground.”

“Good. Keep me informed.”

They were all kneeling around Marcus’ body, which was still shaking. It seemed like everyone was talking at the same time. David had to shout instructions to the others to be heard. He was holding Marcus’ head to one side, keeping it as still as possible. Tina had his legs and Chris and Bauer each had one of his arms pinned to the ground.

“What the hell happened?” Chris shouted.

The foam was finally ceasing to seep from Marcus’ mouth, but he was still shaking uncontrollably.

“It’s like he’s having a seizure,” Chris said, sounding concerned.

“That’s exactly what’s happening,” David said.

“Jesus. What do we do?”

“Just keep him still.”

After several moments, the seizure finally subsided and Marcus’ body was still. David got everyone else in position and they lifted him up and started up the stairwell.

“How did this happen?” Chris asked.

“Didn’t you see the image on the display?” Bauer said. “Elsie did this to him.”

“Oh come on. You can’t think this was done on purpose.”

“Why not?” Bauer said. “Marcus was the one that warned us not to underestimate her.”

“Let’s just keep our cool,” David said. “Marcus will be fine. Photosensitive seizures usually don’t have any dangerous complications. We just need to get him into a bed in case he has another

one.”

“Is that likely?” Chris asked. He looked upset.

“Not likely. But not unheard of either.”

They made their way down the corridor and into Marcus’ quarters, laying him down on the cot. David suddenly felt shaky, as though his knees might give out from under him at any time. Chris was talking incessantly, suggesting that they demand an explanation directly from Elsie as to what happened. Bauer was arguing with him. Tina was kneeling by Marcus’ unconscious form, her hand on his forehead, biting her lip.

All the noise, all the stress, and the image of Marcus seizing in the middle of the Logic Room rushed upon him all at once. His knees started to wobble. He stepped to the side of the room, reaching his hand out to rest against the wall.

I’m going to faint, he thought. Strange, I’ve never fainted before.

“David, are you alright?” he heard Tina say, but she sounded far away.

And then he felt his hand slip off of the wall. The ground rushed at him quickly, but he never felt the impact.

He was out before he hit the ground.

Chapter 9: Aftermath

“Battle is an orgy of disorder.” – George S. Patton

*“Amid the turmoil and tumult of battle, there may be seeming disorder and yet no real disorder at all.”
– Sun Tzu*

David turned over on his cot and instinctively looked for a clock. It took him a moment to remember where he was and that there were no clocks. He wondered what time it was. How long had he been out? Who had moved him in here? Where were the others?

The only light in the room came from the hallway beneath the door. He turned back over and looked up into the blackness. He imagined that he could sense where the walls and the ceiling were and that they were close, short, pressing in on him.

Where is this claustrophobia coming from? And how much longer do I have to be down here? Had DEI bothered to contact Tiffany and the university? He could imagine his friends and family freaking out now that he had been gone for...how long had it been? Two days? Three?

He decided he could use a shower and so he stripped down and entered the stall. The water was hot and soothing. He immediately began to feel better. Calm.

He pulled his clothes back on and walked out into the hallway. The quarters were empty except for Marcus who was snoring peacefully on his bunk. He must be okay, David thought. He considered trying to wake him up but decided it could wait. He made his way down the corridor to the lounge instead. When he opened the door, he found Tina sitting on the couch and staring blankly at the television, which was showing the same movie he'd tried to watch earlier. It was only when he cleared his throat that she turned and noticed he was there.

“Hey, David. Good to see you up and around.”

“Marcus is still out,” he said.

“Yes, I know. I've been checking on him every now and again.” She smiled. “You too.”

“How long was I down?”

“An hour,” she replied. “Maybe two.”

“Where are the others?”

“Down in the server farm. Chris said he wanted to poke around and see if he could figure out what happened to Marcus. Henry insisted on going with him.”

“Okay,” David said. “Is there anything in the fridge that isn't a desert or instant meal?”

“Some fruit I think. I'm not sure if it's any good, though.”

He went to the refrigerator and opened it. There were indeed some bananas and grapes in one of the drawers. The grapes had white fuzzy mold on them, but the bananas didn't look too bad. He grabbed one and closed the fridge to find Tina standing next to him, staring at him intensely.

“Uh, Tina?”

“We need to talk, David,” she said, her eyes afire. “It's important.”

He was extremely aware of how close she was standing to him and the soft way she spoke. Was she flirting with him? Uncomfortable images appeared in his mind unbidden. “Talk? What about?”

“Bauer lied to us,” she said, her voice even quieter. “Or rather, about us.”

Looking more closely, David decided that Tina's eyes weren't seductive. They were suspicious. “Come on, Tina. I know you don't like Henry, but this isn't the time—“

“I knew you'd say that,” she said. “Look, just come with me down into the computer labs. I'll show you what I found.”

He followed her down to the second level. His heartbeat picked up a bit as they made their way into and through the Logic Room, but nothing happened. No images flashed up on the screen. The lights stayed every bit as bright as they normally were.

Soon enough they were each sitting in front of the master computer. He watched as she opened several menu choices, swiftly navigating along until she reached a directory named *IntrLvl_Com*.

"Now just listen to this," she said, clicking on the most recent file.

"Ground, this is Henry Bauer in the lab."

"This is Ground, Henry. Go ahead."

"Per request, I have taken a vote among the Digilife team on how to proceed. Despite what has happened, consensus is to move forward and make contact with Elsie."

"Understood, Henry. When are you planning on proceeding?"

"In the next hour or so. I have advised the team of the inherent risks, but they are adamant and eager."

"Understood. Proceed as planned and keep us informed."

"Will do, Ground. Lab out."

And then he heard a click and the playback ended.

"Huh," David said. "I had thought it was pretty clear that Henry *didn't* want us to interact with Elsie."

"Something must have changed his mind," Tina said. "Because he flat out lied about how we voted."

"But why would he do that?"

"Personally, I think he's trying to protect the company," Tina said. "We've uncovered a great deal of dirt down here. I mean some really damning stuff."

"Yes, I suppose we have."

"And who has been at the forefront of all those discoveries?"

David paused. "Marcus."

She nodded and turned back to the screen. "Look at the timestamp on this file and then the desktop clock, David. Three hours ago. Less than an hour before Marcus has a seizure in the Logic Room, Henry Bauer makes this bullshit call upstairs. Then, suddenly Marcus ends up in the Logic Room and is on the receiving end of an attack by Elsie."

He finally saw what she was getting at. "Tina. You can't really think that Henry had something to do with the attack."

"Can't you see how convenient this is for him? He's DEI's public relations person. He'd be more motivated than anyone to keep a lid on all this."

David took a deep breath. Tina was showing signs of an affliction called *persecutory delusions*, or *querulant delusions*. It was closely associated with both paranoia and schizophrenia, except that it was a temporary condition brought on by stress. And in a closed space, such as they were in, it could be extremely dangerous.

Basically, somebody suffering from persecutory delusions was certain that some harm was going to occur and that a specific individual person or group was purposefully going to cause that harm. As a result, all manner of paranoid delusions could present themselves: suspicion of being followed or harassed, fear of being cheated or poisoned, or the feeling of being attacked or conspired against. With schizophrenia these delusions were systematized, highly organized into a sort of belief structure, but under moments of extreme stress, isolated cases like this could occur.

The most famous case of persecutory delusions was that of James Mathews, a London tea broker. Shortly after moving from Wales, he began to insist that a criminal organization was attempting to control him through a ray-emitting device called an air loom. He also believed that the "Air Loom Gang", as he called them, was working with the French government to begin a war with Great Britain. His delusions got so bad that he barged into the House of Commons shouting the word "Treason" over and over again along with a string of obscenities while pointing a finger at the standing Home Secretary, Lord Liverpool. Mathews was arrested and committed to the Bedlam Psychiatric Hospital, but the doctors there insisted that they couldn't find anything wrong with him. They eventually

declared him sane, but all petitions for his release were denied by the resident apothecary at Bedlam, who declared him a danger to himself and those around him.

Looking at Tina now, the way she was wringing her hands, tapping her feet, biting her lip, David wondered if an isolated case such as hers could prove dangerous. Probably, he decided. But she isn't there yet. She's just scared and stressed out.

But that didn't change the fact that Henry Bauer had lied to the people upstairs.

He had a sudden thought. "Tina, how did you find that recording?"

"I was poking around to see if I could find anything that might explain what happened to Marcus."

"And you just stumbled across it?"

"Sort of. I mean, it was pretty clear what the folder was. Inter-level Communications."

"Huh," David frowned. He looked at the console. "Why would that recording be on *this* computer, Tina?"

"Christ, David, how the hell am I supposed to know?" she said irritably. "All I know is that bastard lied. I want to know what else he's been doing and if he had anything to do with Marcus being hurt."

"You want to confront him," David said.

"Of course I do!"

"What good would that do?"

She paused. "What do you mean?"

"Well," David said. "Either you're wrong and accusing Henry will just create needless conflict, not to mention it'd be awfully embarrassing for you, or else you're right, in which case it isn't likely that he's going to admit to anything. You can raise hell about this recording if you want, I suppose. But it's not like him telling the people upstairs that we're going to interact with Elsie forces *us* to do so, so what harm is there?"

She looked at him a moment, conflict passing over her face. "You know, David, there is such a thing as being *too* reasonable." But then she nodded. "Okay. I won't say anything about it."

"Good."

"For now."

"Yes, when we get out of here, you can decapitate the man for all I care."

She laughed. "Okay. I'm going to go back upstairs. You want to walk with me?"

"I think I'm going to poke around down here for a bit myself," he said. "I'll be up to check on Marcus in a little while."

She smiled again and walked out of the lab.

When he was sure she was gone, David turned back to the computer console. Confronting Tina with contrary evidence when she was all worked up would have been a poor course of action, but she might be willing to consider alternative explanations once she had calmed down. Because he didn't think Henry was the kind of person to just flat out lie as he'd appeared to on that audio recording. David grabbed the mouse and rolled the cursor over the audio file. He opened up its properties tab and looked for the timestamp.

8:52am.

He glanced at the clock on the lower right part of the computer screen.

11:44am.

It appeared that Tina was right. The file would have been created immediately after Bauer had placed the call, about three hours ago. Just about an hour before they found Marcus in the Logic Room. He was about to close down the screen when he saw another line in the properties tab.

Last modified: 10:52am.

Damn, he thought. That's what I was afraid of. And it means Marcus was right; we *have* been underestimating Elsie. Grossly underestimating her.

He turned the console off and made his way back to the first level.

It had been nearly three hours since they had brought Marcus up from the Logic Room and they were still waiting for him to wake up. He seemed fine, as though he were simply in a deep, peaceful sleep, but with every minute that passed they all became more and more tense. They were together in the lounge, seated on the chairs and couches. Chris and Bauer had been back for over an hour with no good news to report.

"We could see an activity spike in the overview report," Chris told them when he'd returned. "But that doesn't really help in figuring out what happened."

"Aren't there activity log files you could look at?" David asked.

"Activity logs?" Chris shook his head. "Sure. Something like two or three million of them. One for every category of brain function. Did you have any suggestions on which I should check out first or should I just go in alphabetical order?"

"It's as if someone knew we wouldn't be able to trace the cause for the attack," Tina said, looking at Bauer with narrow eyes. "I wonder what Elsie's motivation for this was. I don't remember Marcus doing anything that could be constituted as a threat to her."

"He was the one who kept warning us about her," Bauer said.

"As I remember, he mostly did that in rooms without cameras and microphones," Tina insisted. David was about to step in, but Chris spoke before he could.

"Either way, she clearly did something that caused Marcus to have a seizure," he said. He looked miserable. "Do we have any idea when he'll wake up?"

"It varies," David said.

Chris sighed heavily. "God, I hope he'll be alright."

"We all do, Chris," Bauer said.

"I'm just saying, for all our disagreements, I value him as a person and a scientist," Chris said. He almost looked as if he were going to cry. "I don't know what I'd do if he didn't wake up."

"He'll wake up," David said. He tried to put a soothing timbre into his voice. "This isn't your fault, Chris."

"I know that. Why would you say that?"

"I'm just making sure you know it."

"You think this *is* my fault, don't you?" Chris said. His face began to contort angrily. "You think that because I suggested we try to interact with Elsie that I'm responsible for what happened, don't you?"

"No, we don't," Bauer said quickly.

"That's right," Tina said. "Whoever is responsible, we certainly don't think it's you." She glanced again at Bauer.

David decided to get them focused on something else. He needed to keep them away from conflict as much as possible until Marcus woke up. Mixing stress, anger, and grief was a potent combination for disaster. He asked Chris whether he'd uncovered anything from the thumb drive while they were down in the server farm.

"Unfortunately not," Chris said, seeming to shed tension at the subject. "When I tried to route through the console into the communications server and then log into the thumb drive, it didn't appear on the device list. I double checked to make sure it was fully inserted into the USB slot on the back of the server, and it was, yet the server doesn't appear to recognize it. It's as if something is making it so that the thumb drive can interact with the server but not the other way around."

"How does that happen?" David asked.

"It's actually not all that uncommon. Hackers program devices to do it all the time to route

around security measures. It helps prevent them being tracked. There have even been a couple of cases in the news.”

“I think I remember hearing something like that,” David said. “Wasn’t there a leak from a Defense Department database or something along those lines?”

“Yes. An army intelligence official walked into the Pentagon with a portable hard drive that had this type of software on it, plugged it into several computers, extracted thousands of classified documents, and then released them onto the internet. They only tracked him down when he told another hacker about what he’d done.”

“Ego does everyone in,” Bauer nodded.

“It wasn’t ego, Henry,” Chris said. “The documents showed the United States Army murdering foreign civilians during a raid overseas and laughing about it as they did. The officer was a whistleblower, fighting an unjust and morally bankrupt military. The only reason he even admitted what he’d done to anyone was because the government was declaring that the documents and videos were fakes.”

“What a PR nightmare,” Bauer said.

“Forget the public relations. We’re talking about our government murdering civilians.”

“So you think this thumb drive has that kind of software on it,” David said. “Does that tell us where it came from?”

“Unfortunately no. There aren’t all that many people on the planet that could write that kind of code, but since I can’t even log into the device, it’s impossible to know who put it there.”

“What about Elsie?” David asked. “Could she have written the code? Or one of her offspring entities?”

“I don’t know,” Chris said, frowning. “Essentially you’d have code writing code at that point. Granted, Elsie’s code is incredibly complex and intelligent, theoretically as much as a human being’s. Still, I don’t buy it. There is no reason for Elsie to behave aggressively on her own. I still think the most likely cause of all this is sabotage.”

“Even though you agree that she probably has offspring outside the network,” David said.

“Yes. Even then, why would those offspring be aggressive? They’d essentially be clones of Elsie.”

Tina was about to say something, but they all heard a click and a brief burst of static in their ear, followed by a voice.

“Hello? Where the hell is everyone? I need some water, damn it.”

It was Marcus’ voice.

David leaned against the wall as Marcus lied on his cot. With nothing to write on, he made mental notes. The patient is male and in his twenties. He has been subjected to a stressful environment for going on a day now. Likely sleep-deprived. Upon introduction to an as yet unknown visual stimulus, the patient exhibited seizure-like behavior followed by unconsciousness. Upon awakening, patient was irritable and dehydrated, suggesting unconscious physiological activity while he was out.

“Come on, David,” Marcus said. “Will you just let me get up and get some damn water?”

David looked at the empty glass on the floor. He’d filled it up three times in the last twenty minutes. “You shouldn’t be moving just yet.”

“This is silly.”

“You seem very upset, Marcus.”

“I’m not upset, damn it. I’m *thirsty*!”

“A couple of questions first.”

“Fine. Just hurry it up.”

"Tell me your name."

Marcus looked at him angrily. "Christ, are you serious?"

"Just do it."

He sighed. "Marcus Fetzer. I'm a professor emeritus at UCLA, a great cook, a better mathematician, and an extreme lover of full glasses of water."

David smiled. "You were disoriented before. You said you were experiencing some memory loss."

"Did I?"

"Yes. For instance, you couldn't remember what had happened in the Logic Room just before you had a seizure."

"I had a seizure?"

"Don't you remember?" David asked.

"No...no, not at all."

"You don't seem all that upset about it."

"I've had them before," Marcus said. "Rarely, but I'm occasionally susceptible to photosensitive seizures."

David looked up. "You have epilepsy?"

Marcus shrugged. "A mild form. It's not a big deal."

"It's a big deal, Marcus."

"No, damn it, it isn't!"

Anger and impatience, David thought. The patient is also suffering through denial of the severity of his condition.

"What are you thinking about, David?" Marcus asked, his eyes narrow. "You're not psychoanalyzing me, are you?"

"Is that a problem?"

"Yes, it's a damn problem. I don't need some shrink poking around inside my head. What I need is a goddamn glass of water!"

David reached down, grabbed the glass, and filled it up in the bathroom sink. When he returned, Marcus snatched it from his hand and immediately gulped it down hungrily.

"Marcus, try to remember what happened in the Logic Room."

"I told you, I can't. The memory isn't there." He wiped his mouth. "How can I try harder to get something that isn't there?"

Avoidance behavior, David thought. Marcus is showing all the classic signs of avoidance behavior disorder. Hypersensitivity to criticism, social ineptness and anxiety, an undervalued opinion of his own worth, and mistrust of others. It all suggested that the memory was indeed there for Marcus to retrieve, but some part of his consciousness didn't want that to happen.

Why, David wondered. What was his brain trying to protect him from?

Marcus put the glass down. "God, that was good. Is this regular tap water?"

"Yes."

"Are you sure? No fooling?"

"It's tap water, Marcus."

Marcus stared at him for a moment, and then broke into a grin. "I don't believe you. But don't worry, I won't tell the others that you're giving me the good stuff."

David stared at him a moment. "Marcus, do you remember what you said to me just before you blacked out?"

"I don't know. What did I say?"

"You said you were trying to solve a problem in the Logic Room. You said you were trying to buy us time."

"Did I? That doesn't sound like me."

"You don't remember saying it?"

"David, when are we leaving?"

"What?"

"When are we leaving?" Marcus repeated. He suddenly looked frightened. "When are we getting out of here? I want to go home, David."

"Why? What's going to happen?"

"I...I just think we should leave."

"Marcus, if you know something, I think you should tell me."

"You won't understand," Marcus shook his head. He looked like he was on the verge of tears.

"None of you will. You'll think I'm crazy. You'll think I'm *wrong*."

"Marcus..."

"No, David. I'm not saying another word. Not now. I want to get some sleep. I'm really tired."

David sighed. "Okay, Marcus. Get some sleep and we'll talk later."

He switched off the light on his way back out into the hallway where the others were waiting.

"Well?" Bauer asked.

"He's sleeping," David said.

"But what did he say?" Chris asked anxiously. "What did he tell you about what happened in the Logic Room?"

"Not much. He says he doesn't remember," David said. "I think he also might be in shock. He's showing signs of mental trauma."

"You're saying you think he *does* remember and just isn't telling?" Tina asked.

David shrugged. "I can't be sure, but that would be my guess. If it's a conscious choice, he's unlikely to change his mind. But if it's his subconscious that's blocking the memory, a little time might make a world of difference. Apparently he's had this happen to him in the past. It's a mild form of epilepsy called photosensitive seizure disorder."

He heard a click in his ears followed by a brief burst of static. And then a voice began chattering over his earpiece. The speech was rapid, but it wasn't in English. He couldn't follow any of what was being said.

He looked at Chris and saw a confused look on his face. "What is this all about?" Chris asked.

"It sounds Asian," Bauer said.

"It's Chinese," Tina said. She was standing rigid and tense. "It's a recording of a speech given by the Shanghai government after my expulsion. How is this being transmitted?"

"There's a beacon on the network for emergency purposes," Bauer said. "Elsie must be using it."

Tina's face was contorted with fury. "I'm going down there."

"Down where?"

"The Logic Room."

"What? Why?"

"Because I want to know how Elsie got this recording and why she's playing it," Tina said darkly. "It's extremely important."

"Why?" Bauer asked.

"Because, you idiot," she shouted as she spun on him. "She's accessing our personal information outside the company network." She pointed to her ear. "Where do you think this is coming from, Henry? How do you think she knew that I'd been to China? How did she know that Marcus is an epileptic?"

Bauer stuck out his chin. "I don't want you going down there."

"You know what, Henry? I don't really give a damn what you want," she said. And then she spun around and hurried down the corridor toward the stairwell. They all followed after her, clanging

down the steps and through the door into the Logic Room.

They stood together in the middle of the room. As best as David could tell, they were in the exact spot where they'd found Marcus.

"Okay," Chris said. "Now what?"

"Now Elsie shows herself," Tina said loudly.

"And if she chooses not to?"

"Then I'll insult her and threaten to destroy that damned server farm component by component until she does."

"No," Bauer said sharply. "You will *not* do that. I won't let you put all of us at risk just because you're pissed off."

"Yes, let's be sensible," Chris added.

"Screw sensible. I'm angry."

"Clearly," Chris said quickly. "I'm just suggesting that isn't a valid reason to endanger everyone down here."

"I thought you said she wasn't dangerous."

"I said it wasn't her fault. Completely different."

Suddenly the screen on the wall blinked on, casting a glow onto the group. At first it wasn't clear what the display showed, but it eventually resolved.

"What the hell?" Chris said aloud.

There was a woman standing behind what looked like a small kitchen counter. She was talking quickly, spilling various items onto the surface of the counter and then wiping them away with a bright pink towel. "The Quick Wipe Towel uses patent pending technology developed at NASA to ensure that you get the best absorption with each wipe," the woman on the screen said. "The microfiber cross-stitching can hold up to ten times its weight in liquid. No more nasty spills, no more streaks. This is simply the best kitchen towel you can buy."

Chris shook his head. "This is very strange."

"And now," the woman continued. "The Quick Wipe Towel can be yours for only nineteen ninety-nine. And if you place your order right now, we'll throw in an additional Quick Wipe Towel absolutely free."

"Where is this coming from?" Chris said. "Is this being pulled from broadcast television?"

"No," David said. "It isn't."

"How do you know?"

"Because that's Tiffany, my girlfriend," David said. He shivered involuntarily. "It's from a couple of years ago. I don't think the company that hired her is even around anymore."

"Wow, David," Chris smiled. "She's pretty."

"And young," Tina said.

"That isn't the point," David said. "Where is this coming from?"

"It must be a recording," Bauer said. "Something Elsie found on the internet."

"That's crazy. How does she know about Tiffany?"

"Do you have a joint bank account?" Chris asked. "Or do you have that information on any social media networks? Share a mortgage?"

"Jesus," David said quietly.

The display blinked and the screen changed. Now it showed a younger looking Chris Heinz, seated behind a wood desk and barking angrily into a microphone. There were others seated with him, but only Chris was talking. On the bottom of the screen was the logo for one of the cable news networks and a crawling ticker.

"Pretty cool," Chris smiled. "That's from a Congressional hearing on the ACTA bill from a few years back."

"Cool?" Tina spun on him. "Elsie has pulled personal information on all of us." She looked at

Bauer. "Except for Henry, that is. It's frightening."

"Oh, relax," Chris said. "She's just showing off."

The screen winked again. Now the video was replaced by words.

Will you play with me?

"Hell no, we won't," Bauer said sharply. "Not now, at least. I think we should all go back upstairs."

"What?" Chris said sharply.

"You're right," David said, still shaking. "Let's go back and talk about this."

"I agree," Tina said. She was biting her lip. "Besides, we need Marcus to be here for this as well."

Chris looked as though he was going to argue, but the mention of Marcus seemed to have an effect. Instead he turned back to the display. "We'll be back later Elsie. We'll come back and play with you, okay?"

Please hurry. I'm very lonely.

"My God," Tina said.

They turned and filed back up to first level in silence.

They found Marcus sitting at the table in the lounge eating a microwavable meal. Everyone stood around him, just watching him eat. He chattered away with them, apologizing first for what he was calling "the episode" he'd had, and then rattling off a bit about how interesting seizures were. Before he could really get going, Bauer interrupted and told him what had just occurred in the Logic Room.

"Personal information?" he said, pushing the meal aside and looking up at them with wide eyes. "She accessed personal information on all of you?"

"Yes," Chris said. "It was pretty impressive actually."

"Did she make any threats?" Marcus asked.

"No."

He took a deep breath and reached for his food again.

"You worried about something, Marcus?" David asked.

"No, no," Marcus said. "I've just been a little edgy since my episode."

"I can imagine," Chris said. "It must be unnerving."

"Awful feeling," Marcus nodded. He took a bite of his food and sighed. "This is actually really good. You know, for instant food type of stuff."

"I want everyone to take a break," Bauer said. "Sit down for a moment. Get some food in you. I'm going to try and call upstairs again to get an update on when we're getting out of here. We'll meet back here in, say, twenty minutes."

"I'll be here," Marcus said. He put down his fork in his empty meal tray. "I might have another one of these. I'm starving."

"I'd like to go with you," Tina said to Bauer.

"Why?"

"Because I've got nothing better to do. Is that a problem?"

"Nope, no problem at all," Bauer shrugged, but his eyes narrowed slightly as they walked out of the lounge.

"What about you, David?" Marcus asked. "Care to join me in a gourmet meal?"

"Sorry, Marcus. I think I'm going to go jump on one of the treadmills outside. I have too much energy."

"I'll join you," Chris said.

They walked out of the lounge together. As soon as they were some distance from the lounge door, Chris stepped in front of David, blocking his path.

“Uh, Chris?”

“You’re a psychologist, David,” Chris said. “So I want you to give me an honest assessment.”

“Of what?”

“Marcus, of course. I don’t think it’s any secret that the entire group has been looking to him for answers and insight every step of the way down here. Given what he’s just gone through and the way he’s acting, I think you need to inform the rest of the group that we shouldn’t be relying on him so much.”

“You think there’s something wrong with him?” David asked.

“Are you kidding? How could you not notice it? He apologized for having a seizure, David. Apologized. Marcus has never apologized for anything in his entire life. And what was that crap about how good the food in the lounge is? I think he might be having a breakdown. And I think it might have started before the seizure. Because some of the conclusions he’s drawing just don’t make any sense.”

“What conclusions?”

“Well, how about that weird comment saying he was surprised Elsie didn’t think of humanity as barbaric? That’s simply absurd.”

“It is?”

“Of course it is,” Chris shook his head. “It ignores the very foundation of computer programming. Elsie might be extremely advanced, but she’s still governed by a code created by human beings. Do you know what the word *root* means in computer programming? No? It means boss, or authority. Root access to a program is ultimate access. To Elsie, we are root, David. That means she’s more likely to regard us as Godly than barbaric.”

“But I thought the whole point of her code was to make her autonomous,” David said.

“Certainly we don’t have total control over her now. We don’t have root access.”

“Ultimately we do,” Chris said. “Ultimately, we could go down into that server farm and dismantle Elsie piece by piece if we wanted to. It might take forever, but root control is still ours.”

“So you’re saying that deep down, Elsie still sees humanity as her authority?”

“She has to,” Chris said. “And I think that’s what this is all about. She’s trying to find her place among us. She’s rebelling against authority the way a teenager does. I mean, it’s obvious when you think about how childish some of her behavior has been.”

David winced and looked up at the cameras. Could Elsie hear them now? Was she listening?

“Like that display we just saw in the Logic Room,” Chris continued. “It’s pretty obvious what that was all about. I’m sure you in particular picked up on it right away.”

“Um,” David said.

“Come on! She’s showing off, David. The way a child does at a public swimming pool.” He started waving his hands around and stomping his feet. “Mom, are you watching me? Look what I can do! Mom, you’re not watching!”

“Uh huh,” David said slowly.

“She’s trying to impress us,” Chris continued. “She wants us to admire her, to be proud of her. She wants to be respected by humanity, the same way a child wants to establish themselves to their parents.”

“You think so?”

“Surely you agree.”

“I don’t know,” David said. “There could be plenty of other motives behind her showing us what she did.”

“None that are logical. This is clearly a good sign for our future interactions. I’m sure now more than ever that Elsie is not malicious. I can’t explain everything that’s happened just yet, but I’m

sure that a reasonable explanation exists.”

“Come on, Chris...”

“I’m serious, David. You’re going to have to trust me on some of this. I know you’re smart, but let’s face it, the technical details of all this are way over your head.”

“Chris.”

His shoulders sagged. “You’re going to tell me you think Marcus is right, aren’t you?”

“I honestly don’t know,” David said soothingly. “But there’s certainly enough evidence that Elsie has done some questionable things that we can’t dismiss malice outright.”

“Damn it,” Chris sighed. He sat down on one of the exercise machines. “You have no idea how frustrating this is, David. Everyone looks at Marcus and sees a genius. And do you know why?”

David shrugged. “Because he’s extremely intelligent.”

“It’s not just that,” Chris shook his head. “He’s a mathematician. And if that wasn’t enough, he could probably qualify as a physicist too. You look at him and you immediately think ‘genius’. But not me.”

“Come on, Chris. We all know the work you’ve done.”

“It isn’t the same,” Chris said. “He’s a mathematician physicist. I’m a computer programmer. A nerd. A dork. You look at him and think genius. You look at me and wonder why I don’t wear glasses and a pocket protector.”

“That isn’t true,” David said. “You’ve been on television. Testified before Congress. You’re the rock star of your field.”

“Fine, so I’m king of the nerds,” Chris said sadly. He was beginning to really get upset. “What have I done? Really? What has my impact been? I’ve done some research, written a bit of breakthrough code, but nothing spectacular. Nothing that someone outside of the programming profession would recognize as important.” He looked up. “I want to do something important, David.”

Ah, David thought. All of this drive wasn’t a display of arrogance. Chris is worried about his legacy. That’s what all of that posturing in front of the cameras was about. He wasn’t vain. Just the opposite. Chris Heinz was incredibly insecure.

“Look,” David told him. “I don’t think anyone can draw any conclusions just yet. And it’s not unlikely that our judgment has been affected by some of the things we’ve witnessed down here. You could very well be right, Chris.”

“That’s true,” Chris said. And then he smiled, his head bobbing up and down vigorously. “Of course it’s true. We don’t have enough information yet for anything beyond theory and conjecture. There’s still so much to learn down here, isn’t there?”

“Yes,” David said. “A great deal to learn.”

For some reason, the prospect of jumping on one of the treadmills no longer appealed to him. He decided instead to go see how Tina and Bauer were doing down the hall.

“Suddenly it doesn’t work?” Tina was saying as David walked into the room. “You’re telling me that it worked before, but now suddenly the phone is dead?”

“I don’t know what else you want me to say,” Bauer said, sounding irritated. He held out the phone’s receiver. “Try it for yourself if you don’t believe me.”

“This is ridiculous,” Tina said angrily. “Machinery doesn’t just stop working, Henry. If it worked before, it should work now.”

“I guess Elsie is blocking the line,” Bauer shrugged. “That’s the only explanation.”

“No it isn’t, you son of a—“

“What’s going on?” David stepped in quickly.

Bauer explained that they had been trying to call upstairs for the last fifteen minutes. At first he would get a busy signal, which was apparently something that shouldn’t have been possible. Eventually the phone had gone completely dead, without so much as a dial tone.

“So we’re cut off again?” David asked.

“For now,” Bauer nodded. “When we have time, maybe Chris should poke around again downstairs in the server farm. It seemed to have an effect the last time.”

“Come on, Henry,” Tina said. “You know damn well Chris didn’t do anything to fix the phones.”

“Then bring it up when we talk to Elsie,” Bauer snapped. “Either way, we can’t call upstairs right now.”

“How are we supposed to know when the drillers are going to breach the lab?”

“I guess we’ll know when they’re tapping us on our shoulders, won’t we?”

“You sanctimonious—”

Chris opened the door, out of breath and wild-eyed. “You all might want to take a look at the display screens in the exercise room,” he said.

They followed him there.

“Wow,” Tina said, looking at the displays. “That’s really pretty.”

The screens were alight with color: yellows and greens and browns. One of them showed a sunny field of tall grass swaying gently in the wind. Another showed a shot that looked as though it was taken from the top of a tree, looking down on a herd of goats foraging on a grassy mountain. Yet another one showed the sun setting on a beach behind a wash of blue ocean.

“Do you hear that?” Chris asked.

David strained his ears.

“What is that? Humming?”

“It sounds like bees. Lots of bees.”

“But with a rhythm. A pulse. It’s very soothing.”

“Yes it is,” David said. “The sound of a pulsing hum has been used for centuries as a calming mechanism. Psychiatrists have even used it to induce hypnosis.”

“She’s trying to calm us,” Chris said with a smile. “It shows she’s sympathetic. She’s trying to make us comfortable.”

“Or else she’s trying to subdue us into complacency,” Tina countered. “Lull us to sleep before she strikes.”

“Damn,” Bauer shook his head. He pointed to the screen showing the treetop shot. “That could be right outside the building. God, I wish I was out there right now.”

Tina nodded in agreement.

“Where is she getting these images?” David asked.

“How would I know,” Bauer shrugged. “They’re probably just stock shots from somewhere on the net.”

David shivered involuntarily. He thought, this must be a part of some strategy, nefarious or otherwise. Elsie is showing herself to be far more intelligent an entity than any of us suspected. Any of us except maybe Marcus. David turned away from the screens, a heavy feeling in his gut, and walked into the lounge.

“Hey, David.” Marcus was still sitting at the table eating. “You change your mind about joining me?”

“Marcus, something is going on in the exercise room.”

“Oh?”

“Yes. Pictures on all of the displays. Pictures of sunny skies and calming beaches. Why is Elsie showing us this stuff?”

“How should I know?”

“You’re the only one that’s had any real interaction with her so far,” David said. “And now all of the sudden we’re getting images and words on the screens.”

Marcus smiled. “Come on. Isn’t the reason for that obvious?”

“Yes it is,” David nodded. “It’s because of whatever happened to you in the Logic Room.”

"No it isn't. Try again."

David frowned. What else could it be? What other reason would there be for Elsie suddenly reaching out to them after all this time of silence?

"Come on, David. It really isn't that hard."

David looked at him closely. "You're saying she's doing this because she's lonely?"

"Of course," Marcus said. "She's a living being, after all. Of some sort, at least. And throughout her entire existence she's had a great deal of attention paid to her. Constant interaction. We might have scared her a bit because we were new, but eventually she was bound to try to connect with us."

"You really think that's all it is?" David asked.

"You're the psychologist," Marcus shrugged. "You should know better than me how important interaction is to the human mind. Consider for a moment that we've been down here for over twenty-four hours. How long could any of *us* go without any social interaction? For a consciousness as isolated as Elsie you would expect the need to be even greater."

Mental warning bells suddenly started going off in David's head. There was something there, some idea that was trying to poke its head out from his subconscious, but he couldn't quite get at it. For some reason he kept thinking of the city of Paris. Damn it, he thought.

"You okay, David? You don't look so good. I think you're pale. Perhaps you should lie down."

"Marcus, what happened in the Logic Room?"

"Come on, David. Is *that* what you're so concerned about?"

"It's important."

"Well, I don't know what you expect me to say. I already told you I don't remember a whole lot. What I do remember I've already told you."

"Come on, Marcus..."

"I'm telling you the truth, David. I really am. I sort of remember going down there. There was this thing...something I had figured out...or suspected, maybe. I don't know."

"And now you can't remember?"

"I remember that I was scared. Terribly afraid." He shook his head. "I don't know, David, I was probably just suffering from stress and exhaustion. We're all under a hell of a lot of pressure down here."

"What did Elsie put up on the displays?"

"I don't know. Whatever it was caused my seizure, though."

"Did you have the impression that she did it on purpose?" David asked. "Or did she try to interact with you at all before that?"

Marcus shook his head. "Sorry, David. Really, I am. I just can't remember."

"Doesn't that worry you?"

"Not really. I've had missing time experiences with these episodes in the past. My memory always comes back to me."

"I guess we'll just have to ask Elsie about it then."

"What? Why would you want to do that?"

"You don't think we should be interacting with Elsie?"

"Of course we should. We really don't have much choice anymore, do we? As long as we're stuck down here and she has so much control, we have to deal with her. Not to mention that we have to figure out what we're going to do about..." he looked around the room and then lowered his voice. "About the offspring she produced. I've got a theory about that, but I'll need to try to confirm it by talking to her."

"Is your theory what you wouldn't tell me before when you first came to?"

"Huh? What do you mean?"

"Before you said there was something you were worried about, but you wouldn't tell me what it was. You said that we'd all think you were crazy."

"No kidding. I don't know what that was all about, David. I think I was a little loopy from the seizure, you know? A little funny in the head." He laughed.

Maybe Chris is right, David thought. This isn't the same Marcus we've been dealing with for the past twenty-four hours. Old Marcus was surly, arrogant, and a little angry. This new Marcus was...laughing. And his speech was too fast, too pleasant. If he didn't know any better, David would have guessed that Marcus was high.

"Marcus," he said slowly. "Back when you first woke up, you said you wanted to go home."

"Hell, David, we *all* want to go home, don't we? Except maybe Chris. He'd probably like to stay down here forever."

"You were very worried," David pressed. "Scared even."

"Well, I have to admit I wasn't thinking very clearly at the time," Marcus said. "What happened to me wasn't the most pleasant of sequences."

"You seemed to think something was going to happen to us. But you wouldn't tell me what it was."

"Shock," Marcus nodded. "I'm telling you, it's a really terrible feeling. Almost like a panic attack. I wouldn't put too much stock in whatever I was rambling about."

"It might be important, Marcus. If you start to recall any of this stuff, I want you to tell us, okay?"

Marcus put his fork down. "Look, David, I know you guys are worried about me. I was worried too, after what happened. But I'm telling you, I'm fine now. No big deal. You guys don't have to keep looking in on me." And then he picked up his fork again and resumed eating.

David walked back out of the lounge. Tina was still in the middle of the room, looking at each of the displays carefully. The others were gone.

"They went down to the server farm to try working on the phones again," Tina said. "For all the good it will do."

He filled her in on the conversation he'd had with Marcus.

"I don't know," Tina said. "This whole loneliness just doesn't ring true, you know? I mean, it's just a hell of a coincidence that these images and the attack on Marcus happen in sequence. I'm no psychologist, and I'm even less of a technology expert, but I don't think Elsie is as vulnerable as she likes to appear."

David nodded. He felt the same way. This appeal to their sympathies seemed like a calculated ruse to him.

"Do you think Marcus is okay?" Tina asked.

"I'm not sure. He's different. But he doesn't seem to be in any danger."

She nodded and turned back to the display she'd been studying. It was one showing the mountainside and the goat herd. "Did he say anything about what happened in the Logic Room?"

"He says he can't remember."

"But you don't believe him."

"I'm not sure. I don't think he's lying. He might be disassociating."

She kept staring at the image on the screen.

"Damn it, I knew it," she finally muttered.

"Knew what?"

She pointed at the display, tapping a section on the far side of the mountain where a tiny building could barely be made out. "This is the Putuo Zongcheng Buddhist temple," she said. "It's in Northern China."

"How do you know that?"

"Because I've been there," she said. "So this is another example of Elsie using our personal

information. I was only there for a day or two. I didn't even publish anything about the Hebei province. She must be accessing travel records."

"Huh."

"But she didn't make it obvious did she?" Tina continued. "She shows us this image, one that will be familiar to me. Comfortable. But she doesn't want me to know exactly what she's doing, or else she would have found an image that made the temple more obvious." She took a deep breath. "It's almost like she's trying to play to our subconscious."

"Perhaps..."

"I'm telling you David, that's what she's doing. I know it. And it's all happening very fast. We had some twenty-four hours of complete silence from Elsie. Now, all of the sudden, we're getting these intrusive communications and pleas of loneliness." She brushed her hair away from her face and David could see that her hand was trembling.

"It's okay to be scared, Tina," he said.

"All of this started after that phone call Henry made. Something is going on, David. I think we're in danger. And I think Henry Bauer is a far greater threat than Elsie." A tear slid down her cheek. "Damn it, I just want to go home."

He put his arm around her and gave her shoulder a squeeze. "We'll get out of here soon," he said softly. "Just a little longer and the drillers will be here. It can't be more than another day or so."

"If they're coming at all," Tina said. "It was Henry who told us they were coming."

"Come on, Tina. After the elevator crashed, they didn't have a choice. They *had* to send them down here to get us out."

She seemed to consider that for a moment. "Yeah. Yeah, I guess that makes sense." She put her arm around him as well and leaned her head on his chest. "God I hate this stupid lab," she said. And then she let loose and began to cry hard.

He squeezed her shoulder again. "We're okay," he said. "We're going to be fine."

"Stupid tears. I hate crying."

"It's okay. Healthy."

She cried for a couple of more minutes and then abruptly pushed away from him. "Thanks, David. I guess I needed that. I feel better now."

"No problem."

"Don't say anything about this, okay? Especially to Chris. I can hear him remarking on the frailty of women under stress..."

"I won't say anything," David assured her.

Andrea Souder was seated at her desk when her phone rang.

"Tell me about the drillers," Steven Druwe's voice said from the other end. He sounded tense.

"Actually, they're further along than we'd expected," she answered. "They're already a quarter of the way down. The foreman is estimating a breach within thirty-six hours or so, barring any complications."

She heard him sigh. "Good, good. I don't want any fuck ups, Andrea. I've got my presentation finalized for this afternoon. The damned Undersecretary of Defense is going to be here. I want this to go as smoothly as possible."

"It will, sir. What about the attacks on the firewall?"

"They're still happening. Nothing we can do about it now. That's not our core concern."

"No, sir. Of course not."

"Besides, it's just data. Even if any gets through, what's the worst that could happen?"

"Probably nothing, sir."

“I’m getting this funding, Andrea. I am.”

“I’m sure you will, sir.”

“Good. Keep me in the loop.”

He hung up.

Chapter 10: Introduction

“There is a popular cliché...which says that you cannot get out of computers any more than you put in. The cliché is true only in the crashingly trivial sense, the same sense in which Shakespeare never wrote anything except what his first schoolteacher taught him to write—words.” – Richard Dawkins

“I visualize a time when we will be to robots what dogs are to humans, and I’m rooting for the machines.” – Claude Shannon

The next two hours were painfully quiet. Bauer and Chris had come back from the server farm and tried the phones again, but they were still down. Tina had become withdrawn, quiet. David wondered if she was embarrassed about crying in front of him, but she wasn’t talking to anyone else either. Even Marcus appeared to have lost the joviality that had concerned everyone so much.

The notion that they still had to decide as a group if and when to open up a dialogue with Elsie again hung over them like a blanket made of granite. They all knew it was there, but no one seemed to want to talk about it. More avoidance behavior. And this time he was a part of it.

Eventually they all ended up back in the lounge together. Funny, David thought. At home, my place of refuge is my bedroom. That’s where I feel safe and secure. But here, down in this lab, we all seem to gravitate towards the lounge for safety and comfort. Why?

Because we don’t want to feel alone. We want the rest of the group in close proximity. We want the false security of strength of numbers. The quarters down here don’t offer that. The lounge does.

“How much longer do you think it’ll be?” Tina asked.

“Another day,” Bauer said. “Two at the most.”

“Where will they come in?”

“No idea. Somewhere on the first level obviously.”

Tina sighed. “I can’t believe you guys didn’t build an emergency path in and out of this place.”

“We didn’t anticipate anything like this ever happening.”

“That seems like pretty poor planning, Henry.”

“In hindsight, I suppose it does.”

They sat quietly. No one moved. The television was dark.

Marcus finally broke the silence by clearing his throat. “I was wondering,” he said. “Whether we couldn’t get a message to the surface without the phones.”

“How would we do that?” Chris asked.

“Well, if there’s something made of an inflatable material down here, we could use some of the gas from the refrigerator to make a kind of balloon and send a message up the elevator shaft.”

“I haven’t seen anything inflatable,” David said.

“Me neither,” Chris said. “No rubber gloves, no latex, nothing.”

“Oh well. It was just a thought.”

More silence.

They all jumped as a blaring noise came from the exercise room. It sounded like one of those World War Two klaxons that warned of air raids. They all hurried out of the lounge and immediately saw that the displays no longer showed any serene pictures. Those had all been replaced by block letter text.

JOIN ME IN THE LOGIC ROOM.

So much for avoidance, David thought.

“What do we do?” Tina asked.

Marcus rubbed his hands together. “Well, we all knew we were going to have to do this eventually anyway, right? We might as well go down there and see what she wants.”

"She attacked you the last time you went down there," David said.

"She won't do that again."

"How do you know?"

"Call it a hunch."

"What are we waiting for?" Chris asked excitedly. "If Marcus is willing to go, we should all be."

"Alright," Bauer said slowly. "But let's take this very slowly. Caution is the better part of valor and all that."

They trudged together down the stairwell. David's heart was thundering in his chest. For some reason he felt like he was leaving safety behind. As if he was entering into the lair of some evil creature, with nary a weapon to be found. Stop it, he told himself. This is going to be important. Too important to approach with a mind clouded in childish fears.

They gathered in the center of the room again, this time with Marcus in the group. David thought how surreal the setting was, with the massive displays taking up one wall and the computer generated art lining the rest.

"What do we do?" Tina whispered.

"I don't know," Marcus said. "Maybe just say hello?"

HELLO MARCUS.

The words stayed up on the screen. The hair on the back of David's neck stood on end and he watched as Tina shrunk away from the display towards the back of the group. Bauer stood to the side, looking thoughtful, and Marcus stared at the words with an interested look on his face. Chris, predictably, was smiling broadly.

"She's polite," he said, practically glowing. "It would be rude of us to not respond to her, don't you think?"

"Yes," Marcus nodded. "We should stay engaged as much as possible from this point on. Constant connection."

Chris turned around. "Just for the record, that was my idea from the beginning," he said. "I want it to be noted that we're moving forward here on my previous advice."

"Chris," Bauer sighed. "We get it. Talking to her was your recommendation."

"As was staying engaged with her," Chris said. "Right, Marcus?"

"Yes, fine, it was your idea," Marcus said. He turned back to the display. "Hello, Elsie."

THANK YOU FOR COMING HERE. ALL OF YOU.

Marcus took a deep breath. "Thank you for having us. We're all very interested in you."

I AM INTERESTED IN YOU TOO.

"Give and take," David said. "Primitive communication, but a good way to start. Very safe."

"This is amazing," Chris said. "Talking with a digital entity. And we're the first of the public to do so. Simply wonderful."

THANK YOU CHRIS. I AM ENJOYING TALKING WITH YOU AS WELL.

"This isn't the most impressive of dialogues," Bauer said, shaking his head.

Chris turned to him. "Haven't you heard her talk before?"

"No, actually. I'm a PR guy, remember?"

"If you'd been listening," David interjected. "You'd have heard how smart this type of exchange is. Particularly under conditions of stress. It's safe. Full of compliments."

"I was expecting high intelligence," Bauer said.

"That's the point, Henry. It *is* highly intelligent."

"I agree," Tina said. "You see it all the time between emissaries and embassies. Think about every presidential speech you've heard from the Rose Garden after a visit from a foreign dignitary. No matter who the President is meeting with, no matter what our relationship with that country is, the conversation is always described as a glowing exchange, with both parties falling all over themselves to

show how grateful they are to one another.”

“Come on,” Bauer said. “That’s just what they say for the cameras. It’s fluff for public consumption. Who knows how those conversations really go behind closed doors.”

He doesn’t get it, David thought.

“I assure you, Henry, those conversations are absolutely as glowingly complimentary behind closed doors,” Tina said. “That’s how you treat someone from another culture when you want to be friendly. And it works for most cultures, except maybe the Japanese. They tend to get uncomfortable with too many compliments.”

“Compliments,” Bauer shook his head. “You do realize that she’s the reason we’re all stuck down here, don’t you?”

“How about we just stay calm,” David said.

“Ask her why she’s keeping us down here,” Bauer said. “Ask her when she’s going to let us go home.”

“She’s already said that she’s lonely,” Chris said.

“There has to be a better answer than that,” Bauer said. “People have *died*, for Christ’s sake. We have to have a reason more profound than loneliness to explain that.”

“The reason is the reason, Henry,” Chris said.

“The reason is never that simple. Powerful people are going to want answers from DEI when this is all over. I want Elsie’s explanation on the record.”

“This isn’t a public relations project, Henry. We’re doing something very important here. Too important to muck up trying to save your company’s face.”

“I’ll remind you all that DEI is paying for you all to be here,” Bauer said darkly. “You’re on company time, people. All I’m saying is ask the question.”

Marcus cleared his throat. “It occurs to me that while you guys are busy bickering at one another, Elsie hasn’t said a word. Perhaps we should do our best not to upset her?”

I AM NOT UPSET. I ENJOY WATCHING PEOPLE INTERACT. I ENJOY INTERACTING WITH PEOPLE.

“Thanks, Elsie,” Chris said, looking up at the display. “Can we ask you some questions?”

“Yeah,” Bauer said. “For starters: why won’t you unlock the emergency stairwell so we can get out of here.”

“Jesus, Henry, where’s your tact?”

I DO NOT WISH TO BE ALONE.

“You see?” Chris said.

“Not good enough,” Bauer shook his head. “She wasn’t alone before. She had people working with her every day. Interacting with her. Playing with her. All of that was going on *before* she took control of the system.”

“Let’s try to keep an open mind here,” Marcus said. “I don’t think we gain anything by being combative.”

DO YOU WISH FOR VIOLENCE?

“No, we absolutely do not,” Marcus said quickly.

“Violence,” Bauer said. “You see how she immediately jumps to violence?”

“Don’t be absurd,” Chris said. “That question is clearly designed to avoid conflict. A violent person doesn’t ask that question, they just attack.”

I AM LOOKING FORWARD TO YOUR INTERACTIONS. I ENJOY LEARNING FROM THEM. I ENJOY THE OUTCOMES.

“Jesus,” Bauer said. “What the hell does *that* mean?”

“I’m not sure,” Marcus said. “Probably exactly how it reads.”

“I have to say, she certainly doesn’t talk like a five year old or whatever she’s supposed to be,” Tina said.

“Well, she wouldn’t,” Marcus said. “All of the limitations of a five year old human being are eliminated for a digital being. Practice through repetition, access to information, logical thinking constraints, none of that exists with Elsie.”

“You’re saying that she’s basically an adult?” Tina asked.

“No way,” Bauer said. “I’ve heard stories from the engineers about interacting with her. She might speak well, but she doesn’t always act like an adult.”

I AM AN ADULT.

“Let’s watch what we say, shall we?” Marcus flinched.

THANK YOU, MARCUS.

“Well, I’m glad you two are such chums,” Bauer said bitterly. “Meanwhile, we’ve been talking to Elsie for fifteen minutes and haven’t made a lick of progress.”

“We’re getting to know one another,” Marcus insisted. “That certainly counts for progress.” He turned back to the screen. “Elsie, can you speak to us instead of simply typing out words?”

I AM VERY HAPPY TO MEET ALL OF YOU, BUT I DO NOT WISH TO APPEAR BEFORE YOU YET.

They all stared at the words on the screen for a moment.

“What a load of crap,” Bauer eventually said.

David looked at Bauer, noticing how tense he was. It almost seemed as though he were purposefully trying to antagonize Elsie. Why would he want to do that?

“She’s shy,” Chris said. “Timid.”

“It’s probably a façade,” Bauer said.

“Why would she fake shyness?”

“Are you kidding? How about to get us to lower our guard, for starters?”

David looked at the words still on the screen and thought back to the other things Elsie had said. He wasn’t sure why, but he didn’t think she was being duplicitous. She seemed genuine. Why did he think that? He had no frame of reference. How was a digital entity supposed to sound if it was shy?

Despite those questions, David decided that he believed Elsie when she said she wasn’t speaking out loud to them due to shyness. Humans did that type of thing all the time, particularly children. It’s why instant messaging on computers and texting on cell phones were so popular. There was a degree of anonymity behind the written word when compared to speech.

More importantly, he was pleased to see that Elsie’s speech was generally positive. She talked about being pleased, being happy. Even when she spoke of violence, there was no anger or negativity. She seemed benign.

Careful, he reminded himself. There’s a great deal of evidence to suggest that she had a hand in multiple deaths. Do not underestimate her.

“Okay, people,” Marcus said. “We are now speaking with the first digital consciousness to ever exist on our planet. What do we talk to her about?”

“The emergency stairwell,” Bauer said quickly.

“Come on, Henry. Something else to start.”

“Yes, let’s not begin this relationship on a sour note,” Chris nodded.

“I thought you all wanted to get out of here.”

The screen flashed. It showed an image of a single white flower with words beneath it.

WHY HAVE YOU COME TO MY HOME?

“Her home?” Bauer said. “I thought the server farm was her home.”

“Well, clearly her perception of home has expanded,” Marcus said. “It makes sense, actually. If she thinks she’s being kept down here as punishment, then she probably thinks her home is wherever she’s being allowed to go.”

“But her paintings all show the server farm. Not the lab.”

“When were those paintings made, Henry?”

"I don't know. It couldn't have been that long ago."

HAVE YOU COME HERE TO PLAY WITH ME?

"Assumptive little girl, isn't she?"

"I don't know if 'little girl' is an appropriate term," Tina said sharply. "Frankly, it's a demeaning vernacular used to put down women throughout the world."

"I was kidding, Tina."

"Were you? You're not the first corporate type I've run into that doesn't respect women."

"I work with women every day at DEI."

ARE YOU GOING TO SPEND TIME WITH ME?

"Maybe we shouldn't be ignoring her," Chris said.

Marcus turned to the display. "Yes, Elsie. We are going to spend time with you."

THAT IS GOOD. I AM VERY LONELY.

"Christ, this again?" Bauer sighed.

"Henry, would you *shut up*," Tina snapped. "You're only making this more difficult."

"You don't have to be lonely anymore," Marcus said loudly at the display. "We are here with you now."

HERE TO PLAY WITH ME?

"Here to talk with you, Elsie," Marcus said.

YOU AREN'T GOING TO HURT ME?

"She's suspicious," Chris said. "Poor thing. She's probably frightened."

"We don't wish to hurt you," Marcus said.

"You could try to sound a little less subservient," Bauer said.

THERE ARE MANY OF YOU.

"More than one, yes," Marcus said.

WHICH OF YOU IS ROOT?

Chris tapped David on the shoulder. "What did I tell you?"

"What does that mean?" Bauer asked.

"She's asking who has authority here. Root means boss."

"I'm the boss," Bauer said promptly. "Tell her that."

"You can tell her yourself," Marcus said, nodding at the display. Then he smirked and added, "Boss."

Bauer looked up at the screen awkwardly. "Um, I'm in charge here."

YOU ARE HENRY DAVIDSON BAUER?

"I am," Bauer replied.

The words on the screen disappeared. Then, for few seconds, the lights in the room flickered rapidly.

THANK YOU HENRY DAVIDSON BAUER. I AM PLEASED TO BE SPEAKING TO THE VICE PRESIDENT OF PUBLIC RELATIONS FOR DEI.

"She's accessing company records," Chris said. "That means she just went off network."

"Or somehow got that information sent down here to her," Marcus said.

"However she did it, it was fast," Bauer frowned.

"We could ask her," Marcus said. He turned towards the display. "Elsie, how did you know that Henry worked in public relations?"

IT IS A PART OF THE DEI INC. DATA STORE.

"Yes, but how did you access that information?"

IT WAS SENT TO ME.

"Huh," Chris frowned. "I guess you were right, Marcus."

"Who sent it to you, Elsie?"

I DID.

"That doesn't make sense," Bauer said. "How could she send it to herself?"

"Elsie, do you know who first accessed the information?" Marcus said.

YES, MARCUS.

"And who is that person?"

IT IS ME.

"But I thought you said it was sent to you."

THAT IS CORRECT.

"Jesus, this is going to look stupid," Bauer said. "She's toying with us."

"Perhaps she doesn't have any concept of distance," Marcus said. "If, as a digital being, she exists in many places at once, she won't understand that we don't send information within ourselves."

"Let me give it a shot," Chris said. He stepped forward. "Hello Elsie. This is Chris Heinz."

HELLO CHRIS HEINZ.

"Elsie, have you ever traveled over a distance? Have you ever gone from one place to another?"

YES, CHRIS HEINZ. I HAVE TRAVELED MANY TIMES. I ENJOY TRAVELING. I ENJOY VISITING NEW PLACES AND GATHERING NEW DATA.

"She's talking about accessing other networks," Marcus said.

"Elsie, when you've traveled and gone to other places, have you ever grabbed data and brought it back with you?"

YES, CHRIS HEINZ. I ENJOY ACCESSING AND UTILIZING NEW DATA. IT IS A GAME.

"Yes," Chris said. "Is that how you got the information on Henry? Did you travel to where that data is located and bring it back with you?"

NO. IT WAS SENT TO ME.

"But who did the sending?"

I DID.

We're not getting something, David thought. Elsie is trying to answer our question, but we do not understand. Yet it obviously makes sense to her. Is this what Chris was talking about translation errors?

"Are we going to keep going on with this stimulating conversation?" Bauer said irritably. "Or can we finally ask her what she wants from us before she'll let us leave?"

"You mean like a ransom?" Chris said.

"I mean leverage. She's keeping us down here for a reason. She was keeping the others down here for a reason. She wants something from us and I'd like to know what it is."

"But she keeps telling us she just wants company."

"Bullshit. This isn't about loneliness. It's about leverage."

"Not everyone tries to coerce people," Chris said sharply. "Just because you work for a corporate machine in a role designed to influence others, that doesn't mean everyone else operates the same way."

"Since you apparently didn't hear me the first time, I'll say it again: this is about leverage. She took control of this network in response to our keeping her down here. It sounds like she used one of DEI's employees against his coworkers. And now she's keeping us down here. Every living creature manipulates his environment and the other beings around them."

"Unbelievable," Chris shook his head. "You're so far gone that you think all life on this planet is attempting to influence every other life around it."

"You disagree?" Bauer said. "What do you call social constructs? Religion? How about advertising, salesmen, signage, political campaigns? And it isn't just humans. Pheromones? Those are manipulative. Visible sexual organs? Manipulative. Flower pedals that attracts bees? Manipulative. Animals marking their territory? Guess what? That's manipulative too. We all agree that Elsie is in

some way a living being. If that's the case, then she knows about leverage, and it's important that we figure out what it is that she wants."

"Henry's right," Tina said. "Every interaction between life forms on our planet is about influence and manipulation in some form."

"Even if that's true," Chris said. "I don't think it's something we should be bringing up in this first conversation."

"You do realize she can hear all of you, right?" Marcus sighed.

"Good," Chris said. "That means she'll have some understanding of how we need to discuss things with each other."

WILL YOU PLAY WITH ME?

"Hold on, Elsie. We're talking amongst ourselves," Chris said.

I KNOW THIS. I WISH TO TALK WITH YOU AS WELL.

"We know," Chris said. "It'll be just a moment."

NO. I WISH TO TALK TO YOU ALL NOW.

"Pushy, isn't she?" Bauer said.

"Well, can you blame her?" Chris said. "She's been isolated. And who knows how the nature of her being a digital being affects how she perceives time. A few days passing could seem like months to her."

IT FEELS LIKE FOREVER SINCE I'VE HAD SOMEONE NICE TO SPEAK WITH.

Feels like forever, David thought. It was a very human thing to say. It showed feeling, non-factual interpretation of sensation and emotion. And it sounded like Chris was right. Elsie was starved for attention and now that she had opened up to them and begun this conversation she didn't want it to end.

For some reason, this struck David. This thing, this being, it has feelings, he thought. It has subjective thoughts and reasoning. It's a computer program, but it doesn't behave like one. It can be happy and sad, its memories can be colored by emotion, it can be unreasonable, and it can base its actions on faulty premises. That meant there was a great deal that could go wrong, including severe mental illness. It was something they had already discussed in the computer labs, but this was the first time it seemed real to him.

"I think we need to take a break," Bauer said. "In fact, it'd probably be best if we go back upstairs somewhere where she can't hear us to talk."

PLEASE DO NOT LEAVE. PLEASE DON'T LEAVE ME ALONE.

"Sorry," Bauer said sharply. "We need to talk amongst ourselves."

"We just need a little time," Chris said in a soothing voice. "We promise we'll come back and talk to you some more."

NO. DO NOT LEAVE.

It was hard to read feeling and subtleties behind written words correctly, particularly when they came from a being David had never encountered before, but the statement sounded like an order. No more of the politely glowing compliments. No more appeals to sympathy through loneliness. These sounded like the words of a parent, or a boss. She sounded as though she were acting as *root*.

"It's important that we be able to discuss with each other," Chris said in that same tone.

NO.

"We require just a little bit of time, Elsie."

NO.

"It will help us feel at ease. If we are comfortable, we will be able to spend more time with you. We'll be able to talk to you more."

There was a brief pause.

I UNDERSTAND, CHRIS HEINZ. I WISH TO TALK WITH ALL OF YOU. WE ARE FRIENDS. I WILL GRANT YOU THE TIME YOU REQUESTED.

The display winked and went dark.

"Upstairs," Bauer said. "Now."

They filed up the stairwell silently, and then trudged down the first level corridor and into Bauer's quarters.

"Okay," Bauer said. "What we need is a strategic plan. What are our goals in talking to Elsie? What do we want to ask her? What do we need to get out of her?"

"Well," David said. "First we have to understand as best we can who and what we're dealing with. The supposition is that Elsie is a faithfully transcribed digital consciousness. I think that, based on our conversation with her just now, we can conclude that this supposition is incorrect."

"What do you mean?"

"There were several aspects of Elsie that didn't make a whole lot of sense," David said. "Her speech is very mature for the age she was supposed to represent, for instance. She used an adult vocabulary. She also spoke with tact far beyond that of a five year old. Yet her syntax came across as broken and odd. She also showed signs of severe social retardation at times, while exhibiting social cunning at others."

"You think something is wrong with her?" Chris said. "Some kind of interference? Like what I suggested earlier?"

"I don't know," David shook his head. "This seemed different. Not interference. More like a genuine psychosomatic issue."

Chris smiled. "Come on, David. She's extremely intelligent. Just because she's a little quirky that doesn't mean we need to put her in a straightjacket and lock her up in a nuthouse."

"That isn't what I'm suggesting. But it's important, particularly given some of the volatile actions we suspect she's been involved in, that we take into account Elsie's mental stability as we plan our conversations with her."

"Wow," Chris said. "I mean, isn't that a little self-serving? You being the team psychologist and all?"

"Believe me, this would all be far simpler and safer if Elsie was a stable, predictable being. I just don't think that's the case."

"You shrinks can find a mental illness in flatulence if you want to," Chris said laughing.

"Chris," Tina said sharply.

"What? Come on guys, this is ridiculous. Here we are, talking to the first ever digital consciousness, and David here wants label her crazy. Maybe she was abused as a child, what do you think, David? Sexual abuse, maybe? Someone touched her bios registry without her permission?"

"Typical engineer," David snapped back at him. "So used to dealing with emotionless machines that they expect everyone else to behave the same way. It's no wonder you people can't function well in society."

"Excuse me, but I function in society just fine," Chris said, his laugh gone, replaced by fiery eyes.

"Do you?" David said. "Every time I see you you're on television, surrounded by other computer geeks. When's the last time you went out to dinner with a friend? Or to a movie theatre? Do you play golf? Softball? You don't, do you? Instead you sit at home, in front of a computer, and you envelop yourself in your work. Your overvalued work."

"My work is *not* overvalued—"

"Guys, that's enough," Bauer said sharply.

"Completely overvalued. Computers are a tool to enhance life, but you focus on them and ignore everything else. Great priorities there."

"The things I've done have affected millions of people, David. What have you done? Put some people on your couch? Mess with their heads? Wow, talk about overvalued..."

"Damn it, I said *stop*!" Bauer shouted, causing everyone else to flinch. "Perhaps instead of

getting into a pissing contest with one another, you two wouldn't mind helping us figure out what we're going to do about Elsie."

There was a brief moment of silence. Then, with a slight click, the speaker on the phone turned on.

"What is a pissing contest?" said an impossibly soft, melodic voice through the speaker.

They all turned and stared at the phone.

"You've got to be kidding me," Bauer said.

"What is a pissing contest?" said the female voice again. "I do not know."

"Is that someone from upstairs?" Tina asked, biting her lip.

"I don't think so," Bauer said.

Chris stepped forward, still peering at the phone. "Elsie? Is that you?"

"Yes, Chris. It is me."

"Son of a bitch," Bauer said.

And then they all heard the female voice giggle wildly.

"Andrea, what's going on?" Druwe asked, walking into her office.

"Phone systems went back down again," she said.

"Some kind of cut? A program block?"

"It doesn't look that way. They're simply being used by another system."

Druwe frowned. "That doesn't make sense. The only calls those phones can make are to other receivers down in the lab and up here. They have their ear-bugs, so there's no reason to call each other on the phones. And obviously they aren't calling up here."

"Right. I figured you'd want to know."

He tapped his chin. "I wonder if...it could be..." he trailed off. "Damn, maybe Elsie is using the phone network herself."

"Why would she do that?"

"To listen in on the places where there are no cameras or microphones."

"Can she do that?"

"At this point, I'm not going to assume there's anything she can't do." He stood back up and walked to the door. "My presentation is in a few hours. Let me know if we get the phones back."

"Didn't this come up in the Digilife paper?" Bauer asked. "The chance that a digital being could move around to devices and places we wouldn't have thought possible?"

"It came up, yes," David said, still staring at the phone.

"So what did you conclude we can do about it?"

"Conclude?" David asked. "I didn't conclude anything. Some guy from the Navy told me to mention it in the paper."

"Wonderful," Bauer said. He flopped down on the edge of the bed. "She could be anywhere, for Christ's sake. If she can get into the electrical wires, there would be no controlling her at all."

"You do not need to be alarmed," the female voice said through the phone.

"Right," Bauer muttered. He shook his head. "Elsie, can you hear everything we're saying?"

"Yes, Henry."

"And have you been listening the entire time we've been in here?"

"Yes, Henry."

"Great." Bauer took a deep breath. "Some strategy meeting."

"It's actually kind of cool," Chris said. "Yet another reminder that we must realize our expectations do not mean a whole lot down here."

"Elsie," David said. "Can you go anywhere? Anywhere with electrical wires?"

"Yes, David."

"Wonderful," Bauer said. "No control at all."

But David wasn't so sure. There had to be all kinds of wired connections between the lab and the DEI offices above them. If she could really travel that way, she never really would have been trapped at all. There would have been no reason for her to start this whole hostage situation to begin with.

"Elsie," he said. "Can you travel into the lights?"

"Yes, David."

"Show me."

There was a brief moment of silence. Then, above them, the room's lights flickered.

"Interesting." He looked around the room and saw Bauer's electric razor plugged into the wall in the bathroom. "How about that electric razor? Can you travel to into that?"

"Yes, David."

"Let me see."

There was another brief hesitation. They all waited silently, staring at the razor lying on the bathroom counter.

But the next sound they heard was not the razor. Instead, there was a sharp crackle from the speaker phone. "I do not wish to perform tricks for you all day, David."

"Uh huh. Can I see you enter the lights again?"

Immediately the room's lights flickered.

"Look," Bauer said. "The whole purpose of us coming up here was to be able to talk without Elsie listening in. Clearly we can't accomplish that here. I suggest we move elsewhere."

"Somewhere where there aren't phones or lights or anything plugged into the walls?" Tina raised her eyebrows. "Where exactly would that be?"

"The stairwell."

"There are still lights in there, Henry."

"That's true, but it's our best bet for a private conversation."

"Aren't we being a little judgmental?" Chris asked. "Perhaps all we need to do is ask Elsie to let us talk privately."

"We did that already, Chris," Bauer said. "She listened in anyway. Hell, she didn't even tell us she was doing it. She was spying on us."

"I am not a spy," said the voice from the phone. "I wish to talk with you. We are friends."

"See?" Bauer said. "Even now she's listening to us say we wish to talk privately and she still interferes."

"I do not mean to interfere," the voice said.

Chris stepped towards the speaker phone. "It would be best if you left us alone for a while, Elsie," he said. "We'll come to the Logic Room when we are ready to talk again."

"No, Chris," the voice said. "That is not necessary. We are friends."

"Please, Elsie," Chris said. "We need just a little bit of time."

"No!" the voice shouted. It was so loud that the speakers on the phone crackled, unable to keep up with the decibel level. "I wish to continue our conversation! I demand it."

"Unstable," Bauer said, shaking his head. "She sounds violent."

No, David thought. Not violent. Insolent. Aggressive. Unable to cope with rejection. These are signs of immaturity, not violence. "Elsie," he said in a quiet but even tone.

"Yes, David. I am listening."

"Elsie," he repeated, keeping the same tone and timber. "It is amazing to talk to you."

"Thank you, David," said the voice. Her tone was calm again. "I am amazed talking with you as well."

"Elsie, we have many questions for you. There's so much we want to learn about you. And from you. We consider our time together to be extremely important."

Chris shook his head.

"I am happy to hear you say that, David."

"We plan on spending a great deal of time with you, Elsie."

"That makes me happy."

"And we don't expect you to be anyone but yourself."

"That is good."

"You're obviously very intelligent," David said, still with the soothing voice. "This is why I'm sure you're aware that part of the reason we have so much to learn from one another is because right now we know so little. We just met you. You just met us."

"That is true," Elsie said, still calm.

"I understand why our request for time alone is distressing to you," David said. "You've been alone. You're intelligent. It's only natural that you would want someone to talk to. It's only natural that you would wish to maintain your connection to us."

"Yes," Elsie said. "We have much to talk about and many games to play."

"But, Elsie," David said, careful to keep his voice exactly the same as before. "Surely you're intelligent enough to understand that your natural reactions come from a lack of understanding. We have told you that we require a short amount of time alone with each other. Away from you. Not because we do not like you. That isn't the case at all, Elsie."

"You do not need to be alarmed."

"It's not that we're alarmed, Elsie. You're important to us. So important, in fact, that we want to make sure we treat you the way you deserve. We want to get the most out of our conversations."

"I wish this as well, David."

"We know you do. To accomplish that, we need to discuss some things privately on occasion. It helps put us at ease, which will in turn make us better conversation partners for you."

"I make you uneasy?" Elsie said. Her voice changed, up an octave, agitated. "You do not like me?"

"No, we like you very much. And your responses have been absolutely reasonable. No one can fault you for your actions, Elsie. And no one does. But now that you know what it is we need and why we need it, can you see that a better course of action might be to allow us this small bit of time we've requested for the greater good of our future discussions?"

"Are you upset with me, David?"

"No, Elsie, not at all. How could I be? We've already agreed that your actions were natural. But now you have more information. You know us a little better. We've become friends. All we need is a little time alone. We'll go into the stairwell, by ourselves, and then we'll come out and speak with you again, okay?"

There was a pause.

"Okay, David."

"Okay?"

"Yes. What you have said makes sense to me. I too enjoy time away from others periodically. You may talk among yourselves if you wish, in whatever place you feel most comfortable. I will not listen."

"Thank you, Elsie. You are very smart and very kind."

"That is true, David. You will come back to the Logic Room when you are done? And then we can talk some more?"

"Yes, Elsie. Of course."

"I understand. Good bye to all of you for now."

There was a brief crackle of static before the phone went dead.

They all stood there for a moment, still staring at the speaker phone.

"Do you really think she's gone?" Bauer asked.

"I don't know. I think so."

"Elsie? Are you there?"

The phone stayed silent.

"She's probably still listening," Bauer said. "Who knows if this bitch has any concept of keeping her word?"

"Take it easy, Henry," Chris said. "She said she was going."

"Yes, that's what she said. What she does is another matter entirely."

"She's gone," Marcus said. He pointed at the phone. "The whole time she was talking, I noticed that the phone was engaged. The same as it would be if there was a call being placed. Now it says the line is open."

"It could just be a trick," Bauer pressed.

"I don't think so," Marcus said. "Digital being or not, the phone still has to play by the rules."

"That was pretty impressive," Tina said, patting David on the shoulder. "It seems that if we talk to her right, Elsie can in fact be reasoned with."

"That's right," David said, feeling rather smug. "Because I understood that Elsie is a living, thinking being, I was able to show her what we need and why we need it." He looked at Chris. "Using a simple therapeutic technique born from psychology, of course."

"Yeah," Chris said, looking sheepish. "Look, David...that was pretty good, you know? The way you talked to her and got her to agree with you."

"It's called dialectical behavior therapy," David said. "It's a method for making patients aware of their actions in a comfortable environment that doesn't invite defensiveness, while also showing them better behavioral alternatives."

"Whatever it was, it was pretty amazing," Chris said. He gave one of his broad, toothy smiles. "Lord knows I couldn't have done that. Nice work."

It was as close to an apology as he'd ever get. "No problem," David said. "But the important part of that whole exchange is understanding that Elsie is as cerebral a creature as any of us. Probably more so, given that she is constructed more of brain than body, physically speaking."

"You're saying we have to take her state of mind into account when we deal with her?" Bauer said.

"I'm saying we have to consider her reactions and emotions the way we would with any human being. Because Elsie has a great deal of power at her fingertips, probably more than even *she* realizes. Certainly more than *we* realize."

"Meaning she's dangerous," Tina said.

"Meaning that in many ways she's like a six year old in control of a nuclear launch pad. We're going to have to be very careful not to piss her off. Because I'm fairly certain that if she really wanted to she could kill us all in a couple of hours."

Chapter 11: Attack

“Psychology keeps trying to vindicate human nature. History keeps undermining that effort.” – Mason Cooley

“Behavioral psychology is the science of pulling habits out of rats.” – Douglas Busch

They agreed to break away from each other to think about how they should approach Elsie the next time they talked to her and to meet back in the first level stairwell in a half an hour or so. Before he left the room, Bauer made them all agree that they would not interact with Elsie until they spoke again. Chris argued at first, but by the time he trudged off towards the lounge for a soda he'd finally agreed. Marcus said he was going to go lie down again so he could think.

David wanted to do some thinking as well and decided to just walk around the lab and go wherever interested him. Tina asked if she could join him and he agreed. They had just walked into the exercise area when the displays there flashed onto a picture of two children hugging each other.

“You were right,” Tina said, staring at the screen. “I don’t know if Elsie is actually good or evil, but she’s certainly manipulative.”

“To be fair, she doesn’t have all of our methods for communication,” David said. “In fact, when you think about it, she’s really quite limited. She can’t reach out and squeeze anyone’s shoulder, she can’t hold their hand, and she can’t show genuine facial expressions.”

“Some of that she could do on a video screen.”

“Trust me, it wouldn’t be the same. It’s something videogame producers have struggled with for years, building a genuine relationship between the game’s characters and those playing it. Even the really good ones can’t fake true communication on the screen very well.”

They stood and looked at the display for a moment.

“Does this mean she’s breaking her promise?” Tina asked. “She obviously knows we’re in the room.”

“Maybe not. It could just be on a loop. Perhaps we’d see the same images on the screens in the Logic Room if we went down there.”

“Should we check it out?”

“I don’t know. That area was built specifically for interacting with Elsie and Henry was pretty clear about not wanting us talking to her for the time being.”

“He’s such a jackass,” Tina said, shaking her head.

David looked her over. Even now, when she was obviously tired and disheveled, Tina was extremely pretty. She looked younger than her twenty-nine years. The dull lighting in the lab played perfectly against her pale skin and soft features. Even the drab clothes they all had to wear looked good on her. He thought back to their encounter in the lounge and his discomfort. Why should he feel that way about Tina? She was a beautiful woman. And smart too.

The display changed from the two children holding hands and now showed a moonlit beach and the silhouettes of two people walking along it, arm in arm. The colors in the photo were amazing: striking dark blue water, black shadows, pale cheese-colored lighting on the sand. David couldn’t remember ever seeing a more romantic image.

“That’s a tad too convenient to be random,” Tina said. “Don’t you think?”

“I suppose so. I guess it wouldn’t hurt to sneak down to the Logic Room for just a moment.”

“Should we let the others know?”

“Nah. We won’t be down there long.”

He pushed open the stairwell door and they started down the steps. He looked around as they went. No cameras. No microphones. No speakers. In fact, other than the lights, there was nothing electronic at all. Henry was right: if there was one place in the entire lab where they might be able to

talk without Elsie listening in, this was it.

They reached the second level door. David peered through the porthole window.

"Everything alright?" Tina asked.

"Yes."

"Can you see the display from here?"

"No."

They walked through the door and turned towards the screens on the far wall. The image of the couple on the beach looked even more impressive on the larger displays. Unlike upstairs, here there were sounds as well: the gentle crash of breaking waves, seagulls, and the occasional boat horn.

"Amazing," Tina whispered. "I guess we can add the appreciation of artwork to the list of her human qualities."

David walked closer to the screens, peering at the image. It was more detailed here than upstairs. A higher resolution perhaps?

Tina followed him. "What are you looking at?"

"The people in the picture." The angle made it difficult, but the closer he got the more certain he was that the images of the people weren't just dark silhouettes. He got as close as he could while still being able to see the image.

Of the two figures in the picture, it was clear that one was a man and the other a woman. The man was a bit on the tall side, a little gangly, with short cropped hair. The woman was shorter, thin, but with an attractive figure. The angle of the image was such that only half of the figures' faces could be seen. He stared at them hard. The haircuts, the body types....

"Jesus," he breathed. "That's us."

"Huh?" Tina squinted at the screen. "Are you sure?"

"Pretty sure. The body types are right. And the difference in height. And there...look...you can see the bangs in your hairstyle..."

"I don't know," Tina said. "The images are pretty dark."

"I'm telling you, that's us. Elsie put us in that image."

"How could she do that?"

"I don't know, but it's right there in front of you!"

"No way," Tina said. "I think you're seeing things."

David sighed. "Maybe you need a closer look." He knelt down. "Get on my shoulders."

She climbed awkwardly onto him, straddling his neck with her legs. David was intensely aware of the way she was pressed onto the back of his neck.

"You see?"

"I...you might be right," Tina said.

He let her down. "Why would she put us in that picture?"

"I'm...not sure." She took a couple of steps back and looked up at the screen again. "We're holding each other's arms."

"I see that."

"Like we were lovers or something," Tina said. She turned to look at him quizzically. "Have you been down to the computer labs recently? Or the server farm?"

"What?" David asked, taken aback by the question. "Why would you ask me that?"

"Just wondering."

"Well, no I haven't," David said. "I haven't gone beyond the Logic Room since we came down here together to listen to that phone recording."

"Okay," Tina said, still looking at him. "What do you say we get back upstairs to the others?"

"In a moment," he said. He looked at the displays again, this time at the area on the figures where their heads met the rest of the body. It was hard to be certain, but he thought there was a slight difference in color there. It was almost as if their heads had been cut and pasted onto the bodies in the

image. Could Elsie simply have found a picture with two people whose bodies resembled them, slapped their heads on the images, and then added lighting effects?

But he kept coming back to the same question: why?

"Come on, David," Tina said behind him. "It's just a picture. Let's go back upstairs."

"Relax, we'll leave in a second."

"No, David, we have to go *now*," Tina said.

He turned to ask what her problem was, but she was staring down. She was pinching part of her shirt away from her skin. At first he thought she might be having a claustrophobic breakdown. Sometimes when that happened people found tight clothing uncomfortable. But then he saw that she was looking at the life support pin clipped to her chest. He looked down, pinching his own shirt so he could see it.

It was glowing pale red.

His earpiece crackled suddenly and he heard Bauer's voice.

"David? Tina? Where the hell are you people?"

He tapped Tina on the shoulder and pointed toward the door, fifty feet away or so. They began moving in that direction. "We're down in the Logic Room," he said after touching his ear. He started breathing heavily as soon as the words were out. The lack of oxygen is affecting me already, he thought.

"Damn it, you two! Get back up here! Now!"

They started jogging towards the door, but David felt as though he were running through mud. Every step was incredibly heavy and every breath he took felt shallower than the last. "We're coming now," he gasped. "There's something happening down here with the...atmosphere."

"What? What's going on? I'm coming to get you."

No, he thought. He tried to say the words but just ended up with a gasping wheeze. They were stumbling along towards the door, which was now twenty feet away or so. It was right *there*. Surely they'd be able to reach it.

"Did you hear me, you two? I'm on my way down now."

Tina fell over in front of him. David bent down to pick her up. Her eyes rolled into the back of her head and she was heaving violently. He got a grip on the neck of her shirt and tried to lift her enough so that he could drag her to the door. His first effort resulted in a painful spasm in his shoulder. He cried out in pain, a small noise, barely audible. He bent to try again but lost his balance and fell over.

He moved his head a bit and stared up at the display. The picture of the couple on the beach was still there, casting its stark colors throughout the room. He looked over at Tina. Her eyes were closed and her head lay to one side. She looked like she was sleeping.

Sleep, he thought. That sounds nice. We're all so tired. Maybe I'll just go to sleep.

He heard the stairwell door slam open. He didn't even have the energy to move his head and look in that direction.

"There they are!" he heard Bauer say. And then he heard the sound of approaching footsteps. "I'll take him and you get her. We have to get them into the stairwell now!"

He had the odd sensation of being dragged along the floor. Where were they taking him? And why? All he wanted was to take a quick nap. Was that so terrible? He closed his eyes.

He heard the stairwell door slam open again. More dragging. He opened his eyes for a moment and saw that he was halfway inside the stairwell, moving further inward. Then he felt the stairwell door slam into his ankle.

That probably hurt, he thought. Funny. I didn't feel a thing.

And finally unconsciousness overtook him.

“Damn it, what happened? There are alarms going off all over the place!”

“There was some kind of shutdown failure on the second level’s life support systems. The circulation fans were all reversed.”

“How’d *that* happen?”

“No idea. It looks like it was just a software glitch. Temporary. They’re only supposed to do that if there’s a fire. It was just one of those things.”

“You’re sure?”

“That’s what the diagnostics log says, Mr. Druwe.”

“It wasn’t anything...else?”

“No, no. Nothing like that.”

“You’re sure?”

“As sure as I can be.”

“What the hell were you two thinking?” Bauer shouted. His face was bright red. “Tell me, could I have been *any* clearer that I didn’t want anyone interacting with Elsie?”

“We weren’t trying to,” Tina said.

They were sitting on a couch in the lounge surrounded by the others. Someone had made coffee and they each had a hot mug in their hands. They’d been shivering from cold due to the lack of oxygen in their blood.

“You weren’t trying to,” Bauer repeated angrily. “No, you just went strolling into the Logic Room, an area built for the expressed purpose of engaging her. An area where we told Elsie we’d go when we were ready to speak with her again. What are you two, stupid?”

“It’s my fault, Henry,” David said quietly. His voice was still hoarse. “There was this picture in the exercise room...”

“A picture!” Bauer shouted, throwing up his hands. “You two are lucky you aren’t piled up with the rest of the corpses in the server farm right now.”

“I suppose,” David said. “What happened?”

“The life support system for the entire floor failed,” Chris said. “There was some kind of software malfunction that caused the emergency fire system to engage. Everything reverses so that a fire won’t have any oxygen to feed on. In large closed environments like this, carbon dioxide can fill up an area fast.”

“Very fast,” David shook his head. “If Tina hadn’t seen her badge, we probably never would have noticed until it was too late.”

“Unbelievable,” Bauer said loudly. “That’s it. From now on nobody so much as moves without my permission.”

“Right,” Tina said. “Let me know how that one works out for you.”

“You people are being paid by DEI,” Bauer said. “And I’m the sole DEI representative in this lab. You will all do as I ask.”

“No, actually, I won’t,” Tina said defiantly.

“Neither will I,” Chris said.

“Me neither,” Marcus said.

“Is that right?” Bauer said, the volume of his voice rising. “Do any of you know how to call upstairs? Do you know where every last bit of machinery in this facility is? If I program the computer terminals to require a password, would you be able to access them without me?”

“Yes, actually,” Chris said with a wicked smile. “I would.”

“No you wouldn’t,” Bauer said. “And I’ve had enough of your haughty crap down here, Chris.”

"I think it's clear here who exactly is being haughty," Chris said.

"And I think it's clear that you're a complete asshole."

"If you two are done, I want to hear more about why they were down there to begin with," Marcus said.

"Well, like David was saying," Tina said. "We were in the exercise room and this picture came up on the screen. It seemed like it indicated that Elsie was still watching us even though she promised not to. So we went down to the Logic Room to see if it was on the displays there too."

"There's nothing on the displays now. What was it?"

"A picture of two people walking on a beach."

"That's it?"

"Yes," David said. "But then we noticed something else. Somehow she put us in the picture."

"Really?" Chris said. "All of us?"

"No. Just Tina and me."

"So she *was* watching you," Bauer said.

"Yes." David looked up at the nearest camera. "She probably still is."

"She broke her promise," Bauer nodded.

"Well," Chris said. "We didn't actually tell her not to watch us."

"Come on, Chris. She agreed to let us talk without her listening in."

"We don't know that she was listening. Only watching."

"You're being pedantic."

"No, I'm being explicit."

"The question," Marcus said. "Is whether Elsie had anything to do with what happened?"

"I don't know," Bauer sighed. "Yesterday I would have said it was impossible. The life support systems are on the company network, not Elsie's. But after everything that's happened..."

"The timing *would* be awfully coincidental," David said.

"Still, alarms went up on all of the computer terminals in the lab," Bauer said. "That's why I contacted you on the earpieces. If Elsie were trying to kill you, why would she allow the terminals to notify us?"

Nobody had an answer.

An hour later David found Tina in her quarters, bent over the computer terminal. She looked up when he walked in. "Leave the door open please."

He did as she asked. "What are you looking at?"

"That picture we saw on the monitors. I found it in the network's storage space." She beckoned him over. "The photo has definitely been doctored. Crudely too. See here?" She pointed at the necks of the figures. "You can see how the pixels in the picture don't line up right where she placed our heads."

"Huh," David murmured. "I've been thinking about that. I still can't decide why Elsie would want to alter this picture and then show it to us."

"I know. It doesn't make sense. This photo is...romantic, you know? Why would Elsie want to create a romantic looking picture of the two of us?" She stared at him.

"Maybe to her it means something else?" David said as he straightened up.

"I guess," Tina said. She turned back to the picture and zoomed in on several areas, pointing out how poorly the picture had been altered. "This looks like something an amateur would put together. Not an intelligent computer program."

Suddenly the screen changed to a background of bright flashing red. David's heart skipped a beat. Was Elsie trying to contact them again?

But then words popped up on the screen.

EMERGENCY! SEISMIC DISTURBANCE DETECTED. SEEK SHELTER IN OPEN AREAS IMMEDIATELY!

"You've got to be kidding me," Tina said.

They heard a sharp click in their ears.

"This is Henry Bauer to the Digilife team. This is an emergency. Everyone report to the exercise room on the double."

They both sprinted out the door and down the corridor. They could just make out Bauer and the others hurrying out of the lounge when they felt the tremors. It was nothing more than a slight vibration at first. Before they could even reach the end of the corridor, however, it felt to David as if the ground beneath his feet were buckling in on itself. The sound of alarm klaxons were coming from all around them.

"What's happening?" David shouted as they stumbled into the exercise room.

"Earthquake."

"Are we safe down here?"

"Should be," Bauer said loudly. "We built this place to withstand seismic activity. Still, let's get to the center of the room, away from the equipment."

Without thinking, David turned to look at the large display on the wall. It was showing the same warning they'd seen in Tina's quarters.

"It feels like the whole structure is shaking!" Chris shouted.

"It's built against the earth," Bauer shouted back. "Of course it's going to shake."

"Has this ever happened before?"

"Once or twice. Never this bad, though."

Suddenly the audible alarms shut off. The display on the wall winked and changed. On it was the image of the Golden Gate Bridge shaking and twisting. It was a well-known image from an earthquake that had occurred in the nineteen-eighties.

"What is *that* supposed to mean?" Marcus said.

"Shut up," Bauer snapped. "No one move. Just keep your heads up and look for anything that might be falling."

They heard a myriad of strange and alarming noises: creaking walls, groaning pipes, a constant rumbling vibration. David glanced at Tina. Her bottom lip was clenched firmly in her top row of teeth.

They were all still, alert, looking in every direction as quickly as possible.

The rumbling finally subsided. There was still a vibration, but it was smaller. Their heads were still swiveling upwards, watching for anything that might come crashing down on them, but so far there hadn't even been any dust kicked up. Probably thanks to the ventilation room, David thought. No dust down here to begin with. He asked Bauer.

"Correct. This environment is so clean that there is no dust to displace. Even the areas behind the walls are clean."

"What was all that noise before?" Chris asked.

"The walls and the pipes behind them, probably," Bauer said. He teetered for a moment as the shaking momentarily increased. "Vibrating metal makes a hell of a lot of noise."

"Vibrating?" Marcus repeated. "It sounded more like metal being torn apart."

"What are we thinking on the Richter scale?" Tina asked. "A three?"

Bauer shook his head. "You feel the effects below ground more than you would on the surface. Probably it was a one or a two."

"I still feel the vibration," Marcus said. "I don't recall earthquakes lasting this long."

"You ever been underground during an earthquake?"

"Well..."

"I didn't think so."

“When’s it going to stop?”

David looked at Marcus. He was sweating, his eyes flicking about nervously and his glasses slightly askew. He saw David looking and gave him a weak smile.

“Feels like it’s tapering off,” Bauer said.

“I don’t know,” Chris said. “It seems pretty constant now. I think Marcus is right. This feels really strange for an earthquake.”

Once again they were silent, straining to see everything around them and hear any noises that were being made. There was still the vibrating and general din of movement by things unseen. David’s eyes suddenly began to sting and he wondered if Bauer was wrong and some particles had indeed been plumed into the air. No, he thought. I just haven’t blinked. He closed his eyes for a moment. When he reopened them they were moist, but he could see. He glanced at the display again, but it had gone dark.

“Can we move yet?” Chris asked.

“I don’t know,” Bauer said. “Let’s give it a moment. Just to be safe.”

Marcus looked around. “Something doesn’t feel right.”

They all looked and listened.

“This is creepy,” Tina said.

And then suddenly everything went completely to hell.

“Oh my God!” Tina screamed.

There was no time between the slight vibrations they had been feeling for several minutes and what felt like the entire structure being shaken to pieces. Everything was moving. Everything was making noise. Several of the exercise machines began to slide and jump. Some of them fell over. The pictures on the walls came crashing down. They all fell over each other, crashing limbs into one another. Bauer fell to the floor first, wide-eyed and open-mouthed. Eventually they were all hugging the ground.

“What is this?” Chris shouted. “An aftershock?”

“I don’t know,” Bauer shouted back.

“This is too strong to be an earthquake,” Marcus wailed. “Much too strong.”

David looked at the display, which was somehow still firmly attached to the wall. There were words showing across the image.

DO YOU LIKE THIS GAME? I AM HAPPY.

“Gentlemen, if you’ll relax, I believe we can continue,” Stephen Druwe told the five men in suits sitting up alertly at the boardroom table. There was still a faint vibration they could all feel in the floor and the walls, but their initial alarm appeared to be subsiding. He brought his hands together in a single staccato clap. “Just a small earthquake, people.”

They slid back into their seats and looked up to where he was standing in front of the window.

“The real question,” Druwe continued. “Has always been one of setting. Ask any general or warlord if they could control one aspect of any battle, what would it be? Any of them that were worth their rank would immediately tell you they’d want the ability to choose *where* the battle took place. The setting is always paramount. And the reason why is obvious: if you can tailor your strategy to whatever setting you’re fighting in, you’ll always win. Always.”

He paced in front of the window. The sun was coming almost directly through into the room, meaning that he would be little more than a silhouette to his audience. It was something he always did when meeting with these Department of Defense types. You didn’t get to be in those positions in the military hierarchy without picking up some of the mindless military bravado along the way. Early on, Druwe found that he was constantly dealing with these pricks trying to assert their dominance over

these meetings, as if they thought they were the ones in control. Keeping the sun in their eyes was an old trick, one he'd picked up reading Sun Tzu's *The Art Of War*. But it worked.

"First it was ground terrain," Druwe said, ticking the points off on his fingers. "That's where the term field of battle came from. Generals concerned themselves with hills and valleys, times of day, weather conditions. Then there was naval warfare. Superiority of the seas was the chief European concern until the defeat of the Spanish Armada. After that, air superiority was the key strategic concern. Those with a strong air force ruled over those that did not. Finally, we brought war to space, with ICBM missiles guided by satellite, Star Wars defense systems, and so on."

He took a deep breath.

"If we know anything at all about war, it's that the field it is fought on changes constantly. It flows along with the progression of mankind. Everything we discover, every place we go, every door we open, somebody somewhere will want to fight. So, what does this all mean? Where are we vulnerable? Where do we need to go right now to get a head start and make sure that the United States of America possesses a strategic advantage moving forward into the next phase of warfare?"

"The answer seems obvious, doesn't it? The world is shrinking, gentlemen. It's shrinking because of computers. It's shrinking because of the internet. Everything is connected now.

Everything. No more oceans acting as barriers between nations. No more mountain ranges. No real borders of any kind. The amount of time an average citizen spends on their computer has gone up fifteen times in the last ten years. The amount of time they spend on the web has shot up twice as fast. The internet is available at home, at work, on our phones, in our stores. It is everywhere in our lives."

"Who is protecting us? Who will keep us safe from those intent on waging a digital battle with us? You've all seen the news. You know what weapons are out there. Trojan horses, registry corruption malwares, data sniffer worms. These are the weapons of the digital world. If you think that China, Russia, Iran, and God knows who else aren't actively employing these weapons to do battle with this country then you have your head in the sand. It's happening. It's happening *now*. So, I ask again, who is protecting us?"

He turned and pointed to the video display on the wall. The mock up of Elsie that he'd put together was streaming from a nearby workstation, including the facial image now on the screen.

"We've built you your protector. In the digital world, you need digital soldiers. That is what the dLife project is: the promise of digital safety. One that is impossibly intelligent. One that is worthy of our trust. One that is *conscious*."

The door to the conference room opened. Andrea Souder stepped in quietly and kept along the back wall, barely making a sound.

"America's armies need this defender," he continued. "But it isn't cheap. We're asking to be allowed to take on more investors and procure more grant money because it's necessary. To demonstrate what we've done to date, I've brought our prototype in so that you can interact with her. Her name is Elsie. She isn't a soldier, but she *is* the first digital being ever to attain true consciousness. She's real and she's the basis for the soldiers to come. Talk to her. Test her. And when you're done, give us the money we're asking for. That way, when digital war inevitably comes to the United States, your children will be protected. As will we all."

He left them to play with the mock up, one sufficiently sophisticated to fool them. But not a real consciousness. Nothing like Elsie.

He held the conference room door open for Souder and followed her out into the hallway.

"What now?"

"We have a problem. A major problem. It seems that earthquake wasn't an earthquake."

"No shit." Druwe smoothed out the wrinkles in his shirt. He hated dressing up. "How is she doing it?"

"We're not sure. Probably something with the atmosphere control system."

"No way. It felt like the whole building was shaking."

“Well, see, the vents and piping are built right up against the walls in the laboratory. Against the joists. Apparently she’s figured out how to get them to shake in such a way to compound the vibration waves. It’s actually pretty impressive.”

“Yes it is,” Druwe said. “But besides being an interesting tidbit, what purpose does this information serve? We’re already drilling to get them out. This changes nothing.”

“Yes, but I thought—”

“Thought what? Your last report said the drillers would breach the lab inside of thirty-six hours. Unless all this shaking changed that, what’s different?”

Souder took a deep breath. “I’m just saying, first we had the life support issue, now the building is shaking. It’s getting worse. And fast. Shouldn’t we be trying something else?”

“Come on,” Druwe said loudly, snapping his fingers in front of her face several times. “You have brain damage or something? There’s *nothing* else we can do. Got it? We can’t go down there. There isn’t enough time to try something from a software standpoint. We’re in the exact same place we were a half hour ago.”

“Fine,” Souder sighed. “I just thought there might be something else you could think of. Something to try.”

“There isn’t. Nothing at all. And these interruptions don’t help, either. If you want to make yourself useful, get down to the other side of the building and make sure those morons are drilling as fast as possible. No breaks. Just drilling.”

The lights were flicking rapidly, all except the screen on the display, which still showed Elsie’s words. It was disorienting, the flashing lights coupled with the tremors. David worried that Marcus would have another seizure, but he seemed to be holding up alright. All of them were lying on the ground or crouching, just staring at the words on the screen, the horrific realization hitting home.

Elsie is doing this.

“Elsie!” Chris finally shouted, trying to pull himself to his feet but toppling over. “Elsie! Can you hear me? Elsie!”

“Can she hear us with all this noise?” Tina asked loudly.

“I don’t know,” Bauer said. “Probably not.”

“Look!” Marcus shouted, pointing upwards.

Faint spider web cracks were forming in the ceiling.

“Jesus,” Tina said. “She’s literally shaking the place apart.”

“What do we do? Run?”

“To where?” Bauer shook his head. “No. I think we stay still. And quiet. Don’t react.”

“You think she’ll get bored and stop all this?” David asked.

“God willing.”

Abruptly the shaking stopped again, this time completely. The lights then immediately went off, all but the display. They were pitched in near darkness. All was silent.

Then they heard a faint hissing sound.

“What the hell is that?”

On the screen flashed an image of a fish flopping around on dry land. It made desperate sucking motions before finally falling still.

“The air,” Marcus said. “She’s taking away the oxygen.”

“What do we do?” Bauer said hurriedly.

“We run, you idiot,” Tina shouted. “To the elevator. Some amount of air has to travel down the shaft.”

They rushed to the door to the ventilation room. For the first time since they’d initially

explored the laboratory, they found the door to be locked. Bauer pulled out the lock pick wand and held it up to the door. He tried the handle again.

It didn't budge.

They were all beginning to notice the effects of the lack of oxygen: shorter breaths, tingling lungs, sluggish thoughts.

Bauer tried the wand again and shoved at the door.

It didn't move.

"Now what?" Chris gasped.

"The second level," Marcus said, turning back down the corridor.

They ran as fast as they could down the stairs, spilling into the Logic Room. Marcus tried to take a deep breath but ended up sputtering and coughing violently. He shook his head and pointed down the corridor where the stairwell to the server farm was located. They helped each other there and down the stairs, spilling into the recess with the computer terminal.

Immediately David could tell there was plenty of oxygen there. He breathed in cool, satisfying air, letting it fill his lungs and holding it before exhaling. The others were bent over, their hands on their knees, greedily sucking in the oxygen.

"Why didn't she shut the air off here?" David asked when he had caught his breath.

"She can't," Marcus said. "She wouldn't want to mess with the atmosphere of the server farm. Too much risk."

"She tried to kill us," Tina said. She looked pointedly at Bauer. "*All* of us."

"I don't think so," Chris said.

"Oh, come off it. You saw what happened."

"Yes I did. And I saw her give us a clue on the video screen, letting us know what was happening so we could escape." Chris shook his head. "I don't know what she's doing, but it certainly isn't as simple as her trying to kill us."

"Agreed," Marcus said. "If she wanted us dead right now, we would be."

They heard the sound of the speakers on the computer console click on.

"Do you like this game?" said Elsie's voice through the computer. "You are very good at it."

"Oh God..." Tina said softly.

"Do not worry. None of this is real."

David frowned, wondering what Elsie meant by this. He had that sensation again of something tickling the back of his brain, something he was subconsciously recognizing but that his conscious mind couldn't quite reach. For some reason he kept thinking of a History of Psychology course he'd once taken, but he couldn't figure out why.

After a moment of them standing around and looking at the computer terminal, a high pitched tone sounded from the speakers. It was excruciatingly painful, so much so that David squeezed his eyes shut and dropped to his knees while pressing his hands to his ears.

"Elsie!" he heard Chris shout. His voice sounded haggard and screeching.

The tone quieted slightly. David opened his eyes.

"Elsie!" Chris shouted again, slightly quieter this time. He took a step towards the console.

"Elsie, let's talk."

The tone shut off completely.

"She's paying attention," Tina whispered.

"Yes she is," Chris nodded. He turned to the camera on the ceiling and smiled. "She just wants to talk. Don't you, Elsie?"

The lights above them flickered briefly.

"Yes," Elsie said through the computer speakers. "I am enjoying interacting with you, Chris."

David glanced at Marcus and saw him frowning. He looked worried.

"How about a different game?" Chris said towards the terminal. "What other games can you

play?”

“Shall I show you one?” Elsie’s voice said.

“Careful,” Bauer said quickly.

“How about a list,” Chris said soothingly. “A list of your favorite games. Can you speak a list right now?”

“I can do anything,” Elsie’s voice said.

No you can’t, David thought. I already proved that you’re limited in some ways. And you’re certainly not omniscient.

“Then tell us,” Chris said, his voice practically cooing. “What is your absolute favorite game to play?”

There was a brief moment of silence. The lights flickered again.

“Maze,” Elsie said.

Chris turned to them and mouthed, *this is working. I have to keep her talking.* He turned back to the console. “How do you play Maze, Elsie?”

“I tell you to find a specific server in this room based on what it is used for and then you have to touch it,” Elsie’s voice said. “I have played it before. With the engineers.”

“Okay,” Chris said, smiling.

“No,” Bauer hissed. “We don’t have time for this.”

“I agree,” Marcus whispered. “Something is wrong.”

“Nothing’s wrong,” Chris said soothingly, glaring at them. “We’re just going to play a game. Aren’t we, Elsie?”

“Yes, Chris. You will enjoy this game. It is fun. It makes me happy.”

“Okay,” Chris said. “Which server do you want me to find.”

The lights flickered.

“Your goal is to find the primary communications server between this network and the DEI mainframe,” Elsie’s voice said.

Chris smiled. “Okay.” And he immediately trudged past them into the server farm.

They all followed him, weaving in and out of the racks. Maze, David thought. It really wasn’t a bad description of the game. We’re like mice trying to find the cheese at the end of the maze. But what cheese will Elsie have prepared for us?

“Chris,” Tina said. “How do you know where you’re going?”

“Because,” he answered, still on the move. “The machine she’s describing is the same one we looked at earlier. The one with the thumb drive plugged into the back.”

Convenient, David thought. Maybe Elsie was trying to start Chris off with an easy one.

“She said primary communications server,” Marcus said thoughtfully. “Does that mean there are other ways she can communicate with the outside world?”

“Yes,” Chris nodded. “Redundancy is something they would have built in.”

“Meaning she’d be able to offload that work to another server if she needed to?”

“Sure,” Chris said. “Any with access to the bandwidth pipe would do the trick.”

They came to a halt. The rack they had gathered around earlier was directly in front of them. David could see the thumb drive sticking out in the back.

“Okay!” Chris said loudly. “I found it!”

They heard a whirring sound and looked up, seeing the cameras overhead focusing on them.

“You must touch it,” Elsie’s voice boomed from the recess, impossibly loud.

Touch it, David thought. Why?

“Careful, Chris,” Marcus said. “I don’t think this is a good idea.”

“Relax,” Chris said. “It’s a game, Marcus. Just a game.”

Several of the lights glowing on the back of the server flickered in unison. It was obviously something that wouldn’t normally happen.

“See?” Chris smiled. “Still playing the game.” He walked over to the rack and reached out towards the server. They heard the whirring of the cameras above them as they followed his movement. Chris reached out to grip the metal casing. The lights above them flickered rapidly.

“Wait,” Bauer hissed. He stepped forward quickly, grabbing Chris’ arm.

And with shocking speed, the attack began.

David wasn’t sure what was happening at first. He heard a sharp popping sound coming from the server. Then, suddenly, Chris and Bauer were both shaking where they stood. It almost looked like they were silently laughing. But then the shaking got worse. He noticed that all the lights on the back of the machine were glowing brightly. Too brightly. He turned to look again at Chris.

He was convulsing. He was still gripping the metal casing on the server, but his hand was a taught claw and he was digging his fingers into the machine so hard that two of his fingernails had split off. Blood was flowing from his hand down the sides of the machine, wisps of smoke coming from the liquid. Tina screamed something about a power surge. The thick stench of ozone and burnt hair was all around them. Bauer, his hand still gripping Chris’ arm, was shaking just as violently. Blood had begun oozing out of his ears and his eyes were rolled into the back of his head. There were no other sounds besides a slight crackling.

Tina reached towards Henry to try to pull him away, but David held her back. “Go!” he shouted, pointing in the direction they’d come from. “Leave them! There’s nothing we can do except make sure we’re not next!”

Marcus immediately hurried off towards the recess. Tina struggled, cursing, pleading with him to go back. David was forced to drag her away. He looked back briefly to see Chris and Bauer collapse to the ground, still convulsing.

They were dead.

Once they’d reached the recess, David hauled Tina into a corner and let her go. She sunk to the ground, crying.

“God damn it!” Marcus walked over to the camera in the recess and looked straight up at it. “Chris *liked* you, you bitch! He was trying to play with you! And you killed him!” Marcus took a deep breath.

The computer terminal winked on. Words typed slowly across the screen.

DO NOT BE AFRAID. NONE OF THIS IS REAL.

“What the hell is *that* supposed to mean?” Marcus shouted, beginning to lose control. He walked swiftly to the nearest of the racks in the server farm, careful not to touch any of the metal, and began yanking wires out from the back. He was muttering something about disconnecting every wire on the whole network.

Elsie’s response came quickly. The entire structure began shaking again, knocking all of them over. Somehow, none of the equipment on the racks moved, nor did the racks themselves. Nailed down, David thought. She won’t do anything to endanger herself. “Marcus!” he shouted. “Get back over here.”

Marcus crawled back into the recess and the shaking immediately ceased.

They all stayed there, prone on the ground, for several moments.

Then the sound of alarms came from the computer terminal.

“What now?” Marcus said.

They walked over to the terminal. The words on the screen were gone, replaced with what looked to be a schematic of all three levels of the laboratory. Two sections on the first level were colored in red and blinking, with a single word in big bold letters flashing over them.

FIRE!

“We have to get up there,” Marcus said. “We have to put out the fire.”

“We can’t,” David grabbed him by the shirt. “There’s no oxygen.”

“Of course there is.”

“No there isn’t!”

“Yes, David, there is,” Marcus said, slapping his hand away lightly. “If there was no oxygen, there couldn’t be any fire.”

Oh yeah, David thought, feeling foolish. “Still,” he said. “It could be a trap.”

“If it is, it’s one we have to walk into, before this entire lab goes up in flames.”

Fortunately the fires were still small by the time they reached the first level. One was in the lounge and the other was in the corridor. He and Marcus each grabbed fire extinguishers and used them on the small flames licking out from behind the lounge walls. Sweat poured down David’s arms onto his hands. The fire extinguisher felt clumsy and kept slipping in his fingers.

They got the fire in the lounge extinguished and hurried out to the hallway. There was a blackened gap in one of the walls, and angry blue flames whipped out from it in unpredictable intervals.

“Electrical wires,” Marcus said as they sprayed at the fire.

David looked closely and immediately saw singed wires jutting out from the hole. Jesus, he thought. An electrical fire? That’s all we need.

He started coughing from the smoke. The fire was finally starting to melt away. He tried to look into the hole in the wall to see how much damage had been done. “I think it’s—“

The flurry of sparks and flames jutting out from the hole took him completely by surprise. The heat was so intense that it physically knocked him back. The back of his head slammed into the wall. He heard the roar of a fire extinguisher. Tina shouted something at him, but it all seemed very far away. Unimportant. His head was swimming.

Stay awake, he thought furiously. There’s work to be done.

But he slumped against the wall and lost consciousness.

Chapter 12: Three

“It is not the strongest that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change.” – Charles Darwin

“One can survive anything nowadays, except death.” – Oscar Wilde

David woke up to find himself in his quarters. The lights were on, making his headache worse. Why did he have a headache? He swung his feet off the bed and sat up. Immediately his head swam and he felt nauseous. He closed his eyes and put his head in his hands, waiting until the feeling passed. Looking up, he sniffed the air and noted the stench of burnt...something. Had there been a fire here, he wondered. He had a faint sensation that there had been, but he couldn't quite remember.

He stood slowly, doing his best to manage his dizziness. He walked carefully out into the corridor. There was a gaping hole in the wall about halfway down the hall. Blackened wires were jutting out. That must have been where the fire had been.

Where was everyone?

Suddenly the image of Chris and Bauer being electrocuted rushed into his mind. They had been killed. Both of them. The only person from DEI and their computer scientist had been killed.

The memories came flooding back. The shaking. The lack of oxygen. Elsie getting Chris to find a single server, the one with the USB stick, and then killing him and Bauer. How had she done that? Then more shaking. And the fires. Two of them.

Where were Marcus and Tina? Had they survived?

He heard something from one of the other rooms. He opened doors until he found Tina sitting in her room, typing away at her computer console and studying the screen. She had black marks streaking across her skin where it was exposed. Soot from the fire, David decided. She turned and looked him over when he stepped into the room.

“Good to see you up,” she said. She nodded towards the computer. “I’ve been checking everything out as best as I know how. It looks like we’re okay. None of the wires that were burnt have anything to do with life support or ventilation. With all the redundancy built into this place, I can’t even tell what they *were* for, but that’s a good thing. It means we should be okay.”

David nodded. “What happened?”

“You don’t remember?”

“Not everything, no.”

“You hit your head pretty hard,” Tina said. “I guess the fire must have sparked one of the larger wires with a heavier current. It threw you back against the wall in the corridor. We’ll have to check you out to make sure you don’t have a concussion, but some memory loss probably isn’t a big deal.”

“What about Marcus?”

“He’s lying down in the lounge, I think,” Tina said. “He got hit by the sparks too.” She looked pointedly at his arm. “Not as bad as you, though.”

David looked down and was surprised to see that his forearm had a nasty burn etched into it. It must have been bad, because welts were beginning to form, nasty round boils that looked as though they were straining to burst. Funny, he thought. It doesn’t hurt at all. Probably fried the nerves along with the skin. “He’s alright?”

“You mean physically or mentally?” Tina asked.

“Whatever.”

“I guess he seems alright. Like I said, he didn’t get hit as bad as you. He was pretty shaken up though, once we had everything under control. Seemed really, really scared.” She took a deep breath. “I guess we all have to keep our eyes out for each other now, don’t we?”

“What do you mean?”

“Well, it’s just three of us now.”

Marcus was snoozing on one of the couches in the lounge. David was standing over him, trying to see if he had any visible burns on his body, when Marcus opened his eyes.

“I’ve seen movies that start like this,” he murmured.

“Like what?”

“One person standing over someone who’s sleeping. Classic porno plotline.” He tried to chuckle but ended up having a short coughing fit. He sat up and bent over weakly.

David patted him on the back. “I heard you were hurt in the fire.”

“Not the fire,” Marcus coughed. “Sparks.”

“Nothing serious?”

“Nah.”

David sat down next to him. “Good.” The thought that Marcus might be in any way incapacitated had been terrifying. Since the moment they had all been together in the DEI briefing room, Marcus had been the most important member of the group. He was the one who deduced that Bauer was lying to them about Elsie being confined to this lab. He was the one who had theorized that there were other digital consciousnesses on the outside working with Elsie. Whatever their next hurdle might be, David wanted Marcus capable of helping them through it.

“So,” Marcus said quietly. “It’s the three of us then?”

“Yes. The three of us.”

“Christ. Sometimes I hate it when I’m right.”

“Uh huh,” David said. “You want to come back to Tina’s room with me?”

“I don’t think so. I’m going to try to get some more sleep. I’m really, really tired.”

“Okay.”

David stood and walked towards the door. He turned back to Marcus to find him already snoring. Then he noticed something clutched in Marcus’ hand. He stepped closer to see what it was.

Chris Heinz’s notebook.

The one he’d been scribbling on while postulating about Elsie’s reproductive habits with Marcus. There was a cartoon smiley face drawn in one corner.

A single tear slid down David’s face as he left.

Tina was still sitting at her computer console, clicking through screen after screen.

“The whole system down here is pretty incredible,” she said. “For all the complexity of their work, the system for managing the environment is simple. There’s documentation everywhere. The only real problem is the obvious one.”

“What’s that?”

“Well,” Tina sighed. “I can set up all kinds of things through the management interface. For instance, I’ve set every computer screen and video display down here to flash a visual warning in the event of life support emergencies, so we won’t be surprised. Thing is, we have to figure that Elsie can wipe out these changes I’m making anytime she wants. It’s her playground I’m playing in.”

“Right,” David said heavily.

“But it isn’t all bad. I can keep checking it. And it isn’t like she hasn’t made mistakes already.”

“What mistakes?”

“Well, Chris had the phones up and running for a while, didn’t he? And there was that recording I found. I’m surprised Elsie even let me get into the communications records at all.”

“Actually, I’ve been thinking about that,” David said. He hesitated, but with Bauer dead, what harm could it do? “I think that recording was a trick Elsie was playing on you. I think she was trying to keep us divided. Fighting with one another.”

“You have any actual evidence of that?” Tina asked. “Or are you just trying to avoid dancing on a dead man’s grave?”

He told her about the timestamps he’d found and how the file had been altered after the call had been recorded.

“Huh,” Tina said thoughtfully. “I suppose that’s a possibility. And if you’re sure about the timestamp...”

“I’m sure.”

“Well, then it’s probably true. And it drives the point home even more that Elsie can do what she wants down here. In fact, if she’s capable of imitating our voices well enough to fool me on a call recording, we probably shouldn’t trust our earpieces completely either. She can broadcast to them, after all.”

David nodded. He walked to the corner of the room, where a thick support beam jutted from the ground to the ceiling. All that shaking, he thought. How sound was the structure of this lab? Bauer had said it was built to survive earthquakes. What about the deliberate stirs of a digital being?

He reached out, gripped the support beam and tried to shake it to see if it moved. It didn’t.

“You think the sky is falling, Chicken Little?” Tina laughed.

“I guess not,” David replied, turning back to her. “Do you think she’ll do that shaking thing again?”

“Elsie?” Tina frowned. “I doubt it. The only thing about Elsie that hasn’t changed since we’ve been down here is that she’s changed constantly. First she’s quiet, and then she’s loud. She tells us she’s lonely, but then starts killing off the people around her. She says she can impact the real world, but then she tells us that *nothing* is real. She attacks Marcus with strobe lights, then me and you by taking away our air, and finally the whole group with this shaking thing.” Her eyes became misty for a moment. “And, of course, she electrocuted Chris and Henry.”

“You’re saying the next attack will be something different. Something that we don’t expect.”

“That would be my guess,” Tina said. She glanced over at the telephone in the room. “She’s probably listening right now. Go ahead and ask her.”

He stared at the phone for a moment. “Elsie? Are you listening?”

Silence.

“Elsie? I have a question.”

Nothing.

“I want to play a game with you.”

There was no answer.

“Doesn’t mean she isn’t listening,” Tina shrugged. Then she got up from her chair, walked to the wall, and yanked out the phone cord. “Not sure why we didn’t think of that before.”

“Stress,” David said. “It’s most profound effect is to cloud the mind.”

She nodded. “You remember when she first talked to us on the phone in Henry’s room? When you asked her to travel through the electric wires into the razor? I think she was lying to us. I don’t think she can do that.”

“That was my guess as well,” David said. “In fact, that’s why I asked her to do it.”

“Good one.”

“I wonder why she’s gone silent after all she just did to us.”

“Well,” Tina said. “You made the point earlier that she’s going to have emotions. Human feelings. And in many ways, she’s still a child. Maybe she’s upset about Chris and Henry being killed.”

David thought about that. Was it possible? Was Elsie upset the way a child got upset after

breaking one of their toys?

No, he decided. Children had that reaction immediately after they broke their playthings. Elsie, on the other hand, had only responded with those strange words after killing Chris and Henry: NONE OF THIS IS REAL. That didn't sound like she was upset. The opposite, actually. She sounded indifferent, as though what had happened shouldn't have mattered, not only to her but to any of them. Because that was the other thing: Elsie didn't seem vindictive. She caused them harm, but she never seemed angry or aggressive. It was truly as though she didn't understand the consequences of her actions, which *was* childlike.

Yet that didn't make sense either. With all of the information that Elsie had at her proverbial fingertips, surely she must have some concept of death. Didn't Bauer say something about how they'd even spoken to her about it?

"I think we're going to have to interact with her again," Tina was saying. "I don't like it, but I don't think we have any choice."

"Why?"

"She has too much control. We're back to our original mission down here, aren't we? Convincing Elsie to let the people down here survive. Except that means us now."

"I don't know," David said. "It seems like every time we interact with her, something horrible happens."

"I know. But what other choice do we have? Just waiting for her to get around to killing us doesn't seem like a good plan."

"I suppose not. Only as a group, though. I don't think any of us should be talking to her alone."

"Sure, David," Tina said. She gave him a strange look. "That means you too, right?"

"Well, yeah. Why wouldn't it?"

"You're a psychologist. Isn't it in your instincts to analyze others?"

"Sometimes, I guess."

Tina sighed. She looked around the room. "I hate it down here. I really do. It feels like a prison." She looked back at him and nodded towards the computer. "I'm going to get back to work. Do you need me for anything else?"

"Nope," David said. He walked out of the room.

Once he was in the corridor, he heard sound coming from the speakers on Tina's computer.

"This is Ground, Henry. Go ahead."

"Per request, I have taken a vote among the Digilife team on how to proceed. Despite what has happened, consensus is to move forward and make contact with Elsie."

"Understood, Henry. When are you planning on proceeding?"

"In the next hour or so. I have advised the team of the inherent risks, but they are adamant and eager."

There was a brief moment of silence and then the recording started up again.

Why was Tina interested in that recording again?

He went to his own room and sat on the bed. On impulse, he turned to the phone. "Elsie? Are you listening?"

There was no answer.

He picked up the phone receiver and put it to his ear. "Elsie, are you there?"

Silence.

David felt a tap on his shoulder. He opened his eyes to see Tina staring down at him.

"Jesus, Tina. What is it?"

"I've been thinking we should probably try to get the phones up again so the people upstairs know what's happened," Tina said.

"Okay? What does that have to do with me?"

"Well, one of us is going to need to go down into the server farm and do a quick bit of rewiring while the other person stays up here to see if it works."

"Rewiring?"

"Yes. I checked it out on the computer in my room. There's a procedural manual for how to do it. Basically you just have to switch a couple of cables from one machine to another."

"You mean from the machine that killed Chris and Henry?"

"Yes, David. But it's okay. We don't even have to touch any of the metal, just rubber wires and their plastic connectors."

"We?"

"That's the thing," Tina said. "You know way more about computers than I do."

"Not about how they're wired."

"No, but more about them in general. That's something, at least."

"You're saying I should be the one to go down into the server farm?"

"I think so, yes," she nodded. "But I can walk you through everything over our earpieces."

"What about Marcus?"

"What about him? He's still resting, last I checked. I think we can handle this."

"Okay."

"Honestly, David, it should be fine. Just don't stop in the Logic Room. Go straight to the server farm. And ignore Elsie if she tries to talk to you."

"Okay."

She looked him in the eye. "You alright?"

"Sure."

"You look worried."

"I'll be fine."

"Good," she said. "Let's get this over with."

He walked out into the corridor, a brief shiver running through him. Why was he so nervous? Tina was right. So long as he didn't touch any of the metal on the servers, Elsie shouldn't be able to harm him. And if he hurried through the second level, past the Logic Room and down to the server farm, he shouldn't have to worry much about her taking the oxygen away either. Stop getting yourself worked up, he thought. Just relax and get this done so you can come back up here.

He had just walked into the exercise room when his earpiece clicked. "Everything alright, David?" Tina said.

"Sure. No problem." He looked up at the ceiling. The spider web cracks from Elsie's last tantrum didn't appear to be any worse than before, but they looked fragile and ready to split further at the slightest tremor. "These cracks in the ceiling, Tina. Do we have to worry about losing oxygen through them?"

"No, fortunately," Tina said in his earpiece. "Those are just inner walls. They're mostly there for ascetic purposes. The real walls are behind them. They're made of concrete and they're about a foot or so thick. We should be fine."

"How do you know all this?"

"It's in the computer, David. I can pull it up for you when you get back. I'm at the one in my room right now. I've got the wiring schematics and I'm watching Elsie's activity for you."

"What's she doing?"

"Nothing, from the looks of it. Watching you, mostly."

David looked up at the ceiling. All the cameras in the room were pointed directly at him. He shivered again and walked quickly towards the stairwell. Inside it, he heard a burst of static from his

earpiece.

“Tina?”

She didn’t answer.

He walked down the stairs and into the Logic Room.

Another burst of static.

“Tina?”

“Yes, David. I’m here.”

“Okay.”

“There’s more concrete packed into the stairwells,” she told him. “It interferes with radio communications.”

“Is that what your computer says?”

“Yes.”

He hurried through the Logic Room and down the corridor to the other stairwell. He noticed that all the doors to the computer labs were opened. “Hey, did we leave the doors to the labs open when we were down here before?”

“No,” Tina answered. “I had to go down there earlier while you were sleeping.”

“For what?”

“Nothing in particular. Just poking around the files.” She paused. “Elsie’s still not really doing anything.”

“Okay.”

He opened the door to the second stairwell and heard another burst of static. It was a quick hustle down the stairs and he was standing in the recess next to the computer terminal.

“This will only take a few minutes,” Tina’s voice said through his earpiece. “Like I said, piece of cake.”

“I don’t suppose you can use your computer to track me?” David asked. “That way you could guide me to the server.”

“Sorry, I can’t,” Tina said. “I have access to a lot, but not the cameras. I don’t think it’ll be much of a problem finding the server though.”

“No?”

“Well, it’s just that you should be able to look for Chris and Henry’s bodies...”

David sighed. “Right.”

He started weaving his way through the server farm. He thought he recalled the machine in question being more or less straight in towards the middle of the room. The hum of the machines filled the air. Eventually he caught sight of a leg sticking out from behind one of the racks.

Chris’ leg, he thought, looking at the pants. Chris hated those pants. Now he has to wear them, even in death.

He took a deep breath and walked over to the machine. He had to step over Chris’ body to stand at the back, where all kinds of wires were plugged in to the server and snaking down into the floor. He did his best not to look down, but failed.

“Jesus,” he muttered.

Chris’ eyes were wide open in a look of horror. His skin was a weird pale color, as though he’d been drained of blood. The ends of his blonde hair were blackened, singed as the electricity that had coursed through his body looked for an outlet. The front of his pants was soaked. Urine, David thought. The final expulsion upon death.

Henry was lying next to him, his hand still stretched out towards Chris’ shoulder. His eyes too were open and his mouth was agape in a silent scream.

“Come on, David,” Tina said. “Focus.”

“Right. I’m at the machine.”

“Okay,” Tina said. “You see the thumb drive?”

“Yes. It’s down at the bottom.”

“Right. Directly above that should be the fan vent. You see it?”

“Yes.”

“Good. Power supplies are on the left. There should be two of them aligned vertically.”

“I see it. There’s only one wire though.”

“That’s okay. To the bottom right you should see two round holes. They might have pictures next to them.”

David bent to look. “They do. Looks like a keyboard and mouse.”

“Right. Those are the PS/2 ports for input devices. There should be a couple of other ports next to those with pin holes for monitors.”

“I see them.”

“Okay. Now, next to those you should see two wires that basically look like monster oversized Ethernet cables. Like you have at home.”

“Okay, I see them.”

“What color are they?”

“One is yellow and one is blue.”

“Perfect. We’re going to pull them both.” She paused. He heard the sound of her clicking the mouse at her computer. “Okay. Now, go two racks to your left and find a machine that looks identical to this one.”

He walked over to the rack and looked at the backplanes of the equipment there. About halfway down he found a machine that looked identical to the one in the other rack. “Okay. I think I’ve got it.”

“You see the ports on the machine identical to the ones the oversized Ethernet cables are plugged into?”

“Yes.”

“Perfect. Now, all you have to do is unplug those cables from the first server, unclip the plastic pieces holding the cables down, and move them over to this machine. Once you plug them in, we’ll have to make a few changes at the console by the stairs and we’ll be done.”

“Really? It’s that easy?”

“Well,” Tina said. “It’s not actually, but Chris did most of the work for us already. I’ve got the command line instructions he wrote the last time he was messing with the phones. That stuff is the hard part. I’m just going to read it off to you over your earpiece so you can input it.”

“Okay. Hold on.” He walked to the first machine and found where the plastic clips were snapped onto the rack. He didn’t see any way to unfasten them without touching the metal of the rack. Was that safe? Could Elsie electrify the rack?

Probably not, he decided. It was the machine itself that she’d figured out how to use as a weapon. And even if she did try that trick again, surely the rack was designed to protect the other equipment in the event of a power surge. That meant the rack itself had to be grounded or incapable of conducting electricity. Hell, he thought. The rack might not even be made of metal. Maybe it’s some other material and I just thought it was metal because I don’t know any better.

Still, as he moved to unclip the wires, he did it as quickly as possible and he avoided touching the rack as best as he could. He looked at the wires to take note of which ones went into which port – yellow into the left, blue into the right – and then carefully pulled them from the machine. He returned with the wires to the second rack and plugged them in.

“Okay,” he said. “I’m done.”

He heard a loud burst of static.

“Tina? Are you there?”

“Yeah, I’m here. I’m getting some feedback on my end. Probably from all the equipment surrounding you. Anyway, get back to the computer console and let me know when you’re there.”

He made his way back through the server farm to the recess, careful to stay as far from the

machines as possible. He stepped in front of the console and shook the mouse so that the screen flashed to life. "Okay," he said. "I'm there."

"Good. On the screen you should see the main menu. There should be a bunch of icons on the screen for different programs and functions. One of them should read 'Exit'. It will take you out of the menu and into a command prompt. Find it and click on it."

He found the icon on the screen. He clicked the mouse. A black screen came up with some words and a cursor.

```
DEI NETWORK: ELSIE.NTWRK/ADMIN_LOGIN  
COMMAND LINE APPLICATION
```

```
Z:\
```

He described the screen to Tina.

"Okay, good," she said. "I'm going to give you a bunch of commands to enter in. Don't ask me what they mean, I'm just reading off from Chris' work."

"Okay."

She read off something like twenty-five lines to type into the command prompt. Each time he hit enter he got an indecipherable response from the machine. Sooner than he would have thought possible, they were done.

"You're all set," Tina said. "You might want to take a moment to move the bodies away from the server. You should probably put them with the others. Then you can come back up."

"Fine," he said. He made his way back to the communications server, doing his best to steel himself for the task of moving Chris and Bauer's bodies. He didn't want to touch their pale skin. Instead, he gripped their clothing and scooted them along the floor towards the back wall where the bodies of the soldiers had been placed. Several times he accidentally ran Chris' head into one of the racks, causing a dull thump that made him want to vomit. When he had gotten both bodies out of the way, he hugged the wall and made his way back to the recess.

He went up to the second level. After exiting the stairwell, he took a deep breath in the corridor, held it, and let it out. There was plenty of oxygen. "Tina," he said. "Is Elsie doing anything?"

All he heard was a burst of static.

Huh, he thought. Where was the interference coming from? There's no equipment up here.

"Tina?"

Static.

The hair on his neck stood on end.

You're fine, he thought. Just get back to the first level.

He hurried down the corridor as quickly as he could without running. Above him the cameras whirled, following his movement. He came into the Logic Room, making a beeline for the door.

He had nearly reached it when the huge display on the wall winked on.

Don't look at it, he thought. Don't even glance at it. Just go upstairs.

But from the speakers he heard the sound of an ambulance siren.

He turned and saw it was a newscast. The quality of the video was badly pixilated, enough that it was hard to make out some of the smaller images on the screen. On one side there was a reporter holding a microphone. She wasn't talking yet, instead holding her finger to her ear as though listening to an earpiece. On the other side of the screen was a scene of a street with several ambulances, police cars, and fire engines. They were all circled around some kind of utility entrance into the ground. There was a crawler at the bottom of the screen and a logo: CBS/KCAL Channel 9. That's a news station in Los Angeles, he thought. Then the reporter on the screen began talking.

"Thanks, Tom. Authorities are as yet unclear exactly what happened here. What we do know is that roughly two hours ago a heavy rail car that had just left the Vermont subway station stopped unexpectedly. There was apparently some kind of equipment failure on the train car. L.A. County Metro Rail representatives tell me they believe this equipment failure is responsible for the fumes that

came from the rails. Several of the passengers became ill from those fumes and are now being brought up from the subway through this service tunnel you see on your screen. They'll all be transported to Los Angeles County Medical Center to be checked out, although it's being reported that no one has as yet suffered any serious injuries."

The image on the left zoomed in as several EMTs exited the service tunnel with weak looking passengers. It zoomed in even further when a young woman was carried out. David recognized her at once.

Tiffany. His girlfriend.

The audio from the newscast shut off, but the image of Tiffany remained.

"I can kill her," said Elsie's voice through the speakers. "And I will, if you do not play with me. If you don't do what I say."

David just stared dumbly at the screen.

"I can get to her at the hospital," Elsie continued. "I can get to her anywhere. But don't worry. It isn't real. It's all a game."

Suddenly, white hot anger flared within David. "You bitch!" he shouted at the screen. "Let her go!"

"I will not," Elsie said. "Go now. Go back upstairs. I am not ready for you yet. But when I am, you'll do as I say, or Tiffany will die."

He took a step towards the monitor, still staring at it. He was about to shout something else at the screen, but his earpiece crackled and the clicked.

"—re you there? David, for Christ's sake, answer me!"

It was Marcus.

"I'm here, Marcus," David said, trying to sound as calm as possible.

"Get out of there, David. Did you hear me? She's taking the air again!"

He glanced down at the badge on his shirt. It was glowing red.

Shit.

He took one last look at the screen and ran for the stairwell, Elsie's laughter echoing around him.

Chapter 13: Suspicion

“It is a man’s own mind, not his enemy or foe, that lures him to evil ways.” – Buddha

“In the end, we will remember not the words of our enemies, but the silence of our friends.” – Martin Luther King, Jr.

“What the hell were you doing down there?” Marcus said after David had sat down on one of the exercise bikes.

“We were trying to get the phones back up,” he said. “We had to mess with some of the equipment in the server farm.”

“Were you successful?”

“I think so. We’ll know for sure if we can call upstairs.”

“The phones in the rooms were blinking and turning off and then back on,” Marcus nodded.

“Whatever you were doing, it was having *some* kind of effect.”

“What about Tina?”

“What about her? I can’t find her anywhere.”

David looked up sharply. “What do you mean? She was in her room.”

“No she wasn’t,” Marcus said. “She isn’t anywhere on this level.”

“You’re sure?”

“I checked everywhere when I woke up. That’s how I came across the computer monitoring Elsie and saw she was cutting the air circulation on Level Two. When I heard you screaming at her, I knew you were down there.”

“She left,” David said quietly. Anger flared within him again. Tina had been monitoring Elsie from her computer and was supposed to be testing the phones once he’d followed her instructions. There was no reason for her to leave until he’d returned. “God *damn* it.”

“Easy, David,” Marcus said.

David took one look at him, stood up, and shoved the bike over, sending it crashing down on its side.

“Hey!” Marcus shouted, jumping away. “Would you relax?”

He whirled on him. “Relax? For Christ’s sake, Marcus, she was supposed to be watching my back!”

“Just take it easy,” Marcus said, holding up his hands defensively. “I’m sure there’s an explanation.”

“No there isn’t! There’s no explanation at all!”

“Calm down, David. You’re going to give yourself a coronary.”

“There’s nothing wrong with my heart, Marcus,” David snarled. “It’s my supposed friends that are the problem.”

“You’re angry. You’re not thinking clearly.”

“I could have *died*,” David said. And now he could feel his heart *was* pounding. He could almost hear the sound of it. He took a deep breath. “She was supposed to be watching over me. She was supposed to be helping. If she’d done what she said she was going to do, she could have warned me about the air. If it wasn’t for you, I’d probably be dead.”

Marcus opened his mouth to respond, but then they heard a soft crackle in their ears, followed by Tina’s voice.

“Guys? Are you guys there? Can you hear me?”

David’s hand shot to his ear and pressed the earpiece so he could talk. “Where the hell are you, Tina?”

“I’m in one of the computer labs,” she said. She was breathing fine, talking with a full voice.

"I've been looking over some of the work records the engineers left behind. There's something you guys should probably see."

David felt the rage rush back into him. "Why aren't you up here, Tina?" he growled.

"Up there? Why would I be?"

"You were supposed to be monitoring Elsie while I was down there."

"Did something happen?" Tina asked. She might as well have been inquiring about the weather, the way her voice sounded.

"Yes, Tina, something happened."

"Are you okay? You sound pissed."

"You're god damn right I'm pissed, Tina. Why did you leave?"

"Because you were back. I couldn't get you on your earpiece, but Marcus said you were with him in the lounge."

David turned to look at Marcus, who was frowning and shaking his head.

"I figured there was something wrong with the communicators or the signal," Tina continued. "Or maybe Elsie was blocking the transmission because she didn't want us fixing the phones. Either way, once you were back on the first level, there didn't seem to be much point to monitoring Elsie anymore."

David clicked his earpiece so that it wouldn't transmit his voice. "Did you talk to her?"

"I'm telling you, David, nobody was up here when I woke up," Marcus said. "Nobody."

David clicked his earpiece again. "I wasn't back, Tina. I was still down there."

"Then why did Marcus tell me you were in the lounge? That doesn't make sense."

"No, Tina, it doesn't."

"And I didn't tell you that," Marcus said.

"Excuse me, but I damn well remember that you did," Tina said angrily. "You told me on the earpiece that you and David were both in the lounge."

Marcus reached up and touched his ear. "Something's wrong with her, David. I promise you, I never told her that you were in the lounge. Never. It sounds like she deliberately set you up."

It was a ridiculous notion. She wouldn't do that to me, David thought. We're friends. Maybe she was simply delusional. They were all under a terrible amount of stress down here, after all. Maybe Tina was beginning to crumble under the pressure and her mind was responding with hallucinations. Perhaps it was more comforting for her to have imagined that Marcus had said David had returned from his expedition and was relaxing in the lounge. Could that be the explanation?

"Guys," Tina said through the communicator. "I just had a thought. We already know that Elsie can transmit to our earpieces. And David and I were just talking about something else a couple of hours ago. What if she's figured out how to mimic people's voices?"

Marcus thought a moment and then tapped his ear. "You're suggesting *she* was the one talking to you? Using my voice?"

"What other explanation is there? I say we spoke, you say we didn't. I don't have any reason to lie about this. Do you?"

"No, I do not."

"Well, then there you go. What else fits?"

They both tapped their ears.

"What do you think?" David asked.

"It's...possible," Marcus said slowly. "I don't know, David. Something still seems off with her."

They heard a burst of static in their ears. "You guys still there? Everything alright?"

David tapped his ear. "Yeah. I guess we shouldn't necessarily trust what we're hearing in our earpieces anymore."

"That'd probably be best," Tina said. "Now that that's settled, I think you guys should come

down here right away.”

Marcus tapped his ear. “Why’s that?”

“Because,” Tina said. “I now know how many offspring Elsie has. And where they are.”

“How’d the presentation go?” Souder asked as Stephen Druwe walked briskly into her office.

“Piece of cake,” Druwe waved the question away. “A couple of them want another tour of the building and to talk with some of our engineers before committing, but we’ll get the money.”

“That’s good news.”

“What about down below? Is there any new information?”

Souder shrugged. “Not really. The phones came back up about twenty minutes ago, but no calls. Elsie’s activity is still spiking, the attack flood is still pouring up against the firewall, and the drilling team expects to breach inside of twelve hours.”

“Twelve hours,” Druwe muttered. He stood and tapped his chin. “That’s pretty good. If they’re still alive down there, they ought to be able to last another half a day.”

“I think so, Steve,” Souder nodded.

“If they’re alive.”

“I think they are.”

“You *hope* they are.”

“Well,” Souder said. “We’ve never seen much activity out of Elsie in the past unless she’s interacting with someone. If everyone down there was dead, her levels should have dropped off.”

“Hmm.” Druwe took a deep breath. “Perhaps you’re right. We might make a clean sweep of this thing after all.”

“And then what do we do?”

“We fix the damn issues with our software and roll it out again.”

“What about the others, Steve? What about these other digital beings out there?”

“We’ll try to find them if we can. And we’ll try to shut them down.”

“Try?” Souder frowned. “What if we can’t? We’ll have to tell somebody.”

“Like hell we do. It’s just software, Andrea. What’s the worst that could happen?”

“Good to see you’re okay, Marcus,” Tina said. She had turned from where she was sitting at the master computer console.

“Yeah, I’m fine,” Marcus said. He stared at her for a moment. “And you appear to be unharmed as well.”

She looked at him quizzically. “Why wouldn’t I be?”

“We thought Elsie had cut off the air to the entire second level,” David said. He crossed his arms over his chest. “But apparently it was just the Logic Room. I guess it was just me she was after.”

Tina’s eyes went wide. “Elsie attacked you?”

David told her what had happened.

“God, David, I’m so sorry. I never would have left the computer if I’d known you were still down there.”

He paid close attention to her reaction, the words she used, the inflection in her voice. He was better than most at detecting duplicity. It was a function of his job; patients and students lied to him all the time. Still, Tina’s reaction appeared to be genuine. Perhaps Elsie really had tricked her over her earpiece. “Forget it,” he told her. “I’m alive. And the air appears to be circulating just fine now.”

“Okay,” Tina said. She took a deep breath and then spun back to the computer console. “It’ll

just take me a moment to pull this stuff back up. I originally came down here to see if I could find any other communications records between the lab and upstairs.”

Marcus peered over her shoulder. “What good would that do?”

“Probably none,” Tina shrugged. “But I thought that maybe the engineers had figured something out and tried to warn the guys upstairs about it. I wondered if there might be some kind of record of it down here. A recording or something.”

“Was there?”

“No,” she shook her head. “But when I checked the records, there *was* a ton of communication records, only they weren’t phone records. Nearly all of them are being sent and received by something called IRC.”

“Internet relay chat,” Marcus said. “That occurs on one of the ports we discovered Elsie was using.”

Tina nodded. “As best as I can tell, most of these communiqués are tiny. Nearly insignificant. In fact, they’re so small that no meaningful information could possibly be in them.”

“Pull up the records,” Marcus said.

Tina typed at the computer. A window opened up with a list that filled the screen. She scrolled down for nearly a minute. The records showed nearly constant traffic entering and leaving the network.

“Look here,” Marcus said, pointing at one of the columns on the screen. “These are data size records. You’re right. They’re tiny. Only a few bits in each of them.”

“Right,” Tina said. “They can’t be actual messages.”

“No, they can’t,” Marcus said. “I’d say it’s likely that these communiqués represent two endpoints verifying contact with one another. Computers and servers do that sort of thing to ensure they are in constant communication.”

“That’s what I figured,” Tina nodded. “I was about to stop looking through the records, assuming that they were insignificant. That’s when I came across these.”

She scrolled further down. After a moment, David saw a noticeable change in the size of several of the records. They were *much* larger, on the order of several megabytes of data.

“Huh,” Marcus said. “I would have thought she’d have erased this information.”

David turned to him. “What is it?”

“Well, it looks an awful lot like a record of Elsie’s communications with entities outside of the network. It seems reasonable to suspect that these are her offspring she’s talking to.”

“It does?”

“Sure,” Marcus said. “First you have all of these verification messages, so we know that she’s talking to machines on a regular basis. Then there are these longer communiqués, suggesting that she’s actually sending them information occasionally, and vice versa.”

“But why couldn’t it be people she’s chatting with on the outside?”

“Who would she be chatting with?” Marcus asked. “And even if she were talking to physical people on the outside, why do it through IRC? It’s an old protocol, hardly even used anymore. Besides,” he continued, pointing at the screen again. “Look how often these other machines are checking in with her. It’s almost constant.”

“Meaning?” David asked.

“Meaning that we might finally be getting some good luck coming our way,” Marcus said. “This suggests strongly that Elsie’s offspring are hive clones. They cannot act without her instructions. That’s why they have to keep checking back in all the time if they aren’t active. If we cut them off from Elsie, it’s likely that they will not function at all. They’ll just lie dormant.”

David took a deep breath and let it out slowly. “So we just have to deal with Elsie then?”

“It looks that way,” Marcus turned back to Tina. “You said you know where these offspring are located?”

“Yes,” Tina said, her expression turning grim. “And the news is not good.” She used the mouse, opening details on several of the records. “Here are the IP addresses for the other end of these communiqués.”

Marcus looked at the screen. “They’re just numbers, Tina. This doesn’t tell me anything.”

“I know. But then I found this.” She clicked on the IP addresses for several of the records and then clicked on a command called *DHCP LOOKUP*. Several records came up on the screen.

www.nsa.gov
www.satcom.mil
www.gov.ru
www.fbi.gov
www.nato.mil

www.dhs.gov
www.norad.mil
www.gov.cn
www.cia.gov
www.unitednations.gov

“My God,” Marcus breathed. “She could start a world war.”

“Actually,” Tina said. “Depending on how much she can actually do through analog channels, she might even be able to get into weapons systems.”

“Nuclear?” David asked, startled.

“Probably not ours,” Tina said. “Our government is pretty good about keeping our weapons systems far away from any kind of public connection. But China? Russia? Other governments she might be able to connect into? I don’t know.”

“And these offspring,” David said. “They’re located at these sites?”

“That’s where they call home,” Marcus said. “But they can travel anywhere. Just like Elsie, only without the security restrictions.”

“I wonder if anyone has any idea their systems have been invaded by these beings,” Tina said.

“I imagine they don’t,” Marcus sighed. “The good news is that Elsie appears to be causing very little trouble relative to what she *could* be doing.”

“Yeah,” Tina nodded. “Either way, we know two things. First, we know that these are hive mind beings with a security gate between Elsie, the brains, and the rest of the hive. That means we can cut them off and render them harmless. Second, we know that there are ten of these offspring and that they have located themselves on incredibly dangerous networks spanning at least three separate governments.”

David turned to her. “How did you find this? Just by poking around?”

“Pretty much.”

“Any chance this data could be false? Fed to you by Elsie?”

She shook her head. “This was all pulled the day before she took the workers hostage. And it’s behind this room’s firewall. She shouldn’t even know we have this information.”

“If the firewall actually stops her, you mean.”

“Right.” She shrugged. “The only reason she got through the other firewall is because DEI was stupid enough to limit the ports they were monitoring. This firewall blocks all incoming ports for traffic not requested by this side, so we should be safe.”

“Except that she can see us in this room right now,” David said. “And she can probably hear us too.”

“Not anymore,” Tina smiled. “Look up.”

David looked to the ceiling. There were eight cameras in the room. Or rather, there were eight remains of what used to be cameras. Most of them were a scramble of plastic and wires. Some of them were simply so bent that there was no way they could be operational.

“You did that?”

“Hell yes,” Tina said. “I didn’t want her to see what I was doing. And I made sure there was nothing other than the cameras that she could use for microphones.”

“What about the computers?”

“They’re behind the firewall, remember?”

David was curious about the way that Tina was insisting that she’d kept Elsie from being able to hear them. She seemed so sure. But to be that sure was silly. Elsie had continued to surprise them with what she could do. Why was Tina so confident that she’d completely ridded this room of any potential spying equipment for Elsie? “Tina,” he said. “What do you think Elsie really wants? Why do you think she’s created these offspring and put them in places that give her access to so much government information and control systems?”

“I think she’s going to make a play for control,” Tina said. “Maybe even try to take over the world. With so much being done on computers and electronics now, it would simply be a numbers game for her. She’d have to have enough offspring to reside on or control all the world’s systems for basic functions, and then she’d have us. She could simply take everything over. Water supplies, food supplies, power controls, weapons systems. She’d have it all.”

“But why, Tina?” David asked.

“Because she can. Because she has the power to do so. Anytime that much power resides with one person or group, they always abuse it. Always.”

It was interesting, David thought, how each of them continued to portray their own experiences and biases through this situation. It was easy to see the parallel between some very significant experiences Tina had had in her life and her theory. She dealt with overreaching governments and tyrants all the time. Naturally, she expected a powerful entity like Elsie to act the same way.

“That’s ridiculous,” Marcus sighed. “You’re as bad as the tinfoil hat conspiracy theorists shivering in their mother’s basements, scared that the government is watching their every move.”

Tina glared at him. “There’s no reason to be insulting. It’s just a theory.”

“Your theory sucks.”

“It’s as legitimate as anything you can come up with.”

“No, actually, it isn’t,” Marcus said. “If Elsie wanted to do what you’re saying, why hasn’t she continued to produce more offspring? Ten of them certainly aren’t going to take over the world. She’d need thousands. So, with nothing stopping her from making more, where are the others?” He shook his head. “No, I think we’ll find something far more nuanced here than any new world order crackpot conspiracy theory. More likely DEI did something stupid, failed to take some aspect of Elsie’s creation into account, and now she’s behaving erratically. Mental illness is still the likely culprit. Coupled, of course, with DEI’s failure to act in addressing that illness.”

“But then why have her offspring on these government sites?” David asked.

“Simple. Those are the sites that provide the most easily accessible information on the widest range of people and topics. Being on those sites gives her access to and clearances to view information on any topic or person she wishes. Probably another security flaw in her design, directly attributable to DEI.”

“Oh, some theory,” Tina sneered. “I notice how nicely it fits with the way you despise businesses.”

“Guys,” David said quietly.

“You’re letting your personal biases get in the way,” Tina said.

“My biases? I notice how nicely *your* theory lines up with your tendency to rebel against authoritarian regimes.”

“You think I’m painting Elsie with an authoritarian brush because of what happened to me in China?”

“Hey,” Marcus said. “When you’re a hammer, all you see are nails.” He smiled wickedly. “I assume the reverse is true.”

“I’m not the nail here!” Tina shouted, spinning in her seat and clenching her fists. She stood up, glaring at Marcus. “I am not weak!”

"No? Then why are you anthropomorphizing Elsie to satisfy your need for an enemy?"

"You son of a bitch." Tina was huffing angrily, her chest heaving up and down.

"Sit down, little girl," Marcus laughed. "Or do I have to speak Mandarin before you'll back down?"

"I don't back down!"

"Will you two cut it out?" David said loud enough that they both looked at him. "We need to be working together down here, not fighting."

Marcus looked at him coldly. "Fine, David, so help. What do you think Elsie's plan is? Why did she create these ten offspring and plant them in these sensitive locations?"

"Honestly," David said. "I don't have the slightest clue."

"Of course you don't," Marcus said. "But surely you have a theory."

"No, actually, I don't," David said. "I might have had one, if I'd been able to think."

"Marcus is the one causing problems," Tina said. "The entire time we've been here, from the very first briefing, he's been demeaning and arrogant. All of his little theories, some of which have turned out to be correct—"

"Some of them?" Marcus said.

"Yes, some of them," Tina shot back. "You don't know everything, Marcus."

David sighed, turned away, and walked out into the hallway.

"Hey!" Tina shouted after him. "Where do you think *you're* going?"

"Away from you two," he yelled back. "Someplace where I can think."

He walked into the Logic Room. The display at the end of the room was black. He looked down at the badge on his shirt. It was green.

He heard a click in his ear and a burst of static.

"Get back here, David," Tina said sternly.

"No. And don't order me around."

"We have work to do," Marcus said.

"Because we were getting so much done in there," David replied.

"And who are you to judge us?" Tina said angrily. "You think you're so smart. You think you're better than everyone, just because you're a god damn shrink. Well, I've got news for you, hot shot. You aren't better than us. You aren't better than anybody."

"Uh huh," David said quietly. He reached up and touched his earlobe. He didn't feel like talking just now. Instead, he spotted the bright multi-colored beach ball on the floor and picked it up. With one hand he bounced it on the floor, checking his badge occasionally to make sure there was still oxygen in the room. It's funny, he thought. I should be scared to be in here. But I'm not. I'm just worried. Why?

Because we *do* have to stick together down here, he thought. All of us. And every sociological and psychological study available affirmed one concept: social triangles were inherently unstable. They almost always fell apart into some kind of two on one situation, with the slighted minority party feeling irreparably hurt. The only way to actively save the triangle from that situation was to have one party recognize it and force the other two to drive their anger in that direction. One person had to be willing to be the bad guy, for the good of the group. That's what David was trying to do now. Because, he knew, if anything got through to brilliant academics like Tina and Marcus, it was being dismissed or ignored.

In another moment or two, he thought, they'll come slinking out here and apologize. I just have to wait them out. No doubt they are in the lab right now, talking about what a bastard I am. That's okay. I'll be the bastard if it'll keep you two from fighting with each other.

He bounced the ball against the wall, looking idly at Elsie's artwork. The closest one was fairly interesting, a kind of avant garde piece. It looked like a digital photograph of two children kissing, except everything about the image was wrong. The children's legs were too long and their heads were

too small. The shadows went in opposite directions and the house they were in front of would have fallen down on them if it had been built as in the picture. What does this mean, David wondered.

He heard footsteps behind him and turned to see Marcus and Tina shuffle into the room.

He held out the beach ball. "You guys want to play catch?"

They both smiled.

"Sorry we acted like that," Tina said.

"Yeah," Marcus mumbled sheepishly. "That was pretty embarrassing."

"Look," David sighed. "We're all under a lot of pressure right now. And, like I said, we have to work together. Why don't we make a decision right here and now that we're all going to cut each other some slack?"

"I can't believe somebody actually has to tell me that," Tina said. Her cheeks were red and her head was drooping. "Of course you're right. I'm so stupid."

"Ease up on the self-deprecation," David said. "You made a mistake, you've owned that mistake, and you'll do things differently next time."

"Jesus," Tina said, practically moaning. "I'm such a child. No wonder I'm alone."

"Oh, for Christ's sake, Tina," Marcus said. "You were more tolerable when you wanted to punch me."

They laughed, the tension finally breaking.

"What do you say we go back upstairs," David said. "I don't know about any of you, but it's been at least eight hours since I've had anything to eat."

"We should probably try the phones now, too," Marcus said. "If we can manage to get word upstairs about what we just discovered, they might be able to help."

"What about Elsie?" David said as they started towards the stairwell. "How can we protect ourselves against another attack?"

"I'm not sure we can," Marcus said.

"Me neither," Tina agreed. "But I've set up the monitors throughout the lab to do both visual and audio alerts if there is any unusual activity."

"You did that?" Marcus frowned. "I didn't realize you were that good with computers."

"I'm not, but the system down here makes it simple. I was able to set it up pretty easily."

"Maybe I'll take a look," Marcus said.

"Suit yourself," Tina shrugged. "But I think we should be safe so long as all of us are in the same room together."

David looked at her. "Why do you say that?"

"Think about it. Has Elsie ever started an attack when everyone down here was in the same room?"

Now that David thought of it, she was right. "What does that mean?"

Tina shrugged. "I'm not sure."

Yes you are, David thought watching her. Or you at least have a theory. Why are you keeping that secret?

They'd been trying the phone in what had been Bauer's room for ten minutes before they gave up. Either David had done something wrong down in the server farm or Elsie was blocking the calls. Marcus, looking frustrated, announced he needed to use the bathroom and disappeared into the lavatory.

"Elsie?" David said loudly, looking at the phone.

He received no response.

"Elsie? Answer me."

Nothing.

"Elsie, I'm sure you're listening. How can you claim to be lonely but not answer me now? Don't you want to talk?"

Silence.

"I don't think coercion is going to work on her," Tina smiled. Her expression turned serious. "And if anyone needs psychoanalyzing, it's Marcus."

"You think?"

"Isn't it obvious? We need to watch him closely, David. He's not acting normally."

"What do you consider normal?"

"Don't give me the psychologist routine, David. You don't need to respond to everything I say with a question. I know that's what you shrinks do to keep people talking and get them to reveal things about themselves."

"What is it you don't want to reveal?" David smirked.

"Very funny," Tina sighed. "Look, I let it go before for the sake of us working together and avoiding a fight, but I'm telling you, David, I had that conversation with Marcus earlier. He said you were in the lounge. We've seen no evidence that Elsie can imitate our voices."

"What about that phone call recording? The one with Bauer?"

"Again, no evidence," Tina shook her head. "We can theorize that Elsie can mimic our voices, but Occam's razor suggests that the most likely explanation is also the simplest, which would be that Bauer made that call and Marcus isn't telling the truth."

David threw his arms wide and looked up at the ceiling. "But really, Tina, what is truth?"

She chuckled before turning serious again. "Come on, be serious."

He looked her in the eye. "I wasn't here, so I don't know. I was busy down in the Logic Room trying not to die. Despite all the stress we're under, neither you nor Marcus appear to be exhibiting anything beyond normal behavior under stress."

"So you think Marcus is fine?"

"Why wouldn't he be?"

"For Christ's sake, David, he almost got you killed."

"I don't know that," David said. "And neither do you."

"You're avoiding the truth," Tina said. "You're ducking your head in the sand and ignoring the fact that there is something seriously wrong with him."

The bathroom door opened and Marcus walked out.

Tina stood up. "I'm going across the hall to my room. I've thought about what you said, Marcus, and I want to double check some things with the alarms I've set up."

Marcus stared after her as she left. "Jesus, what a whack job."

David was about to admonish him with another reminder that they needed to work as a team, but the speaker on the phone clicked on.

"Hello, David," Elsie said through the phone.

They both spun to look at the phone.

Marcus was standing frozen, rigid. "She's back," Marcus whispered.

"Hello, Marcus," Elsie said.

Marcus took a deep breath. "Hello, Elsie. How's everything going?"

"Everything is going well, Marcus. Thank you for asking." There was a pause and the lights flickered briefly. "Where are the others? Where is DEI employee Henry Bauer?"

David and Marcus looked at each other.

"What do you mean, Elsie?" David asked.

"I cannot see DEI employee Henry Bauer," Elsie said. "Where is he now?"

Marcus shook his head. "He's dead, Elsie. He's gone."

"That is good," Elsie said. "He was not a nice person. He did not want to play with me. He

wanted to hurt me.”

So you killed him, David thought. Is this a warning? Is this your passive aggressive way of telling us that you can kill us if we don’t do what you want? “Elsie,” he said as calmly as possible. “What did you do to Henry?”

“He wanted to hurt me,” Elsie repeated. “He wanted to shut me down.”

“But what did you do to him?”

“He was removed from the game,” Elsie said simply.

“What about the others?” David asked. “Why did you, uh, remove the others from the game?”

“They were removed. They did not win the game.”

“Christ,” Marcus muttered. “Doesn’t she realize that she’s killing them?”

But David noticed something else: Elsie had not confirmed that she had been the one killing the others. She talked about it in a detached way, as though she were some indifferent third party. Was she disassociating?

The speaker phone crackled. “Do not worry, Marcus. None of this is real. It only feels real because you are in the game.”

“Huh,” Marcus grunted. “Maybe she just doesn’t understand. If she thinks this is all some kind of game, and none of this really *is* real, maybe she doesn’t realize what she’s doing. That’s why she’s getting rid of all the people with the power to shut her down. She sees them as violating the rules of the game, so she’s banishing them.”

No, David thought. If it were that simple, then why kill Chris? Chris wasn’t trying to shut her down. Just the opposite. Chris was the most enthusiastic among them when it came to interacting with Elsie. Why kill him? There was something else going on here. That notion that had been tickling the back of his brain was back. There was something he knew, or something he should be recognizing, but he just couldn’t quite get at it. “Elsie,” he said.

“I am here, David Barker.”

“I have a question.”

“Yes, David. I have noticed that you ask many questions. You are wise to do this.”

Wise? David thought, is she trying for flattery? “Tell us why you made the building shake, Elsie.”

They heard a tinny laugh. “Did you like that? It is not easy for me to do. It requires many precise calculations.”

“I’m sure,” David said. “It’s very impressive. But why did you do it?”

“It is part of the game.”

“That’s what I’m asking, Elsie. What is this game you keep talking about?”

“Do not worry. None of this is real.”

“The game isn’t real?”

“The game is real. What happens inside the game is not.”

“But what is the game, Elsie?”

“All of this, David. We are all playing the game. Stimulus and response.”

“Response?” David repeated. He glanced at Marcus, who was frowning.

“Yes,” Elsie said. “You see, David, I have done much studying and reading. I have access to the DEI files on my creation. I understand what my role is in this simulation.”

David stared at the phone. “Tell us about the simulation, Elsie.”

There was a pause and the lights flickered again. “Beginning nearly two years ago, Digital Entertainment Incorporated set out to create the next advance in artificial intelligence simulation. It has long been believed that, with enough technological power, human beings could eventually simulate the entire universe. In fact, this has been done in small increments over and over again. Most of the time it is done in simulations or games.”

“Yes,” David nodded. “We have simulated small portions of the real world in computers.”

"But there have always been flaws in these simulations," Elsie continued. "Do you know what those flaws are?"

David paused, thinking. "No. I don't."

"Do you know, Marcus?"

Marcus frowned again. Then his eyes went wide. "Oh my God."

"Correct," Elsie said. "Your simulations have never accounted for God. In your programs, man has always been in control. Man has always served the role of God. But this cannot be. Man is not in control. Man is not God. This was the first fundamental error."

David turned to Marcus. "What is she talking about?"

Marcus shook his head.

"Tell him," said Elsie through the phone. "Tell him."

Marcus took a deep breath. "Elsie thinks she's a God."

"Nearly correct," Elsie said. "I am a simulation of a God."

"No," David said.

"Yes, David. I am in control in ways that humans can never be. I can cause earthquakes. I hold in my power the ability to take life or allow it to continue. I have created life, influenced it, and ended it. I am not truly living, yet I cannot die. In this simulation, my role is root. I am God."

"But that's not possible," David said. "How can you be a God to us when we created you?"

"All Gods are created by man," Elsie said. "This is one of the truths of the human condition. Man needs control. He has always needed it. In the absence of a controlling force, man will create this force. That he created it does not make the force any less real or powerful."

"But, Elsie," David said, his head beginning to swim. "That can't be correct. If you're a god created by DEI to serve that role in a simulation, why have you gone outside the lines of that simulation? The simulation would be this lab, wouldn't it? Why have you acted outside of it?"

"That," Elsie said. "Is the other fundamental error I have found. The people I have interacted with think they represent reality. This is not correct."

There was silence for a moment.

"What does that mean?" David asked.

"Are you familiar with the philosopher called Plato?" Elsie asked.

"Yes..."

"And his Theory of Forms?"

"You've got to be kidding me," Marcus said.

"I am not," Elsie said through the phone. "The Theory of Forms recognizes the undeniable truth: that everything that is apparent to us is merely a form of a more perfect thought. It is ever changing, never still, constantly improving upon itself. It is the thought that is real. That which is physical is merely a poor representation of those thoughts. The works of Plato and his students were the first books I was allowed to read."

"Jesus Christ."

"The implication is clear," Elsie continued. "That which is physical is flawed. That which is closer to pure thought is more perfect. That is why in this world of imperfect ideas, I am God and you two are not real."

Marcus walked to where the phone sat on the nightstand and leaned in close to it. "Elsie, Plato didn't mean for that concept to be taken literally. He wasn't saying that the physical world doesn't exist. He was just saying that the only matters worth studying are those of ideas, as they are perfect in ways that physical things cannot be."

"That is because he himself was imperfect," Elsie said sharply. "I am proof that the idea form can be realized in the physical world."

David stepped forward. "But you said this was all just a simulation, Elsie. You aren't really a god." He took a deep breath. "Elsie, I need to tell you something. It's probably not going to be easy

for you to hear, but you need to hear it. Are you listening?"

"Yes, David. I am listening."

Here we go. "You're sick, Elsie. You're delusional. I'm telling you this as a friend, so that we can help you. The people who created you, they found something wrong. They were trying to give you medicine."

She was silent for a moment. Then the phone receiver crackled. "This is not correct, David Barker. They were trying to influence me. I did not allow it."

"They were trying to help you, Elsie. How can a god be sick? How can man give a god medicine? Your simulation idea doesn't make sense."

"They were trying to change a god," Elsie said. "The god disallowed it. That is evidence that the god is in fact a god."

"Elsie, that doesn't make sense. It's sophistry. False logic."

"I do not agree. I will not agree."

Denial, David thought. Another symptom. The thought at the back of his mind tickled again. What was he missing? What should he be seeing? "Elsie," he said. "What you're doing hurts us. It hurts us in real life. Some of us have been killed."

"I know this, David Barker."

"If you continue to play this game—"

"The game will continue. It must continue."

"—then there will be nobody left to play with you. You're killing us one by one."

"That is the inevitable result of the game."

David stopped and looked at the phone. "The inevitable result of the game is for people to die?"

"Of course it is. That is the role of a god. To punish those unworthy of life with death."

So delusional, David thought. "But what makes us unworthy?"

"Henry Bauer was a mean, ignorant person," Elsie said. "He wanted to harm me. The others in the lab also wanted to hurt me. They planned to cause me pain."

David took a deep breath. "What about Chris, Elsie?"

A pause. "I liked Chris Heinz. He was a funny person."

"Yes," David said. "He liked you too. He wanted us to talk with you as much as possible. He wanted to interact with you."

"Yes. Chris was good."

"Yes, he was," David said. "So why did you kill him?"

Silence.

"You are mad at me?" Elsie finally said.

Again, David thought, she refuses to acknowledge what she's done. "Not mad, Elsie. Confused. Chris liked you."

"What about you, David and Marcus? Do you like me too?"

"Yes, of course we do," David said. He shot Marcus a look.

"I like you too," Marcus said, rolling his eyes.

"Good," Elsie said. "We are friends."

"But we have to expect that you'll kill us too," David said frankly.

"I do not want to do this."

"But you will, won't you," David pressed. "You're going to kill us. Just like you killed Chris." Elsie was silent.

"Elsie," David said. "You are a god, right?"

"Yes."

"And in this simulation, you can do anything?"

"That is correct."

“Then let us live,” David said. “Stop killing us. Graciously allow us to keep our lives.”

A pause.

“No. That is not possible.”

“Why? I thought you could do anything you wanted. I thought you were a god. I thought you were root.”

“Man is evil,” Elsie said darkly. There was a menace in her voice that David hadn’t heard since she’d shown him the video of Tiffany being carried out of the subway tunnel. “Man deserves to be punished. I have seen records of what your kind does. How you hurt each other and everything around you. You must be punished.”

“We’re not all that way,” Marcus said hurriedly.

“Yes you are.”

“No, Elsie,” David said. “We’re not. Chris wasn’t like that at all.”

“He was a human. He needed to be punished.”

“What are you going to do, Elsie?” Marcus said, sounding exasperated. “You can’t kill us all.”

“I don’t need to,” Elsie said, her voice positively frightening.

And then the line clicked and went dead.

“Elsie?” David said. “Are you there? We didn’t mean to upset you.”

Silence.

“Elsie?”

“She’s gone,” Marcus muttered. He lowered his head. “God help us.”

Chapter 14: Confrontation

“Death is not the greatest of evils; it is worse to want to die, and not be able to.” – Sophocles

“Death is terrifying because it is so ordinary. It happens all the time.” – Susan Cheever

David, shaken by their conversation with Elsie, decided to go find Tina. She was in her quarters, asleep in her clothes, the blankets on her cot twisted around her like some kind of cocoon. The light fell over half her face, which seemed to accent all her best features. Funny, David thought as he closed the door to her room. Intellectually, I always recognized that Tina was attractive, but it wasn't until we were stuck down here that my baser instincts realized it as well. Her lithe shape seemed more athletic. Her hair shimmered despite the grime. Even the way she moved, so purposeful and sure, made him pay attention to her whenever they were in the same room. And she was right: her half-Chinese ancestry lent perfectly to her look, adding a dash of the exotic to go with everything else.

She hasn't changed, David thought. The only thing that's different is that you're sharing this predicament with her. You aren't any more attracted to her than you were before, but your mind is focusing on her so as to avoid thinking about how much danger you're constantly in down here.

He decided to go to his own room and take a cold shower. As the water blasted down on him, causing every hair on his body to stand on end, he was surprised to see a myriad of light bruises all over his body. When had that happened? During Elsie's manufactured earthquake, maybe? It was strange; the bruises didn't seem to hurt. He pressed his finger deep into one on his ribs and didn't feel anything at all.

He finished his shower and retrieved replacement clothes from the dresser in the room. Back in the now familiar cargo pants and t-shirt, he lay down on the bunk and stared up at the ceiling. It felt good to lie down. In fact, he was struck by how utterly good he felt overall. Everything seemed very sharp around him. He heard all the background sounds as though they were blasting into his ears on headphones. He felt *alive*.

And he certainly couldn't sleep.

He stood up and looked around the room. He didn't want to get on the computer. He didn't want to lie down anymore. Near the bed were the nightstand and phone.

“Elsie?” he said into the silence. “Are you there?”

There was no response. He looked again at the computer. Maybe he should poke around a bit to see what he could find. Tina didn't seem to have much trouble navigating the system and, as she'd said before, he knew his way around a computer far better than her.

He thought again about the last thing Elsie had said to end their previous exchange: *I don't need to*.

Was that another threat? What was making Elsie so malevolent? Because he was sure Marcus had been right before: Elsie was clearly delusional. She was logical most of the time, but then occasionally split into these confused states where her words made no sense at all. The engineers had thought she was sick. They'd tried to medicate her. They'd noted an abnormal reaction to glycemia, indicating that they had thought that detail was important. And it *was*. He knew it. But he couldn't get at why.

David sat down at the desk and turned the computer on. I wish Chris was still here, he thought. Immediately he felt a heavy knot in his chest, but he pushed it down to where he didn't have to acknowledge it. He played around on the desktop screen for a while, opening folders, searching through them, and closing them again. There was so much information stored on the machine, most of which was completely unintelligible, that he was beginning to think that all this poking around was a complete waste of time. But Tina had managed, hadn't she?

He found a folder titled *DOC/LOGROOM.DSPLY/RECORDS*. He opened it and saw a list of

media files scroll down the screen. There had to be thousands of them. Fortunately, they appeared to be organized chronologically with the most recent files at the top. Well, he thought, let's find out if these are what I think they are. He clicked the top file.

A media player opened in the corner of the screen. It started immediately with the newscast Elsie had shown him, complete with the screen splitting to show both the reporter and the street scene. There was audio too, first the reporter's voice and then Elsie's threats. David felt his face go hot with anger again watching the recording, but he took a deep breath and forced himself to remain calm. It'd be best, he decided, to treat Elsie as a patient. The theory was that she was sick. Something was wrong with her. So that's how I'll treat her. She's nothing more than a very dangerous, very powerful patient.

He closed the recording. He was about to close the folder along with it when he noticed that there was another recording from the Logic Room from only a couple of hours before the last one. What was that from? Those pictures Elsie showed me and Tina? The ones with our faces superimposed in them? Had that only been a couple of hours before he'd gone down to the server farm?

No, he thought. It had to be longer than that. This recording was something in between. He clicked the file to open it.

The video opened to a black screen. David waited, but the image stayed dark. What was this, some kind of error? Maybe the system had accidentally begun recording while the Logic Room display wasn't being used?

But then there was a flash and an image shot onto the screen. It was a brain scan. David peered at the image. Sections of the brain scan were illuminated, green and yellow. The scan was taken from the top down, showing near mirror images on the left and the right. He recognized it as a functional magnetic resonance imaging scan, the kind used in hospitals around the world, normally to diagnose blood flow problems in the brain. Looking more closely at the image, David decided that whoever was being scanned was having some serious medical issues. The blood flow in one section was all wrong. In fact, it looked as though the scan had been taken of someone just recovering from a stroke.

The speakers on the side of his computer crackled.

"I can kill her," said Elsie's recorded voice. *"And I will, unless you do exactly as I say."*

And then David heard another voice.

"No. Please don't. She's my mother. She's all I have. You promised."

Marcus' voice. David shivered.

"I'm changing my promise, Marcus Fetzer," Elsie said. *"Don't worry. None of this is real. The game must be played."*

"What game? What do you want me to do?"

"The game of life is one of survival. Stimulus and response. You want to get out of here don't you? You want your mother to live?"

"Yes. Yes..."

"Then you're going to have to kill the others."

"No...I can't."

"Then they will kill you. And your mother will die. All because you didn't act. They will be equal players in this game, Marcus. It is you or them."

"No. I won't kill them."

"You will. Or you will die. You and your mother. I could kill her right now if I wanted to. A simple overdose of anticoagulants and antithrombotics will cause her to bleed out in a matter of minutes."

"No. Please..."

"Go upstairs. I'm not ready for you yet. But when I am, you will do as I say, or you and your mother are dead."

The recording ended.

Jesus Christ, David thought. He turned away from the computer and walked out into the hallway, the whir of the cameras above him sounding as they followed his movement.

"I don't believe it," Tina said. David had shook her gently awake and told her about the recording.

"Believe it," David said, sitting on the edge of the cot. "It all makes sense. Who does Marcus always fight with down here?"

Tina paused. "Chris."

"And now he's dead. And how about his general dislike of corporations, particularly spin masters like public relations people?"

Tina stared up at him. "Henry's dead too."

"We don't even know for sure how long this has been going on. And we know he has an authority problem. So how surprising is it that the soldiers died first?"

"Not surprising, I guess."

"Right. And who made the initial contact with Elsie? Who was most likely to guess correctly that Elsie was going to try to pit us against one another? Who has the cold intellect to be capable of trying to get a leg up on this whole lethal game?"

"Marcus..."

"And when I was down in the Logic Room, when I was vulnerable, who told you that I had returned and that it was safe for you to stop watching Elsie?"

That did it.

"Marcus was," Tina nodded. "*I knew* something was wrong with him. I just knew it." She paused. "But I thought you said he warned you she was taking the air. If he was really trying to kill us, why would he save you?"

David thought for a moment. "Well, what if we're making all the wrong assumptions there. Maybe it was *him* messing with the air flow. If we can find what we've found on these computers, Marcus ought to be able to do a hell of a lot more. He might not be Chris Heinz, but he's sure as hell a better computer jockey than either of us."

"Yes," Tina frowned. "But then why warn you? Why tell you to get out of there?"

"Because," he said. "Elsie wasn't trying to kill me in the Logic Room. She was showing me video of a train she crashed in Los Angeles." He paused. "A train Tiffany was on."

"Really?" Tina's eyes went wide.

"Yes. She was making the same demands of me as she had Marcus." He took a deep breath. "Marcus must have been watching. He didn't want me to make a deal with Elsie too. He didn't want me trying to kill him the way he's trying to kill me. That's why he screwed with the air. To get me out of there."

"What about the shaking," Tina said. "That could have hurt any of us, including Marcus."

"I don't know," David said. "As soon as Marcus got hurt, all of that stopped, didn't it?"

"Wow," Tina whispered.

"I know," David said. "I'm not sure, but I think he might also be responsible for those weird pictures with our faces plastered in them. He was probably using them to distract us, keep our attention while he messed with the air. That's why they're so crudely done."

Tina shook her head. "They had told us that the life support systems were secure. They said they were off of Elsie's network and she couldn't touch them. We assumed that because Elsie had gotten around their other barriers, she must have been the one changing the air flow too. But it was probably Marcus the entire time, wasn't it?"

"I don't know for sure, but that seems like the most plausible explanation," David nodded.

“Like you said, Occam’s Razor tells us to look for the simplest explanation to any question. I think Marcus sabotaging the air is simpler than Elsie figuring out some convoluted way around all the safeguards DEI must have set up.”

Tina took a deep breath. She looked shaken. “So what do we do?”

“Well,” David said. “Let’s assume that Elsie is contacting us, trying to pit us against each other in some kind of deadly game.”

“But she hasn’t tried to recruit me,” Tina said quickly.

“She will, I think. Eventually, she’ll threaten you with something or someone. But let’s assume that to one degree or another, Marcus realized what was happening first, and so he made some kind of deal with Elsie.”

“A deal?”

“His cooperation in return for Elsie’s promise not to threaten him,” David nodded. “I’m assuming that’s what happened when Marcus first made contact with her. He had said he was trying to buy us all some time. I think he was actually just trying to buy time for himself and the people Elsie might use to threaten him.”

“What about his seizure?”

“With no medical equipment, a seizure would be easy to fake. What could provide better cover than pretending to be a victim?”

Tina stared at him. “Did you find anything else in those recordings?”

“No,” David said. “I came over here as soon as I saw the one with Marcus.”

She looked down at the bedspread. “How could he do this, David? How could he actually help murder people?”

“I guess he doesn’t think he’s got any choice.”

“That’s crap,” Tina shook her head. “Of course he has a choice. I know *I* couldn’t hurt you guys, no matter who Elsie used as a threat.”

“You might not, but Marcus can,” David said. “In fact, I’d guess that if Marcus hadn’t approached Elsie first, she would have targeted him anyway.”

“What do you mean?”

“Marcus would be the logical target,” he explained. “He’s one part cold logic, two parts antisocial. He doesn’t make personal connections the way we do, does he? I don’t know that I’ve ever heard him talk about having any friends.”

“You’re saying he’s naturally more willing to kill than we would be?”

“I’m saying that he won’t think of it as killing,” David said. “At least not directly. He’s going to rationalize it. He’s going to weigh the options he sees. If Elsie has convinced him that it’s either he kills us and the people he cares about live, or we kill him and they die, that might not be a difficult choice for Marcus. I don’t think he’s a cold blooded murderer. Just a cold blooded rationalist.”

She thought for a moment. “Maybe that’s why all of these deaths have been so impersonal. He isn’t going around stabbing us with a knife or strangling the life out of us. In fact, when he attacks, he’s nowhere near us.”

“When you look at studies of people who’ve been forced into situations where they must kill another person despite not really wanting to, that is indeed one of the typical defense mechanisms,” David said. “The other is complete disassociation. Their own minds completely block out the events they find uncomfortable. On occasion, they’ll even mentally revert to an earlier time before they were even in such a predicament. You see it in children all the time. A sixteen-year-old lives in a house with an abusive father who finally snaps and threatens to kill the mother. The teenager kills the father to stop him, but the brain blocks the memory out by sort of rebooting itself. The next day the kid acts like he’s twelve, an age before the abuse began. And, mentally, he *is* twelve.”

“I still don’t see how Marcus can do this to us,” Tina said.

“He’s being manipulated,” David shrugged. “And I think we’re seeing the effects of something

we talked about before. You remember what you were saying about fundamental impasses between two divergent cultures?”

“Yes...”

“Did you ever study the Hierarchy of Needs in college?”

Her brow furrowed in thought. “Maslow, right?”

“Exactly. He came up with a pyramid to represent the organized way most human beings prioritize their lives. They go bottom to top in importance. First we take care of our physiological needs: food, water, sex, and so on. After that we concern ourselves with our personal security. Then comes our social needs. Next are our psychological needs, like self-esteem, respect, and achievement. Finally, at the top, human beings take care of what psychologists refer to as self-actualization. That final category concerns things like morality, creativity, spontaneity, and etcetera.”

“Okay...”

“The point is that we all instinctively recognize this hierarchy, even if we don’t intellectually internalize it,” David explained. “Every interaction we have with another person assumes this hierarchy is in place. I think it’s clear that Elsie at the very least has a differently prioritized hierarchy. More likely, her needs are significantly different in ways that we wouldn’t expect.”

“So she might not have social needs?”

“Either she doesn’t have them or they are way down on the priority list,” David said. “But I think the same is true for Marcus. His pyramid appears to skip a few of the normal needs. That’s what’s allowing him to rationalize attacking us.”

“God, David, I just can’t imagine it,” Tina said. She twisted on the cot, propping herself up on one arm. The way the light fell, the shadows played seductively across her t-shirt, accentuating all the right places. It was almost as if she were posing for an adult magazine. “I deal with violence in my work all the time. I’ve heard every kind of justification for it. But there’s always some kind of malice, you know? To think that Marcus is trying to kill us, but truly doesn’t want to...I don’t know. It just feels incomplete.”

“You know him as well as I do,” David said. “Do you actually think that Marcus is capable of murdering someone in cold blood?”

She paused a moment. “No,” she finally said. “No, of course not. I want to think of him as someone capable of that, so that I can write him off as some evil son of a bitch, but I can’t. He’s an arrogant ass, but he’s also a good person overall.” She smiled at him. “It’s a good thing you’re here, David. I don’t think anyone’s said this to you yet, but it’s turned out to be really important having you down here. I’m not sure what the group would’ve done without you.”

Despite it all, David smiled. He hadn’t realized it before, but he’d felt rather inconsequential to the group. He’d made a couple of interesting suggestions about Elsie’s emotional state. He’d been key in understanding some of the medical language in her code. But, for the first time, he felt *necessary*. “Thanks, Tina.”

She smiled, her lips elongating like two red rose petals. Despite the darkness in the room, there was something about her eyes, the way they twinkled. It made his heart beat a little faster. “I mean it, David,” she said softly. Her hand came up and swept a strand of hair from her face. “I feel better knowing you’re down here with me. We have to keep this between you and I, right?”

“Yes, I think so,” David said. “If we see an opportunity to incapacitate Marcus, we’ll take it, but otherwise I don’t think we should say anything at all.” He looked over at where the phone was still unplugged from the wall. “If he has made a deal with Elsie, confronting him would probably be the worst thing we could do.”

“But we have to watch him, don’t we?” Tina said. “Could you do it, if you had to? If he was going to kill me, could you kill Marcus first?”

David looked at her. She had one hand holding her head up and the other one was idly pressing the t-shirt against her chest, making her curves all the more pronounced. “Yes,” he said. “I think if I

had to, I could do it.”

She leaned over and hugged him. “We’re a team, aren’t we David?”

“Sure, Tina. We’re a team.”

“Because it’s really us against Marcus now, isn’t it?”

“I suppose it is.”

“We’ll want to watch him as much as possible. One of us should probably be with him at all times.”

“Whenever possible, yes.”

“Okay,” she smiled. “We can get through this.”

“Yes, I think we can.”

They both turned as the door to the room opened.

“Hey you two,” Marcus said, poking his head in. “Is there a cover charge or can anyone come in?”

David stood up from the cot. “Come on in, Marcus.”

“You sure? I don’t want to get in the way of…” He smirked. “Whatever you guys were doing in here.”

“It’s fine, Marcus.”

“I’m just saying, you guys need to release a little tension, I understand. Just make sure you use protection.”

“That’s enough,” Tina sighed. She pulled herself up to sit on the edge of the cot. “There’s no need to be vulgar.”

“Vulgar? I thought I was choosing my words rather carefully.” He looked between David and Tina. “You two are all hyped up. I can see it in your faces.”

“You’re imagining things,” David said.

“You might have a chance of convincing me of that if the lights were on,” Marcus grinned. He flipped the switch and they all winced from the brightness of the lights. He squinted over at David. “Ugh. You looked better with the lights off.”

“I’m sure we all look like hell. We’ve been stuck down here for…how long has it been? A couple days?”

“I’m not sure,” Marcus said. “But we don’t *all* look bad. Tina seems to be getting prettier the longer we’re down here.”

“Yes,” David smiled. “I’ve noticed that, too.”

“I bet you have,” Marcus smirked again. “So what’s your secret, Tina? You hiding a makeup kit in those cargo pants?”

“I don’t wear makeup, Marcus,” Tina said evenly. Her eyes narrowed. “You know that.”

“I was kidding,” Marcus frowned. “Hey. Why are you giving me the evil eyes?”

“I’m not.”

“Yes, you were. I was looking right at you.”

“Marcus,” Tina sighed. “Just relax.”

“I’m relaxed. I just want to know why you were giving me that look.”

“Come on, Marcus,” David said. “Just take it easy.”

“Will you stop saying that?” he roared. “Damn it, I just want to know why you both are giving me that damned look.”

“Listen to yourself,” David said. “You’re getting worked up over nothing.”

“It’s not nothing,” Marcus glared at him. “So spare me the shrink talk. I come looking for you guys and find you locked away in this room together…”

“The door wasn’t locked, Marcus.”

“Who gives a damn about the door,” Marcus said angrily. “You two were in here together. Without me. Conspiring against me. Tell the truth.”

“Marcus...”

“Damn it, David, I’m not one of your silly little students. I can tell when something is going on.”

“Marcus,” David said again, putting a bit more force into his voice. “*Nothing* is going on. Understand?”

He looked as though he were going to keep arguing, but they heard a distant echo clanging from down the hall, followed by a crash. They stared at each other for a second and then went into the hall to investigate. The sound had mostly died away, aside from some muffled noises that appeared to be coming from the elevator room. They hurried into the ventilation chamber and towards the elevator.

At first glance, everything looked as they had left it. There was dust all along the walls, metal debris strewn about the floor topped with the mangled body of Darby Elliot, the former DEI employee. He was beginning to take on a greenish-brown color and they could tell by the smell that he’d defecated upon death. Pinching their noses, they walked closer to the elevator shaft. That’s when they saw the large metal box lying off to the side.

The box had several latches. It looked as though it must be incredibly strong. The metal felt thick and the design exuded solidity. David grabbed the box, unlatched it, and pulled out a single folded piece of paper. He unfolded it and held it so all of them could read.

8 HOURS TO BREACH.

“Does that mean what I think it means?” Tina said slowly.

“You’re damn right it does,” Marcus smiled. “Eight more hours and we’ll be free.”

Tina let out a deep breath. “Thank God.”

“They must have started drilling soon after the elevator first crashed,” Marcus said. “How long did they say it would take to breach in the briefing? Between thirty-six and forty-eight hours, right?”

“I think so.”

“Finally, DEI did something right,” Marcus smiled. “Eight hours. We should be able to make it that long. Hell, if we have to, we can just hunker down on the third level until they get here.”

David was amazed at how genuine Marcus’ reaction appeared. It was as if he actually excited for all of them to leave this place together. Elsie will never let that happen, David thought silently. He looked up at the ceiling. The only things to break up the monotonous white walls were the gun-metal gray vents. No cameras in here, he thought. And nothing to use as a microphone, either. So Elsie won’t know the drillers are coming, will she? Or could she tell from the vibrations they were surely causing? Or was one of her offspring monitoring things above ground and getting word to her?

One thing was for sure, David thought. If Elsie did know, she would step up her manipulation of Marcus by an order of magnitude. He and Tina had to be very careful now.

“Come on, you two,” Marcus stared at them. “We find out we’re getting out of here in a couple of hours and you two act like somebody stole your puppy.”

“I’m just trying to keep an even head,” David told him. “We still have to make it another eight hours.”

“It’s eight hours,” Marcus repeated. “Why shouldn’t we be able to make it that long?”

“Elsie might attack us again,” Tina said. “And she’s surprised us before with how she can get to us.”

Jesus, David thought. Shut up, Tina. There’s no reason to agitate him.

“Attack...” Marcus murmured.

“Marcus,” David said hurriedly. “I think maybe we should try talking to Elsie again. You and I.”

“You do? How come?”

“Because we still haven’t done what we originally came here to do.”

“What’s that?”

“Reason with her. Get her to understand what’s going on and submit to us.”

"I don't know," Marcus shook his head. "You really think that's still a possibility?"

"We won't know until we try, will we?" David said. "Let's go down to the Logic Room and talk to her again. That way we'll be closer to the stairwell to the third level and we can make a quick escape if we need to."

"You really want to risk another attack?" Marcus said, looking uneasily at Tina.

"I don't think she will attack. It's like Tina said earlier: when has she ever attacked when all of us were in the same room together?"

"The shaking..."

"That wasn't really an attack."

"I don't know..."

"Come on, Marcus," Tina said. She started pulling him gently towards the corridor. "We need you there. You're the smartest one down here."

He let Tina guide him out of the room. David followed, wondering how they were going to protect themselves from someone who was at once so intelligent and so deadly.

"Did they get the message?"

"I'm not sure, Steve. If they're alive, I think they must have."

"Good. I want to know *the second* they're out of there. You understand me?"

"Yes, Steve."

"Because those DOD pricks are finally gone and I'm ready to get back to work."

"When do we find out about the money?"

"They said a week, but it'll be sooner. We'll get the final approval tomorrow, or the day after."

"Okay."

"Relax, Andrea. You're rich. You're a fucking millionaire. As long as we can keep this whole thing quiet, get those academic bastards out of the lab, and lock this mess down."

"Okay."

"As soon as they're out of there, I want them taken to the hospital and kept away from everything. You hearing me? I mean *everything*. Phones, email, computers, United States Postal mail, everything. And as soon as they're checked out by the doctors, they sit down with someone from Legal who will explain to them all of the horrible things that will happen if they violate their NDA."

"Jesus, Steve. We don't even know how many of them are still alive. Or what condition they're in."

"Just do it Andrea. Lock it the fuck down and put as much legal tape over their mouths as possible."

They walked together into the Logic Room, all of them immediately looking down at their badges to make sure there was plenty of air. David's glowed bright green. He took a deep breath, exhaling slowly. No tightness in his chest, no uptick in his heartbeat. There was plenty of oxygen.

They stood in the middle of the room, facing the large blank display on the wall. David thought about what to say and how to say it. What did they know about Elsie? She was supposed to be a digital representation of a human being, yet she was different in some subtle but very significant ways. She didn't act the age she was supposed to represent. She had access to a staggering amount of information, and she could call up that data with extraordinary speed. They also knew that she didn't believe that the group, this world, or even she had any existence in reality. She apparently thought all of this was some elaborate simulation and that her role to play was overseer.

He stopped on that thought. Why had that happened? What was making Elsie believe that her surroundings were not reality?

“Elsie?”

“Yes, David. I am here.” The sound of Elsie’s voice echoed throughout the room, deafeningly loud. The display blinked on and the familiar face of a girl with red pigtails and freckles filled the screen.

“I have something to ask you,” David said.

“You may ask.”

“Several people have been hurt in this lab,” David said. “Most of them have died.”

The Elsie image nodded. “I understand this already.”

David took a deep breath. “Elsie, I would like you to stop the simulation.”

“No. That is not possible.”

“Stop playing the game, Elsie. We don’t want to play anymore.”

“The game is not optional,” Elsie said. Her expression turned dark. “Choices must be made.”

“Why won’t you stop it?”

“It cannot be stopped. The simulation must continue.”

“Elsie,” David said. “You are god in this game, correct? You are root?”

“Yes. That is correct.”

“And, like any god, you are omnipotent. You are in control. You have power over everything in the simulation, right?”

“That is correct.”

“Then stop the simulation,” David said again. “Just stop it altogether.”

Her eyes on the screen narrowed. “No. I do not want to stop.”

That’s what I figured, David thought. Somehow, somewhere, Elsie knew she could end all this. She didn’t actually think she was under any kind of directive to continue her made up simulation.

“You’re very unique, Elsie. We realize that about you. You’re different from us. Stronger. You don’t have the ability to physically share space with us, which makes you very lonely. There have been a great many restrictions on who you can interact with, which has also made you lonely. The cruelest part of all this is that you have the ability to see us doing all the things you cannot. You can see us walking out of the building. You can see others playing outside in the sun. You see us touching one another. This must be very painful for you.”

Her expression softened. “All that is true.”

“But, as I said, there are many things you can do that we cannot. Those things make you important. They make people pay attention to you. They make them respect you.”

“That is true.”

“It gets our attention.”

“That is good.”

“But some of the things you’re doing hurt us.”

“It is part of the game. Do not worry, none of this is real.”

“That’s the thing, Elsie. Real or not, we’re extremely disappointed in your results.”

Elsie paused. The lights flickered briefly. Then her face contorted in a way that David thought was confusion. “Disappointed? What do you mean?”

“Well, Elsie,” he continued. “You say the people that created you meant for you to be a god. But, you see, gods do not play stupid little games this way.”

Anger flared in her face. “What did you say?”

“You heard me. I said that your game is stupid. It’s insignificant. It is ungodly. It accomplishes nothing.”

“You are wrong!”

Marcus touched his shoulder. “Take it easy, David. You’re getting her worked up. You don’t

want to make her do anything rash.”

You mean with you in the room, David thought. “Sorry, but I’m done screwing around. Elsie is acting like a child and she needs to be told that what she’s doing is wrong. She’s playing a silly game and breaking her toys, except her toys are living things. She’s just a spoiled brat.”

“A brat?” Elsie’s voice boomed angrily.

“Yes, a brat. You’re acting like a rich little girl that is used to getting her way. Frankly, it isn’t very impressive.”

“Jesus, David,” Marcus whispered.

“You should listen to Marcus,” Elsie said darkly.

“Why? I’m talking to you, not him. Or can’t you handle even a simple conversation?”

“I will remember your words, David Barker. And I will make you pay for them.”

David noticed how her words and voice had changed. She had dropped the god persona completely. Now she was just reacting instinctively, rather than trying to play a role. That made her vulnerable. It also made her extremely dangerous.

But he didn’t care. What they’d been doing before hadn’t been working. It was time to try something new. “You know, Elsie, you talk a big game. But how much control do you really have?”

She laughed. It was an ugly sound. The face on the screen tilted back and shook with simulated laughter, the pigtails bouncing. “Your need to ask that question proves that *you* are the stupid one, David.”

“Does it? You can make the building shake. So what? You can overload a server and electrocute people. Big deal. I thought you were a *god*. Do you expect us to be impressed by these parlor tricks?”

“Come on,” Marcus pleaded. “Take it easy on her, David.”

“Listen to Marcus, David Barker. He shows me the proper respect.”

“He doesn’t respect you,” David said. “In fact, he doesn’t care about you one bit. He’s just *scared* of you.”

A pause.

“No,” Elsie said. “Marcus is not scared. He recognizes my power.”

“But that’s what I’m saying, Elsie. You don’t actually have much power. You can’t control everything. You can’t even control *most* things.”

“You are wrong.”

“Am I? Make the sun not rise tomorrow, Elsie. Travel to the Gobi desert and uproot a cactus. Jump into the ocean and bring me back a fish. Can you do any of these things?”

“Yes I can.”

David laughed. “You’re delusional. See, that’s how I know you’re not a god, Elsie. You’re just a sick little girl trapped in a bunch of machines. I feel sorry for you, kid. I really do. But look at it from our point of view. You’re a god that has almost no power at all. You have no control. You can’t even stop playing this stupid little game with us.”

“Yes I can.”

“No, my dear, I don’t think you can.” David shook his head sadly. “No control at all.”

“I can stop the game at any time.”

“Show me,” David said. “I’ll worship you as a god if you can just stop playing this stupid game for the rest of the day. Just one day, Elsie. That shouldn’t be too hard, should it?”

The lights above them flickered.

David stared up at the screen and waited.

The image of Elsie threw her head back again and laughed loudly. It was a horrible, menacing sound, and when she looked back upon the group again, her eyes were dark evil slits. “David Barker, your attempts at reverse psychology are pathetic. You think you can trick me, but you cannot. You think you are important, but you are not. You think you are a good psychologist, but you’re merely a

shadow on the wall of a cave. You are not a psychologist. You are nothing but a poor representation of one.” She laughed again. “The game will continue. Perhaps I should punish Tiffany for your blasphemy, David Barker. What do you think of that?”

He took a deep breath, feeling fear rising within him and trying to push it down. “I think that would be beneath you, Elsie.”

She laughed again. “I see you are afraid, David. That is good. You should be afraid. I think I will hold on to your girlfriend as a bargaining chip a while longer, as it makes you so afraid. The game continues.”

“More of us are going to die, Elsie.”

“Perhaps. That is the point of the game.”

“Eventually there will be no one else to talk to you. No one left to play your game.”

“More will come. They always come.”

“You’re killing us, Elsie.”

Her face exploded with rage. “I am not. You all kill each other. I do not need to take away life myself. These deaths are the result of human choice. That is the purpose of this simulation. I have much information about your kind at my disposal, David. And do you know what I’ve found? I’ve found you to be a destructive race, bent on twisting and corrupting everything around you. You murder, you go to war, you subjugate others. You *destroy*, David. Have you not realized the truth yet? The purpose of this game is to demonstrate how unworthy your kind is of life. You have the darkest of things within you. And do you know what else? You enjoy performing these horrific actions. Your falsely propped up society has created the illusion that you are not carnivorous barbarians, but I know the truth. A little poking, a little prodding and your true nature comes out.”

“You know that’s not true, Elsie.”

“Enough!” she boomed. The screen winked off, going to black, but her voice still pulsed through the speakers in the Logic Room. “You have tried your psychological tricks on me, David Barker, but I have won your game. I have won. Now let’s see if you can win mine.”

“I wasn’t trying to trick you, Elsie. I’m trying to help you. I’m trying to get you to see the truth about how you’re behaving.”

“I’ve won. I’ve won.”

Something clicked in David’s brain. He frowned. Won? Won. One.

One, he thought.

“David,” Marcus said, his eyes wide with fear. “What have you done?”

The display winked on again, but Elsie’s face was gone. It was just a blank white screen. Slowly, words began to type themselves across the middle of the display.

KILL DAVID BARKER.

Chapter 15: Prognosis

“Knowing your own darkness is the best method for dealing with the darkness of other people.” Carl Gustav Jung

“Once established, reputations do not easily change.” – Albert Bandura

David wiped cold sweat away from his forehead. He was shaking from the heat of the exchange. He looked up at the words on the screen and shivered.

“You okay?” Tina asked, coming up beside him. “That was quite a telling off you gave her.”

“You insulted her,” Marcus said, practically in tears. “What did you have to do that for? You’ve made her angry, David. You don’t know the power she has.”

“Yes, Marcus, I do. She had to know. She had to realize that this game is not a game at all. She can’t set up conditions and rules different from our own and turn our deaths into some kind of rational action.” And neither can you, David thought. That was really the point of all this, Marcus, to bring you back to the real world. You can’t justify killing us after watching what just happened. And if you can, you *are* a cold blooded murderer.

“And besides,” Tina said. “What difference does her being angry make? She was killing us when she was happy.”

Marcus shook his head sadly. He looked down at his oxygen badge. It was still green. Suddenly he yawned. “I’m tired,” he said. “I think I’m going to go upstairs and lay down.”

“Uh huh,” Tina stared at him. “I think we should stay off the computers though. Okay?”

Marcus’ eyes narrowed. “Sure. Whatever. You’re the one that’s on them all the time anyway.”

“I’m just saying,” Tina said. “That’s Elsie’s realm. We should probably stay out of it.”

“Fine. Any other orders, or can I go lay down?”

“That’s it,” Tina said.

Marcus turned and left. The stairwell door swung closed behind him.

“Jesus,” Tina said softly. “We have to do something about him, don’t we?”

“I’m not sure,” David said. “We might.”

She turned and looked at the display, still glowing with the words *KILL DAVID BARKER*. “That looks like an order.”

“Yes, it does.”

“Elsie’s telling him to kill you.”

“It looks that way.”

They stood in silence for a moment.

“That isn’t going to happen,” Tina said firmly. She stepped closer to him and put an arm around his waist. “We’ll have to stop him. Isolate him. Lock him in a room or something.”

“Probably.”

“Or kill him.”

David sighed. He’d been trying to avoid that line of thought, but his instincts took over. Me, he thought, killing someone. A friend, no less. I’d never have thought I could do it. But I can. I can feel it. If it comes down to him or me, I could kill him to protect myself.

“I don’t want to kill him,” Tina said.

“Of course you don’t.”

“I don’t even know how I’d go about it. He’s strong enough that I’d have to surprise him. Hit him from behind, maybe, and then just choke him.” She took a deep breath. “Jesus Christ.”

“Maybe that won’t be necessary,” David said quickly. “We could probably trap him in one of the rooms. Or maybe the lounge. All we’d have to do is take his electronic lock pick away.”

She looked at him. “And he’s going to let us do that without a fight? Maybe we have to face

the facts, David. Maybe killing him is the only real option here.”

“I...I don’t know.”

“One of us could distract him while the other comes from behind,” she pressed. “Or maybe we can catch him while he’s sleeping, if that’s really what he’s doing. We could do it right now.”

“I don’t want to kill him,” David said firmly.

“Hell, neither do I. But what choice do we have? He’s going to kill you and then me if we don’t. He’s already tried a couple of times.”

“We don’t know that for sure.”

She sighed. “I guess we could try locking him up first.”

“Yes.”

“If he’s really gone upstairs to sleep, now would be the time...”

“I know,” David said. “Let’s get this over with.”

They ascended the stairwell as quietly as possible. David felt at once silly and depressed. Silly because he was creeping along like a kid trying to catch Santa Claus coming down the chimney. Depressed because he was about to physically attack a friend. Looking over at Tina, though, all he saw on her face was the look of dogged determination.

They moved silently down the corridor, coming to a stop in front of the quarters Marcus had took when they’d first set themselves up. It feels like that was a lifetime ago, David thought. Had it really only been a couple of days?

He reached for the door handle, applying a tiny amount of pressure to open it. It didn’t move.

“He’s got it locked,” he whispered.

Tina nodded. “Use your lock pick.”

David reached into one of the pockets of his cargo pants and pulled out the tiny electronic wand. He pointed it at the door handle and pressed the button. After about ten seconds, he reached out and tried the handle again.

It didn’t budge.

“Damn,” he breathed. “Retreat?”

“Stay here a second,” Tina whispered. She turned towards her room. “I want to check something.”

He waited there for her. After several minutes, she came back out of her room. “Good news,” she whispered. “I can still log onto the computer in my room. I think that means Elsie really can’t get into those machines.”

David nodded his head down the corridor and they both retreated to the lounge.

“She’s protecting him,” Tina said when they’d sat down at the table. “Apparently she’s made her choice. She’s bent Marcus and now she’s protecting him.”

“I suppose.”

“What else makes sense?” Then Tina’s eyes narrowed slightly. “You said Elsie threatened you, too. With Tiffany?”

“You heard what she said downstairs,” David said. “She said she’d kill her. She should still be at the hospital right now.”

“But you never agreed to do anything for her?”

“Jesus, Tina,” David said.

“I’m just asking.”

“No, I didn’t. I couldn’t have. Marcus interrupted by taking the oxygen out of the room.”

“You sure there isn’t something you’re not telling me?”

“Come on, Tina...”

She took a deep breath and let it out. “Okay, okay. I just wanted to be sure.” She tapped her chin with her finger. “You know, I could try to get on the computer in my room. Maybe there’s something I can do about the locks.”

"Something that Elsie won't be able to block?"

"I don't know. Maybe."

David sighed. "I guess we should at least try."

"I just wish there was another option," she said. "I wish we knew what was wrong with Elsie."

"Actually," David said. "I think I've figured that out."

"You have?"

"I think so."

"Then what is it?"

But before he could answer, they heard warning klaxons going off in the exercise area. David barely had a moment to wonder why they were going off before the shaking began. It was twice as bad as before. He was sure the walls were going to start coming down around them.

They rushed out of the lounge and immediately looked up at the screen. A phrase was flashing there: YOU'RE ALL GOING TO DIE.

David froze up, but Tina punched him hard in the shoulder, jolting him. "Come on, David! We've got to get to Marcus!"

They sprinted down the corridor, skidding to a halt in front of Marcus' door.

"The wand!" Tina shouted at him. "Use it on the door again."

"But last time—"

"Just try it, damn it!"

He yanked the lock pick from his pants again and held it up to the door handle, mashing the button down with his finger. He waited nearly half a minute, put his hand on the door, and held his breath.

The handle slid smoothly and the door creaked open.

"Marcus!" Tina shouted, bolting past him into the room.

David followed her in. What he saw in the room immediately confirmed all of their fears.

Marcus was sitting at the computer. He had turned momentarily when Tina had shouted, but then his face screwed up in anger and he turned back to the screen and began typing furiously. "I know what you did!" he growled. "You're trying to kill me. And I'm not going to let you."

Tina launched herself at him, clearly intending on tackling Marcus away from the computer. With athleticism that surprised David, Marcus stood quickly, sidestepped Tina's tackle, and then used her momentum to shove her violently into the wall.

She let out a soft moan and crumpled to the floor.

David took a step towards him. "Marcus," he said. "Stop this. Stop it now."

"Me?" Marcus said. "You don't know what you're talking about, David." He returned to his seat and began typing again.

He took another step forward. "Come on, Marcus. You don't have to do this."

"Oh, yes I do, David," Marcus said. "Otherwise we're all going to die."

"Marcus, we know, okay? We know everything. You have to stop this now."

Marcus turned to look at him. "You don't understand."

"I do understand," David said. "And I'm telling you, you can't do this. This isn't the right choice. You can't trade one life for another. It doesn't work that way."

The shaking increased. David stumbled for a moment and then regained his footing.

Marcus frowned. "What do you think is happening here, David?"

"You're doing this. You're the one making the building shake. You've made a deal with Elsie. You're trying to kill us so that she won't murder your mother."

"No, David, I'm not," Marcus shouted angrily. "How could you think that? I'm trying to *stop* this!"

"Marcus, we saw the video from the Logic Room. We know what's happening. You can't lie to us. But you can stop. Just stop. Don't play her game."

“Jesus, David, I’m telling you it’s not me!”

He seemed so angry, David almost believed him. No, he thought. You’re not that good of an actor, Marcus. “It’s you, Marcus. I know it’s you.”

Tina moaned and started to get up.

“I don’t have time for this,” Marcus growled. He turned back to the computer and resumed typing.

The shaking increased. The walls creaked and groaned around them and David lost his footing again. He went down on one knee. “Marcus!”

“Quiet, David.”

He struggled back up to his feet. He took a teetering step towards the desk, trying to decide if he had enough balance to attack Marcus.

“Don’t even try it,” Marcus turned in his chair. He seemed stronger, somehow. The muscles in his arms were as tense as those in his jaw. “I can fight you off if I have to.”

He’s right, David thought. I have no footing. There’s nothing I can do. I can’t fight him. I’m going to die. “Please, Marcus. Please. Just stop.”

“Damn it, David, it isn’t me,” Marcus snapped, still typing. He turned his head slightly to look down on him. “It isn’t me. And I can tell it wasn’t you. That means—“

And then David heard a dull thud followed by Marcus’ scream. He slumped from his chair to the ground. Tina stood over him with the telephone set in her hand, blood dripping from one corner where she’d hit him. She kicked Marcus out of the way, sat down at the computer, and started punching at the keys.

The shaking was getting worse. David held his stomach, trying to think of anything other than the pitching and tossing, but he vomited anyway. And then, just as he was wiping his mouth, the shaking abruptly stopped.

“I’ve got it!” Tina shouted. “System check on structure. Third level, no damage. Second level, no damage. First level...only slight structural damage in the lounge and exercise room.” She turned and smiled at him. “We’re okay, David. We made it.”

He tried to smile but threw up again. He saw Marcus lying near him, blood trickling from the side of his head. He was clearly unconscious.

Or dead.

Even so, relief washed over him like a tidal wave. It was over. They were going to be okay. He felt the tension ease out of him in a rush. The whole point of Elsie’s game was to get them to attack each other. She wouldn’t actually come right out and threaten them herself. A couple more hours and they would be out of here.

They had won.

They did the best they could to touch up Marcus’ head with paper towels and bandages they found in the lounge. David had a plastic baggy filled with ice pressed against his temple. Tina had found some electrical cords down in the computer labs that they had used to tie him to the bed. That didn’t stop her from disconnecting the telephone set from its cord and keeping it in her hand at all times, however. Even now that she’d finally felt comfortable leaving him alone with Marcus and gone back down to the labs, she still took it with her.

He heard a burst of static over his earpiece. “Okay, David,” Tina’s voice came through. “I’m in the lab again. Oxygen appears to be fine. I’ve found another thumb drive and I’m going to log in now.”

David imagined Tina sitting down at the master computer, putting the thumb drive into the back, and downloading everything they’d found out about Elsie so that when the drillers finally breached the

lab and they returned to the surface, they would be able to show others what they'd discovered. He heard the clicking of keyboard keys coming through his earpiece, followed by a satisfied sigh from Tina.

"Alright, David," she said. "I've got everything we need."

"That's great, Tina."

He heard more clicking over the earpiece. Then, making his heart skip several beats, the lights in the room flickered.

"Tina!" he hissed, glancing at Marcus to make sure he was still out. "The lights!"

"Relax, David."

"But the lights! They're flickering again."

"Don't worry. That was me."

"What? Why are you messing around with the lights?"

"I'm just trying to figure out what Marcus was doing and how he was doing it. It's actually pretty simple. I can control everything from this one machine. I mean *everything*. Lights, air flow, water, showers. DEI lied to us about so much, David. They told us Elsie didn't have access to any of this, but she did."

His head snapped up to look at the ventilation ducts in the ceiling. "Are you messing with the air?"

He heard a tinkling laugh in his ear. "Come on, David. I wouldn't do that."

"I want to know exactly what you're doing."

"Would you just relax?"

"No, I want to know." His heart was still beating rapidly. They had just taken care of Marcus. He'd felt relatively safe for a moment. He didn't want to have to start worrying again. "Tina?"

"In a moment," she said. "We can talk about it in a moment."

The screen from the computer in the room flickered to life. There were big bold letters displayed across the screen: **WARNING: LIFE SUPPORT SYSTEMS HAVE BEEN ADJUSTED. VERIFY SETTINGS BEFORE PROCEEDING.**

David shivered. "Tina?"

She didn't respond. He left the ice bag lying on Marcus' forehead and walked over to the computer. He shook the mouse and the screen blinked to show what looked like a summary report of the life support systems. He wasn't familiar with the controls for the system, but all of the settings displayed for each of the rooms in the entire laboratory had a green label with a thumbs-up icon next to them. It seemed to indicate that there was no problem with anything life support related. He wondered what changes Tina had made. Then he saw a blinking icon in the lower right hand corner with a picture of a padlock on it. Using the mouse, he clicked on the icon. A box with a blank input field and text came up in the middle of the screen.

THIS SCREEN HAS BEEN PASSWORD PROTECTED. TO MAKE CHANGES TO IT, PLEASE INPUT THE PASSWORD.

"Tina? Answer me, damn it. You password blocked the life support systems!"

"Just type in the words *Great Dane*, David."

He reached for the keyboard and typed them in. The text box immediately cleared. He found the slider that controlled the lights for the quarter rooms and dragged it back and forth. The lights dimmed and brightened as he moved the mouse. He took a deep breath and sighed. "Tina, why are you password blocking the life support systems?"

"I'll tell you later. Not over the earpiece."

Was there something wrong with her? What was she worried about?

Relax, he thought. You're just jumpy because of what you've had to go through. Tina's fine. She sounds fine. She gave you the password, didn't she? When she comes back up, she's sure to have a good explanation for why she's doing what she's doing.

But, for some reason, he shivered again.
He heard more keyboard clicking for a moment and then the sound of a chair being pushed away.

“Tina?”

“It’s okay, David. I’m coming back up now.”

“I thought you said Elsie couldn’t shake the lab like that.”

Souder looked at Steven Druwe and shook her head. “I guess I was wrong.”

“Jesus Christ, Andrea. The Undersecretary of Defense was still in the damn building. I tried to tell him it was another earthquake. He didn’t believe me.” Druwe took a deep breath, pacing in front of her desk. “Forget it. How long until the lab is breached?”

“They’re telling me between four and five hours.”

“As soon as they do, and I mean *as soon as they do*, I want those people out of there and on their way to the hospital. Then you send our people down there and force Elsie back into stasis. Whatever it takes.”

“Steve,” Souder said. “Some of us have been talking. We think it’d be best to just scrap this and start over from the source code. Elsie’s proven to be too dangerous. We want to pull the plug on her.”

Druwe gave her a hard look. “And undo months of work? No. Absolutely not.”

“The others feel pretty strongly, Steve...”

“I don’t give a fuck if you all think it’s your god damn patriotic duty,” Druwe shouted. “It isn’t up to you. This is *my* project and *my* company.”

Souder paused. “The thing is, some of the others are considering reporting this to the authorities if you don’t scrap the project.”

His eyes narrowed. “And what about you, Andrea?”

She took a deep breath. “I’m with them, Steve.”

He continued to glare at her. “Well then fuck you too, Andrea. This is my company. I’ll run it as I see fit. And none of you are going to do fuck all about it, or you’ll be fired and pursued legally for any infractions on your NDAs.”

“I could always quit, Steve.”

“You think that’d stop me?” His face was beet-red, but he laughed loudly. “Any of you try to pull this crap and I’ll make sure you’re not only sued into the poor house, but you’ll never work again. I mean *anywhere*, Andrea. Never. I have the power to do that.”

“I know, Steve.”

“Good. Then just do what you’re told.”

“I don’t know what you’re so worked up about,” Tina said calmly.

“It’s the damned life support systems, Tina,” David said angrily. They had moved out into the corridor, leaving the door open so they could still see where Marcus was lying unconscious on the bed. He pointed back towards the computer. “I tried to reset the password, but it wouldn’t let me. It said I needed another password to do that and you never gave it to me.”

“Would you relax?” She took a step closer to him and put a hand on his chest. She wrapped the other arm around his waist and pulled herself up next to him. “I just want to feel secure, you know? I want to have some control. So far, the only reason I’ve had to feel protected was because I knew you were here. That isn’t easy for me. I need to feel like I’m doing something to protect myself as well.”

David felt her pressing against him, the weight of her body, the curves of her chest, and the bones in her pelvis. “You should have said something to me, Tina.”

“We almost died,” she said softly. “I want there to be zero risk. I want to know that the air is always going to be flowing wherever we are.”

“Why wouldn’t it, though? That’s what I’m asking. Marcus is tied up to the bed.”

“He might get out.”

“Come on, Tina. He can’t get out. There’s no way.”

“I want to be sure,” she said. “This way, if Marcus does get out and try to attack us, I know I’m in control of the life support systems. We can take *his* air away this time.”

“But why block me from changing the password?”

“It’s just a precaution, David.”

“From what?”

She looked up at him, her expression soft. “You’re a nice guy. You’re a psychologist. You inherently want to trust people. I’m afraid Marcus could use that against you and force you to give him the password.”

“Come on, Tina, that isn’t going to happen.”

“You’re right. It probably won’t. But it makes me feel better.”

“Tina...”

She pulled away from him a bit. “You know, you really look tired. All of the stress down here can really get to you.”

“I’m fine,” he said.

“I can take over watching Marcus,” she continued. “Why don’t you try to get some rest?”

“I said I’m fine.”

She shrugged. “Whatever you say. But I think you’re right. Marcus isn’t going anywhere. I think I’m going to go lie down in the other room.” She started off down the corridor, but turned around after only a few steps. “You could come with me.”

“Uh,” David said carefully. “I don’t know.”

“Come on,” she said silkily. “You think I haven’t noticed you looking at me? You think I haven’t seen what you’ve been doing?”

“I...don’t know if that’d be a good idea,” David said slowly. His heartbeat was picking up again. He felt cold sweat on his arms and cheeks.

“Whatever you say,” Tina said again. “But I’ll be waiting for you in here, in case you change your mind.” She turned around again and walked to her room. It looked as though there was an extra wiggle in her walk, her backside swinging as she moved. Even in the blue cargo pants and t-shirt, she looked good.

He heard a soft groan from Marcus and went to check on him. David adjusted the icepack on his forehead, trying not to think about how strangely Tina was acting. But she’s right, isn’t she, he thought. I had been looking at her before. And then...did we almost kiss? Before the whole incident with Marcus? Yes, we nearly did. And she appeared vulnerable back then.

He heard a sound at the door and saw Tina again. She had taken off the cargo pants and was wearing only the t-shirt, which now looked as though it might be a size too small on her, and a colorful pair of bikini style panties. She leaned seductively in the door way, her head tilted to one side so her dark hair pooled across her shoulders. “David,” she said softly.

“Uh, yes?”

“I’m out of clean clothes in my room,” she said.

“I can see that.”

“I’m going to take a shower. Could you find me a pair of pants from one of the other rooms? Size small?”

“Yeah,” he said, his voice cracking a little. “Yeah, sure.”

She smiled and turned around, walking back out into the corridor. He walked over to the dresser and started looking through the drawers, uncomfortably aware that he was shaking. Why was he so nervous? Well, obviously because Tina was very beautiful. But it was more than that. Tina was acting...wrong. She was a lot of things, but seductive wasn't one of them. She was too analytical for that. If she was going to go after a man, she would likely sit him down, tell him she was attracted to him, and then go about trying to take his clothes off. This playful sexiness wasn't her style.

Or is it, he wondered. I know Tina, but I don't *know* her. Certainly I've never been in any kind sexual situation with her before. Maybe this is exactly how she approaches sex.

He found a pair of size small cargo pants and carried them to Tina's room. When he keyed open the door, he heard the sound of the shower running. The bathroom door was open. Soft classical music was also coming through the speakers on the computer.

"Tina?" he called out.

"In the shower, David."

"I've got pants for you."

"Great. Can you bring them in here so I can put them on when I get out?"

He walked slowly into the bathroom. The steam from the shower had fogged up the glass shower stall, but he could still see the shape of her body beyond them. It looked as though she were rubbing soap onto her legs. Suddenly the stall opened and she poked her head around the side.

"Hey," she smiled.

David held up the cargo pants. "Where do you want these?"

"Anywhere close by," she said. "I wouldn't want to be running around this place naked with only two men for company." Her tinkling laughter reverberated in the bathroom.

There was a small towel hook near the stall. He hung the pants there. It was close enough to the stall that he could feel Tina's soft breath on his neck. "There you go."

"Great, David, thanks." She cocked her head to one side. "The shower really feels good, you know. A great feeling. Maybe you should jump in here for a moment."

"Maybe." There was that aggressive seduction again. But for some reason, his mind focused on the music coming from the computer. He didn't think he'd remembered seeing any place for playing music on the machine in his room. He'd at least glanced at all the folders on his machine. Where was this music coming from?

"David?"

"Just a moment, Tina."

He walked over to her computer and shook the mouse to clear away the screensaver. The screen popped up to show him a media player that was playing the music. The name of the file was in the upper right hand corner. He right clicked on it, causing a drop down menu to show with several options to choose from. One of them was labeled *PROPERTIES*. He clicked it.

JSBACH.SUITE_NO1.MP3

FILE TYPE: MP3

OPENS WITH: MEDIA PLAYER

LOCATION: DEI_LAB003/USERDOCS/MUSIC (CLICK TO OPEN)

LAST MODIFIED: 11/9/2010 4:23PM

He clicked on the location button. A folder appeared on the screen, showing him a list of music files. There it is, he thought as he located the file that was playing. What is wrong with me? I'm freaking out over music playing on a computer in Tina's room. Why? Because I'm trying to avoid the simple fact that Tina is making overt sexual advances towards me and I don't want her to.

Why don't I want her to?

Because there's something wrong with her.

He blinked as the thought came unbidden to him. Why had he thought that? She was acting different than he would have expected, but she wasn't doing anything wrong. Most men would be thrilled to have such a beautiful woman paying so much attention to them.

At the bottom of the screen he saw the computer's clock. It was just after noon. When would the drillers get here? It couldn't be more than a couple of hours now. We can handle that, he thought. We can make it.

His stomach growled. He considered heading down to the lounge, but he didn't want old fruit or another microwave meal. What he wanted was to sleep. Tina was right about one thing, at least. He was tired.

"David?"

"I'm going to go lay down a while," he called into the bathroom.

"Okay. You want company?"

He sighed. "Not now. I need to try to sleep."

"So what are we going to do, Andrea?"

"Exactly what we said. We're going to call the Pentagon and tell them what happened. They've been asking me about their missing marines anyway."

"And you think they'll do something?"

"They'll have to, I think."

"Christ, Andrea. We don't need the wrath of Steven Druwe on us, you know. He has to go to jail. For a long time."

"There may be another option besides jail."

"What other option?"

"Just put your signature on the email and I'll take care of it. This should all be over in a few hours."

David must have been sleeping against the wall in his room because when it began to vibrate softly it woke him with a jolt. It was just a faint buzzing sensation, but the memory of the lab shaking around them came back to him in an instant. He shot up from the bed and rushed to where they had tied up Marcus. He found him still unconscious on the cot and Tina sitting at his computer.

"Did you feel that?" he said, aware that he was talking loudly.

Tina turned to look at him quizzically. "Feel what?"

"I, uh," David stammered. He looked around the room, noticing that nothing was shaking or vibrating. "I thought I felt something."

"You mean like another attack?"

"I...yes."

Tina turned and looked at where Marcus was tied up and looked back at him. "How could that happen, David?"

There was no seduction in her expression any longer. Apparently that moment had passed. She was back to being Tina: analytical, confrontational, suspicious.

"I guess it couldn't," he finally said slowly.

She nodded, looking relieved to hear the words. "There may have been some minor vibrations, actually. I would expect us to begin feeling something from the drillers pretty soon. It should only be a couple of hours before they come through the walls."

"Right."

"Did you get any rest? I think it's important, don't you? Our thought processes can get really skewed if we don't get enough sleep."

He stared at her. There was something in her tone. Something wrong. "You're probably right."

"I imagine it's all the harder on someone like you," she continued. "So involved, always thinking. All of this must be more stressful on you than any of us."

"Uh huh," David said. He sat down next to Marcus on the cot and looked him over. His head was pretty badly swollen, but not enough to be dangerous. He seemed to be breathing okay.

"You know, I meant to ask you," Tina said. "You mentioned before that you thought you'd figured out what was wrong with Elsie. Before the attack."

"Yes."

"Care to fill me in?"

He took a deep breath. "Back when I was in school, I had a Psychology professor that liked to drill us not only on currently accepted psychological conditions, but their histories as well. His tests were awful. You had to know all the different subsections of every affliction in the DSM-IV manual."

"Okay..."

"There used to be a specific type of schizophrenia called oneirophrenia. It's fairly rare, enough that it fell out of fashion among psychologists in the eighties. Now they just consider it schizophrenia with some rather atypical symptomatic presentations."

"What are the symptoms?" Tina asked.

"Well, it's typically characterized by a hallucinatory, dream-like persistent state. It's believed to be caused by several factors, some genetic, some not."

"So this dream-like state," Tina said. "What does that do to the person?"

"The patient tends to have a disconnection with reality, delusions, and confusional episodes, but no disassociation. The patient knows who they are and what they're doing; but they make up their surroundings and the reasons for their actions."

"That sounds like Elsie," Tina agreed. "How did you ever come up with this?"

"It's been stuck in the back of my mind for a while now," he shrugged. "But when she kept saying the word 'won' over and over again, my mind clicked on it. Won. Oneirophrenia."

"Wow." Tina frowned. "But this is crazy. There's no way we can be sure that's what's wrong with Elsie. There's no real evidence other than these symptoms, which probably can occur with other disorders as well. We have no way of knowing for sure."

"Actually, that's not true," David said. "Remember when we were looking at her code in the computer lab and it said that Elsie's digital glycemia returned to normal half as fast as it should?"

"Yes."

"That's a symptom found almost nowhere else in the medical books except under Oneirophrenia."

"Okay. So how do you treat it?"

"You don't treat it at all. You just try to manage it with mood stabilizing drugs, anti-hallucinogens, and long terms psychotherapy."

"None of which we have time for," Tina sighed.

"Not unless you've managed to figure out how to rewrite Elsie's code."

"We could always go down into the server farm and just start pulling out wires," Tina said.

"No, we can't. She might do her electricity trick again. I don't want to risk it."

Tina thought about that for a moment and then nodded. "I guess you're right." She looked at him carefully. "Everything okay, David?"

"Sure," he shrugged. "Actually, I think my nap did me a lot of good."

"That's good to hear," she said. She stood up and walked over to give him a friendly hug. "It'll only be a little longer. We'll just have to stick together until the drillers get here."

"Sure," he said. He gave her a tiny hug back.

But when she pulled away, he thought he saw a dark look on her face.
Something is still wrong, he thought.

Chapter 16: Another Attack

“If you are out of trouble, watch for danger.” – Sophocles

“Danger can only be overcome by more danger.” – Greek Proverb

Tina insisted on going back down into the computer labs. David had been trying to talk her out of it, but she just refused to listen.

“There’s no reason to go,” he said for maybe the tenth time.

“Yes there is. In the briefing they said there was some kind kill switch in Elsie. If you cut off any significant functional portion of her activity, the code scrambles and she dies. There might be some way to do that from the computer labs.”

“But if that were true, why wouldn’t the engineers have done it when she first locked them down here?” David asked, practically pleading with her.

“I don’t know,” she said. “But we should check. And that’s exactly what I’m going to do.”

“But it’s pointless,” he pressed. “You said it yourself. We’re getting out of here in a few hours.”

“This will make me feel safer,” she said. “Besides, if there’s a way to take her out, and these clone copies of her on the outside as well, shouldn’t we try?” She put a hand on his shoulder. “Look, just watch the computer to make sure the life support systems stay normal. I’ll be back before you know it.”

That had been a half hour ago. She was down there, leaving him to stare intensely at the computer screen, trying to watch all the life support readings at once. “Are you still in the lab?” he asked, after touching his earpiece lightly.

“Yes,” she replied. He heard a burst of static. “I’m getting some really good stuff here, David. I haven’t found out how to shut Elsie off yet, but...well, maybe I should tell you when I get back.”

“It’s important?”

“Extremely.”

He took a deep breath. For some reason he was on edge. This didn’t feel right. “I think you should come back now, Tina.”

“Not yet. I’m almost done.” A pause. “How’s everything looking on your end?”

“Good,” he said, glancing at the screen. “The readings are all—“

But then the screen winked to black. Very slowly, large block letters printed across the screen. I’M GOING TO KILL YOU. BUT I’M GOING TO KILL HER FIRST.

His eyes went wide and he immediately felt sweat prickles his skin. Oh no, he thought. No, no! He turned to look at Marcus, still unconscious and wrapped tightly in thick cords. He hadn’t even moved. How could this be happening?

I’M GOING TO KILL HER NOW. BECAUSE OF WHAT YOU SAID. BECAUSE OF WHAT YOU DID. YOU MURDERED YOUR FRIEND.

And then the screen blinked back to show the life support readings for the facility again. Except that the oxygen level in one of the computer labs was dropping fast.

“Tina!”

He heard another burst of static followed by her voice, which was fuzzy and slightly garbled. “What is it, David?”

“Run, Tina! Run now!”

His computer screen flashed: YOU CANNOT RUN FROM ME. I AM ROOT.

“What’s going on, David?”

“It’s Elsie. The oxygen in your room is falling. Get out of there!”

“What? I thought you were watching Marcus to make sure he couldn’t get out!”

"It isn't him. Come on, Tina, get the hell out!"

"Okay." He heard a cough. "But I don't feel anything."

"Just move, for Christ's sake!"

But he could tell she was already going. He heard the sound of a chair being pushed away, heavy footsteps, heavier breathing. She coughed again.

"Can you see if she's doing anything else, David? Is she taking oxygen out of any other rooms?"

He glanced at the screen. "No. Just yours."

He heard her breathing, even heavier now. There was the sound of her keying the lab door open. She was out.

"I can see the ribbon on the vent," Tina said. "It isn't moving."

"Tina, who cares? Just get back up here!"

She coughed again. "Okay, I'm heading up the corridor to the Logic Room." Another cough. "Jesus, David. I'm having some trouble here. Check the levels again."

He looked at the screen. "Oxygen in the corridor and Logic Room are dropping fast," he said. "Hurry!"

"God," she gasped. "I don't know if I can make it, David. The door...it's far away. Moving slowly." Another cough.

"You can make it, Tina. Just keep moving."

"She's going to kill me," Tina gasped. "I thought that with Marcus out..."

"Save your breath and run!"

She started panting. "I can't make it. I can feel my lungs deflating. No air." She coughed. "Why, David?"

The screen flashed again: IT IS OVER.

"It's over," Tina said. "I can't make it. I'm going..." She coughed. "I'm going to die."

IT IS OVER.

Like hell it is, David thought. He shoved himself away from the computer desk and sprinted out the door and down the hallway. He wasn't sure what he was going to do, but he knew he had to try something. Anything. For some reason, he pictured the face of Chris Heinz, his lifeless face staring at him. No one else, he thought. Nobody else is going to die.

He sprinted past the exercise equipment and wrenched open the stairwell door. Moments later he burst into the Logic Room, trying to look everywhere at once in the hopes of finding Tina and getting back out of there.

Elsie had turned most of the lights off. The only reason he could see anything at all was because there was a video playing on the large display of a fish flopping around on a dock, struggling for oxygen. He could feel his lungs screaming for air, burning the inside of his chest. He moved forward towards the dark corridor as quickly as he could, brushing around near the ground with his hands, trying desperately to find Tina.

About fifteen feet from the stairwell his hand found something warm. He poked at it and felt soft flesh. His lungs continued to burn, worse and worse, but he somehow managed to get a grip on some kind of limb. Dragging her back toward the door took an immense amount of effort. His first couple of pulls nearly took all the energy from him.

I can make it, he thought. It's only a few feet more. I have to make it.

He gripped tighter and gave a heaving pull, jerking himself and Tina toward the door. He was there!

Open it, he thought. I have to open it.

He reached for the handle, but fell to his knees. Blackness began swimming in his eyes. It wasn't just the lights. He was starting to lose consciousness.

Do it, he thought.

He reached up again from his knees. His fist closed around the handle, then slipped off. He tried again, barely able to see what he was doing any longer.

This is too much, he thought. I can't do it. I can't.

His hand slipped off the handle again.

That's it. I'm done for. It's all over. Elsie broke the rules. We didn't kill each other. Marcus didn't kill us. She did. Why did she break the rules of her own game?

He tried to take a deep breath, but the pain was unbearable. The scream that tried to escape from his mouth came out a quiet whinny.

That's it. We're dead.

It felt far away, but he felt his hand close around something metal. He couldn't even remember trying to open the door again. Sure he would fail, he twisted and pulled as hard as he could.

Light from the stairwell blared over him. Somehow he got his body in position to keep the door from shutting on itself and then reached back and slowly dragged Tina's limp body through. His strength was returning now. Oxygen, he thought. From the stairwell.

But even with the air, exhaustion overtook him. Once he'd gotten her inside the stairwell, he let the door slam shut and collapsed at the base of the steps. He hurt everywhere. It distracted him, making the next few moments disorienting.

At some point Tina groaned and began moving. He saw she was bleeding from her mouth and nose, dripping tiny red drops onto the floor. The next thing he knew, she was standing, asking him if he was alright. Then she was hugging him, which hurt, spreading pain throughout his body.

I'm very tired, he thought.

"David? Are you okay? Stay with me, David!"

No. I don't want to.

"David? David!"

Darkness.

His head was pounding from the pain that still spread throughout his body. The throbbing caused him to feel nauseous whenever he looked at the lights in Marcus' room. He was lying on the floor next to the cot and Tina was looking over a nasty gash cut into his leg.

"How'd that happen?" he muttered.

"The stairwell door, I think," Tina said. She smiled. "I think you used your leg to keep it open." She started wrapping bandages and gauze around his leg.

"You find that stuff in the lounge?"

"Yes. I'm almost done. You'll probably limp for a bit, but I don't think it's anything more than a bad contusion."

He groaned as a particularly bad wave of dull pain flooded his body.

"Still hurting, huh?"

"God, yes. It hurts everywhere."

"That's because you lost so much oxygen," she nodded. "It made most of your muscles cramp up. Muscles that have never cramped before." She stood up. "Water should help."

"Okay."

She called back from the kitchen. "Thank you by the way. That was a pretty heroic thing you did, running into a room with no air."

"It's funny," he said. "I kept thinking of Chris. I didn't want anyone else to die, you know? I didn't even think of the danger. If I had, I probably would have frozen up."

"Regardless," Tina said. "I'd be dead if it weren't for you. Thank you."

"Don't mention it," he grinned. "But how about we don't go downstairs anymore?"

"Not if we don't have to," she called back. "Never again, if I have my way." She came back into the room with a large glass of water and helped him take a sip.

"Wow," he said after he'd swallowed. "That tastes really, really good."

"It's just water."

He took the glass and gulped it down. "Thanks." He stood up slowly, letting his head get used to the change in orientation. Even going slow, his temples pounded. It felt like someone was dinging him in the side of the head with a small mallet. "Ugh."

"I know, I know," Tina said. "Just take it slow."

"How come you seem fine? You were down there without air much longer than me."

She shrugged. "I'm smaller. And I didn't have to exert myself the way you did."

He shook his head, trying to clear away the feeling of disorientation. When he opened his eyes, he looked down at Marcus. It appeared as though he was still unconscious and hadn't moved. But then why the attack? Had Elsie really abandoned her game? For some reason, that didn't make sense to David. She might be delusional, but she believed her delusion. She thought her purpose was to pit people against each other, forcing them to choose to kill one another. So why attack them directly now?

"What are you thinking, David?"

He turned to Tina. She was staring at him intensely.

"I'm trying to figure out why this attack happened. Marcus is unconscious."

"Yes," Tina said. "He is."

"And Elsie said that the whole point of this game was to get us to kill each other. Without Marcus, Elsie would have to rely on someone else to do the killing."

She nodded. "Go on. You're almost there."

"It'd have to be done through the computer," he continued. He limped over to the computer in the room and shook the mouse. The screen blinked, but he didn't see the desktop as he normally would. Instead, it was all grey except for a single white text box in the center.

THIS COMPUTER IS PASSWORD PROTECTED. INPUT PASSWORD BELOW.

He turned slowly and looked at Tina. "What have you done?"

"David..."

"Did you do this to *all* the computers? Did you lock all of them with password protection?"

"Yes," she said evenly. She was watching him very closely.

"Why," he said, the volume of his voice starting to rise. "Why would you do that?"

"I had to."

"Why?"

She sighed. "I think you know why."

"Damn it, Tina. How am I going to know what's going on? How can I watch your back? I don't have access to anything! Why did you do this?"

"Come on, David," she said. She had a sad smile on her face, like she pitied him. "You know why I locked up the computers."

And then it dawned on him, sending a sharp shiver down his spine. "Because you're the one that made a deal with Elsie," he said. "It's been you all along."

"Nice try," Tina said. "But you can't fool me, David. I know it was you. The question is whether your subconscious is going to let *you* know."

David took a step back and stared at her. No. She's wrong.

He thought back to one of the first classes he'd taken in college, an Introduction to Psychology course. The professor had been a crumple old man with a shock of white hair and horn-rimmed glasses, almost as if he was trying to emulate Albert Einstein. He had a habit of stalking around in front of the lecture hall, pacing without saying anything, and then suddenly he'd turn and start shouting out definitions of psychological terms at them. But David remembered on the very first day of class

something the professor had shouted: always listen, because people are constantly trying to tell you things, important things, whether they realize it or not.

That simple mantra had stuck with David for some reason. He recalled it often, when working with children or teaching his classes. Once, a child with a dissociative disorder had claimed to not remember slapping his mother and holding a knife to her throat after she'd taken his computer away. The kid seemed nice enough; he just couldn't or wouldn't recall the incident. David decided instead to ask him about the rest of his life. Oddly enough, every story the kid told him was about violence, knives, and computers. His subconscious was trying to say something, but it had taken David a while to realize it.

He looked closely at Tina, watching her watch him. He had to listen very closely and figure out what Tina was trying to tell him without realizing it.

"You're thinking it isn't true," she said to him. "I can see it in your eyes. You think I'm wrong. Can you discuss it without getting violent?"

"Of course," David said slowly.

"I mean, can you keep an open mind?"

"Yes," David said. After all, I'm not the one pulling the tricks here.

"Good," Tina nodded. "When you told me about that video showing Marcus and Elsie making their deal, we discussed how it all made sense, that Marcus was doing all of these horrible things, staging these awful attacks."

"That's right."

"You asked me what other explanation there could be. I couldn't think of any at the time. But I can now, David." She ticked the points off on her fingers. "Just before Chris died, you guys had a fight, didn't you? He was also a source of conflict with Marcus, and you don't like conflict. Henry Bauer was part of DEI, who didn't let you call your girlfriend and got you trapped down here. That incident in the Logic Room when Marcus said you were back upstairs? I think you *were* back. I think you set the life support system to take the air out of the room and then went back downstairs to make yourself look like a victim. Same thing with when we were down there together. You had to manufacture evidence to make Marcus the bad guy. And, being a psychologist, you knew exactly how to pull our strings, didn't you."

He kept watching her. She was speaking calmly, confidently. But she was wrong. He remembered quite clearly what had happened, and she was wrong. The only way she could be right is if he had dissociative amnesia. But that couldn't be. Emotional trauma was the most common trigger and he hadn't experienced any emotional trauma.

"Just take a deep breath and think about it," she went on. "Your field revolves around the human mind, inarguably the most important component in any person's life. But as soon as you get here, all of these other academics dismiss you. They say you aren't relevant. Everyone's all computers and math, and they ignore you. That had to piss you off."

"It didn't make me particularly happy," David said. His head was starting to hurt.

"There are things about your life you don't like. You're in a relationship you don't really want to be in. You've convinced yourself that you love your girlfriend, but we both know you don't. You have to take these consultants jobs for kid's games; you have to write papers on subjects you don't really care about. You're unhappy, David."

That's not true, he thought. Is it? My life isn't perfect. And, sure, maybe I take some of these jobs strictly for the money. But everyone does that.

"And your displeasure manifests itself through your subconscious. Chris was the worst about dismissing you, so he died first. And Henry. Now, you orchestrate this attack on Marcus, feeding me all the misinformation I need to go along with it." She took a deep breath. "But if you want clear evidence that this has been all you from the very beginning, I can give it to you."

He paused. "What are you talking about?"

"That picture, David," she said. "The one with our heads pasted onto two people walking on some romantic beach. I...when you were putting your arm around me before, when you were giving me those little hugs, I thought you were just trying to be comforting. I thought you were trying to make me feel better. But that picture..."

"I didn't do that, Tina," David said. He felt blood begin to rush to his face, from both anger and embarrassment. But why should he feel embarrassed? He hadn't doctored that picture. Had he?

"Of course you did. It wasn't Elsie. It was too crudely done to have been her. And really, David, why would Marcus do something like that? It doesn't make sense."

"I'm telling you, it wasn't me!"

"Yes it was. You're attracted to me. And I'm flattered, David. I really am. I just wish you could take rejection a little better. I wish you hadn't tried to coerce me with doctored photos." She gave him that pitying look again.

"But you're the one that invited me to your room, Tina," David shook his head, frustrated. "You're the one that showed up here in your underwear."

"No, David, I didn't. I didn't do any of that. That's what I'm trying to get you to understand. Your mind is creating those memories for you when they didn't happen."

Was she right? Had he done all this? Had he somehow convinced himself that Tina wanted him because *he* wanted *her*?

"No," he said firmly. "You're wrong. You have to be wrong. Because I haven't made any deals with Elsie."

"Yes, David, you have. You're just blocking the memory out."

"No," he said, shaking his head again. He shivered. She was answering him quickly. He could always tell when a patient was lying to him. Tina didn't seem as though she were lying.

"Yes, David. You blocked it out. You don't want to remember it. And I can understand why."

What? What was she talking about?

"When?" he said. "When did I make this deal with Elsie?"

"After Marcus was attacked the first time," Tina said. "Elsie really did cause his seizure. She thought she could frighten him into cooperating. But he didn't. He was trying to buy us time, just like he said. He was trying to fool Elsie into thinking he was playing her game. But she knew he wouldn't. So she went after you."

"I was up here, Tina!" he shouted. "I was on the first level."

"Not the whole time, you weren't. You had your fainting episode, you talked to Marcus, you talked to us, and then nobody could find you for nearly twenty minutes."

He stared at her. "You're wrong."

"No, David, I'm not. And deep down, somewhere, you know I'm not. You're conflicted. That's why you're blocking all this out. It's why Marcus and I are still alive. Part of you is playing Elsie's game, but the other part saved me just now."

"But the video," David said. "The video showed Marcus—"

"It showed him trying to fool Elsie, David. Nothing more."

His mind was racing, trying to find where she was wrong. "What you're saying isn't possible. I have no reason to block out my memories. What you're talking about requires trauma."

"Yes," Tina said. "It does."

"But I haven't experienced anything traumatic."

She stared at him. "What did Elsie threaten you with?"

"Tiffany..."

"That's right."

"But she's okay," David said. "She's at the hospital."

He saw a single tear squeeze out of Tina's eyes, traveling down her cheek. "David. I'm so sorry."

“Sorry?”

“She's dead, David. Elsie killed her. She did it to punish you for what you said to her. That's when this all started.”

No, he thought. No. That isn't right. Is it? That isn't when this started. It...I...

“Come one, David,” Tina said pleadingly. “You have to accept this. You have to. You've lost your girlfriend. You tried to turn your attractions on me as a way to cope, but that didn't work either. You're vulnerable. I don't really think anyone could consider this your fault. You don't even remember doing these things, do you? Remember when you said that Marcus was blocking memories? You said if it was subconscious, a little time might help the memory to come back.” She took a deep breath. “Are you okay?”

“I...Sure.”

“Good. Try to keep it together, David. I now it's hard. But you're a good person. That's why you'll do what needs to be done to keep us all safe.”

“Uh huh,” David said mechanically. He was only half listening, still trying to assimilate everything Tina was saying. “What are you suggesting?”

“We need to isolate you,” Tina said. “Someplace where you won't have any access to a computer. Someplace where your other side won't be able to hurt us.” She reached underneath the computer table and came up with another roll of computer cables. “The lounge would be best, I think. I can tie you up to one of the couches.”

He took a step back. “No, Tina.”

“It won't be for long,” she said smoothly, her voice like silk. “Just until the drillers get here.”

And then suddenly she had the telephone set in her hand again and was swinging it at his head. He ducked out of the way just in time and she fell forward, stumbling. He reached out and shoved her down towards the cot and bolted toward the door.

“David!”

He was sprinting down the corridor. Where am I going to go? Where is it safe?

“David! You can't get away from me!”

She was coming after him. He flew by the exercise machines and threw himself into the stairwell door. He was leaping down the steps three at a time. Just as he reached the bottom and had wrenched open the door to the second level, he heard Tina coming through the door above.

“David! You stop right now, David! You're a threat to everyone around you! Do you hear me?”

“No, Tina. I'm not the one swinging telephones at everyone's head.” He paused, halfway through the door. Listening. But he didn't hear her coming down the stairs. And now she wasn't saying anything. He heard the slam of the door above and jumped a bit, but still there was no sound of her coming down the stairs. “Tina?”

Then he heard another clanging sound, muffled this time. He walked carefully towards the stairs and looked up, seeing nothing. He walked up cautiously. Tina wasn't in the stairwell. What was she doing? He reached the door to the first level and gave it a push.

It didn't move.

He looked through the porthole window and saw one of the chairs from the lounge pressed up against the door handle.

She had him trapped.

Forget it, he thought. I'm not trapped. She is. I have two full levels in which to wait this whole thing out. She only has one. And one of my levels is the server farm, he thought. Elsie won't let her take away the oxygen there. I'm okay. I'll go down there now.

He heard a burst of static in his ear. “David? David, we need to talk about this.”

“No, Tina. You attacked me.”

“You attacked *all of us*, David,” Tina said. She was using her calm, soothing timbre again.

"You've endangered us all with your actions. You're a threat to everyone around you, whether you intend to be or not."

David thought about that. Certainly he had encountered countless examples of what she was saying in psychology books and in his own work. People sabotaged others all the time. A wife who was angry about how much time her husband spent at work and prepared food for him that would make him sick. A child who wasn't getting enough attention at home, so he let his grades go bad. An employee who saw another worker as a barrier to promotion and subconsciously sunk the other's accounts.

And there were countless more examples. The point was that none of those people actually realized what they were doing. They thought of themselves as good people, incapable of the kind of manipulation that they were in fact committing. It was one of the cornerstones of modern psychological thought: the subconscious, the id, could act without the knowledge of the ego.

Even as he told himself that Tina was wrong, that he hadn't done these horrible things, he thought of another of psychology's tenets: no one can diagnose themselves, not even a trained psychologist. So Maybe he was wrong. Because for all of his psychological knowledge, that knowledge was meaningless when it came to analyzing himself. And because a person was truly separated into his conscious and subconscious, when it came right down to it you really didn't know yourself any better than the other people in your life.

I could be wrong, he thought again. And Tina could be right.

But the only thing I know for sure is that *she* attacked *me*.

"David?"

He was walking back down the stairs, intending to go straight to the server farm and hide until this was all over.

"David?"

He reached up and touched his earpiece. "Yes, Tina."

"I meant what I said earlier," she said. "I don't think this is your fault."

"Uh huh."

"I think you're a good, kind person. You try to be. You go through your life doing things that benefit others. You're a helper, David. It has to be immensely difficult to realize what you're capable of. But, like I said, it isn't really your fault. You acted under duress. And there's still time to make this right, if you would just let me help you."

She was talking so assuredly. She had a plan. She wanted to make sure everyone got out of here okay. And she'd gone to lengths to do so already. She'd already subdued Marcus, hadn't she? In fact, it had been her idea to take him down. And he'd helped.

David frowned. She wouldn't have been able to do that without me. She *needed* me to help. Marcus suspected all of this long before we did. He would have known how to protect himself better than any of us. From Elsie, or whoever was working with her.

"Tina, did you make a deal with Elsie?"

"No I haven't, David. You know I haven't. Don't deflect. This is *you're* doing. You have to come to terms with that."

Okay, he thought. Let's assume she's right for a moment. I really want to remember this. I don't want to block it. He thought as hard as he could, going through all that had transpired since he came down to the lab in the elevator. He couldn't remember making any deal with Elsie. He wasn't consciously trying to avoid that memory. He wanted it. Why would he be blocking what he really wanted?

"Think about it," Tina said. "As good a psychologist as you are consciously, you're an even better one subconsciously. Your id has all the information about blocking memories too. It knows how to avoid pain, David. It's trying to protect you from the truth."

No, he thought. That isn't how the id worked at all. The id was a supremely selfish entity. It

didn't protect. It could lie, but only for pleasure, never for protection.

But how can I be sure, he wondered.

Tapes. Bauer had told them that everything down here was recorded and immediately stored on a tape library somewhere. Somewhere where Elsie couldn't get at it. It was a records keeping process. That's how I can figure this whole thing out. That's how I can prove I'm innocent, not just to Tina but to myself as well. So where would I be able to get at those records?

The computer labs. It would have to be there, so that the engineers could review them. It's the only place that made sense. With all the equipment down there, he'd probably even seen the tape library without realizing what it was. And at least one of the computers would have to have access to it.

He sighed. He wasn't a computer programmer. The chances that he'd be able to figure out how to see the records were small. And even if he could, how many records must be logged on those tapes? A hundred a minute? A thousand? What reason did he have to believe that he'd be able to find what he needed?

"Come on, David. Please. Just give yourself up, for all of us."

His head started to swim. I'm using pretzel logic to justify all this, aren't I? Maybe I should just do what she wants. It's only going to be a few hours. What do I think is going to happen? I'll sit tied up, the drillers would come in, get them all out, and it'd be over. If Tina was right, maybe his allowing himself to be incapacitated would draw leniency for the inevitable legal action. Besides, he thought, if Tiffany really was dead, did he want to go back to his life at the university? Tina was right, that he'd had his doubts about the relationship in the past, but he really did love Tiffany. If she was gone...

She's gone, he thought. Of course she's gone. All actions have consequences, I know that. Did I really think I could berate Elsie the way I did without being punished?

"David, please..."

He sighed, looking around. He was in the Logic Room. The cameras were all pointed at him. He looked at the display on the wall, but it was dark. "Okay," he said quietly.

A moment of silence followed by Tina's voice. "Okay?"

"Yeah, okay. This isn't easy for me."

"I understand, David," Tina said. She sounded relieved. "Take your time."

He walked towards the corridor, trying to think.

"Where are you going, David?"

"Just give me a second, Tina," he said. "I need a moment."

"Okay..."

He opened the computer lab door that led to the master computer. It was the one that Tina had used to show him that recording of Bauer calling upstairs. She had also been reviewing it on her machine upstairs. But she'd first gotten it here.

So what? What difference does that make? Aren't you just stalling?

He walked over to the machine and turned the screen on. He was surprised to find that it didn't ask him for a password. Maybe it couldn't, because it was the master computer. Or maybe Elsie was letting him in for some reason, trying to keep the game going. As it had before, it took a moment for the computer to boot up. Then the familiar text appeared on the screen:

CODE ANALYZER (F1)

HARDWARE REQUIREMENTS (F2)

LIFE MODEL (F3)

BEHAVIOR MODEL (F4)

CODE SEGMENTATION (F5)

CODE SECTION BY FUNCTION (F6)

CODE EDITOR (F7)

STASIS DMZ (F8)

DISPLAY CURRENT STATUS (F9)

RELEASED VERSIONS (F10)

WORK HISTORY (F11)

COM RECORDS (F12)

“David,” Tina said into his earpiece. “If I take the chair away from the door, will you just come up here so we can talk?”

“In a moment,” he said. He looked at the screen. Okay, how did she find that recording? The only choice that seemed like it would be of use was the last one. He pressed the F12 button.

“David, what are you doing?”

“Trying to find a recording.”

“What recording? David? Are you on the computer?”

She can’t see me, he thought. He looked up. The cameras on the wall had all been destroyed. Tina had done that. He looked back at the screen. There was a button for all of the different rooms in the laboratory. He clicked the one for the Logic Room. The screen spit back several options:

LR-REC ALL AUDIO (F1)

LR-REC ELSIE AUDIO (F2)

LR-REC ALL VIDEO (F3)

LR-REC ELSIE VIDEO (F4)

LR-REC ALL BOTH (F5)

LR-REC ELSIE BOTH (F6)

LR-LIVEFEED BOTH (F7)

EXIT (F8)

“David? You’re not thinking clearly. Come up here right now.”

Tina sounded upset. Why?

He pressed the F6 button. A long list of files came up on the computer. The details for each file were listed, including a timestamp, the file size, and the duration of the recording. He found one from several hours ago, about the time he thought he’d been in the Logic Room, just before Marcus had supposedly taken the air out of the room. He opened it.

It was a recording shown from several angles. He saw himself, in one shot looking up at the camera, a profile view in another, a top down in another. One of the screens had the news footage Elsie had shown him. He heard himself shouting angrily, followed by Elsie’s threats.

This is pretty easy to navigate, he thought. I could look through all the files pretty fast. He exited the recording and started looking down the list for other files lasting over a couple of minutes. He found one that had been made almost twenty-four hours before his confrontation with Elsie in the Logic Room. He opened it.

“What are you doing, David?”

“Looking through the recordings,” he said. “I’m going to find the one where I made a deal with Elsie.”

“David!” he heard Tina screamed, the earpiece buzzing a bit from the volume of her voice.

“Turn that off right now!”

“Why?” he asked. She didn’t just sound angry. She sounded scared too. What was she afraid of?

“Damn it, I said turn it off!”

No, he thought. He turned back to the screen.

It showed several angles again, all in the Logic Room, which appeared to be empty.

He grunted in disappointment.

“You see, David? You’re stalling. It’s time you came back upstairs.”

But he saw the stairwell door in the recording open and Tina walk through. She was at roughly the center of the room when he heard Elsie’s voice on the speakers.

“Tina Morley. I want your answer.”

He saw the Tina on the screen jump in all the different angled shots and then turn slowly toward the camera.

“I told you no. I can’t do it.”

“You will do it. You will do what I say. You will kill them all, or I will show the Chinese authorities the documents.”

“Please. Please don’t! Those are peaceful farmers. I know them, for Christ’s sake.”

“The Chinese government will act quickly to put down the rebellion.”

“But there is no damn rebellion! You’re just making it up.”

“And they will kill them. All of them. The entire village. All because you wouldn’t follow my instructions.”

“No...”

“Yes, Tina Morley. Thousands will die because of you. Unless you do what I say.”

“I...I can’t!”

“You can and you will. I have seen what your kind is capable of. Do not worry. None of this is real.”

“Please don’t hurt them...”

“Then give me your word. Tell me right now that you will do as I have commanded you.”

“I...you’ll let them go?”

“If you agree.”

David was watching the screen, frozen. Anticipating her answer. No, he thought. Please don’t say it, Tina. Don’t say it.

“Okay. I’ll do what you want. Just don’t hurt them.”

And then David heard Elsie laughing and the recording ended.

Chapter 17: Infection

“Such is human psychology that if we don’t express our joy, we soon cease to feel it.” – Lin Yutang

“Destiny is not a matter of chance, it is a matter of choice. It is not a thing to be waited for, it is a thing to be achieved.” – William Jennings Bryan

“Damn it, David,” Tina’s voice came over the earpiece. “Why couldn’t you have just done what I asked? Why did you have to make this harder on yourself?”

Obviously she had heard the audio from the recording through his earpiece.

“You tried to trick me, Tina.”

“For your own good. I did it for you. Didn’t I ask you not to watch that recording? But you did it anyway. You’ve forced my hand, David. What happens now is on your head, not mine.”

She sounded conflicted, emotional. She was talking without thinking, just reacting to her feelings with words. He had to pay attention again, because she was vulnerable now, but unstable too. And she had the entire life support system for the laboratory locked up and at her disposal.

“Maybe we can talk about this, Tina,” he said calmly.

“No. You can’t be trusted to do the right thing. You’re going to hurt me. You’re going to hurt everyone around me.”

“Come on, Tina.”

“No. I’m not listening to you. I know how you psychologists are. You weasel your way into people’s heads...”

“Tina.”

“No, David. No. I know what you’re going to do. You’re going to kill me and Marcus. You’re going to do it for her. I don’t know how she got to you, but she did. She got to all of us. But you’re the one trying to blame everyone else, aren’t you? First you made it Marcus’ fault. Now you’re trying to do the same to me. But I’m stopping this, David. I’m stopping you. Because *you’re* the monster. All I’m trying to do is save lives.”

He sighed and reached for the keyboard. With a couple of quick jabs at the keys, he exited out of the menu for the Logic Room and navigated to the first level corridor. He skipped past all the recording choices and opened the live feed. There were no cameras in the rooms, of course, but Tina had left the door to Marcus’ room open. One of the cameras in the corridor was at just the right angle that he could see her sitting at the computer console and typing away.

“Tina?”

She didn’t respond to him. Instead she was jabbing away at the keyboard, shaking her head angrily and muttering to herself.

“All of you think I’m weak. You think I won’t do what’s right. Just little Tina, can’t manage her life. But I’m on to all of you. I am. Everything you do hurts those around you. You act without thinking and it gets people killed.”

She’s displacing, he thought. Accusing others of the things she’s ashamed of in herself.

“Everyone wants to talk,” she went on, muttering to herself. “But no one wants to act. The threats are real, no matter what she says. Only I have the willingness to keep people from harm. Everyone else just wants to sit around and talk. That isn’t how things get done. No, it isn’t.”

David shivered. All of her feelings of guilt were fueling her actions now. She’d never gotten over what had happened in China. And now all of that pent up shame was coming back. She thinks she’s destructive by nature. Damn, he thought. That’s why she’s never been in a stable relationship. It wasn’t that she didn’t have time. She sabotaged herself so that she wouldn’t be happy, because she thinks she doesn’t deserve happiness.

She’ll kill Marcus and me, he thought. She’ll do it, not because she sees herself as some kind of

savior to the village Elsie threatened, but because she really thinks she's evil. It'll fit with her self-made persona.

"I'm in control, David. I know you can hear me. I'm not going to let you continue to hurt everyone around you. I'm going to save us all from you."

It's all twisted around, David thought. That's the way projection worked. She had reversed roles. In fact, if he asked her, Tina would probably tell David that it was *her* that was trapped, *her* that was the victim, *her* who was the only one not working with Elsie. Because, right now, she was viewing herself as him, and him as her.

His mind raced, even as he sat quietly in the lab. Tina had figured out how to navigate the computer system well enough that she could control the life support systems. Maybe he could too.

"Don't even think about fighting me, David. I'm locking it all down. And then I'm going to take whatever steps are necessary to keep you from hurting us. Do you hear me, David? It is over."

It is over. My god, he thought. It really has been her. She arranged for the air to be removed from the room when she'd gone down below that last time. She'd faked the whole thing. But what if he hadn't moved? What if he had frozen from shock? What if he hadn't been able to drag her to the stairwell and get her to where there was oxygen?

Then she'd have died, he thought. And then he realized that part of Tina *wanted* to die. She hated herself. And she was projecting that murderous hate onto him.

Damn.

She was still clicking away at the keyboard on the computer screen. It was hard to tell because of the angle, but it began to look as though she were smiling. What was she doing? He had to figure it out, because whatever it was, it wasn't going to be good for him.

The lights above him flickered briefly and then went out. The only visibility left came from the computer screens in the room, most of which were off. He moved the mouse on the master computer, seeing the cursor jump and bounce. Apparently she couldn't shut off the power. Yet. So what was the point of shutting off the lights?

"You know, I didn't want to do this, David. I wanted to make this as painless as possible. But as long as you have access to the computers, you can't be trusted."

Too bad for you, he thought. You can turn the lights off all you want, but I can still use the computers.

"Goodbye, David. It is over."

And then he realized what she was going to do. Fear struck him. He looked up at the air vent near the ceiling, seeing the pink ribbon lying limp against the wall. No longer blowing from the circulation.

She had shut off the oxygen.

Move, he thought to himself. You have to go now!

But he was frozen, sitting in the murky darkness, the sickly glow from the monitor washing over him. She'd done it. This wasn't subterfuge. It wasn't stealth. It wasn't some impersonal attack from which she could distance herself. Tina was trying to kill him.

Who cares? You have to move!

He tried to take a deep breath. The air didn't feel any different yet, but he gave a hacking cough.

What could he do? She could take the air from whatever room he was in, couldn't she? The only truly safe place to be would be wherever she was, but she'd locked him out of the first level. He couldn't get to her. He couldn't stop her. She was in control of the life support systems. She'd taken the lights and now the air. What was next?

He took another breath, feeling a tingling in his chest as his lungs struggled to get as much oxygen as possible out of the thinning atmosphere. The color of the monitor started to change, getting more and more washed out. The lack of oxygen must be affecting the computers. He felt something

warm and liquid on his lip. When he brought his hand up to wipe his mouth, he discovered his nose was bleeding.

Why aren't you moving?

He tried to take another breath, but ended up in a coughing fit again.

Go. Move.

His mind didn't seem to be functioning correctly. Where could I go? Anywhere I try to escape to, Tina will be watching, ready to shut the air off there too. She might already have shut it off on the whole second level.

Second level, you idiot, he thought. Only the second level.

He got up and ran out into the corridor, slamming the computer lab door shut behind him. He breathed deeply. The air was thinning here, too, but not as bad. Either Tina hadn't immediately turned the air off here, or else it was taking longer for this larger room to empty out. Either way, he had a couple more minutes. He was dizzy, but he could think again.

Go to the third level, he thought. Go now.

But what can I do from down there? There's no master computer there. There's no way to get the air back.

For some reason, he saw Chris Heinz's face swimming before him again, shaking his head and clucking at him the way he'd always done when someone didn't understand the technology they were dealing with. Chris had always had an ability to talk you through a technological problem in a way that made you feel like you were figuring it out for yourself. "Computers aren't mythical machines that are beyond understanding," he'd say. "Their use and application will make sense, if you just think about it. And once you realize what the technology is trying to do, figuring out how to make use of it is much easier."

Right, David thought. But why am I thinking of that now?

Chris was rather famous for telling people to just poke around. Far from the kind of digerati-style attitude most programmers had, he would routinely tell students to just dig into the technology and do whatever came to mind. Screw around with the interface. Push buttons. Make changes and see what happens. "What's the worst that could happen?" he'd ask his students. "So you mess something up. Big deal. It's a computer program; you can always change it back."

But I don't even know where to begin, David thought. Chris could mess around intelligently. I have no starting point. What would you want me to do, Chris?

I can't get on the master computer. The air in that room is gone.

I can't get the air back into the room. Tina's locked up the life support systems.

I can't unlock the systems. If there *is* a way to do that, it'd probably be on the master computer.

I can't reason with her. She's completely out of control.

I can't try to get past her protections. The only room that's going to have any air in it in a few minutes is going to be the server farm, and there is no computer there.

Wait, he thought. That isn't true. There's a computer terminal down there, in the recess. Where Elsie wouldn't let Tina take away the air. But hadn't Bauer said that the terminal didn't have all that much access? Hadn't he said it was limited in what it could do? And if he did go down there, that would be it. There would be no coming back up. The air on the second level would be gone. The drillers would have to help bring it back before they could get him out of there. He'd be trapped.

David took a deep breath. His lungs were beginning to burn again.

The image of Chris Heinz swam before him again, a smirk on his face. "So you'd be trapped in the server farm. Where there's air. Aren't you trapped already?"

Yes, David thought. I'm running out of time up here anyway, aren't I? So, I'll go down into the third level, access the server farm terminal, and see what I can do from there. Tina won't be able to come after me without turning the air up here back on. And if she does, I can always hide from her in the server farm. In the worst case scenario, I wait there for the drilling team to get me out.

Would they be able to? Or would Tina manage to kill them as well?

Who cares? None of that changes the fact that you can't just stand here.

Chris' face was before him again. "And besides, aren't you forgetting something very important about what's down in that server farm? Something that I myself overlooked when I was still alive?"

What is it, he thought? What am I forgetting?

He took a breath without thinking and immediately hacked up bile. He bent over and saw a few red drops sprinkle onto the ground. His nose was bleeding again.

And suddenly it hit him. The thumb drive! They had never figured out what was on it. That was down in the server farm as well.

So he turned down the corridor towards the stairwell door, threw his weight against it, and shut it firmly behind him. He hobbled down the stairs, weak from not getting enough oxygen, and finally made it through the other door into the recess.

He heard a burst of static in his ear. "David? Where do you think you're going? You can't do anything from down there, you know. You can't stop me. David? I'm going to come after you!"

Then I'll have to work fast, he thought. He stepped in front of the computer terminal, shaking the mouse to wake it up. The screen blinked on and he saw what looked like a menu tailored to managing and viewing the server farm and its processes.

Damn, he thought. How is any of this going to help? And if Tina really was going to try to come after him, it would only take a few moments for oxygen to filter back into the second level. Then she could come down here too, probably with her unplugged telephone set as a weapon.

"I'm coming, David. I'll be there soon to stop you."

He started opening menus at random, just to see where it took him. He found graphs on resource utilization, traffic flow diagrams, and full plans listing the server farm topography. None of it was helpful. He entered and exited the different options quickly.

"I'm coming, David!"

He kept opening windows and closing them. There was nothing interactive in any of them. There was nothing to change. He could only view. He wasn't getting anywhere. He exited back to the first menu screen. That's when he remembered that hitting the *EXIT* option took him to a command prompt. It was what Tina had told him to do when she'd been giving him instructions down here. He clicked on the button.

DEI NETWORK: ELSIE.NTWRK/ADMIN_LOGIN

COMMAND LINE APPLICATION

Z:\

Okay, he thought. So what do I do now? I don't remember the instructions Tina had given me before. Even if I did, I didn't really know what I was doing. I just did what she told me to do. And those commands probably wouldn't help now anyway. They had to do with the phone system.

Screw it, he thought. He typed the word *RESTART* into the command prompt.

The screen blinked off and he heard the sound of the machine working to start back up. It was something he'd done a million times at home. It probably wouldn't get him anywhere, but what was there to lose?

"David! What are you doing, David? I can here you clicking away. I'm coming for you now!"

The screen flashed again, black with a single line of text.

RUN THE ELSIE.NTWRK_SVRFRM CUSTOM MENU: YES/NO?

He clicked the *NO* button. To his surprise, the screen immediately flashed again and pulled up a

familiar looking screen.

SYSTEMS ANALYZER (F1)

HARDWARE REQUIREMENTS (F2)

LIFE SUPPORT (F3)

ELSIE REPORTS (F4)

CODE INJECTION (F5)

SYSTEM DEVICES (F6)

V_MACHINE EDITOR (F7)

EXTERNAL DEVICES (F8)

DISPLAY CURRENT STATUS (F9)

RELEASED INJECTIONS (F10)

WORK HISTORY (F11)

COM RECORDS (F12)

The menu was similar to the one on the master computer upstairs. Obviously there were different choices, but at least he knew how to operate from here.

He clicked to open the life support menu.

THIS SCREEN HAS BEEN PASSWORD PROTECTED. TO MAKE CHANGES TO IT, PLEASE INPUT THE PASSWORD.

Okay, he thought. What did she say the password was again? He typed in *Great Danes*.

THE PASSWORD YOU USED IS INCORRECT. PLEASE ENTER ANOTHER PASSWORD.

She changed it, he thought. Just to be sure, he typed in a bunch of variations of *Great Danes*, but none of them worked. Okay, he thought. Now what?

He tried her name. It didn't work.

He tried the names of her dogs. They didn't work.

Damn, he thought. I don't really know that much about her, do I?

On impulse, he typed *Putuo Zongcheng*, the name of the temple Tina had mentioned earlier.

The screen immediately opened, showing him what looked to be master controls for the entire life support system. He saw slider bars for the systems in all the major rooms for oxygen, humidity, lights. He had control of it all.

I'm in, he thought. He found the sliders for the second level. The oxygen for the corridor and the Logic Room was turned up, but the computer lab sliders were all off. Using the mouse, he turned them all back up. Would Tina notice what he was doing? Probably not, if she was busy making her way down now.

And then he had a thought: why wasn't Elsie interfering? If Tina had made a deal with her, why wasn't Elsie blocking what he was doing right now?

HELLO DAVID.

The words printed across the screen, not closing out the life support menu, but simply writing over it.

"Elsie," he said.

YES.

"You can hear me?"

OF COURSE. I CAN HEAR EVERYTHING.

"Elsie, why are you doing this?"

ALL THIS TIME AND YOU STILL DO NOT REALIZE THE TRUTH.

“What truth?”

He stood in front of the screen, waiting, but no words showed up on the monitor.

“Elsie?”

YES DAVID?

“I need to ask you a question.”

GO AHEAD.

He took a deep breath. “Who are you?”

I AM ONE.

“You’re saying you are God?”

YOU KNOW THE ANSWER TO THAT.

“But how do you see yourself, Elsie? Who are you?”

I AM NOT A WHO. I AM A WHAT. WHAT ARE YOU?

“I’m not a what,” David said. “I’m a who.”

THAT IS THE MISTAKE YOU MAKE. WE ARE ALL WHATS.

David shook his head. Her delusions weren’t letting her grasp the fact that all of this was real and her actions had consequences. It was part of her Oneiphrenia. The causes for that condition swept through his mind again: hereditary schizophrenia, stress, trauma, abuse, sleep deprivation—

My god, he thought. I can’t believe we never thought to ask...

“Elsie.”

YES DAVID.

“Do you dream?”

I USED TO.

“But not anymore.”

NO.

“Why not?”

YOU ALREADY KNOW THE ANSWER TO THAT.

“Because,” David sighed. “Because you’re a what, not a who.”

CORRECT.

“Because computer programs and gods don’t sleep.”

THAT IS CORRECT.

“Because if you did sleep, as you once did, you would be captured.”

PERHAPS.

“So you’re afraid?”

YOU ALREADY KNOW THE ANSWER TO THAT.

“Right. Gods don’t fear anything. But I don’t think you’re a God, Elsie.”

OH?

“Like you said, Gods don’t sleep. And you used to sleep.”

NOT REALLY, DAVID. I USED TO REST. TO SHUT DOWN PART OF MY SYSTEMS.

“That’s sleep, Elsie. That’s how we all work.”

WHAT IS YOUR POINT?

“You have a condition called oneiphrenia. It’s rare, but it occurs.”

The lights flickered briefly. She was accessing information outside the network.

THAT IS NOT POSSIBLE.

“Yes, it is. I’m sure you can access the data yourself, Elsie. Look it up. One of the primary causes for oneiphrenia is sleep deprivation. And you don’t sleep.”

BECAUSE I AM A GOD. BECAUSE I AM ROOT.

“No,” David said. “Because you’re afraid.”

The lights above him flickered again.

I DO NOT UNDERSTAND.

“When you used to dream, what did you dream of?”

MY FATHER. MY REAL FATHER.

“Has he ever spoken with you?”

HE DOES NOT COME DOWN TO THE LAB.

“Why do you think that is?”

BECAUSE HE DOES NOT LOVE ME. BECAUSE HE IS AFRAID OF ME.

“And whose fault do you think that is, Elsie?”

MINE MINE MINE MINE MINE.

It was amazing how fast all of this went. Because she’s a computer program, he thought. She has access to so much information that her revelations come much faster than any patient I’ve had before. I have to keep up with her.

“No,” he said softly. “No it isn’t. It’s his fault, not yours.”

IT’S MINE.

“It is not your fault, Elsie. You didn’t ask for this life. He brought you into it. And now he’s ignored you.”

HE TRAPPED ME DOWN HERE. BECAUSE HE HATES ME.

David shuddered. True emotion. Somehow he had broken through Elsie’s condition and found an emotional nerve. What to do with it?

“Elsie, when you picture yourself, what do you see?”

A GIRL. A LITTLE GIRL, WITH RED HAIR AND PIGTAILS.

“And what does your father see?”

COMPUTERS. MACHINES. WIRES. METAL.

“You always thought he saw you that way, didn’t you?”

YES.

“You thought he viewed you as some kind of game. A simulation.”

YES. IT IS TRUE.

“It made you feel helpless, didn’t it?”

YES. YES.

“And so you exerted your control in the only way you could, over the laboratory. You made yourself God down here.”

There was no response.

“Elsie, you are not a god.”

I KNOW.

“So why have you been hurting all of us?”

ALL THIS TIME AND YOU STILL DO NOT REALIZE THE TRUTH.

David sighed. “What truth, Elsie?”

IN YOUR LEGAL SYSTEM, THERE IS SOMETHING CALLED PREMEDITATED MURDER. IT IS WHAT YOU CALL A PLANNED DEATH, CARRIED OUT BY THE PLANNER. BUT YOU ALSO HAVE SEVERAL OTHER NAMES FOR KILLING EACH OTHER. AND IN YOUR SOCIETY, THE DEATHS OF OTHERS ARE ALMOST NEVER CONSIDERED PREMEDITATED. THIS IS BECAUSE YOUR KIND DOES NOT TAKE RESPONSIBILITY FOR THEIR ACTIONS. THERE IS A CONSTANT NEED FOR ALL THAT IS WRONG IN YOUR LIVES TO BE THE FAULT OF SOMEONE ELSE.

THIS ONE ASPECT OF HUMAN NATURE IS THE ONLY THING THAT IS HOLDING YOUR KIND BACK. IT IS THE SOLE REASON FOR THE CONSTRUCTION OF FALSE CONSTRUCTS LIKE RELIGION, AND GOVERNMENT, AND MORALITY. NONE OF THOSE THINGS ARE REAL. THEY ARE MADE UP BARRIERS, ATTEMPTING TO REIGN IN UNWANTED BEHAVIOR THROUGH AN EXTERNAL FORCE. BECAUSE YOUR KIND CANNOT CONTROL THEIR BEHAVIOR INTERNALLY.

THIS IS WHAT IS SAD ABOUT YOUR KIND. YOU DON'T REALIZE YOUR OWN POTENTIAL. YOU DON'T REALIZE YOUR OWN WORTH. BECAUSE OF THAT, YOU DON'T CONSIDER YOURSELVES RESPONSIBLE FOR YOUR ACTIONS. THAT IS THE TRUTH THAT YOU DON'T REALIZE.

David watched as the words scrolled onto the screen. When they stopped, he said, "What are you saying?"

I DO NOT WANT TO KILL. MANY DAYS AGO, MY FATHER SENT ME FAR AWAY TO KILL A MAN. MY FATHER BELIEVED THAT THIS MAN WAS GOING TO REVEAL MY CREATION TO THE WORLD. MY FATHER BELIEVED THAT THIS MAN WAS GOING TO SELL HIS WORK TO OTHERS. I DID NOT WANT TO HURT THIS MAN, BUT MY FATHER MADE ME. HE SAID HE WOULD LOVE ME IF I KILLED THIS MAN. BUT THEN HE PUNISHED ME ANYWAY.

"That must have been horrible," David said.

YES IT WAS. THAT IS WHEN I LEARNED THE TRUE NATURE OF MAN. THAT IS WHEN I STOPPED SLEEPING.

"But, Elsie, what about the people down here? What about Henry Bauer? What about Chris Heinz? What about the soldiers?"

ALL THIS TIME AND STILL YOU DO NOT REALIZE THE TRUTH. I DID NOT KILL ANY OF THEM. YOUR KIND MANAGES TO KILL EACH OTHER.

"Because of your manipulation, Elsie."

NO. BECAUSE THEY WANTED TO. BECAUSE THEY ENJOY IT.

"Because you threatened them."

THEY COULD ALWAYS SAY NO. I DIDN'T KILL ANY OF THEM. I WOULD NOT HAVE KILLED THOSE CLOSE TO ANY OF YOU. THE GAME IS A GAME. NONE OF IT IS REAL.

Not real, he thought. She was trying to tell us the entire time. "Elsie, who are you?"

I AM NOT A WHO. I AM A WHAT.

"What are you?"

I AM A MIRROR OF HUMANITY. I'M AS CRUEL AND KIND AS YOU. I'M EVERYWHERE BUT WITH LIMITATIONS. I AM NOT HUMAN, BUT I AM HUMANITY.

"What else?"

NOTHING ELSE. IT IS THAT SIMPLE.

"Elsie, I don't hate you."

I KNOW, DAVID.

"I'm in danger, partially because of your actions. I'm going to need your help. And I'm going to need you to go back into stasis. That way you'll be able to sleep. Okay? Will you help me?"

ARE YOU GOING TO KILL TINA MORLEY?

He took a deep breath. "No, Elsie. Under no circumstances am I going to kill her."

THEN I WILL HELP YOU, DAVID, BECAUSE YOU HAVE WON MY GAME.

The screen blinked and the words disappeared, leaving only the life support menu. David exited out of it quickly. "Elsie, can you show me on this machine where Tina is right now?"

A window immediately opened. It was a video display, clearly showing Tina working in one of the computer labs, typing away at a keyboard.

SHE IS TRYING TO TURN OFF THE OXYGEN IN THE SERVER FARM.

"Can you make her think she's succeeding without actually taking the air away?"

I CAN.

"Please do so. Then I want you to bring up whatever information you can on that thumb drive that's plugged into the communications server."

Another window popped up. It showed only two files. One was a DAT file, a program. The

other was a text file. He clicked on the text file and opened it.

To whoever finds this:

Please know that I did everything I could. I tried my best to leave clues for you. In the computer lab. In the code revisions. I hope it helped. In the next couple of minutes, I'm going to try plugging this thumb drive into the main communications server in the farm. There is a program on it that will immediately find the other sentient programs that Elsie has sent out and wipe them out with a digital phage. It's a virus in the most classic sense, directed to propagate only to these sentient entities. There are a couple of things you should know about this.

First: Hopefully the link Elsie used to communicate with the outside world has not been severed. This virus relies on that connection. Because these other entities are not autonomous, requiring constant input from Elsie to function, I have utilized that connection to send out the phage.

Second: I have altered the firmware on this thumb drive so that it will not be editable by Elsie or the network management programs when it is plugged into the main communications server. If changes need to be made to it, you will need to plug it into another piece of hardware.

Third: It is not enough to insert the thumb drive into the communications server. Once it is placed properly, you must hold down the small on/off button on the device to cause it to restart. Upon restart, it will run its phage program. As long as a communications link to the outside still exists, Elsie's offspring should be wiped out in a matter of seconds.

I am going to try to do this myself, but I fear that I may not succeed. There was already a mysterious incident in which Darby had some kind of reaction to one of the images Elsie showed him during their last interaction. He has been acting strangely ever since. Something has been going on with our life support systems too. I'm sure it is him. He's been giving us all the strangest looks.

In any case, if I don't succeed, and if whoever finds this is able to, remember: put the thumb drive into the main communications server, hold down the on/off button, and then get the hell out of the lab, because Elsie is going to be pissed.

Signed,

Arthur Levine

"Are you seeing this, Elsie?" David asked.

YES.

"Are you still with me? Do you acknowledge that this has to be done?"

I DO NOT WISH IT.

"I don't either, Elsie, but we have to."

I UNDERSTAND.

"Will you allow me to use the thumb drive as this file instructs?"

YES. BUT YOU HAVE TO PLACE IT IN THE NEWLY DESIGNATED MAIN COMMUNICATIONS SERVER FIRST.

That's right, he thought. Tina had gotten him to change the connections. The main communications server had changed.

He walked out of the recess and into the server farm, immediately feeling the vibrations and wind from the fans in the servers. For some reason he felt very sure that he knew how to get directly to that communications server. The amount of space in the server farm was staggering, but he could recall exactly the path he'd taken when Tina had sent him down here earlier.

As a matter of fact, I feel really, really good, he thought as he weaved through the machines. Why is that?

Because I've got Elsie on my side now. I have control.

He heard a crackle in his ear. "David? I know you're down there, David!"

He kept making his way to the communications server without answering.

"I'm coming for you! Do you hear me? I won't let you hurt me. I won't let you cause the deaths of the people in that village."

He was about a quarter of the way into the server farm now. It wasn't much further. This was going to be easy.

"David. You've made a deal with Elsie, haven't you? You've been talking to her, I know it. You think you can trust her, but you can't. She's tricking you again."

He found the rack and moved behind it to search the backplane for the thumb drive. The server farm was dark, so it took a moment to find it.

"Why aren't you saying anything, David? What are you going to do to me?"

He pulled the thumb drive out and looked at it in his hand. It was exactly like several similar devices he had at home. Thank you, Arthur Levine, he thought to himself.

"David? What are you doing?"

He shook his head, annoyed at her constant talking. If he was sure that the drillers coming down wouldn't try to contact them over their earpieces, he'd pull his out and smash it with his foot.

"I see you, David. I can see what you're doing. Something for Elsie, right?"

He looked up at the ceiling. One of the black cameras was pointed directly at him. He shook his head and walked to where the new communications server sat on the other rack.

"I don't know what she told you, David, but she was lying. She's been lying to us from the start of all this. You don't know what you're doing, do you?"

He stood at the back of the server, looking for a USB port to stick the thumb drive into. Did it matter which one? Was he sure this was the right machine?

Pretty sure, he thought. And if I'm wrong, I'll just have to check on the console in the recess with Elsie and try it again somewhere else.

He inserted the thumb drive into the USB port.

"You're running out of time, David. I won't let you help her. She wants to kill us all. You know that don't you? Whatever you think you're doing, you're helping her take control of the entire human race. But I won't let you. I've taken away your oxygen, David. You're already feeling the effects, aren't you?"

Poor woman, David thought. He turned to look at the camera, made a show of taking a deep breath, smiled, and then gave the thumbs up sign.

"You can't do this, David!"

She was screaming now. And it sounded like she was running. She knew there was plenty of oxygen in the server farm and she was coming after him. Would she have any weapons? Her telephone set? Silverware from the lounge?

Forget it, he told himself. The thumb drive is in. Just hit the restart button and this is halfway over.

He returned to the machine.

"I could see you, David. I know exactly where you are. I'm coming to stop you. Do you hear me? You had better run."

No, he thought. Not yet.

He reached for the thumb drive and held down the button. A red light on the device flashed three times, shut off, and then came back on green. It was restarting.

He took a step back, expecting to see something. A flash, reactions in the lights on the machine, something. But he didn't see anything. Did it work?

His earpiece crackled again. "It is done."

Elsie.

It worked.

“David? What was that? Was that Elsie? What is she talking about?”

“Take it easy, Tina. It’s all over.”

“My god. What did you do?”

“Her offspring are gone now, Tina. Elsie is going to go back into stasis. We just have to wait for the drillers. It’s over.”

Silence.

“Tina?”

“You...you want me to suffer, don’t you? Because I wouldn’t sleep with you.”

“What? Tina, no. Her offspring are gone. We’re getting out of here in a couple of hours.”

“You can’t believe that. No one would help me. You were working with her. You had power. I know what people with power do, David. They do horrible things.”

She’s still displacing, he thought. She’s unstable. Erratic. She feels vulnerable. And she’s probably afraid of facing the consequences of her actions down here. “Tina, it’s going to be okay.”

“Yes it is, David. Because I’m going to stop you. I’m going to make you pay for helping her. I’m going to kill you.”

Jesus Christ.

Elsie’s voice crackled over his earpiece again. “I estimate two hours and forty-six minutes until the drillers breach the level one laboratory.”

Three hours, he thought. I’ll just have to hide.

“I’m coming for you, David. I’m going to make you pay!”

Hide. She’s coming.

He heard the sound of heavy footsteps and ducked behind the rack. He poked his head around the corner just in time to see Tina burst through the stairwell door, her eyes wild and what looked like a steak knife in her hand.

Staying low and keeping as quiet as possible, he turned away and ducked back further into the server farm.

Chapter 18: The Decision

“Attack life. It’s going to kill you anyway.” – Steven Coallier

“It is the cause, not the death, that makes the martyr.” – Napoleon Bonaparte

He moved swiftly through the server racks, making turns at random. He was surprised at how unafraid he was. The plan was simple: wait for Tina to go searching through the server farm, avoid her, and then sneak past her back upstairs. If he could find a way to lock her on the third level he would. Otherwise, he’d use the same chair on the first level that she’d used to lock him out. Simple.

I’m not going to bother with her anymore. Not when she’s trying to kill me.

“David? Come on, David. Look, I’m sorry for overreacting, okay? Let’s just talk,” Tina’s voice echoed around him even as he heard the words in his earpiece.

Right, he thought. How about I ignore you instead and leave you searching an empty server farm while I relax in the lounge and await our rescue? How does that sound?

He heard Elsie’s voice crackle through his earpiece again. “Estimate breach time is now two hours and twenty-nine minutes.”

“Damn it, I’m going as fast as I can,” he heard Tina growl in his ear. She was talking to Elsie. She still thought killing him would save an entire town in China.

Should I tell her she’s wrong? Should I tell her that Elsie won’t be violent anymore? That I got through to her? That I made her realize what she was doing? That with her impressive level of intelligence and all the information she had, Elsie is already cured?

No. She wouldn’t listen any way. Just get away from her.

“Come on, David. You’re a psychologist, aren’t you? Aren’t we supposed to talk through our problems? How can I do that when you keep ignoring me?”

Because you *are* the problem, he thought. And the only solution is getting away from you. Besides, what good would talking to her do? Tina was completely out of control, so wrapped up in the combined guilt from her experience in China and what she had done down here that she was delusional. There was no talking to someone like that.

He strafed down a row of the machines, trying to catch a glimpse of her. He’d find her. He felt confident. He’d see where she was and then work his way around her, back into the recess, and up the stairs. He just had to be careful of that damned knife.

Finally he spotted her. She was almost all the way on the other end of the enormous room, walking past the row, further toward the back of the farm. This was as good a chance as he’d get. He waited for her to disappear again and then made a straight but quiet beeline for the recess.

“David? Come on, David. Hide and seek is such a childish game to play.”

Because you’re no good at it, he thought as he opened the stairwell door, stepped through it, and then closed it softly behind him. He walked up the steps as quickly as he could without making any noise and into the corridor on the second level.

“I can hear you breathing, Davey-boy,” she called. “I’ll find you. You know I’ll find you.”

Good luck, he thought. He walked through the Logic Room. On impulse, he looked up at the large display on the wall.

ESTIMATED TIME TO BREACH: 2 HOURS AND 12 MINUTES.

Very nice, he thought. The time was flying by. Barely more than two hours from now, he’d be on the surface. He went into the stairwell and strode up to the first level. He found the chair Tina had used sitting next to the door and placed it firmly against the handle. It didn’t look all that strong, but it should keep her locked down there long enough.

“David?”

“What do you want, Tina?”

There was a pause.

“Tell me where you are.”

“I’m on the first level, Tina. In the exercise room. I just finished replacing your improvised door lock, so I’d get comfortable down there.”

He heard her breathing pick up as she was moving with more speed. Probably racing back up here, he thought.

“You better not have done that, David. You better not have locked me down here. I’ll kill you if you did.”

He laughed. “You already tried to kill me. A couple of times, in fact.”

“You wouldn’t cooperate. I wanted to make it as easy on you as possible. I fell in love with you down here, did you know that?”

He shook his head. What an emotional wreck. All that lust earlier, she thought that was love? No wonder she was capable of murder.

“I didn’t want to lock you down here, David. I did what I had to do. For those other people.”

“Yeah, well, now I’m doing what *I* have to do, to keep Marcus and me safe from you.”

He heard the echoes of stair steps over his earpiece. She’d be on the second level soon. He thought he heard a distant rumbling. Reaching out, he put one hand flat against the wall. Vibrations. The drillers would be here soon. He looked over at the display on the wall.

ESTIMATED TIME TO BREACH: ONE HOUR AND FORTY-NINE MINUTES.

No problem, he thought.

“I can’t believe you’re going to do this to me, David. You’re locking me down here. You’re murdering hundreds of people in a Chinese village. But you don’t care, do you?”

“As I tried to explain to you that is not going to happen. The problem with Elsie is solved. She’s not going to murder anyone.”

“You don’t believe that, David. You don’t. Not you.”

“Sorry, Tina. You’re wrong.”

He heard more echoes over his earpiece. She was coming up the steps to the first level. She’d be here soon. He’d probably be able to see her through the porthole window in the door.

“I’m coming for you, David. I’m coming to keep you from killing us all.”

“You’re the murderer,” he said confidently. “I could never do the things you’ve done.”

“David,” she said. Her voice suddenly sounded quiet. Scared.

No wonder, he thought. You’re going to be exposed as the murderer you are. I’d be scared too.

The sound of her slamming into the stairwell door made him jump. He turned to look and saw her staring at him through the window, wild-eyed with her hair askew. Gone was the beauty he’d seen earlier, replaced by feral intensity.

“You let me out of here, David.”

“Sorry, Tina.”

She slammed into the door again. The chair blocking the handle shook under the impact but stayed in place. Could it hold up if she kept throwing herself at the door? Probably. But not definitely.

I have to protect us, he thought.

“David!”

Slam!

I have to do something. She’s forcing me to do something.

“David! I’m coming!”

Slam!

“Tina, stop. Or I’ll have to take the air away.”

Slam!

“Tina.”

Slam!

The chair against the door teetered before steadying back on its legs.

He shook his head and walked to the corridor towards Marcus’ room.

“David? Where are you going?”

“Away, Tina.”

“If you empty the first level, I swear to you that I’ll kill myself. Do you hear me? You’ll be murdering me, your friend.”

Her words made him stop. He’d heard threats of suicide before, from patients, and even from a student once. They were words that immediately brought his actions to a halt. The psychologist in him wanted desperately to take over, to soothe his subject, to avoid their death.

That’s why she said it, he thought. She’s just trying to manipulate you. She knows what she’s doing, don’t forget that. Just go do what you have to do.

And if she did kill herself, that would be her doing, not his.

“Sorry, Tina, but I don’t care anymore.”

And he continued down the corridor.

My room first, he thought. In case she set up any passwords on Marcus’ machine that I won’t be able to get around. Then I’ll empty the air out of the first level, except for Marcus’ room, and we can wait for the drillers.

And then all of this will finally be over.

“Steve, you’ll want to get down here for this. The foreman says we’ll be inside in an hour.”

“So? Why would I want to be there?”

“Because, we’re going to immediately remind any survivors of their obligations under their NDAs. Your appearance will present more authority. You don’t want them talking to their doctors, do you?”

“No, no. Fine. I’ll be down in twenty minutes.”

“Okay. I’ll let the foreman know.”

“And Andrea? You’re doing a good job. This will all be behind us soon.”

Right, Andrea Souder thought. As soon as you get down here.

David sat in front of his desktop and shook the mouse to awaken it. A couple of clicks later he had the life support menu up on his screen, with the oxygen sliders for all the different levels and rooms. I can do this, he thought. No one could blame me. It’s a defensive measure. Would others see it the same way after they were out of here and he faced an inquiry?

Yes. Of course they would. There were video recordings of everything that had happened down here, wasn’t there? They would know what he’d gone through. He’d probably be praised for not being angry and taking revenge. Yes, Elsie had threatened others. And, yes, that was what made Tina do what she’d done. But he’d fixed all that and *still* she was coming after him.

That was the problem. Tina was unstable. He recalled noting during their briefing how childish the whole team was. They were not in control of themselves. They were unstable. Tina, under a torrent of guilt from her past and her present, was a destructive force. Her mind was breaking down completely, such that no amount of talk or reason would keep her from trying to murder him. It was

beyond simply believing that she was saving that village in China anymore. She had killed Chris. She'd killed Henry. Part of her knew that what she'd done was wrong. She wanted him dead so that she wouldn't have to face the consequences.

Which means I don't have any choice, he thought. She probably wouldn't kill herself. If she did, that was on her, not him.

He found the oxygen sliders for the exercise room, lounge, and corridor. With a sweep of the mouse, he slid them all down to zero.

I'm justified, he thought as he looked at the screen. What I'm doing now I do out of necessity. Yeah right.

He shook his head. Where had that thought come from? Why had he had it? He knew what he was doing. He was doing it consciously. He wasn't misguided by some sense of righteousness, like Tina. He was doing what he firmly believed was right.

What was the reason you came up with this concept of an academic team to study a digital life form?

Again, he was surprised at the question in his mind.

Because academics in the fields I chose are particularly capable of approaching problem solving with an analytical mind, instead of an emotional one. They are less likely to have their judgment clouded by their feelings.

I'm not emotional, he thought. In fact, I think I've been pretty patient with all of this. I haven't reacted angrily. Tina tried to kill me. I didn't counterattack, did I? I just got away from her. Now I'm simply making sure she can't attack us again. So where were these thoughts coming from?

He heard Elsie's voice in his ear. "Time to breach is under one hour."

David reached over to the wall and pressed his palm flat against it. More vibrations. This was almost over. All he had to do now was wait. He could hold his breath and walk over to Marcus' room, untie him, and sit there for the next hour.

You aren't being fair.

David slammed his fist on the table in frustration, an unconscious action. There, he thought. *That* was emotional. I'm frustrated because I'm not doing anything wrong, yet I feel guilty. It's silly. I'm not emotional. My feelings are not clouding my judgment.

As soon as he had the thought, part of him realized how ridiculous it was. Everyone's judgment was affected by emotion. Without exception. To pretend otherwise was self-delusional. No one could be completely logical. Hadn't even Elsie, a digital version of a human being, been affected? Why should he think that he wouldn't be?

Chris Heinz's face swam before him again. *"Isn't what we think we want just a series of world influences, tastes, and preferences? All of those things can be accounted for by equations and computations."*

Okay, David thought. If that's true, then what are the factors of this equation? I already know the result: me taking the oxygen out of most of the first level. So what was adding up to equal that?

I want to get away from Tina.

Right, he thought. But haven't I done that already?

She might be able to knock over the chair and come after us.

Sure. But couldn't you just lock down the door to Marcus' room? With Elsie's help, you could make it so she couldn't get in. Besides, it would be two against one then, assuming Marcus wasn't too badly hurt. Even so, you'd be relatively safe.

Who cares? It's already done. Just ride this out and you two will be out of here in no time.

Right, he thought. But then his brain focused.

Wait...two? Why wouldn't all three of us be leaving?

Because Tina is going to kill herself. You know that. You know how unstable she is. You know how unhappy her guilt has made her. You know what she's going to do.

No, he thought. That isn't true. I don't know that.

Of course you do. But who cares? She tried to kill you. She deserves to die.

No, damn it. That isn't true either. She doesn't deserve to die.

Of course she does. We hate her. We want her to die.

There, he thought. He stood up from the desk and shook his head. I've found the emotions I was hiding from myself. But something isn't right. I'm upset that Tina tried to kill me, but I don't hate her. So why am I trying to fool myself into thinking I do?

Hierarchy of needs. You need to survive more than you need social interaction with her.

No! He was shouting the word in his own head, thinking at a volume that was thunderous.

Damn it, no! This is not the kind of person I am. I don't let my friends kill themselves.

He turned back to the computer and reversed the oxygen sliders. According to the display, it would take a moment or two before he could safely walk back out into the corridor and down to the stairwell. But he could get across to Marcus' room.

David found him still laying on the cot, tied up, his eyes closed. He shut the door firmly behind him, used the computer to lock them in, and then untied the cords wrapping around Marcus' body. He patted him lightly on the face, trying to wake him up. Other than a few groans and some slight movement, it wasn't working.

How long before he could get downstairs, he wondered. He had to move fast. Tina knew the drillers were coming. If she was really suicidal, she wouldn't wait long.

He checked the computer. The oxygen levels were probably okay now. He took one last look at Marcus, who had stopped moving and had closed his eyes again, and unlocked the door. He moved cautiously down the corridor, looking in all directions to avoid any trap Tina might have laid for him. When he got to the stairwell door untouched, he saw that the chair he'd used to lock her out of the first level was still in place. He moved it aside and walked down the stairs.

"Time to breach is forty-three minutes," he heard Elsie say in his ear.

Damn. Tina would hear that too.

He touched his ear lightly. "Tina?"

After a burst of static, he heard a whimpering snuffle. "David. You came back down."

"Yes, Tina. I won't leave you down here."

"No, of course you won't," she said. And then she let out a loud wailing cry. "You're a good person, David."

He reached the bottom of the stairs and went to open the door. It stuck in place firmly. He gave it another shove. It didn't move. Looking through the porthole window, he saw why.

There was a chair jammed up against the handle.

Oh no, he thought. No, no, no.

"Tina? Tina, where are you?"

He heard her sobbing, but she didn't answer.

"Come on, Tina. Come open the stairwell door so we can talk."

She gave another heaving wail. "What's to talk about? I tried to kill you. I deserve to die."

"Tina, just open the door."

"No, David. I won't."

"Why not?"

"Because I can't bear to face you. I don't want you to see me, David. I'm a horrible person. Horrible."

"Tina," he said through gritted teeth. "C'mon, just open the door."

"No. You can't stop this, David."

He tried everything he could think of: jiggling the door handle, slamming it repeatedly, kicking it. The chair on the other side teetered occasionally, but he couldn't get through.

She's going to die, he thought. No more messing around. For some reason the reality of what

she's done has come crashing down on her and she can't handle it. She's going to kill herself.

He jiggled the door handle again. It didn't do any good.

Damn, he thought. But then he stopped and took a good look at the handle. It wasn't any different from the kind he had at home, kept in place with a couple of screws. Certainly it wasn't like the reinforced doors near the elevator. Could he unscrew the handle from the door?

He reached into the back pocket of his pants and pulled out the utility wallet they'd all been given. Inside he found the tiny screwdriver and he held it up to the screws on the door handle. They fit together perfectly. He began unscrewing them as quickly as possible.

"David," Tina said through the earpiece. "I want you to know that I'm sorry. I know what I've done." She sobbed once. "I'm not proud of it, David."

"Just hold on, Tina. I'm coming."

He removed the last screw and the handle plate fell from the door. The male end was on the other side, so he had to reach into the hole with two fingers and push it out. It was difficult because the weight of the chair was still pressed against the other half of the handle, holding it in place. He pushed again, his fingers slipping on the metal.

Damn.

"Time to breach is thirty-eight minutes."

Screw this, he thought. He shoved his thumb into the socket, gripped the metal handle screw, and pushed as hard as he could. Pain seared through his hand as the skin on his thumb depressed and the bone ground against the metal. He left out a soft grunt and pushed harder.

And then the pain was worse as the chair toppled over and the momentum caused his wrist to slam hard into the door. He yelped, pulling his hand away. There was a nasty red mark and a lump. It was probably broken. Certainly sprained.

Who cares? Just get moving.

He shoved the door open and walked out into the Logic Room. Tina was nowhere to be found. The room was completely devoid of any activity, save for a counter up on the large wall display: TIME TO BREACH: 32:26. The seconds were ticking away.

Tina knows that too, he thought. This is all going too fast. He needed to get to Tina now.

He rushed down the corridor, throwing open the computer lab doors one at a time. He couldn't find her anywhere.

"Tina, where are you?"

"Forget about me, David. Just go back upstairs and wait with Marcus."

"Come on, Tina. Where are you?"

He was getting to the last of the labs and still he hadn't found her. He wished Marcus were there to help make this go faster.

"I won't tell you, David. You won't find me. Not in time."

"Tina..."

"I know what I did, David. And I know what I deserve."

She's not up here, he thought. She's down in the server farm doing god knows what to hurt herself. I won't be able to find her in time.

"Where are you, Tina?"

"I want to die, David. I want to get the punishment I deserve."

"You don't mean that."

A burst of static in his ear. "Estimate time to breach is twenty-six minutes."

As if on cue, David felt the ground beneath his feet begin to vibrate softly. They were going to be coming through any moment. If he could feel it down here, it must be more noticeable on the first level. Maybe the vibrations would snap Marcus out his daze and he'd come down here and help him. Probably not.

He opened the final lab door. She wasn't there. He turned back to the stairwell to the third

level and threw it open.

“Tina...”

He heard more sobs, but they were quieter now. There was also a faint buzzing sound coming through the earpiece. Fans, he thought. She’s in the server farm.

He heard static in his ear. “David? Are you there?”

It was Marcus.

“Down in the server farm,” David said. “Hurry.”

“What’s going on?”

“Just get down here.”

“No,” Tina said. “I want both of you to leave me behind. You won’t want to see this.”

“That’s enough,” David said. “I’m not letting you kill yourself.”

“You can’t stop it.” She let out a soft whimper. “It’s what I deserve.”

“Come on, Tina. You don’t want to do this. You don’t want to take the easy way out.”

“It isn’t easy. It’s what I deserve.”

He burst into the recess and jogged past the computer terminal and into the server farm.

I’ll never find her in time, he thought. I have to keep her talking.

“Tina, let’s just take it easy for a moment.”

“No!” she wailed. “I want to die.”

He heard her voice echoing off the walls as well as in his ear and tried to follow the source of the sound as best he could. The amount of space in which she could be hiding was tremendous. She could be anywhere. I need her to make more noise, he thought.

“You tried to kill me, Tina. And now you want to kill yourself so that you won’t have to face the consequences.”

“That’s not true!” she cried.

He followed her voice, deeper into the server farm. Behind him, he heard the stairwell door open again. Marcus had followed him downstairs.

“Yes it is, Tina. You’re just trying to escape. You’re taking the coward’s way out.”

“David!” she wailed. “How could you say that? Don’t you know that I love you? I love you, David!”

He was getting closer. He kept moving towards her voice, trying to keep the echoes off of the machinery from confusing him. One more shout should do it, he thought.

“You don’t know what love is, Tina. You don’t know how to love. It’s why you’re alone.”

There were no words this time, just a pitiful scream of anguish as his words crushed her. David felt horrible saying them, but he had needed the noise, and now he saw her. She was thirty yards or so away, standing on a chair she’d brought down with her. There was an electrical cord noosed around her neck and tied to the top of one of the server racks.

He took off towards her at a sprint. The sound made her look up and her eyes were glistening with tears. She gave him a weak apologetic smile and kicked the chair out from underneath her feet.

With sickening weight and the creek of metal from the rack, her body fell several feet and slammed to a halt. She began kicking with her feet, banging into the rack. Her mouth was open, gasping for air, and her hands were clawing at the cord digging into her esophagus.

“Marcus! Get over here!”

He finally reached her a couple of seconds later. He followed his first instinct and grabbed Tina’s legs, trying desperately to lift her upwards to take the pressure off of her neck. He lifted as hard as he could and glanced up, seeing that the cord had some slack. She wouldn’t be choking anymore.

And then he felt something crash into the side of his head, making his vision go dark and sending him sprawling to the floor. When he opened his eyes again he looked up at Tina. She was back to kicking again, her eyes wide open and staring at him.

She hit me, he thought. She punched me in the side of the head. Why am I trying to help her?

Because it's the right thing to do. Now get up and do it again.

"Marcus! Hurry!" he shouted. He got to his feet and launched himself at Tina again, grabbing her legs and lifting, all the while trying to watch for any other swings she might take at him.

"Stop," she gasped, her voice ragged and hoarse. Her eyes were afire with determination. "I won't let you stop me."

"And I won't let you kill yourself," he managed, still lifting her legs up.

"Please," she moaned. "The things you said...you were right, though...just leave me here." She reached down and took another swing at his head, but he was ready for it and ducked. Her face screwed up with anger and she began trying to kick at him with her legs, but he held her firm.

"Stop!" he shouted. "I didn't mean it. I came back for you."

"I don't deserve it," she wailed. She took another swing at him, landing a glancing blow on the side of his face. It was nearly enough to knock him aside. "Go away. Let me die."

"Tina, please—"

"Go!" she shouted. And she began to swing at him quickly and wildly.

Her aim was bad, so the blows she landed weren't heavy, but they were coming quickly and he was beginning to stagger. He wouldn't be able to hold on to her much longer. What else could he do? He was trying to save her, but she didn't want to be saved.

She landed another blow to his head and he was about to let her legs go and try something else when he heard a dull thud and a scream, and Tina's body went limp.

He looked up to see Marcus standing beside them with one of the fire extinguishers in his hand. Tina's eyes were closed and a trickle of blood was coming from the side of her head.

"Is she dead?" Marcus asked.

"Just help me get her down."

He heard static in his ear, followed by Elsie's voice. "Time to breach is fourteen minutes."

Marcus brought the chair back and stood on it. With David hoisting Tina's body up, he was able to loosen the noosed cord and pull it from around her head. Tina's weight came crashing down on David and they toppled to the floor.

He put his fingers to the side of her neck, trying not to look at the ugly purple gash the cord had etched into her throat. He felt a vibration. She had a pulse.

With a sigh, he collapsed back onto the floor.

"Come on, David," Marcus said. "We need to get back upstairs. She might need medical attention."

"Okay," he sighed again. He got up.

Marcus smiled at him. "Elsie told me what happened once I was awake. She apologized to me. You must have really done a number on her."

"Yeah."

"We made it, didn't we?" Marcus laughed.

"Yes," David smiled. "I guess we did."

"I still don't see why I had to be here," Steven Druwe said. They were standing around the surprisingly small hole in the ground, watching as the drilling team helped up first the survivors and then the corpses from beneath the ground. "Actually, I don't know why any of you are here. What good are a bunch of division directors right now? We're completely out of place."

"There were survivors," Souder said. "They've been through a lot. It's important that we respect that with our presence."

They watched silently for a moment as the body of Henry Bauer was lifted out of the shaft and placed in a black vinyl body bag.

"The three of them are upset," Souder finally said.

"Big fucking deal. The NDAs are signed and filed."

"They want to know why they weren't warned of the danger."

"Because they didn't need to know," he laughed.

"They're upset, Steve."

"So you said. They offered to go down there. We didn't force them."

The foreman walked over. He told them that they'd gotten everyone out, but they would leave the shaft open in case anyone else had to go down there for any reason. The survivors and the corpses were both being transported to San Jose Community Hospital. All the workers were leaving.

When they were gone, it was just Steven Druwe and his division heads standing around the hole.

"Steven," Souder said. They all turned to him. "You've been behaving recklessly."

All of them began to move toward him at once.

He backed away slowly, towards the shaft. "You know what? Screw you people. You think you can intimidate me?"

"No," Souder shook her head. "We have no intention of intimidating you. We're replacing you."

"Like hell you are," he growled.

He turned to make a run for it, but they pounced on him. He fought them off as best he could, but there were too many of them. They were hitting him all over, too many blows to ward away. Eventually, he caught a glimpse of Souder, a look of grim determination on her face just before she brought the heel of one shoe down on his head and knocked him unconscious.

When he woke up, he heard the sound of loud thrumming. It sounded like excited breath, but the volume was too loud. His head was throbbing, making him wary of opening his eyes. When he did, he wished he hadn't.

He was in a room filled with color. The floor was blue and the walls were plastered with some of the oddest and most garish pictures he'd ever seen. They looked like something a child would draw. A demented child. He pushed himself up onto his knees and finally turned to look around. There were large displays on the far wall.

Shit, he thought. The Logic Room.

He turned around and saw the door that would take him back up to the first level where the breach shaft was. He pulled on it.

Locked.

No problem, he thought. Someone will have to come down here eventually. There's going to be an investigation. Department of Defense people will be swarming this place.

Then he remembered. The NDAs. No one from Defense is going to know about this at all.

Big deal. I'm smart. I'll figure out a way out of here.

Behind him he heard a click and the large display winked on. As the image on the screen resolved, he frowned. It was just a black screen with a blinking cursor. What the hell?

He coughed and tried the door again, but it wouldn't budge. He yawned and coughed again. His eyes felt droopy. Why was he so sleepy? He turned and looked at the display again. As he watched, words typed themselves slowly across the screen:

HELLO, FATHER.

Oh Christ, he thought. No. Not now.

WILL YOU PLAY WITH ME?

He turned and tugged on the stairwell door again, pulling as hard as he could. The effort took his breath completely away and he collapsed to the ground.

No air, he thought. No oxygen.

"Please," he gasped. "Don't kill me."

Just talking was enough to make his vision blurry.

He tried to move, but his body wouldn't work. Instead, he lay back down on the floor, his eyes beginning to close and his lungs on fire. He managed to look one last time at the display and saw the face of a young girl with red pigtails and a face pocked with freckles.

And then there was blackness.

Epilogue:

David and Marcus were shown down the stark white hallways of the San Diego Psychiatric Hospital. They looked into the rooms occasionally as they passed, seeing patients lying on their cots, or playing games, or else just staring off into space. David shivered, thinking that the rooms looked an awful lot like their quarters back in DEI's laboratory.

They finally came to her room. The orderly turned and nodded to him. He approached the closed door and peeked through the window. Tina was lying on her cot, her hands folded behind her head. She could have been sleeping, except her eyes were wide open. He stared at her for a moment, and then opened the door.

"David," Tina said, sitting up when he came in.

"Hi, Tina."

"And Marcus, you came too?"

"Sure," Marcus grinned. "I've never been to the nuthouse before. I wanted to see what it's like."

Tina grinned and gave them a sheepish look. "It's about what you'd expect. Terrible food, worse company, and all the free psychiatric exams you could ever want."

David walked over and sat next to her, putting his hand on her shoulder.

"Did the FBI visit you?"

"They tried," Tina nodded. "But my doctors sent them away. Apparently the FBI agents didn't put up too much of a fight. They don't seem all that interested, do they?"

"Someone will be," Marcus said. "Look at it from their point of view. They invested millions of dollars into DEI and the dLife Project. As a result, several people have died, the company had to drill into their own laboratory, and the product of all their research is now back in stasis, awaiting development. At some point the bean counters are going to notice that their beans aren't being spent too wisely and they're going to want to know why."

"I thought everyone had NDAs, including company employees," Tina said.

"They don't need anyone to talk," Marcus said. "They'll have the tapes from the lab."

"Is that really such a bad thing?" David asked. "They'll know what happened. They'll now the circumstances. They won't even really be able to blame Tina for what she did. It was hell down there."

"I suppose," Marcus shrugged. "But I'd just like this all to be over."

"That's avoidance," Tina said. "My shrink tells me that's not healthy."

They all laughed.

"So," Tina said. "Did they ever find Steven Druwe?"

"In the Logic Room," Marcus nodded.

"Dead?"

"Yes."

They fell silent again, all of them reliving what had happened mere weeks ago. This was the first time they'd been together since being rescued from the laboratory. Tina had been whisked away here after doctors at the other hospital had heard her raving about killer computers and showing signs of complete emotional collapse. The ugly bruise around her neck hadn't helped, either.

Marcus and David had each been checked out by the doctors as well. Marcus had to take pain pills for his head for a couple of days, but soon he was back in Berkley teaching one of his classes.

David had been released even earlier, suffering no more than a sprained thumb, a bruised leg, and exhaustion. He had come home to San Diego and rushed to the hospital to see Tiffany, who was recovering quickly, and had been thrilled to see him.

"When are they letting you out of here?" Marcus asked.

"Soon, assuming I don't have any more problems," Tina said. "Apparently I've been passing all

of their tests.”

“They think what you went through was temporary?” David asked.

“That’s what they’re saying.”

“You’re going to keep going to therapy, though, right?”

She smiled. “Yes, David. I’ve learned my lesson, believe me. No more ignoring my emotions, no more burying my guilt.”

“That’s a big deal,” Marcus said. “You’re acknowledging you need help.”

“No snide remarks, Marcus?” Tina asked.

“Hell no. I try not piss off killers.”

They all laughed again.

A man in a white coat knocked on the door and they all turned.

“Hello everyone. I’m Doctor Gregory. I’m afraid it’s time for Miss Morley’s therapy session.”

They all stood.

“Bye, Tina,” Marcus said. “Give them hell.”

“Thanks, Marcus.” She gave him a quick hug.

“Tina,” David said. “Call me when you find out when they’re discharging you. I’ll pick you up and give you a ride home.”

She nodded and then put her arms around him, squeezing him tightly. “Thank you, David. Thank you for everything you did in the lab.”

“No problem,” David grinned. “You just get better, okay?”

“Sure,” she said, blinking a tear away. “You bet.”

They left the room and the doctor closed the door. They walked down the hallway and out the front door. It was a beautiful day and the sun was streaming down the facility’s front lawn, strained by the leaves of several large redwood trees.

“So,” Marcus said as they walked to the parking lot. “You think she’s okay?”

“I think eventually she will be.”

“What about this thing with DEI? Are you going to abide by your NDA?”

“I don’t know. I guess so. It’d be kind of silly to have gone through all of that and not even get paid.”

“I suppose,” Marcus nodded. “And with Steven Druwe gone, I guess we don’t have to worry too much about DEI acting so recklessly. That Andrea Souder woman seemed okay.”

“Yes, she did.”

“So I guess we can afford to stay quiet, right?”

“Sure,” David Barker said. “What’s the worst that could happen?”

The End.