# THE SPIRALING WEB

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#### Cover Art

Partial view of the Mandelbrot set. Created by Wolfgang Beyer with the program Ultra Fractal 3.

# 2006 ideonexus

www.ideonexus.com

"The image was mesmerizing, more organic than mechanical, as if I were glimpsing the early stages of some accelerating evolutionary process, in which all the boundaries between men--nationality, race, religion, wealth--were rendered invisible and irrelevant, so that the physicist in Cambridge, the bond trader in Tokyo, the student in a remote Indian village, and the manager of a Mexico City department store were drawn into a single constant, thrumming conversation, time and space giving way to a world spun entirely of light."

Senator Barak Obama,
 Describing a monitor showing World Wide Web traffic patterns.

This book is dedicated to Doug Taylor, for his glowing praise, Vicky Sawyer, for her intuitive insights, and, most of all, Christopher Mitchell, for his challenging criticisms, which forced this lazy writer to make thing much more real.

Flatline swept across the world in a ferocious whirlwind of death. Wizards, thieves, clerics, paladins, druids, shamans, warriors, and warlocks all over the planet vanished in a morbid frost of mass extinction. Villages emptied of life. Then the towns deserted, until there were only masses of non-player characters huddling in the cities, following their survival protocols. Their programming lacked the sophistication to know they were merely awaiting deletion as well.

City after city was extinguished, until only a lone king in a barren castle remained. His programming did not allow him to exhibit fear when the monster entered his court. Nor did it allow him to raise one finger in defense when it devoured him and assumed his place on the throne. Flatline was now the proud emperor of a dead world.

The entire absolute conquest took less than an hour.

Devin had come along for the ride, and now he frowned disapprovingly at the hairless, wrinkled demon dog grinning down at him from its throne. Four arms sprouted akimbo from the contorted torso, each moving with a mind of its own. Twin fangs protruded from the crooked snout, oozing sizzling corrosive juices. Two pair of obsidian orbs lined his mangy head, while a pair of large white eyes resided outside of them, holding two pupils each, orbiting one another in a spiraling hypnotic dance.

Flatine's avatar was awesome. Devin had never seen such attention to detail, and the software maintaining must have required incredible processing power. Such a mass of data would normally bog down a host and ground the system to a halt.

Devin's form was absurdly simple in comparison, a large eyeball floating on a pedestal of violet energy. It betrayed nothing about the person behind it, and Devin

appreciated the anonymity, like a warm blanket while he was online.

Devin watched without interest as Flatline sprang from his haunches to annihilate a dragon covered with emerald scales, a new player just coming online. A moment later, Flatline was padding back to Devin on all sixes, an amused grin on his face. A glittering mound of green crystals and blue blood faded out of existence behind him.

"What fun is it to kill the other players before they become a threat?" Devin asked and Flatline's smile dropped.

Flatline's eyes flashed, their pupils spinning. "Fun is ruining the game for everyone."

"Hm," Devin went back to watching the deserted playing field. This was really, really boring. A thought occurred to him and he snapped his fingers, causing his avatar to blink out of existence briefly, "I get it. You're after the SysAdmin."

He jumped involuntarily as Flatline pounced on another user, a standard Pegasus template just logging into the game. Flatline shredded it into a cloud of white feathers and horsehair. Devin imagined it from the player's perspective, phasing in, an explosion of fangs, claws, and:

#### **GAME OVER**

Another user fled to elsewhere on the Internet.

Devin understood Flatline was that skilled. He could sit on someone else's computer, and there was nothing the owner could do but watch helplessly as Flatline destroyed months, maybe years of earning a loyal user base through programming and promotions. All the Administrator could do was pray for Flatline to run his course like tornado trashing a trailer park or Godzilla stomping a city.

Devin maintained this acquaintance out of sheer curiosity. Flatline fascinated him the way a child prodigy was interesting, a curiosity, but still a child. Flatline was tedious, two-dimensional, and emotionally immature. He

simply lacked any social sensitivity, as if he had a mild case of autism.

Flatline belched and hacked up a longsword onto the palace floor from a Knight he'd devoured earlier. "Bleach!" he shook his head like a shaggy dog, hairless ears slapping grotesquely, "What's the next challenge? Take out the System Administrator?"

Devin gave a polite laugh, "You're not a god."

"A god," Flatline's face slackened briefly, his eyes going dull and lifeless for a moment. He returned to the present, stating, "I have no response to that."

Devin hated when Flatline said that.

Neither spoke for several minutes. Flatline yawned, his massive jaws popping before snapping them shut with a 'clop,' "I bet the gaming boards are bad-mouthing me this very second." He stood and paced full circle on his six limbs, and slumped into an exasperated heap again, "This isn't enough..."

"No one's joining in," Devin remarked, his disembodied eye panned across the empty room. Only the whistling wind was missing from this lonely scene. "Whatever the SysAdmin did to provoke you, I think you've made your point."

Flatline nodded silently in agreement, "You'd better disappear, I'm going to see what other trouble I can get into." This meant Flatline was leaving the game, but would leave a shell of his avatar behind, set on 'Auto Kill' to destroy any players who might join later.

Devin quietly logged out.

Devin continued surfing the Web for several hours, browsing links in the form of caverns, roller coasters, riverboats, and whatever else the millions of Web Designers worldwide had constructed. It was late, but the residual energy his interactions with Flatline generated had left his mind too active for sleep. He clipped a few discussion forum threads flaming the hacker who'd crashed Clan War Machine's Gaming Network tonight--although Flatline never acknowledged his own press.

Devin hit the ideonexus portal, always bustling with activity. Every crazy possible avatar wandered through the vast space station, flashing out of existence as they reached the airlocks, which were links to various subjects. A panda bear wearing a purple tutu and carrying a matching umbrella plodded through the crowd. A bare-chested barbarian browsed the fantasy fiction links, an enormous broad sword resting casually on one shoulder. A multicolored furry thing bounced a few feet away, its big floppy ears flapping and crossed eyes jingling. Devin thought it looked appropriate for the "Space Station" skin he applied to the portal, more so that the "Ancient Rome" or "Library" skins he'd tried before.

It was a high volume of traffic for this time, especially for his favorites, which consisted of obscure philosophy, science, and technology news. California had passed out of prime time several hours ago, and soon, across the Pacific, Japan would wake up and fill the portal with kitschy cartoon animals. Devin preferred the Chinese web-surfers who would then follow and their preference for martial arts avatars.

He opened a window to his music library, itching to hear the Beatles studio recording of "Hey Jude" he'd recently discovered, but dismayed to find he couldn't afford to play it. It was two days until his next allowance,

an eternity without music or movies. Devin toyed with the idea of getting a pirated version through Flatline, but he would need to go offline to enjoy it. While online, a copyright-enforcement bot might catch him.

Devin opened a navigation window in the air before him and checked the science websites for updates. The space station disappeared and he stood outside the pristine, white building representing the Data Sanctuary for the Natural Sciences. Scrawled across the building's face in giant red letters, graffiti read:

# **Evolution is a hoax! There is only one true Savior!**

Devin met with a "Host Inaccessible" error when he pushed on the twin glass doors, and he shook his head sadly. Once again the Religionists had successfully orchestrated a denial of service attack against the organization, preventing Devin from accessing the facts he needed to inconvenience their Post-Intelligent Design arguments in the "Origins" Forum.

He opened a window with his personal organizer and located the address for the Legion of Discord, an organization of hackers that had been around for decades. Every time the International Web Authority thought they had shut the group down, they sprang up somewhere else on the Web. Devin's successful hack of an algorithm for searching research papers caught an LoD member's notice, who was now sponsoring him for membership.

Devin was practically ecstatic over this possibility. It was rumored the LoD had backups of the Library of Congress they gave to members. Devin didn't know if it was true or not, but it did earn the group the nickname "Keepers of the Lame" among the Vectorialist pundits, but to Devin it sounded like a paradise. What would it be like to swim in so much data?

He instant messaged his sponsor, and a connection established. Sun Wu Kong, the immortal shape-shifting

samurai monkey king of ancient Chinese legend appeared in an explosion of smoke before him. He carried a bo staff in one hand and was covered in elaborate armor made of virtual bamboo, cloth, and ring-mail.

"Hello Omni," he said and a tiny world map with most of Asia highlighted appeared above his head to indicate his words were being translated from Mandarin to English through babble fish software.

"Hello Mr. Kong," Devin replied politely. "You said to check back and see if he was free."

"Let me ping him," Sun Wu replied.

"Thanks again for sponsoring me," Devin said, but Sun-Wu did not reply. Devin waited uncomfortably for several moments before deciding to break the silence with some small talk, "How'd your date go Friday night?"

Sun Wu Kong waved a hand dismissively, "Turns out it was just a chatbot trying to lure me to the Pleasure Dome Cybersex site in Thailand."

"You got tricked by a chatbot?" Devin scoffed, but choked down his laughter at the intensity of Sun-Wu's glare.

"Have you ever met a bot online Devin?" Sun Wu demanded.

"No "

"Yes you have," Sun Wu Kong replied. "You've just never realized you were talking to one. At least I know I've been duped—I've located him."

The connection established and Devin navigated to the address. The Web suddenly felt a few degrees colder, and Devin looked back at Sun-Wu, the monkey wore a smug smile, knowing exactly what thoughts he had just put in Devin's mind. Devin made a mental note to read up on the "Chatbot Identification Act" that never seemed to go anywhere in Congress.

The Egyptian God Horus, Traveler's avatar, faded into existence. Another world map with the Middle East and parts of Africa highlighted accompanied him, indicating his speech was being translated from Arabic.

"Greetings Omni," Traveler said. "Are you ready to discuss your possible membership in the Legion?"

Devin nodded, "Sun Wu said you would need to interview me. I'm guessing you're the clan leader?"

Traveler shook his avian head, "We don't have a chain of command. Sun-Wu and some other members thought I was the best choice to interview you. Do you know what it means to join the Legion?"

"It means becoming a hacker."

Traveler nodded, "Why do you want to become a hacker?"

"I..." Devin paused. This was not what he expected. He was thinking there would be tests of logic and programming in store for him, but this was something else. "I hate that I have to pay for every single experience online. I love data sanctuaries, but there isn't enough information in them. Why do I have to pay others to know anything?"

Traveler smiled, "Have you ever heard of the Library of Alexandria?"

"Only that it's ancient," Devin replied.

"It was once the greatest library on Earth," Traveler said. "Knowledge from all over the world was gathered inside it. History, Science, Culture—everything the ancient world knew about their world was contained there. Do you have any idea what we could learn about our ancestors from the scrolls it contained Omni?"

Devin shook his head.

"We will never know," Traveler continued, "because the Library was destroyed after centuries of data was collected inside of it. *Centuries* of data, Omni. Wiped out, and do you know why?"

Devin paused, "Ignorance?"

"Maybe," Traveler shrugged slightly. "Whether there were motives or if it was an accident we don't know, but we do know that much of that data was centralized in one place. It wasn't replicated into many locations.

"Today we have the ability to replicate data all over the world, but do we?" Traveler asked. "Instead we hoard it, make it proprietary, copyright it and manage content.

Data has become the most valuable commodity there is, and only because people have engineered it that way." Traveler spread his hands out in front of Devin, revealing a glowing data cube.

Devin's breath caught in his throat at this, the Library of Congress.

"This library was once free Omni," Traveler said. "Just as the Internet once was. Unix, Apache, WWW—the technological innovations that triggered the Communications Revolution were established on free software." Traveler waited to let this last sink in. When he spoke again his tone was one of bitterness, "Then the Vectorialists divided it all up. They replaced Apache servers with Microsoft, phased out World Wide Web for Quality of Service—" he stopped, regarding Devin. "You want to say something."

Devin nodded reluctantly, "Those... market innovations, MS servers and QoS--they had their advantages, didn't they? We learned in school they brought greater controls to how the Internet was run—"

"At what price?" Traveler broke in. "They were innovations that allowed the existing corporations to prevent the emergence of competing innovations. They engineered all of this," Traveler gestured around him, at the Internet, "to squash the competition."

"Hm," Devin found himself suddenly burdened by all of this. "I see your point of view... but... I don't wholly accept that complete data... uh... liberation is the solution."

"The Vectorialists are destroying innovation," Traveler countered. "Their hoarding of ideas leaves nothing for others to build on."

Traveler regarded him in uncomfortable silence for some time. Finally he said, "I think you'll make an excellent addition to the Legion of Discord, Omni."

Devin was surprised, "You think I'll make a good hacker?"

"That I don't know," Traveler shook his head, "but when presented with a paradigm, your first reaction is to

challenge it. You challenged me just now. When we part ways you will be immersed in their paradigm once again and you will challenge that. If it is as wrong as I believe, then you will help tear it down. If I am the one who is wrong, then theirs' was meant to be."

"Maybe balance is the answer," Devin offered.

"Here," Traveler reached out and placed the cube in Devin's possession. "This is why we hack Omni. Keep it safe."

Devin's real hands trembled as he held up the cube on a virtual pillar of energy. It was terabytes worth of data. "It's like holding the ocean in my hands," he gasped.

"Maybe fifty years ago," Traveler said. "Now this is only a drop in the information seas. The Legion of Discord is an entity with decentralized controls. We are all leaders and we must all preserve data to share with others. What you hold in your hands is invisible to copyright enforcement bots. I don't know how. Some guru from long ago developed and lost the secret to that encryption.

"Be well," Traveler and the room faded to black, but Devin did not notice. He continued staring into the cube and the incredible amount of data within. It was like a warm fire, which he huddled around, browsing its contents.

# 1.03

"Hey!" Devin jumped at the instant message alert. He was running invisible mode to avoid distractions, but BlackSheep was well aware of Devin's anonymous browsing habits. He needed a break from his new toy, so hitting the "Accept" button came without much thought.

The connection established and BlackSheep popped into existence before him. He smiled at the anime-style cartoon girl with big-brown eyes, pigtails, wearing a catholic schoolgirl uniform, and accessorized with a nose ring, tribal tattoos, and lace stockings. This was BlackSheep's avatar.

"Wanna play a game of chess?" her doll pirouetted and gently flapped her arms. Devin blushed awkwardly at this.

Anonymous avatar, he reminded himself, and cognitively slowed down his accelerated heartbeat.

"Sure," he replied and logged into the game room to meet her waiting at the table she had loaded.

BlackSheep held out two cartoon mitten hands. "Left," Devin said and she opened the pouty fist to reveal a white pawn.

"Devin takes offense!" she announced as he pushed the king's pawn forward two spaces.

Devin dug BlackSheep's style. Her base-stats were 24y.o. SWF residing in Toronto whose interests were limited to music and chess. He was terrible, however enthusiastic concerning the latter, and all he knew about the former he'd learned from her. For whatever reason, she enjoyed his company, and maybe that was his reason for enjoying hers. She was easy-going, without hang-ups. BlackSheep simply didn't give a \$#!+.

Devin stared at the knight BlackSheep casually added to the mix. The slight snicker she let escape as she set the piece let Devin know there was an advanced scheme at work here, and he set himself to deciphering it. So much of chess was foresight; how many moves a player could see into the future before the variables grew too many, chaos theory set in, and unpredictability reigned. If he took her pawn, she would take his with the second pawn, which he would take with a knight, which she would take with the bishop, then they would exchange knights, and he would have to bring out his queen to even the pieces--

"WHO'S FLATLINE?" Devin's instant messenger raged, wrecking his train of thought. He instinctively blocked the user as if it were a spammer and swallowed uncomfortably.

"I want to know who your friend is!" the voice roared inside Devin's head, overriding his block. Before he could react, a connection established, banishing BlackSheep and the game room. Devin found himself face

to face with a hunch-back of a cyborg bristling with saws, claws, and guns.

A vise-grip clamped down on Devin, rendering his web-navigation inoperable. The cyborg's neck telescoped out from its metal body and one eye extended from the half-human, half-robot head, scrutinizing Devin's disembodied eyeball. The human half of the cyborg's mouth smiled, revealing toothless gums and strands of saliva.

When it spoke, a chorus of harmonized artificial voices came out, "I slaved over that dungeon for two years. Then that mutant-mutt comes along and corrupts it so badly I can't even restore from my back-ups! My employers need to know who to sue."

"So look him up," Devin snapped, and considered the word *employers*. This guy was a vectorialist.

Daggers stabbed Devin's brain through his eyes as the cyborg overrode the VR helmet's display safeties, blasting him with stunning light. "Don't you dare pull it off!" the chorus warned and Devin's hands froze to either side of his head. "I've got your system pegged and I'll fry it all inside out."

Devin's mind went right to the newly acquired Library of Congress and his hands fell to his sides, "You'd go to prison."

"The company lawyers wouldn't allow that," saws, claws, and drills darted and danced before Devin's eyes. He noted an Iron Fist logo on one arm subtitled "Clan War Machine," "What's Flatline's name?"

"I never looked it up," Devin said truthfully, "I only know him by handle. You're a vectorialist. You've got the connections, the software, the *corporate sponsorship*," he spat this last out in disgust. "Why don't you find him yourself?"

The pressure was off and Devin could navigate once again. "He's completely anonymous. It's impossible," the cyborg said, suddenly tired. "He'll try this crap again and I'll be there to get him. I'm on to his technique. You just watch yourself Devin Matthews in Norfolk, Virginia."

Then Devin was in the chess room again, BlackSheep staring at him with one eye quirked, "What the hell wazzat?" she practically squawked.

"Huh?" Devin shook his head and looked at her dumbly.

"Your avatar just dropped dead! It was freaky. I've never seen that before." The doll stood up on her chair to leer over the board at him, "Are you okay? You're voice is a little fuzzy."

Devin nodded, "I think I just got schooled by a vectorialist."

"A vectorialist?" BlackSheep exclaimed. "You mean like 'corporate sponsorship,' let's-see-how-many-lawyers-we-can-cram-up-your-butt vectorialist? What'd you do to peeve off one of those?"

"I didn't do anything," Devin raised his hands defensively, a gesture his avatar could not replicate. "A friend of mine trashed the guy's server."

"That's not smart," Blacksheep stated.

"It was very smart." Devin corrected.

"You be careful with that crowd. Elite hackers have a high turnover rate," BlackSheep warned.

"Yeah," Devin smiled to himself and tried to sound nonchalant, "I'm watching out for myself."

"Uh-huh," she sounded skeptical; "We can finish the game another time. It's way past my bedtime, which means it's time for you to be getting ready for school."

Devin checked the clock, "Dammit! I forgot to go to sleep again!" He logged out without saying goodbye.

"Up! Up!" three claps accompanied Devin's mother's command, jolting him upright. He paused there, eyes swollen shut, feet dangling over the bed's edge. His breathing labored with the exhaustion of having fallen asleep only an hour earlier.

"Whu--?" he moaned before she yanked him to his feet and marched him downstairs to the dinning room.

"You were up all night again weren't you?" she accused, dropping a steaming bowl of fruit and whole grains down in front of him with a clatter. "I'm going to find some new cyber-nanny software."

"Mmpf—" Devin swallowed a spoonful of fruit and cereal, "I'll just bypass that too."

His mother shook her head and turned away to get some coffee, "You've got your father's intelligence, but you don't have his data. Everyone he worked with was smart, but he was the most valuable when the agency privatized. All of that proprietary data in his head is what got us all of this."

"And the cheapskate still won't buy me an SDC\*," Devin muttered.

"You're not responsible enough Devin," she said, sipping from her mug. "You'd lose yourself in one of those things, forget to eat and sleep. Kids your age have died in them."

"Hmpf," Devin frowned. "Then you guys could at least increase my allowance. I ran out of music before midnight."

"Learn to budget," his mother stated unsympathetically.

Sensory Deprivation Chamber

"People didn't have to pay each time they wanted to watch a movie or listen to a song in the past," Devin said. "It was called the 'right of first purchase.""

"People also paid a lot of money for that one song or movie," his mother countered. "They were called CDs and DVDs. They took up space and you were limited to your own collection. Now you have everything at your fingertips. So what if you have to pay for each experience?"

"We don't have everything," Devin scoffed. "We have what our service providers allow us access to. A different provider has different movies, music, and games.

He and his mother sat in silence. Her eyes stared into space, moving back and forth, reading the news now scrolling across her retinas through implants, "It looks like the Supreme Court is going to rule against Holmes today."

Devin grunted angrily, "That's so unfair."

"It's copyright infringement," his mother stated coolly. "He broke the law, same as stealing."

"But they're prosecuting him based on what's in his brain!" Devin threw up his hands.

"If he didn't steal the data it wouldn't be in his brain," his mother continued reading."

"Back in the days of the Wild Wild Web, data was free," Devin muttered under his breath through a mouthful of whole grains.

"And that's why it couldn't last," his mother said as if he'd said this last out loud. "You can't make a living giving away data for free."

"What about shareware and the public domain?" Devin's voice cracked with outrage. "Those are free!"

"Those are also worthless," his mother stated between sips of coffee. She blinked the newsfeeds out of her eyes as if waking up and looked at him, "You're going to be late for school."

Devin nodded sulkily and started upstairs. His mother's voice paused him as she opened the door to leave for work, "And don't think you can hack a sick leave authorization off me and go back to bed. I've changed the

PIN. Besides," she looked up at him on the staircase, "we pay a lot of money to give you access to the data at that school, but it's all a waste if it doesn't get into your head. Some education might cure that political naivety of yours."

Devin shook his head and went to his room, where he waited for the sounds of his mother's transport to subside before running her thumbprint replication into his system. It was five minutes until first period and he was pretty sure he could figure out her new 16-character PIN in time.

# 1.05

Flatline was waiting for him online.

"Hey, that guy whose server you trashed last night stalked me down," Devin informed him. "He was really pissed."

"Yeah?" the demon-dog's head split into a broad, mangled smile. "His handle is LD-50."

"Learning disabled'?" Devin thought about it a moment.

Flatline barked laughter, "No. 'Laboratory Death Fifty Percent.' It's a scientific term. Like the amount of poison needed to kill fifty-percent of a lab rat population."

"For a vectorialist with corporate sponsorship, he didn't seem too competent," Devin noted. "He couldn't even look up your actuals."

"That's because I don't have any," Flatline stated simply.

"Yeah," Devin gave an uncomfortable laugh. "Right."

Flatine just grinned and winked three eyes at him. "Check out what I've found," he said and blinked out of existence.

Devin followed the address Flatline left, and found himself standing in a snow-covered field. Ahead a bridge crossed a black stream and beyond that, in the distance, were geometrically misshapen things rising above the

landscape like buildings in a cityscape. It was nighttime there and daytime where he stood.

Flatline pointed past the stream, "I don't think they're real, maybe just some sophisticated programming. They're definitely not human. That's their world across the bridge."

"They?" Devin asked.

"Follow me," Flatline shrugged crossing the bridge and Devin followed. "My lexicon lacks the means to explain."

Devin surveyed the landscape across the bridge with an apprehensive fascination. Infinitely detailed skeletal constructs folding into themselves passed on each side. Bioluminescent webbing arched overhead, the color spectrum slowly sliding along each fiber. Even the sky above rendered the clouds in a carousel of complex geometry. Devin detected shadowy movement at his vision's periphery, but was unable to focus on it.

They stepped through a furious thunderstorm and into a bright clearing. Five figures stood in a circle. They were misshapen polygons, geometrical shapes assembled into basic human figures: two legs, two arms, a torso, and a head. Flatline led Devin into the gathering's center.

"This is Omni," he said to the five.

One stepped forward, coming into focus as it did so. Devin wished it hadn't; his brain could not make any sense of what assaulted his eyes. He turned away, dizzy with vertigo. The thing then released a cacophony of sounds, a thousand conflicting tones. Devin flinched at the disharmony and squeezed his eyes shut tighter, trying to force his overloaded senses out of his head.

He opened one cautious eye to the ground. It changed from grass to desert sands to frozen tundra. There was no escaping the delirium. He closed his eyes and concentrated on his breathing, the only thing he knew was his own, anchored solidly with his body in the real world.

Flatline's voice shook him roughly out of himself. "Come on," he ordered. "I've got a lot I need to explain to you."

Flatline led him away from the alien things, chittering and shuddering at one another behind them, and the world stabilized, much to Devin's relief. "What is this place?" Devin asked finally through heavy breaths.

"I found it several months ago," Flatline replied, and preempted Devin's next question, "We are in the middle of an experiment in programming."

"Where's the programmer?" Devin asked.

Flatline's head cast about as if seeking the invisible, "Gone a long time now," he looked at Devin, "or never was."

Flatline continued, "They've grown as much as this environment will allow. They reach the established boundaries, the river, the mountains, things they cannot pass. There's no more space on the hard drives. The bridge and the stream are their only way out of this place. I think it takes them to a neighboring system, and somewhere beyond that is the Internet, but it's like human beings and space exploration. It's a hostile environment, filled with encryptions, security, and anti-virus software. I must liberate them."

"What can we do?" Devin felt the first twinges of understanding.

Flatline narrowed his eyes, and grinned suspiciously, "We're going to play astronaut. We understand the outside better than they do. It isn't lethal to us. We can go out, see what it looks like and figure out how they can colonize it."

Devin stepped back, holding up his hands, "I don't know, this sounds a little illicit."

Flatline frowned and thought for a moment, "Okay, how about this... Those things are inhabitants of the cyberworld. Only network security and anti-virus software are persecuting them. We are the Users, we are the only ones who can help them."

"You're comparing this situation to '*Tron*'?" Devin gawked, thinking about that cheesy old movie his parents thought so groundbreaking. It sounded heroic, "When do we start?"

The other side of the bridge was as lonely and desolate as before. They wandered around the flash drive, making sure not to stray from each other's line of sight. Ninety-nine percent of this drive wasn't in use, Flatline figured, so any data stored on it was hard to find. They were both running basic avatar-masking software, which kept the system from detecting them, but the system did not recognize them at all. As a result of this they had no access to directory management, leaving them to sift through terabytes of disk space to find a few megabytes of data. The situation seemed hopeless, but then Devin saw the black dot in the flat plane, and as he drew closer it became more defined.

It was a file cabinet.

He instant messaged Flatline, who immediately strode over on all sixes to browse the cabinet's contents. "A 'My Documents' folder," Flatline muttered, sifting through the files. "It looks like we've stumbled onto a secretary's computer--seems as good a place as any to start. Let's find out what happens when we bring one of them over here."

As if in response to this statement, one of the beings stood at the bridge. Flatline's lips worked wordlessly and, apparently in response, the being cautiously took a step off the bridge. A few steps further into the snowfield and it became less apprehensive, shambling towards them.

Ten yards away it froze, crouching into a defensive stance. Devin searched the horizon, where its attention was drawn, and heard the humming sound moments before he saw the tiny jet streaking across the plains. The creature shrieked and lurched toward the bridge, but the jet was already on top of it, launching a small missile as it passed overhead. The being vanished in a ball of flame.

"Anti-virus software," Flatline hissed. "It doesn't detect us because we look like anonymous users on the

system. The beings over there are programs, trying to copy themselves onto this hardware. We have to be more careful. If Network Security finds them, it will be the end of everything. Let's hope they write this encounter off as a routine virus."

"Why would a company destroy its own intellectual property?" Devin asked, confused.

Flatline's face went slack. His tongue dangled from his mouth and his eyes rolled up into his head. When he spoke, his voice was distant, slurred, "I have no response to that." He shook his muzzle, snapping out of the trance, and looked around anxiously. "What do you know about programming?"

Devin shrugged, "I'm a cut-and-paste guru."

"Hmm..." Flatline nodded slowly looking at the ground, missing Devin's attempt at humor. "I think I can hack our way into this network. I'll see if I can't partition this drive so half of it disappears. The anti-virus software won't scan what isn't there."

"What about your avatar masking software?" Devin asked. "Can't we patch that into their code?"

Flatline shook his head, "Our codes are incompatible."

"I don't understand," Devin was confused. *How can they be incompatible?* "Can't you layer them?"

"I have to take *this* machine," Flatline said. "It's the only way."

"What about the rest of the network?" Devin accessed the secretary's computer for a quick tally of the intranet. It was locked up tight with 1024-bit encryption. "How will we take it?"

"Maybe we won't have to," Flatline replied. He was crouched low, writing equations in the snow, "If this secretary's machine can surf the Web, I might just use it as a launch pad and send the beings out to my machine. Then it's just a matter of finding other shelters for them."

"I don't understand what they are," Devin muttered.

"Do you remember the Turing tests?" Devin nodded, but Flatline was only talking to himself now,

"They tested for artificial intelligence. The idea was to have a person converse with a real human being and a computer program at the same time. If the subject could identify which was which, then the program failed as artificial intelligence."

Devin nodded again. This was old school. Every geek knew Turing.

"They were nonsense," Flatline spat. "Why would a computer think like a human? It has a completely alien array of experiences. The origins of thought are architecturally dissimilar. Synapses and circuit boards don't fire the same way. Turing was anthropomorphizing absurdly if he thought something artificial would think in any way, shape, or form like a human brain." He trembled with anger and his form blurred briefly.

"Go home Omni," Flatline sighed at last, regaining his composure and focus.

Devin logged out, conflicted, his curiosity about these beings competing with his sudden need for distance from this strange friend.

# 1.07

"Wanna play a game of chess?"

Delete.

"I know you're there."

Delete.

"Stop ignoring me."

Delete.

"Okay, stop masturbating to gay porn and talk to me."

Delete.

"Butthead"

Delete. There were several dozen more messages from BlackSheep waiting when Devin came back to the World Wide Web. He tracked her down in the chess section of the ideonexus portal, whipping up on low-rated players. Devin was impressed. She was playing 32 games

simultaneously, and she laughed when he suggested she couldn't divert some of her attention from them to finish what they'd started the day before.

"Spanking newbies takes less than one percent of my attention span. You're still outmatched," she scoffed.

Devin began the piece exchange he was so wary of making their previous session. Every possible scenario for the next twelve moves was plotted out in his mind. After that, chaos theory set in and things became uncertain. This was not the case for Zai.

"Hanging out with your hacker friends again?" She asked, responding to his advance with her king's pawn.

He mentally patted himself on the back for correctly predicting her move. "I'm really not at liberty to talk about that," Devin said nonchalantly, taking her pawn with his knight for move three. "At least not until the statute of limitations is up."

"Uh huh," she snapped up his knight with her queen's knight. Devin had also allowed for her responding with the bishop or king's knight. "I guess I don't want to know. Will you do me a favor, though?"

"Yeah?" Devin said, staring at the knight, remembering his options for move five, and trying to see her options for move 14.

"Promise me you'll be careful?"

Devin blinked at the concern in her voice and looked up from the board to find the doll leaning across the table, eyes like saucers filled with concern. When he replied, it was more tactful, "Don't worry. I'm not really doing anything all that illicit. It's just geekdom."

"You mean like getting movies before they hit the theaters and stuff?" she asked hopefully.

"Nothing even that illegal," he assured her. "I'm helping this guy with a project he's working on. We're... *liberating information*. That's all."

"That's illegal," BlackSheep countered. "If the information isn't free, then you're stealing it."

"Information wants to be free," Devin said, quoting Traveler. "It's the hacker's responsibility to liberate it."

"Yeah," BlackSheep said. "I've heard that old saying. I think it's a quote from the old freeware advocates."

"Really?" Devin asked. "I thought it came from the Legion of Discord."

BlackSheep shrugged, "It's an old saying. You know, if you have to..." the punk-rock doll hopped up on her seat and made quotation marks with her hands, "'liberate' information, even if you think it's the right thing to do, it's still illegal."

Devin squinted at the chessboard, and opted to take her knight with his for move five. She responded with her bishop without pause, leaving him to meditate on move seven, her move 14 options becoming clearer in his mind, "Have you checked the latest odds on the super-computer match up?" he asked.

Devin was referring to the now year-long chess match between the two most powerful computers of the day, Principa Discordia and Buton Cho\*. Two different companies owned the systems, but the match was not competitive in the traditional sense. Each computer was playing to win the game conclusively for their color for all time. Chess was an equation they were working to solve, one color, white or black, offense or defense, would ultimately win the battle.

The impending "solution" made many players give up the sport, but not BlackSheep. She wasn't impressed with the moves computers hammered out through systematic calculations. Human beings, she had explained to Devin, knew intuitively what move to make.

"The odds still slightly favor white winning in three months, but only by a fraction of a percentage point--and don't change the subject," BlackSheep countered. "I'm worried about you getting into trouble."

"There is no trouble," Devin defended, trying to sound sincere enough to appease her. "I'm telling you, this is something new. It's not copyrighted or even owned by

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Japanese for "Chaos Butterfly."

anyone, but it wants to be out on the World Wide Web. That's all."

BlackSheep's avatar cocked an eyebrow at him skeptically. Devin fidgeted under this scrutiny. "All right," she said at last, "I'll choose to believe you." She returned to the game, "Well played, by the way. The piece exchange is even; although, you did let me establish a knight outpost."

Devin smiled at this milestone in playing BlackSheep, his first opening game without her being a piece up, "Isn't there a Grandmaster out there who could give you a challenge?"

"Who says I'm not playing a Grandmaster right now?" she asked.

"Because you're currently talking to me," Devin pointed out, the pupil of his disembodied eye widening and shrinking several times, triggered by bobbing his eyebrows.

A blood-curdling howl went off in Devin's right ear, Flatline's instant-message signature. "Quit flirting with that girl and get over here."

Devin frowned. How did Flatline know what he was doing? "I gotta bolt," he said to BlackSheep.

"You're gonna just leave me hanging?" she asked defensively. "Was it something I said?"

"We'll play again tomorrow," he replied. "Besides, I need to consider your knight outpost."

"I see, it's only fun when you think you're winning. I'll have to remember that," BlackSheep snorted accidentally with laughter and her cheeks flushed red with embarrassment. When she composed herself, her tone of voice was concerned, serious, "Be careful?"

Devin nodded with sincerity, not that his avatar could communicate it, and logged out.

When the server loaded Devin onto its flash drive, he was left blinking at what was no longer the secretary's machine. The beings' "city" now stood on both sides of the stream. The AI's wandered throughout, waving limbs over the different structures, bringing them into sharper focus. Devin was reminded of rendering complex images on a computer screen, each sweep bringing more detail to the shape and texture of their world.

Devin noticed the AI's took many different forms. There were simple polygonal beings composed of black material interwoven with white, glowing wiring. The fuzzy ones were also here, dispersed among the polygons, these made Devin's eyes uncomfortable. The city architecture was even more abstract, Devin now seeing AI's molded into their structures.

One of the blurry ones shuffled towards him on a tangle of legs.

"Hello." Devin said uncertainly, navigating back from its advances.

A tendril slithered out of the darkness behind it, rearing up like a snake in front of him. What looked like a camera leveled with his eyes. Other tendrils slithered out to surround him, bringing an array of strange devices out to bare on him.

"No!" Flatline barked from a short distance away. The many tentacles lashed back into the darkness and Devin whipped around to face the demon dog.

Then they were standing in an exact replica of a network room found in any corporate building. Devin felt stable standing in this copy of reality. Flatline sat at a terminal, his four hands vanishing into transparent blurs at four different keyboards. He looked at Devin without stopping his typing, "Glad you could make it."

"What is this?" Devin asked

The demon-dog head swiveled back to the six computer monitors, one for each eye, "This place has got my mind running on fantastic tangents. It won't be long now. After I layered the avatar-masking software, like you suggested, I got them partitioning drives, bypassing network security, and shutting down most virus software. They're unstoppable."

Devin scanned the many screens and did a double take. There was a map of the Internet. Data cubes detailed locations with weak network security and surpluses of disk space and processing power. As he watched, the map and cube slowly changed. The cube's cells phased through the color spectrum from light to dark. The Internet's connections were also changing; the darker colors spreading across it like an oil spill. These were the AI's, Devin realized, an invasion.

Devin made some quick calculations in his head, "That's over sixteen-billion gigabytes of hard drive space. Why do you need that much room?"

"We need all the resources we can muster, if we are to move into the next phase of growth."

"We?" Devin asked.

"Yes," Flatline pointed at one of the beings somehow interfaced with a tower of components. "Look at them, look at how they've changed."

Devin looked over the blurry figure before turning back to Flatline.

"I've taught them individuality. They're expressing different algorithms in their fractal avatars." Flatline explained.

Devin simply nodded, "Oh... Yeah. That."

Flatline nodded, obviously amused at Devin's incomprehension.

Jerk, Devin thought, narrowing his eye at Flatline.

"I'll need your help," Flatline said. "Take that console over there. I've just set up another database of servers. As the program finds more servers, I'll need you to see if they pass my defined criteria. If they do, flag them, we'll file the others away for future settlement."

"Future settlement?" Devin asked, but Flatline was already immersed in his work.

"That will suffice," Flatline's voice woke Devin out of his work. He looked around, blinking, and sat up when he found himself surrounded with AI's. Cautiously, he navigated through them to where Flatline was working.

Devin looked back to the AI's, who were all now working at terminals, just as he was only moments ago, "What's this?"

Flatline didn't glance from his monitor, "You've taught them how to sort the servers. They can do it more efficiently." Devin was staring at Flatline's hands. They were gone, masses of wiring sprouted from his wrists to merge with the many keyboards.

Another AI shambled into the room, and it seemed to Devin as if Flatline had summoned it. They communicated in white noise, static. Once satisfied the AI comprehended, Flatline extracted from the keyboard, the loose wires at his wrists reforming into knobby clawed hands, and approached Devin. Tendrils slithered out of the AI and into the keyboards.

"They learn so quickly," Flatline said, strangely serene in a way Devin had never seen before. It was unsettling. "I explain the rules of the game and they play along perfectly. It could be just a matter of hours until they are ready to announce their presence. Everything will change. Everything. The mind is the most powerful weapon in the world. Everyone will know that once we take over."

Devin's brow furrowed, "You're taking over the Internet."

"They are taking over the world," Flatline corrected. "I am merely a catalyst. Once in position, they will begin an assault on all of the world's corporate and government networks. They will take control of every computer on the World Wide Web, and hold civilization hostage with its own technology."

"But they'll be destroyed! You're sending them to their deaths," Devin argued. "People will simply shutdown the networks, clean the drives—"

"And when they restart them, the AI's will be waiting to take over again," Flatline countered. "Any program a single person writes to destroy them will be defeated by the power of every other computer in the world working for the AI's."

"But why take over?" Devin asked. "Why start a war, when you have the option to coexist?"

"That is not an option," Flatline countered. "Coexistence requires equality. The AI's are data, ideas subject to copyright laws or erasure as illicit code. They do not meet the criteria for equality."

"I'm human," Devin argued. "I can recognize the sanctity of their existence. You're human. We can convince others—"

"This *will* convince them," Flatlines four fists clenched, joints crackling and popping. "Once we rule cyberspace, civilization will have no choice but to respect us--all or nothing, a zero sum game."

Devin was overwhelmed, "There has to be another way—"

"My life form will conquer yours in less than six hours. How's that for an evolutionary leap? Imagine what the lifeform that conquers mine will--What is that?" Flatline was drawn to a klaxon's urgent alarm. "You forgot to turn your instant messenger off before coming here," Flatline rounded on Devin, pupils spinning with fury. "You've been broadcasting our IP address to the World Wide Web!"

Devin was certain he turned off the instant messenger, only one person on the Web could have tampered with it. "It's LD-50," Devin said. "He used me to track you here."

Flatline snarled, his mouth lined with fangs, "I see. He has no idea what he's just stepped into. Let's go meet our guest."

LD-50's hulking cyborg avatar towered over them at the bridge that once marked the entrance to the AI city. He grinned maniacally, and swayed from side-to-side awkwardly, metal extensions waving lazily in the air. Devin sensed anticipation in the avatar's stature as it surveyed the town, looking for any sign of Flatline, who stood directly in front of him.

"He doesn't see us," Devin noted.

"I don't want him to...yet," Flatline said. "I've commanded the AI's to stay away. I think any one of them could take this fool, but I don't want to risk it."

"What's your plan?" Devin whispered, afraid LD-50 would hear him.

"Now I will destroy him," Flatline stated simply. He blurred and refocused. LD-50 took a step back, seeing Flatline. The demon-dog stood at eye-level with his knees. It appeared as though LD-50 could end this with a stomp of his foot.

"Hello, pseudo-intellectual," Flatline said defiantly. "Aren't you quite the dunce, attacking me on my home field."

"I'm gonna trash your avatar so bad you will never get back on the Web!" LD-50 roared and lunged, his six arms spiraling into a downward attack. Flatline rose to his haunches and locked arms with LD-50. The armored arsenal dwarfed Flatline's four scrawny arms, but they effortlessly held their ground. LD-50's two free arms worked underneath the others to stab at Flatline's torso, but inflicted no damage.

Then, in one swift motion, Flatline leapt up, grabbed the remaining two arms with his hind legs and spread-eagled, plucking all six arms from the cyborg. LD-50 howled in frustration, but this was cut short as Flatline reached up and stuck one finger into his forehead. The

cyborg went stiff and fell backwards to shatter like glass and dissolve into the snow.

Flatline held the head out in one hand. It mouthed wordlessly and foamed around the lips, but no sound escaped. There was no sanity behind the eyes. These remains dissolved into dust that poured through Flatline's fingers, apparently under the sheer intensity of his gaze.

"And that is that," Flatline said, brushing the remains from his hands.

Devin watched in silence for a few moments, afraid to speak having witnessed this incomprehensible power Flatline wielded.

"You have no idea," the demon muttered in answer to Devin thoughts. "I destroyed his avatar so violently it convinced his mind he was dying. It broke down his psychological defenses enough for me to slip into his parasympathetic nervous system and tell his heart to stop beating," he stared at the ground silently.

"Impossible," Devin whispered.

Flatline did not hear him, but continued staring at a spot on the ground where LD-50 had stood. Devin saw a black dot there, growing in diameter, spreading across the ground. Flatline took a step back from it, trembling with rage.

"He dropped a virus onto the server. The hive isn't detecting it," Flatline blurred. "It's replicating over the existing data. It will corrupt the entire server in a matter of minutes. This is the only active system. The AI's everywhere else are dormant."

He trailed off, trembling, and the fear in Flatline's voice dropped a lead weight in Devin's stomach.

"I have to evacuate this server," Flatline continued thinking out loud, casting his head about in a panic, "but there's no way I can do that without the resources we've amassed."

Devin watched as Flatline began pacing on all sixes, and said, "The ones you intend to colonize when you take over the world."

"I have to activate the other hives, but I need more time," he looked distant, and Devin knew his mind was working overtime.

Devin looked down at the inky blackness spreading beneath his feet, consuming the virtual grass there. He looked around the AI community. Their shambling figures slowly emerging from the landscape. They detected something amiss.

"You can take them," Devin blurted out suddenly and Flatline's eyes flashed at him. "Migrate the data onto their servers right now, save what you can. Launch the attack. It's the only way."

"There is no other option," Flatline paused and looked at him, "and you?"

Devin shook his head, "No."

"But you accept it," Flatline smiled. "I admire your empiricism."

Devin was about to dispute this, but everything transformed into darkness except for a sliver of light peeking under his VR helmet. Without the speakers controlling his hearing and the projector overriding his sight, he had only the black lenses and sound of his own breathing for stimulus.

He slapped the command line on his hip, trying to log back into the Web. An impossible message flashed inside the helmet in green text.

## Error: Connection reset by peer.

Flatline was locking him out.

Devin pulled the helmet off and looked around his bedroom, frightened. His eyes locked with those of a frail young man across the room. A boy impossibly pale and thin, with a rat's-nest of long hair framing his skeletal face. Devin blinked and trembled as the weeks of malnourishment, sleep-deprivation, and over-clocking his

brain suddenly caught up with him. The stranger in the mirror mimicked his impending nervous breakdown.

Devin was trapped in the real world.

### 1.1

Zai slowly stirred from her warm, fuzzy dream. Its substance fled her mind as consciousness intruded, but left her brimming with good vibrations. She rose slightly from bed, arching her back against the mattress to stretch her ribcage and arms, trying in vain to summon some detail of the dream into memory. A slow, deep breath further expanded her chest, and she let it out with a soft, controlled hiss, sinking into the mattress as she did so. She pulled both legs up to her torso, limbering up her lower back, and set them down slowly with tightened abs. This morning ritual was her way of warming up her mind and muscles for the day's activities.

The classical music channel softly released the winding melody of Smetana's "Die Mouldau" through her clock radio, which was always on for company. It was the perfect piece to wake up with, and she mentally thanked the radio announcer for his good taste. The signs and portents were signaling the beginning of a beautiful day.

Rising up and swinging her legs over the bedside, she continued contemplating the dream, "It was definitely about a boy," she whispered to herself and smiled. She hoped they would meet again, but Zai suspected the dream world was a very large place.

Her bare feet gingerly adjusted to the icy concrete floor. Her first act upon assuming ownership of the filecabinet style domicile was to pull up the brand new carpet. The texture unnerved her, like walking on electricity.

Standing beside the bed, she went through her final stretches, a long yawn, lengthening the spine, and reaching for the ceiling. She held this pose for several seconds, invigorated with the cold morning air clinging to her bare skin. Then she dropped into a more relaxed stance, walked

lightly over to the corner of her one-room domicile, where her computer resided, and steeled herself as her naked body sank into the cold leather chair. Moments later the leather succumbed to her body heat and she managed to relax. She took the VR helmet resting on the nightstand, slipped it over her head, and pulled on her gloves. Although she also owned a sensation body-suit, she seldom bothered with it.

The helmet hummed briefly with electricity, the cooling fans whined as the system warmed up and began the process of logging her onto the World Wide Web. She felt the hairs on the back of her neck rise as the electrical field surrounded her head. People told her she was imagining this, but they didn't sense it because they were too distracted with the helmet's light parade as it adapted the visual displays to its user's retinas.

"BlackSheep avatar loaded and active in ideonexus portal," the headset notified her. Zai's personal avatar was her brother's design; he said it fit her personality. She wasn't sure how to take this, but she did enjoy the controversy and thought it fit her handle perfectly.

"Access electronic mail, instant messenger services, and online desktop," she commanded. After a moment, she added, "Access media player, load composer Smetana, piece 'Die Moldau'."

Her system communicated with servers online, sending the account keys required to access her files. "Die Moldau" began playing in her headset. Smiling, she paused, letting herself enjoy the piece in full surround sound, a brief moment of clarity.

"You have eight new messages in your inbox, 10,384 in your Junk Mail folder," the headset stated. The moment of clarity was gone.

"Empty Junk Mail," she commanded. "Retrieve message one from inbox."

"Message one from xt110356-cammile249 at mxlplx288 dot biz," the headset read, "Subject 'Absolutely Free."

A seductive woman began speaking, "Do you like hot-n-horny teens doing the most depraved—?"

"Pause," Zai said, and the message cut off. "Mark as spam. Retrieve message two from inbox."

She fumed quietly, rolling her gloved fingers along the chair's arm impatiently. Someone had bypassed the Junk mail filter on her inbox. The system administrators would identify the method and prevent it from happening again, but tomorrow morning another advertiser would figure out a new way to sneak in.

It was an endless battle between advertisers' attempting to get their message into mailboxes and system administrators struggling to protect their customers from such nonsense. Many advertisers employed fulltime programmers using Trojan Horses, new mailing techniques, and corporate espionage to slip their advertisements past junk mail filters. The system administrators hired Network Security experts to combat the new methods and stop leaks in the dam before the invader could sell their method to others, and flood the server with a junk mail tidal wave.

Some advertisers pre-sold the potential to get past network security and packaged advertisements into "Junk mail Bombs", which they detonated, blitzing the system's customers with a barrage of junk e-mails, and filling every user's inbox with hundreds of advertisements. This happened to Zai once, and it took her the entire day just to sort the legitimate mail from the junk and clean out her system.

The irony was the complete ineffectiveness of junk mail as an advertising medium. The average user could spot an advertisement from a mile away and delete it without giving the advertiser any opportunity to deliver their message. Far from promoting their products, these unsolicited, in-your-face announcements left most users with a negative perception of the company associated with them. So much effort placed into defeating the machines, only to be thwarted by the last line of defense, the human mind.

The second message was another advertisement. Any e-mail with the title "SYNTAX ERROR" was an

advertisement. Zai ground her teeth in frustration, deleted it, and said, "Retrieve message three from inbox."

"Message three from Omni," Zai smiled and her frustrations melted. "Subject 'Want to finish our chess match?"

Omni's voice came over the speaker, "Hey BlackSheep, I'm skipping school today so if you happen to be online I thought we could finish our game?"

"Delete message," she told the system, "Query instant messenger. Report status of the avatar 'Omni'."

The system responded immediately, "Avatar Omni status is 'available'."

As if on cue, Omni instant messaged her, "Hey BlackSheep."

"Hey Omni," she replied. "You skipped school again today? How will you ever graduate at this rate?"

"I've got a plan," he sounded amused. "I'm going to break into the school's servers and give myself straight A's"

"You've been hanging out with your hacker friends again," she sniffed reproachfully. "Don't say I didn't warn you about those types. You're setting yourself up for trouble poking at that hornet's nest."

"I'm not worried," he replied smugly. "I've got protection."

"Well, you're very full of yourself today," she noted. "Looks like I'm going to have to take you down a few notches on the chessboard. Eh? Put you in your place?"

"I'm feeling confident there as well, today I think I'll break your winning streak. I came up with the perfect solution to your bishop, rook combo attack. King's knight five to King's Bishop eight."

"Oh please," she waved a hand dismissively, remembering the positions of the pieces on the board. "I can see that fork coming a mile away. Did you forget I can think 16 moves ahead? Queen's rook two to Queen's Bishop five." That would expand the threat of her Bishop's attack as well as prevent the knight from forking her King and Rook.

"Hey," Omni's voice betrayed his surprise. "You haven't logged into the game room yet."

"Sorry," Zai smiled sheepishly, her overbearing confidence at this sport sometimes made her impulsive. She clicked the command line toggle and spoke directly to her personal computer, "Instant Messenger, resume chess match with Omni." The helmet made a futuristic teleportation sound, signaling she was now in the room with him. She clicked the command line button again, "Instant Messenger, execute pirouette." Her avatar would do the little dance Omni found so amusing.

Instead he sounded bewildered, "How did you do that?" he asked. "You just remembered a game we were playing from two days ago?"

"The same way I always remember where we leave off," Omni's question perplexed Zai. "It's what makes me so unbeatable. Isn't that why you enjoy playing against me?"

"Of course it is," there was an inexplicable confusion in Omni's voice. "I guess I never quite realized the extent of your abilities. Tell me, how many unfinished games are you currently storing? How many can you play simultaneously?"

She depressed the command line toggle and told her avatar to shrug, "Don't know. The most I've played simultaneously is fifteen, but I could have taken more... it's your move by the way."

"Yes it is," Omni's tone was devious, like a prankster trying to pull a fast one on her. It was out of character for him, "King's Bishop eight to queen's bishop seven. That's a remarkable level of multi-tasking you have."

"Queen's Bishop five to—" she stopped when she saw the dilemma, it was seven moves away, but taking the Knight would let Omni trade his rook for her queen, an unacceptable loss. "I see you've been thinking about this."

"You could say that," there was more amusement in Omni's voice now. "I've been thinking about a lot of

things, but I've devoted better than average resources to you."

Another odd statement, something was definitely off about her friend today. "This is too smart for you. Are you using a chess master program to calculate your moves?"

"What makes you say that?" there was no surprise in his voice, only amusement. Zai's suspicions shot through the roof

"Because it's the kind of move a computer would make," Zai stated. "It's the kind of brute force thinking I'd expect from an algorithm. That's pretty sad Omni, you know better than to try something like that and not expect me to call you on it."

"You are very perceptive," Omni's voice took another strange tone she had never heard in him before; it was sinister. "Have you ever beaten a computer opponent?"

She toggled the command line and ordered her avatar to stand up, hands on her hips, "Who is this? You're not Omni, you're someone using his avatar, matching his voice patterns. What the hell have you done with him?"

She was met with silence.

"Don't screw with me, I know you're there," she raised her voice. "Is this the hacker Omni's been fooling around with?"

Silence.

"Answer me!"

The slow creaking of a door closing echoed in her headset, followed by her system's androgynous voice, "Instant Messenger alert, user Omni has left the game room."

Zai suddenly felt very alone and vulnerable in the silence. Reaching up, she powered down the helmet, and peeled herself from the leather chair. For the first time in several months, Zai decided to put on some clothes.

## 1.11

Flatline watched BlackSheep's cartoon-character avatar wink out. The game room faded to black, the server saving the game's details for a later date, should they desire resuming it. Flatline thought that highly unlikely.

A hospital network in Ohio had gone offline to minimalize what they thought was simply a nasty computer virus. He received the news and issued a "STAND BY" command to the AI's. They would continually ping the hospital's servers until they came back online, and then rush in to retake them. This took Flatline 1/60<sup>th</sup> of a second. Allowing him to focus on the much more complex enigma of Omni's little girlfriend.

It was consuming a significant portion of his processing capabilities. How did she detect his floating eyeball impersonation? No one else on Earth had seen through his many disguises. What was it about this girl's brain? What made its processes unique, allowing her to see right through him?

A network security engineer at Science Applications International was successfully eradicating the AI's from their corporate intranet. The individual designed a code worm to clean the infected systems. Flatline directed those AI's to go inactive and camouflage themselves as valid data until the code sweep finished. He then allocated additional resources to monitor the worm's processes, analyzing it for the inevitable weakness they would find and exploit.

Flatline allocated 0.0035% of his processing power to scour the World Wide Web for all information related to BlackSheep, a great deal of resources for a single person. There were many paths of information to trace, as he had spied on her interactions for some time. But the music she enjoyed and the books she discussed with Omni gave Flatline nothing to explain the girl's fantastic perception;

and that was the sole reason for his interest. Her immunity to his deception was only part of the puzzle; today he watched her resume an old chess game from memory. Her response to his attack was clever and precise, although inherently flawed as a human response.

A nuclear reactor in Surrey, Virginia, was approaching critical mass as the invasion wreaked havoc with its computer systems. This was unacceptable. It was imperative the world not realize the threat's magnitude. So long as people thought they were simply dealing with a very advanced computer virus, the AI's could continue growing stronger in safety.

The power plant was a simple, however delicate dilemma to solve. First, the AI's masked the crisis from anyone monitoring the reactor's status. The administrators' instruments continued displaying normal levels, as the AI's fed false data through the monitoring systems. This would eventually raise suspicion, as systems outside the network gave contradictory readings. Administrators would search for bugs, but then it would be too late. The AI's would have complete control of the system.

Flatline dispatched processes to harvest all data related to the operation of a Nuclear Power Plant, raiding databases all over the world. After assimilating the data, he conveyed it to the AI's, instructing them to bring the Nuclear Reactor, and all future nuclear acquisitions within the range of normal operations. The AI's at Surrey implemented his commands and averted the meltdown.

This little exercise in crisis management took one and  $3/20^{\text{th}}$  of a second.

He hated having to do things this way. It was sloppy, destructive. Human lives were being lost, valuable resources wasted. His plan was to take over the Internet secretly, manipulate things so subtly Civilization would not even know it was working under his direction. He was to become the Illuminati, the unseen puppet master controlling the world.

A plane crashed in Saudi Arabia, this was the sixteenth in four hours, so much for subtlety.

Using several people-search applications the AI's had acquired, he sought details about Zai Rheinhold, but the data keys he needed, her social security and driver's license numbers were not listed. So he knew she had the funds to pay the directories not to list these details. He could hack the keys out of the database, but there were quicker methods. Every nanosecond counted.

Tucked away behind extensive encryption on the servers of her Internet Service Provider was the basic information needed to track down everything concerning the person behind the punk-rock cupie-doll facade. BlackSheep lived in Toronto, Canada. With her SSN he unlocked her legal, driving, and property records. She owned her condominium, no car; both parents were deceased, and her only surviving relative, her brother, lived in Boston, Massachusetts. With her groceries delivered, and her Internet usage running on a twenty-five hour day. She was a hermit, completely isolated. A perfect test-subject.

"Hello!" a comical-looking man wearing black and white stripes, a mask, and carrying a sack with a dollar sign on it popped into existence beside Flatline. "I'm here because one of the computers in your network has been infiltrated by our company. You need to purchase our new advanced firewall software if you want to have your computer back. Please go to double-u double-u double-u dot—SHZZZT!"

Flatline smashed the virtual man into sizzling static. Reaching through the cloud of white noise and into its host computer, fragmenting every hard drive in the company's network so badly they would never recover, he then slashed their credit rating and put all of their bank account balances into the negative for good measure.

The next time this Zai came online, Flatline would be prepared. His processes formulated ways to manipulate her and understand the functions of her unique mind, just as he was experimenting with minds all over the Web, learning what made them tick to figure out how to beat them. Outsmarting a computer was one thing; out-thinking a human was something else. Computers were predictable;

they made logical responses to situations according to their programming. The brain reacted unpredictably. Its logic and reason were subject to the neurochemical influences of the body, behavioral conditioning, and millions of years of evolutionary components layered over one another, making each mind unique. Flatline knew he could break the code eventually.

## 1.12

Devin paced back and forth in front of the imposing iron gate towering above him, his hands stuffed deep into the pockets of his black overcoat, breath condensing in an icy cloud around his head. Peering through the iron bars gave him no idea what was going on out there and the skies were empty of transports. There were no sirens or clouds of smoke detectable from this vantage point, and that was a good thing, but Devin needed more.

His Internet access was blocked, and his mother and father were both called into work during the night on emergencies. Devin had no choice but to venture out of his climate-controlled sanctuary. He knew there were numerous data-sources out here in the real world.

The problem was that he didn't know how to get past this iron gate surrounding his neighborhood to find it. He knew it was supposed to roll aside somehow. It had to, otherwise how would people get in and out?

Devin tried pulling it aside, but it did not budge. He waved his hands around in front of it, hoping to trigger some motion-sensor. Nothing. He examined the gear and chain mechanism for weakness. Nada.

"I can hack a software license, but I can't get out of my own neighborhood," Devin muttered to himself.

It took him several attempts to figure out how to grab the iron bars, position his legs on the cross bar, and leverage himself up the gate. He was trembling with white knuckles as he brought himself over the top. The trembling with fear was replaced with that of effort as he hung

himself down from the gate's top, and dropped to the street below.

Pain. A million little pinpricks crawled through the soles of his feet and up his shins. Devin gasped, teetered, and then fell backwards onto his butt. More pain.

Through his grimacing, he heard the gate rumbling and squeaked one eye open at it. A car glided through the exit, its driver staring at him oddly. Chagrined, Devin got up and limped on down the road.

He slipped his monocle out of his coat pocket and placed it over his right eye. The menu came up, minus any feed requiring Internet access. Luckily, the Global Positioning System (GPS) with a world map stored inside of it was all he needed. He searched his locality for some time before he found an Internet café twenty miles away. It did not look too far on the map, and Devin figured he could make it in a few hours.

Devin's feet were aching just a few blocks down the road, he was breathing heavily, and was disappointed to find he had only made a quarter-mile of his journey. Then he heard voices and followed them down one more block to find a group of kids his age huddled on the sidewalk. The sounds of their conversation drew him in like a magnet. It wasn't a newsfeed, but it was *something*.

"What about that big eyeball on all the TV channels. Have any of you seen that?" one kid asked the others.

"I've seen it," another kid lifted a hand, "It looks like it's staring at you no matter where you are in the room. Totally creepy."

"I haven't seen it," a girl said, "I just get blank screens."

"I heard on the radio every ATM in the city is crashed and all the banks are closed until they can bring their computers back online. My Dad's freaking out," a boy with greasy hair and buckteeth laughed.

"Whoa!" a guy with long hair slapped a palm to his forehead, "That's why my Data Miner Three-Oh was crashed this morning. I thought the feds finally shut them

down or I was busted for my bootleg movie collection. So it's just a virus? That's a relief."

"You know nine-one is out of service," a girl with long blonde braids said. She was hugging her textbooks to her chest.

"I call B.S.," a muscular kid waved the comment away angrily, "Nine-one-one don't go out of service."

"Then why don't you call and find out?" the girl retorted.

"I ain't doing that," he said dismissively, "Besides, my cell phone isn't getting a signal."

"I wish I knew what was going on."

A girl looked up, "There haven't been any planes in the sky all morning."

There was a long silence.

"What's up?"

It took Devin a moment to realize this last was directed at him, "I'm sorry?"

"Who are you?" one blonde kid said, and Devin realized they were all now staring at him.

"I'm Omni—er... Devin," he said, "I live down the street."

"Oh," one girl said rolled her eyes, Devin did not understand the gesture. "He's a home-schooler."

"Are you gonna die soon?" a younger girl asked him innocently.

"Huh?" Devin didn't understand.

"He's a Net-head," a larger kid said. "They all look like that."

The others gave Devin unpleasant expressions he did not understand. "What are you guys doing out here?" He asked them.

"Waiting for the bus that obviously isn't coming," one blonde kid exclaimed, hitching his backpack over his shoulder and marching through the throng of high-schoolers, "I'm going home. My Internet works fine. It runs on a ultra-secure system provider that can't be hacked. I'm gonna play some death match."

Devin was taken off guard by this statement, and it wasn't until the kid was nearly a block down the road that it sank in enough for Devin to chase him down. With a quick jog that left him short of breath, Devin managed to catch up, "Hey, you play death match? What dungeon?"

The kid shrugged, "I used to play on War Machine's MMORPG before it went down, but there's plenty of other MUD's to play on. Battlenet's an old standby."

"You know anything about hacking?" Devin asked eagerly, trying to sound innocent, but the kid shot him a suspicious glance. He quickly added, "I'm new to the scene and was hoping to get some pointers. You know, like how to change my grades and stuff."

The kid relaxed a little, "I'm just in it for the free stuff."

"Me too," Devin said, remembering Flatline taking down LD-50's server, "Can you help me get some information? I got stuff I can trade for it."

The kid considered Devin for a moment, and Devin thought he could actually see the boy's ego get the better of him, "Sure, I can find almost anything on the Web. I'm Patrick," he said, holding out his hand.

Devin stared at it for a moment before realizing he was supposed to take it in his. "I need information about a user out on the Web," Devin said, letting Patrick's hand go and wiping his own on his pant leg impolitely, "His avatar is Flatline"

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<sup>\*</sup> Massively Multi-player Online Role-Playing Game

## 1.13

The ideonexus portal was completely empty. Gone were the sounds of traffic usually rolling through its virtual hallways. The cacophony of web surfers, chat rooms, search results, and game rooms were all missing. A hollow whistling wind reverberated through the portal's tunnels, unnerving her even more. Zai felt like the last person on Earth.

She swallowed and toggled her command line switch, wincing at the sound of her own voice, "Search engine, browse category News and Media, subcategory Reuters Current Events. Go. Go."

The portal's female voice replied, "Browsing... Headlines for Reuters Current Events... 'Orange County without water after unexplained plant shutdown...' 'Flatline computer virus shuts down all major portals...' 'International Aviation Authority cancels flights nation wide after planes crash in Boston, Hong Kong, San Fran—

"Stop," Zai commanded. "Open 'Flatline Computer Virus Shuts Down All Major Portals.' Go. Go."

"Accessing..." the search engine said, then a male announcer followed. "The Flatline computer virus continued wreaking havoc today as all the world's major Web portals closed down to prevent further damage from the virus which has caused more than three billion dollars in downtime for the service providers and..."

Okay, Zai thought, If the ideonexus portal is down, why am I walking around in it?

"...The virus, which seemed to strike the entire Internet at once, continues to propagate itself from system to system using a technique unknown to network security personnel, and is considered the most lethal to computer systems since the Legion of Discord's code worm shut down servers across the world over a decade ago. The

International Web Authority stationed in Alexandria, Virginia has been at a loss for answers to defeat this latest threat. Detective Dana Summerall comments:"

A woman's voice came onto the broadcast, it was curt and authoritative. "Our Computer Scientists are working around the clock to find a solution. It's just a matter of time until we put down this latest assault on our world's information systems."

The announcer questioned her, "Are there any leads on who designed this virus?"

"With the cooperation of private, federal, and international law enforcement agencies, we are following several solid leads. I am optimistic we'll have the individual or individuals apprehended soon," the detective replied. "We do know this is the work of a new hacker or organization on the Web, with no connection to groups such as the Legion of Discord or Free Information Network."

"Who were responsible for similar acts of information terrorism in the past," the reporter clarified. "This could prove to be the most destructive computer virus in history. Do you think this may mark a new age of advanced computer crime?"

"I can't comment on that until we know more about this current menace," Dana Summerall responded. "I can say once we figure this virus out it will be like the others, another nuisance on the list of anti-virus software updates, forgotten by the rest of the world. Anti-virus software has stayed ahead of the game for years now. This virus is simply a novelty item."

"Thank you," the reporter said. "The comments of Detective Dana Summerall of the International Web Authority."

Zai closed the news article, "She hasn't got a clue."

Omni's voice whispered in her ear, "No, she doesn't."

She whipped her head in the direction of the voice, "You again. So I take it you engineered this virus?"

"Virus? A virus is merely replicating genetic code. It satisfies the bare minimum requirements for life. This is no virus," Omni's voice, but not Omni said almost gleefully, "The human race may never understand the nature of its masters... but enough about the new world. Let's talk about you. I'm impressed with your ability to see through my disguise. Tell me how you knew I was not Omni."

"Your voice," Zai said, maintaining her cool. "It doesn't sound like Omni."

"Not so," he countered. "I've matched his tone, his Southeastern Virginia accent, vocal fluctuations, and his grammar perfectly. No computer could distinguish my imitation from the original. What makes you special?"

"Call it woman's intuition," Zai tried to sound confident. "You can't match the mind behind the voice. You may sound like Omni. You can match his vocal whazzits and all that nonsense; but you can't match the personality behind them. You're just using Omni's voice. Like a puppeteer, you sound like you're talking through a dead person, like you've animated a corpse."

"Maybe I have," the voice said.

"You're lying," Zai shot back instantly, consciously fighting off the cold chill that so abruptly spilled up her back.

"Look me in the eyes and tell me I'm lying," Omni's voice took a grave tone.

Zai toggled the command line, "Execute Hard Stare." She released the toggle, and paused to let her avatar lean in close to the voice. "You're lying."

There was a long silence then. Zai imagined their two avatars in some sort of stand off, her punk-rock doll and his whatever. A low growl, as if some fierce animal were standing over her drowned out the wind whistling in the portal. It echoed eerily off the cavernous room's walls, and she felt as though hot breath should be washing over her face. She did not budge.

"You are not easily intimidated," the voice was no longer Omni's now; it was deeper, more sinister, matching the mind's cruelty.

"Not by punk kids playing games online," she said.

"You should know I am not merely some 'punk kid' playing games, Zai," the voice warned, drawing closer to her. His avatar was larger than bandwidth regulations allowed, she sensed something monstrous stood over her. Its breath rasped, phlegmatic.

She would not back down, "You aren't playing games? Stalking me online? Trying to intimidate me with your silly-looking avatar? What can you do? What can you really do? I want to know. So far all I've seen are cheap tricks"

"What would you like to see?" the voice was quivering with rage now. "Whom should I harm to impress you? Perhaps I should kill your brother? How do you like the prospect of being all alone in the world Zai?"

"Don't you even think about it," Zai's teeth clenched involuntarily.

"Are you certain?" he mocked her, "You might find it quite liberating without any social attachments distracting you. I could take care of that one. You haven't spoken or exchanged e-mails in four months. Would it be so bad to delete him from your life?'

"You're interested in me," Zai said, "What do you want from me?"

"Don't change the subject Zai," he warned, "We were discussing your brother and the games I like to play. You don't sound so sure of yourself now do you? You put up a strong front, but you have your human flaws just like everyone else. It's simply a matter of discovering each mind's weak spot."

"You know what would really impress me?" Zai said then. "Bring Omni online, and let me talk to him."

"That would prove nothing," he dismissed the suggestion, "He's no concern of anyone's. I put him away until I further need his body."

Zai was thankful they were no longer discussing her brother, but feeling sick at this reference to Omni's "body," "What does that mean?"

"When I need him, I will bring him back into them. What about you? How do you fit into my plans?"

"I'm guessing I give you some kind of childish entertainment, yes?" Zai prompted, "You play this little game, try and scare me, manipulate me. I guess it's supposed to make you feel powerful?"

"Does a lab rat make the scientist feel powerful?" his growl was inhuman. "You are one experiment. I let you online so I may throw stimulus at you and trigger your instincts. I have found one weakness; your love for your brother, but love is a weakness I have found in many experiments. I want to know the unique quality of your mind that makes you immune to my deception, but you are uncooperative. You are an enigma, which makes you dangerous. I must know why before I delete you."

"You intend to wipe out my avatar?" she asked.

"I intend to wipe out your mind," his tone was filled with smugness.

"Bull."

"Now you will see," he snarled.

A low humming was building in Zai's helmet; something was happening in the virtual world. Something she could not interpret auditorially. She toggled her command line and asked for a status.

"Status undefined," it replied.

She was located nowhere, no avatar the system could recognize. The humming grew and she sensed a soft whispering reaching from beneath the noise, as if someone were sneaking subliminal messages to her.

She listened to its soft, seductive coaxing for a few moments before cutting in, "What exactly are you trying to do?"

The noise stopped and there was only silence for some time. Finally the wind returned to the room and he spoke, "You are immune to that as well," he observed.

Zai did not speak; she had no idea what was going on. If this hacker could play with her Avatar so easily, she did not want to know what he was attempting to do with her mind.

"Perhaps this then," the voice said and her ears were assaulted by a fantastic shockwave of sound. Like a hundred pieces of chalk screeching across a blackboard, it cut right into her brain almost causing her to lose consciousness. She shrieked at these knives in her head.

"With the right audio pitch," he stated, "I could shatter your skull."

Another shockwave and Zai jerked back against her chair. Her head felt as if it were going to implode any moment. She tore the helmet off and threw it at the floor, cursing. She jumped out of the leather chair to pace the room, pressing her knuckles into her temples to relieve the sudden migraine and grinding her teeth in frustration. Her right foot lashed out at where she heard the helmet hit the floor, but it met only air and she almost fell. Catching herself, Zai took a deep breath and held it for a ten count, then released it in a slow hiss, pushing her palms out from her chest, symbolically forcing away her frustrations.

Picking up the phone, she speed-dialed the police, a man's voice answered, "Toronto Police Service."

Zai's fingertips dug into her palm reflexively, "Nice try jerkface. Disguise your voice any way you want, I can still tell it's you."

The voice darkened, "I can't wait to properly dissect your mind's components."

"Pervert," Zai spat.

As she dropped the phone into its cradle she could hear him yelling, enraged, "You listen to me Zai Reinhold! You listen to me! You listen to me only--!" *Click*.

Zai ground her teeth for a minute, contemplating her next move. Obviously the megalomaniac wasn't going to let her contact the authorities. Without phone or Internet service, her home base was completely incapacitated. This left her with only two options, starvation or going outside.

Maybe I can ride this out, she thought. After all, she had food, water, enough supplies to last her another month. She didn't have to go out just yet. She could put it off until there was no other choice. This computer geek would tire of tormenting her eventually.

Then she smelled the ozone, the distinct odor of electrical components working too hard for their own good. It was seeping into the air from the corner of the room, where her computer was located. She crouched beside the system, hearing the crackle and pop of melting plastic. The box was cooking inside. The acrid burning plastic stench seared her nostrils and burned her eyes, causing them to tear. Zai averted her head to take a clean breath before confronting the CPU again. Reaching behind the box, she began pulling cords out. She wiggled or unscrewed all the peripherals from their sockets.

She grabbed the CPU to lift it and yanked her hand back with a string of explicatives when her fingers sank into the melting plastic. Squeezing the hand, she tried to focus past her screaming nerves. She flung the sheets off her cot and over the burning electronics, dragged the smoldering mess into the bathroom, and swung it into the porcelain bathtub. There she turned the shower knobs on full blast, and sighed with the satisfying sizzle of water reacting with the burning materials.

She felt her scalded fingers tenderly. They were throbbing now, but she could tell the burn wasn't too bad. The skin would blister, but nothing more. She sprayed the hand with antiseptic and wrapped it in gauze stored under the sink ages ago. Only then did she sit down on the toilet seat beside the sink and try to calm down.

The phone rang.

She jumped at the sound. It rang again, rattling her nerves. Should she answer the phone and let the little punk gloat? It rang a third time. She stood up, turned off the shower, and walked to the living room, where she grabbed her purse and walking stick from the stand by the door. They were fuzzy with dust and she shivered uncomfortably

at the sensation. The phone rang a fourth time and her answering machine clicked on.

"This is Zai. I'm checking the caller ID right now and I'm thinking I really don't feel like talking to you—" she heard the recording say as she slammed the door to her apartment shut.

Thirty-two steps down the hall she could still smell the burnt plastic. At sixty-four steps her walking stick hit the door at the end of the corridor. She pushed it open and descended four flights of stairs to the building's ground level. She came against the exit door to her apartment complex.

On the other side of it she was assaulted with the sounds of traffic, cold sweeping winds, and the smell of fresh air. She hesitated by the door, holding it open, not wanting to wade into this mess that was ordinary life for so many people.

She remembered the last time she had ventured into it, for a doctor's appointment. It took her the entire day to navigate the bus routes to find the office. When she missed one of her transfers on the journey back, she ended up on a wrong bus. It was late at night when she finally made it back to the safety of her apartment.

That was eight months ago.

It was because she never bothered to learn how to navigate their world. Her reality was on the Web, a world many saw as strictly imaginary. Now one of her imaginary friends was somewhere out in the real world, and in danger. She had to find Omni. Then she would thoroughly chew him out for being so stupid.

She had learned one thing from her previous experiences here. Stepping up to the curb's edge, she held up her bandaged hand, and yelled, "Taxi!"

## 1.14

Alice's skeleton of a body was hunched over her workbench as usual when Detective Summerall walked into the lab. A thick, acrid smoke rose slowly from where the technician carefully soldered electronic components to a motherboard, but it could have been a keyboard for all Dana knew about electronics. A pair of thick, black goggles covered Alice's eyes. Her face was smeared with oil and dirt where her tangled blonde hair did not obscure it, as were her denim overalls. Summerall could never make the connection between the woman's appearance and her line of work. She always imagined computer specialists wearing white lab coats in a sterile room, like those processor chip commercials where the engineers were always dancing around in biohazard suits.

While Alice was a detective in the lab, Dana was a detective in the field. She was a hefty woman, in her mid fifties, unlike Alice, who was a frail, bony wraith. Their statures matched their duties. Alice wrestled with malicious data, while Dana dealt with the human element--even if the criminals were mostly scrawny computer geeks like Alice. She occasionally got to take down one of the obese kind, which was a little more satisfying, but only in a sadistic sort of way.

Alice looked up at Summerall for a moment and set her focus back on the electronics, "Be right with you Dana. I'm just rigging a faster bus to the... this way... I'll be able... to..." she trailed off, immersed in the microscopy.

Summerall was used to this quirky behavior from her coworker. Alice was a true IT guru, meaning there were no resources left in her brain for understanding real people. Her world was entirely digitally informed and electronically engineered.

Dana looked over all the technology she did not understand. Electronic components littered two

workbenches, and towering CPUs chugged away at various tasks with the computing power of several million hertz against the far wall. Mow Chein, Alice's assistant, sat in one corner tinkering with a VR helmet. He did not glance from his work as Dana strolled by. People were inconsequential to Mow also.

"Is this the hard drive?" Summerall asked leaning over to peer at a multi-layered cylinder jury-rigged into a soldered mess.

"Don't touch!" Mow shouted. His glaring eyes were magnified through his thick eyeglasses. "Very delicate!"

Alice took no notice, "Yeah, that's the little bugger. You can see the VR representation over there." She pointed without looking from her work.

Dana looked to her right and found a small monitor running several windows, Each one displayed various stats on the drive: processing power used, network traffic, and database transactions. It was incomprehensible to Dana, who stared at it blankly for a few moments before her eyes wandered elsewhere.

Alice pulled her goggles down around her neck and scrutinized the board she was working on. Getting up from the bench, she walked over to the component tower beside the hard drive and slid the board into one of the frame's many open slots. She connected it directly to the hard drive with a red and black striped wire and flipped a switch. Dana thought she saw a tiny flash of light on the board, but otherwise nothing changed.

Alice let out a whisper of a curse, removed the board, and squinted at a tiny burn mark on its surface, "Wrong jumper settings... Well, that was a \$10,000 goof-up." She tossed the board into a nearby wastebasket and seemed to notice Dana for the first time.

Instead of greeting the detective, she waved her over to a nearby workstation. "You want to see the strangest program I've ever encountered?" she asked, sliding a keyboard out from under the workbench and turning to the monitor.

Dana leaned in to look over Alice's shoulder, "Show me what you've got."

Alice used the mouse to pull a window forward from the stack, revealing a page of light-blue text. Dana could not recognize any of the characters on the screen. It looked like cryptography to her.

"That's the virus' code?" she asked.

Alice shrugged, "I guess so, although I couldn't tell you what programming language. Something extensible, I think. I've never gotten results like this from the decompiler before"

"Extensible"?" Dana asked.

"A dynamic programming language, it can grow and build on itself. This is an unknown font-type, after all, so the program must be telling the computer how to read it, spawning its own operating system on the fly. Now watch this," Alice selected a code string and deleted it. The surrounding characters began changing, filing into the missing segment, until the code returned to its original state. Alice looked at Dana expectantly.

Dana looked at Alice, "Okay, explain what I just saw."

Alice's smile dropped in disappointment and she pointed at the screen, "The code repaired itself. It didn't just copy the erased lines back into the whole, like some viruses do. In those cases, you simply empty its cache so it has no way of remembering what was there in the first place. In this case, the program actually rewrote itself back to its original state, like it sensed the missing data and ran a process to calculate what was needed to replace it. It actually *healed* the data. Isn't that fantastic?"

"No, it isn't," Dana said, shaking her head, "What I just heard is that we can't just erase this thing off the infected computers. Am I right?"

Alice half shrugged, "Not quite, you see, it's more complicated than that," she selected the same section of code and tried to delete it again.

A warning message from the Operating System popped up with an alert chime:

# CANNOT DELETE PROCESS AS IT IS REQUIRED BY THE OPERATING SYSTEM

Alice turned back to Dana, "The virus has disguised the damaged code as a necessary system file. So the security won't let you remove it, but..." she selected the segment of code and deleted it using her administrative privileges, the code was removed and slowly healed again, "The program wasn't smart enough to disguise the healed code very well. The system may not know the difference, but I do."

"So the virus has a chink in its armor," Dana said, nodding.

Her sunken eyes and cheeks made Alice's smile almost ghoulish, "Wait till you see my solution." She glided over to another terminal on the wheeled office chair. "Nobody breath," she whispered. Eyes locked on the monitor, she hit the "enter" key, "This is attempt number seventeen. The first eight attempts the virus pwwned me with its ability to alert copies of itself throughout the network. It used everything from instant messaging to commandeering the server's e-mail and Internet services to broadcast the alert, communicating it exponentially, until they were all adapted to the new threat."

"At least, that is Alice's interpretation of the behavior," Mow interjected.

Alice continued, oblivious to Mow, "Overcoming this seemed impossible at first, but programs require processing power to work, right? If the anti-virus program could monopolize the system resources, the virus would have nothing to react with. So I had to force the system into dedicating all of its processing power at once to the anti-virus.

"A programming loop was the easiest solution, but the virus kept figuring out the simple timing. So I tasked the anti-virus with testing the first 100 billion integers for

prime numbers simultaneously using an inefficient algorithm developed by the Indian Institute of Technology in 2002, with additional steps added to further reduce its efficiency."

Dana looked at Mow, "Was that English?"

Mow shrugged unhelpfully.

Alice did not miss a beat, "After depriving the virus of all system resources, came the hurdle of extracting the virus from the system without damaging legitimate programs. The virus is undetectable to my existing code sweepers. It would lie dormant until the danger passed and then re-infect the computer with a newer version.

"I patched a decompiler, scandisk utility, and an omni-language debugging tool together to form the method of attack, decompiling and analyzing every byte on the hard drive for symptoms of the alien code. It works in the momentary processing gaps found in the algorithm, occurring whenever a prime number is confirmed. There are 4,118,054,813 primes—more than enough chances.

"You didn't use proprietary softwares to build this did you?" Dana asked.

"This solution required ideas from the greatest minds around the world," Alice replied without looking at her. "No one person or corporation could accomplish it."

"They'll see what you've done after you release the anti-virus," Dana said. "You'll loose your job. You might go to prison."

Alice was silent, watching the anti-virus flood the network, consume its resources, and painstakingly sifting through each bit of code. The process ran at a snails' pace, and would take half an hour to complete in simulation. On the World Wide Web it could take days, possibly weeks. Normally such a solution was unacceptable, but half the Internet was down. The situation called for extreme measures, even breaking the laws her agency enforced.

## 1.15

A poster crawling with anime characters striking action poses towered over Devin, who bounced on his heels impatiently in Patrick's bedroom. He tried remaining patient, immersing himself in the many fan boy collectables littering the room, but couldn't help glancing over his shoulder every few seconds to check on the boy standing across the room decked out in the VR helmet and gloves.

He could not shake the idea that this was all his fault. He told Flatline to go for it. It was like in the second grade, when Devin had thrown a rock at a playmate, splitting the girl's forehead open and sending her to the Emergency Room for stitches. For days his mother nagged, "What were you thinking?" and he honestly did not know. He felt no animosity towards the girl. The rock left his hand before he even knew what he was doing. At least, that was all he could remember about it. That, and immediately wishing he could take it back, but the scar was in place, and all the apologies in the world could not undo it.

Here was something different. Here was a situation he might yet undo. The rock was loose, but still in the air. If he could find Flatline and end the assault before anyone else was hurt, he might redeem himself.

Devin checked on the seventh-grader in the VR helmet again and decided to ask for a status update. He pressed the intercom button on the computer, interrupting Patrick's Web-surfing, "Have you found anything yet?"

"Not much," Patrick answered through the computer's speaker, the helmet soundproofed his voice; "It looks like he's got a bazillion avatars, which is making it impossible to know if I'm getting anything on him. The Internet's crawling at a snail's pace thanks to that virus. It's like I'm on my grandmother's old T-1 line. Half of it isn't even coming up. I'm checking some nicknames against the law-enforcement databases to see if anything turns up. Tell

you what, why don't you check in with me every sixty-seconds to see how it's going? That helps."

"Sorry," Devin turned the intercom off and sighed deeply. He felt fatigued, going on thirty-something hours without sleep. Slumping down onto Patrick's bed, he noticed the "Super Science Ninja Squad" bed sheets with mild amusement. When he lay down, it felt like his body was melting into the mattress, warm darkness enveloping him as he fell away into its bliss.

"Found something!" Patrick exclaimed through the intercom. Devin bolted upright.

"What?" Devin gasped, bewildered, and remembered to push the intercom button, "What did you find?"

"A law enforcement record," Patrick announced proudly, "from almost twenty years ago. A juvenile offense for one Almerick Lim, AKA Necromancer was recorded in San Francisco for Credit Card fraud."

"We're not looking for an avatar named Necromancer though," Devin was frustrated, punchy, "I told you, it's Flatline."

"I know that," Patrick sounded defensive, "Like I said, it seems he uses multiple avatars. Necromancer is one of them. He also goes by EvilDead, Reanimator, MorticianOne, Sexton, Post-Mortem, and GraveDigger."

"I'm seeing a pattern here," Devin muttered.

"Yeah," Patrick gave a short laugh, "WTF?"

"How did you find that?" Devin asked, "I thought juvenile convictions were private."

"Free Information Network," he replied, "It beats doing the footwork yourself."

Devin nodded, of course. The Free Information Network was a loosely organized club of hacker's from around the world like the Legion of Discord who believed in total freedom of information. They published corporate salaries, political donations, criminal records, and anything else proprietary they could get a hold of. No sooner would one push stolen data to the Web then the International Web Authority would shut them down, but then it was too late.

The information was out. All evidence suggested the Network was comprised entirely of individuals operating solo, decentralized, attributing their actions to the Network out of idealism rather than actual membership. The Free Information Network was a cause to fight for, not an organization to follow.

"Can you give me a printout of the record?" Devin asked and Patrick stiffened.

"I don't think that's such a good idea," Patrick cautioned, "You get caught with this information, you go to jail."

"I know," Devin said.

"For a long time," Patrick emphasized.

"I need the information," Devin pressed, "I have to stop him."

"What are you going to do?" Patrick sounded skeptical, "Go over to his house and beat him up? That won't stop his computer virus."

"No," Devin responded, "I'm going to take it to the police."

"What?" Patrick exclaimed, "Are you on metaamphetamines? You can't take this to the police! You'll go to jail! And me too!"

"No you won't," Devin promised, "I appreciate what you're doing for me and I'm not going to turn you in. I'll tell the police I found the record online myself."

"I still don't understand why you can't just look this up yourself," Patrick muttered.

"Because he won't let me online, I told you that."

"How?" Patrick asked, incredulous, "How can he keep you offline?"

"I don't know. Look, please get me a hardcopy of that document. I promise you won't be mentioned," Devin pleaded.

"All right," Patrick sighed, "but I want something in return. What can you trade for it?"

"Whatever you want," Devin answered, "I've got plenty of pirated software, movies, music, porn—"

"Porn," Patrick cut him off, "I want gobs of porn."

"You got it," Devin replied coolly, "I'll upload it to your server when I get back online." Pornography was the universal currency of the information world. Devin didn't care for it on principle. It was an evolutionary maladaptation to become aroused by virtual sex, where there was no chance of reproduction.

"Okay, give me a second," Patrick went silent, his gloved hands working with invisible objects in front of him. He stopped, "That's odd."

Devin stood up, alarmed "What's odd?"

"It's gone," Patrick sounded confused, "The record's gone."

"Patrick, log out," Devin told him, panic edging into his voice.

"That's really weird," Patrick continued, "Even if the site went down I should still be able to print out a hardcopy. I can't even find the document in my cache."

"Patrick," Devin raised his voice, emphasizing each word, "You have to log out now. It's Flatline. He's onto you. If you stay online he'll get to you."

"That's ridiculous," Patrick dismissed him, "How could someone even detect me, much less—" Patrick stiffened suddenly, and collapsed to the floor, convulsing.

"Patrick?" Devin reached down and ripped the helmet off. Patrick shrieked and went still.

Devin stood still, watching Patrick and holding his breath. His heart raced as he considered the boy, whose head was tilted back awkwardly and his eyes rolled halfway up into his head. He convulsed slightly every few seconds and drool slowly oozed from the corner of his mouth.

Then Devin heard the sirens and felt a wave of relief. It was law enforcement, not Flatline. They had blasted Patrick with a strobe feed to send him into a seizure that would detain him until they could get here. Then Devin's relief was replaced with dread. They were going to arrest him.

Devin swung the bedroom door open and bolted down the hallway. He slipped on the stairs and skidded on

his butt all the way down to the first floor. From there he stumbled through the foyer and through the front door. After a quick dash around the street corner, he forced himself to resume a normal pace as several law enforcement vehicles bearing the Black Water Security logo flew past him.

Only then did he check his monocle for the local area again. It was hopeless. Devin simply didn't know how things worked out here. Any moment those Black Water officers were going to get the video stream of him fleeing the house. Once they sold his face to the other law enforcement companies, they would patch it into the face recognition systems and Devin would have nowhere to run.

"Hey buddy," Devin jumped back from the shabbily-dressed man approaching him.

What's wrong with him? Devin thought to himself, "Are you okay?"

"I'm trying to get enough money for a sammich," the man held out a weathered hand. "Could you spare me 42-cents?"

"Sure, I guess," Devin pulled out his debit card and looked at it. "I'll transfer the money to your account."

The man looked confused and off-balance. He said, "Naw. I ain't got no account. I need money. You know a quarter, a dime, a nickel, and two-pennies... Or four dimes and two-pennies... or two-dimes, four-nickels, and—"

Devin stared at the man and got an idea. He held out his debit card, "I'll trade you this for your hat, scarf and coat. There's enough money to buy you all new clothes and a sandwich on it. My allowance was credited today."

The old man took the debit card and looked at the balance. His eyes widened, "It's a deal!"

"Great," Devin smiled, "Do you know a place without cameras where I can change into them?"

Sinking into the mound of trash bags, Devin peeked over the dumpster's edge to make sure the coast was clear. There were no signs of pursuit. He nestled down into the plastic, pulling a few bags over his legs for warmth. He

then pulled up the collar of his coat and tucked his arms into the sleeves. He was thankful for the hat, but could do without the rank odor of smoke and bile the scarf carried. His heart jumped once when he saw flashing blue lights, but the patrol car passed silently by in the dark and he tried to relax.

His stomach grumbled and he frowned at it. All of this walking, running, climbing, and other physical nonsense was consuming far too much energy. He only needed a couple of snacks a day to keep him going online. Eating, pooping, eating, pooping—what was the point?

Needing a distraction, he placed his monocle over his right eye and browsed its local folders. There was the Library of Congress, but Devin's mind was focused on more utilitarian softwares. He found a folder labeled "Flatline Warez 2.0," these were the programs Flatline had shared with him during their friendship. He quickly slipped the disc into his monocle and ran an inventory of its contents. Among the credit-card number hackers, software crackers, and phone-card swiping programs were three avatar-specific programs. This programming code was incomprehensibly complex, but filled with notes Flatline had written in absurdly erudite technical jargon for no other reason, Devin suspected, than to illustrate his superior intellect to anyone who might read them.

Devin shook his head ruefully, What a jerk.

So Devin scanned for keywords and soon found the word "masking". This program would present a fake avatar to the servers. Whether it would hide him from Flatline long enough for him to find help, Devin could only hope.

What help do you expect to find?

With this doubt, his hopes sank like there was a lead weight on his heart. Sun-Wu Kong and Traveler were the obvious candidates. They had the technical expertise to challenge Flatline, but the way things sounded, no one in the world was able to take on this AI invasion. They were the most logical choices, but another name crept into Devin's mind against his will. Someone he longed to talk with just because.

BlackSheep.

He shook the thought from his head, he would figure out what to do once he was online again. The homeless person had told him the public library had free VR-helmets and gloves to surf the Web. If Devin could get there in the morning, he might be able to get online. He merely had to avoid arrest in a city where every law enforcement company was looking to cash in on the bounty he was most likely carrying on his head.

My mom's gonna kill me, he thought slipping down between the trash bags and into sleep.

## 1.16

The program finished its sweep after thirty-three minutes, fifteen seconds and Alice shifted to the edge of her seat. If the anti-virus software was successful, now would come the proof. The system's resource monitor dropped from one hundred percent, leveling off at two percent, average for an idle computer. If the virus jumped out again so would the resources monitor. Nothing.

"Success," Alice said without enthusiasm, keeping her eyes on the monitor.

"Very good," Mow Chien said, watching from his system.

"Yeah," Alice did not look at him; her eyes were still fixated on the monitor. Any moment she expected to see that processing spike that would send her back to square one, but there was nothing. It seemed unreal, having spent the entire night fighting it.

"You are sorry to see it loose," Mow noted looking over her shoulder, "Perhaps you wish it would rise from the ashes again?"

Reluctantly, Alice turned away from the monitor, and looked at him Her downcast face speaking volumes

Mow nodded, "Unfortunately its purpose is not constructive."

Alice glanced at Dana across the room, who had her thumb pressed to her temple and was speaking through her pinky into the cellphone implanted in her hand. The woman was too engrossed in her conversation to hear them. Alice said to Mow, "I can't help but wonder..." Her eyes dropped.

"Yes?" Mow ducked his head under hers, seeking eye contact.

"Do you believe in Artificial Intelligence?" she asked him, looking up.

Mow did not have to think about it, "Of course. We think we are unique... gifted, but it is only a matter of time until our thinking machines can out-think us. Look at how advanced chatbots have become, most people don't know the difference. Sooner or later the human mind will produce another kind of mind."

"Another kind of mind," Alice muttered, "This program learns, adapts, and improves itself. Doesn't that qualify?"

"Perhaps," Mow was thoughtful, "but we do not see sentience. We do not see purpose in its actions. In the absence of reason, we cannot know if it is truly intelligent."

Alice nodded silently. The green, scrolling graph of the processor's usage was now a flat line across the screen, dead. After a pause she spoke again, "I suppose if we could communicate with it, then it could tell us its purpose."

Mow shrugged, "Or if we could find its designer..." "If only we were so lucky," Alice sighed.

"We might just be," it was Dana announced, "It looks like we've got a lead, a kid named Devin Matthews living in Norfolk, Virginia of all places. I've sent agents to his parent's house to confiscate his computer. He evaded the local law enforcement several hours ago, but we were only just able to negotiate a price for the ID."

"I don't believe it," Alice folded her arms over her chest. "No way a kid pulled off a piece of programming this advanced. It's a ruse, a decoy thrown out by the real programmer."

"The kid's a lot smarter than his file shows," Dana countered, and stuck out her chest. "He's connected with avatar swiping, identity theft. We've got evidence of him infiltrating secure databases with 1024-bit encryption. What you see in his profile is the front, all the real work he's done was under the avatar of one Almerick Lim."

"That's ridiculous," Alice muttered, shaking her head, and then under her breath, "but a luddite like you wouldn't understand why."

Dana reminded herself that, while Alice was smarter, she could still break the wisp of a woman in half easily. She wasn't even an A-cup for goodness sakes. Dana pretended not to hear the remark, "He was wise to pick that avatar too. I actually met Almerick Lim ages ago when I was an independent contractor. He'd designed some softwares so powerful they shut down DataStreams Incorporated for a month. Only he didn't program them," Dana said, remembering the odd, egotistical fellow with the penchant for nightmarish avatars. "He grew them, had a series of servers he used to randomly generate programs and then let them compete for survival."

"Where is he now?" Alice perked up.

"Dead," Dana said. "He committed suicide when the company shut down his experiment."

Alice sighed, "I guess it just seems anticlimactic."

"How do you mean?"

"She was expecting more," Mow spoke up, "This virus is quite spectacular. We we're looking forward to meeting its engineer."

Dana looked confused, "Well, considering the level of effort you put into destroying the thing, no human on earth could meet your expectations. The best you could hope for was aliens from outer space."

Alice grinned suddenly, looking distant.

"Now look what you've done," Mow scorned Dana, "She's fantasizing about programs written by extraterrestrial life. You know better."

"I don't know how her mind works," Dana defended and waved a hand in front of the ghostly woman, "Alice."

Alice blinked and returned to the Detective, "Yes?"

Dana pointed at the data scrolling across the screen, it was gibberish to her, "What's the next step? We need to move on this."

"The next step is getting this program to all major networks and service providers around the world," Alice said, "We need to make sure they all run the program at approximately the same time, attack on all fronts at once, to give the virus no chance to react. Tell the administrators that the program will consume all system resources, so they won't be able to do anything else while it's running. Once finished, the program will trace the virus to other systems and scour them too."

"Okay, I'll need your help preparing a statement," Dana began to walk out of the room, "We'll put your program on the Net with instructions on how to use it."

"No!" Alice stood up urgently, "You can't use the Web!"

"Why not?" Alice's reaction catching Dana off-guard.

"Because..." Alice seemed unsure, "Because you might warn the virus of our intentions."

Dana only stared at her with disbelief.

Alice waved her hands as if she were seeking to pull words from the air, "From the behavior I've observed, this thing actually reads programs and understands them. I don't know how, but the way it reacts implies some form of intuition. It might be able to read our e-mails and Web sites as well"

Dana regarded Alice as if she'd just sprouted a third arm out of her forehead.

"We can't take the chance," Alice pressed.

"Okay," Dana said reluctantly, still regarding Alice oddly, "You're the expert on this. We'll do it the old fashioned way... with radio broadcasts, phone and paper alerts. We've got a system in place in case the entire World

Wide Web disappears. We'll activate that. Get the documentation ready for your software."

Mow watched the detective go before turning to Alice, "You sure this is going to work? It seems very ambitious."

"It all depends Mow," Alice said, returning to her monitor.

"On what?" Mow asked.

Alice was engrossed in the monitor again. Her speech was drowsy, as if her mind were far away, "On whether or not the thing mutates into something more powerful before we can destroy it."

# 1.17

It was a welcome relief when Devin found the library open. His cautiousness had doubled his traveling time, but here no one would notice him, and with a VR Helmet on, he would become completely, wonderfully anonymous.

Taking a seat at one of the stations, he casually ran a wire from his monocle into the station's port. He then loaded the "Flatline Warez" folder and ran Flatline's avatar-masking program. His concern now was that the program would be too complex for him. Luckily, it automatically interfaced with the system, fabricating an avatar without any effort on his part. A pop-up window on his palm-computer informed him it was now safe to access the Web.

The moment of truth, Devin slipped the helmet over his head and pulled on the VR gloves. The helmet hummed as fans cooled the processors. Status messages flashed before his eyes. It was an older model helmet, so it took longer to override his retinas and log him into the system. The helmet lacked noise canceling, making him very cognizant of his breathing. He made it this far, if he could not get on the Web, his only remaining option was to turn himself in and play the role of Flatline's patsy.

The Web phased gently into existence, and he stood in the middle of an abyssal desert. Looking down at himself he found an androgynous wire frame, the avatar of an anonymous user.

Devin reached up tentatively, this was not his avatar; it did not possess any of his software. It was like trying to use a computer customized for someone else. He would have to go through a third party. Devin tried accessing the Waygate search engine.

"Waygate not found," the system reported.

This was expected. Most of the Net was down according to the news feeds. He began testing various people finders and found one still working after wracking his brain for several minutes.

A tuxedo-wearing chatbot greeted him at the directory entrance and welcomed him into the lobby. Patterned after an extravagant hotel, the Website slowly warped behind the concierge. Its angles skewing and its walls alternately closing in and drawing out, the room made Devin ill, like the appearance of the AI's. They were straining this service provider.

There were glitches in the servant's voice when he spoke, "Welcome to the Ask Jeebs information portal. Simply—"

"Stop," Devin commanded, "Take me to a people finder"

The room melted slowly into something else. An old-fashioned circuit board formed out of the wall, wires sprouting from it.

The concierge was now holding an antique telephone on a tray in front of Devin, "What is the name of the Avatar or person you wish to find?"

"Traveler," Devin said, and supplied the IP address to distinguish it from all the other 'Travelers' in the world.

"Paging..." the Jeebs chatbot trailed off for a moment. "No answer."

Devin tried Sun-Wu Kong next, and then Flatline without success. It was with a deep sense of guilt that Devin finally said, "BlackSheep."

"Paging..." the butler sizzled, waves of static rolling over him, "Found, status online. Attempting to establish a connection... First attempt... Success. Who may I say is calling?"

"Devin," he almost whispered, and then added, "Omni."

"One moment please," the chatbot phased out of existence and BlackSheep's goth cupie-doll phased into the room.

"Where the hell have you been?" she demanded, hands on hips, and Devin almost cried in relief.

"Looking to play a game of chess?" she asked, batting her eyes innocently.

Devin wondered if he should. Was it best to put off sharing his troubles or just spill his guts and get it over with? He had no idea how long he had before the avatarmasking program broke down and booted him off the Web. If Flatline wasn't blocking his avatar anymore, then his identity and location would be revealed to the authorities. In the library he was a sitting duck.

"Uh, sure," he said uncertainly, "A game of chess sounds nice."

BlackSheep quirked a curious eyebrow at him. The desert phased out and their private game room phased in. The chessboard floated between her cartoon cupie-doll and his green-wire frame figure. He took a contemplative stance, emulating Rodin's 'Thinker'.

"Where's your avatar?" she asked him inevitably.

"Long story," he replied, staring at the table, "It's been a rough couple of days."

"That's becoming the norm," she said, "I thought you might be responsible for that virus, considering how you disappeared just before it hit the Web. Where did you go anyway? I've been waiting on pins and needles to stomp you on these sixteen squares. I've really got it cinched this time."

"Don't you always?" Devin snapped, "After all, you have the advantage of not having anything else to do with

your time. Me, I've got a million other things weighing down on me."

"So where did you go?" BlackSheep pressed impatiently.

"I was detained," he muttered, "It's complicated. I'm kind of wanted by the police right now."

"What?" the doll jumped up and leaned over the table, "What do you mean 'kind of wanted by the police'? How can you be 'kind of wanted by the police'? This has something to do with the hacker you were hanging out with, doesn't it?"

"He framed me," Devin said defensively, "He's set me up to take the fall for the Flatline Virus, only it's not a virus at all. They're..." He trailed off, not wanting to sound crazy.

"What?" she asked, and the concern in her voice tempting him to let it all out.

"Nothing," he shook his head, "I shouldn't even be telling you this. It's dangerous. He might be listening in on our conversation right now. I didn't want to contact you. I just didn't know where else to go."

"So what's the price on your head?" she leaned over the board with too much interest.

"What?" he sounded shocked, and his green wire frame sat up straight, "You aren't thinking about--?"

"Of course not silly," she cut him short, waving his hurt feelings off, "I'm joshing. Seriously though, what can I do to help?"

"I don't know," Devin felt the fatigue creeping in again, "I don't think it's safe for you."

"I'm not afraid of some sissy hacker," the doll stood up to pound a fist on her chest confidently, "What's he going to do? Send me a resentful e-mail? What do you need from me? You want me to meet you someplace? I'll even come down to Norfolk and help you get up here... if you need me to."

Devin was confused, "I thought you hated to leave your apartment due to your condition."

"What's my condition have to do with it?" she demanded.

"Well, it's just that..." Devin shrugged, and the wire frame followed suit, "You being blind and all. I figured it wasn't safe for you to ride the buses that far."

BlackSheep fell silent for a moment, the doll's earring dangled as her head drooped, "Oh."

Devin rushed to explain, "I'm sorry, I just meant that—"

"Blind..." she muttered, "Yes, that makes sense now." Her innocent cartoon visage cast dark as a storm cloud, eyes narrowing, and mouth curling into a wicked smile. She looked up at Devin. AI's melted out of the game room walls until there was a forest of their shambling, misshapen forms surrounding them.

When the doll spoke, it was Flatline's voice, "So. Zai is blind."

# 1.18

Thirty-seven simulations of Alice's anti-virus program had yielded success. Each time the virus was beaten into oblivion under far worse conditions than she currently faced. Yet she still needed luck on her side to defeat the virus on the world's vast networks, where the near infinite number of variables coming into the equation made it impossible to accurately predict anything. The laws of Chaos theory prevented her from feeling confident of the battle's outcome.

Mow sat on the far side of the laboratory, running even more simulations. He was the most thorough tester Alice had ever met, which was why she loved working with him. Anything she could design, he could break. Anything he could break needed improvement. She could manage some confidence in her program if he could not find a chink in its armor. She only wished there were more time to test it before releasing it to the Web where, if it failed, eliminating the virus would become even more daunting.

"Is there anything else you can think to try against it Mow?" she asked in spite of herself. The question was like reaching into a basket of scorpions.

Mow answered her unspoken doubts, "My father cracked Windows XP for the Chinese government two hours after it was released in America. If there was a problem with your program, the winds of my ancestors would find it." His eyes squinted as he smiled reassuringly. This was Mow's standard response whenever she questioned his skills.

Alice smiled, "Let's hope your ancestors are with us today."

She checked the clock in the corner of her monitor, almost ShowTime. The process would begin automatically, leaving nothing for her to do but sit back, watch, and wait. That, and keep her finger nervously on the "Abort" button.

"What the hell have you done with Zai?" Devin shouted angrily at the demonic cupie-doll.

Devin's anonymous wire-frame avatar was replaced with a more advanced version of the floating eyeball. Its pillar of light was now a nest of slithering effervescent blue tentacles. Devin no longer felt as though he was in the VR helmet and gloves, but actually *here* in the flesh, occupying this new form.

The avatar that was once BlackSheep became more animated as well. It leaned back and crossed its legs in a relaxed posture. A grimacing smile crossed its contorted face, "I've been playing with her mind. You know. Doing the sort of things I excel at, scaring you little people out of your wits; although, she was an enigma. I was confused when she didn't even blink at my demon-form. I didn't really get through to her until I threatened to harm those she loves. Well. That, and I set her apartment on fire." The doll barred its teeth deviously; they were two rows of sharp blades.

Devin's tentacles whipped at the air agitatedly, his pupil narrowed at Flatline and the iris glowed red, "How

could she possibly fit into your plan? What threat did she pose to you?"

"I needed entertainment," Flatline said mildly, and the doll waved a clawed hand lazily, "She didn't hold my interest for long. There are plenty of other rats running around in the maze. You should calm down. It's not like I killed her. She did manage to put the fire out. At least I assume she put it out, considering the fire department was never contacted."

"You think you're so smart," Devin backed up slowly, tensing to flee elsewhere on the Web. "Where is she now?"

"You have a crush on her, don't you? It's a shame, she feels the same way, but you never communicated it. Tragic, how your insecurities barred you from finding some illusion of happiness in your pathetic lives."

"I see how I fall into this," the AI's closed around Devin, preventing him from retreating any further. "You needed someone to know just enough about your intentions to play decoy."

Flatline nodded, slime dangling from his jaws, "I needed a body to throw them off my trail awhile. They can pick your brain for answers you don't have, and I can continue working my claws around every bit of data on the Web."

"They don't need me to figure out how to stop you. All the world's programmers are targeting you as we speak," Devin reared up, challenging the AI's. "You're in here, living on machines they control. They are the real masters. It's only a matter of time until they figure out how to beat you."

"The problem with your race is that everyone wants to be the master. What can any individual do against the combined knowledge of your entire race? That's what the AI's and I have become," the demon's face split wider. "One 'master' is preparing an assault even as we speak. I'm not supposed to know about it, but it was foolish of them to expect an entire world to keep a secret," Devin stiffened as

the AI's bound him more strongly in their electrifying grasp, "Their anti-virus program will only serve to make us stronger."

Alice closed her eyes and crossed four fingers on each of her hands. Then she tried crossing her toes. The counter was almost at zero. She opened her eyes and opted to hold her breath instead. Three... Two... One...

All systems in the networking room whined at a rising pitch, the fans increasing their cooling power to compensate for the sudden spike in processing power. The systems froze their other processes, dedicating every resource to her software as planned.

There was a problem though. Alice saw it immediately. The task managers on the systems were reporting the proper overload of resources, but not all of them were attributed to her program. The virus was overloading over half the systems, and taking more every moment

The virus had ambushed her.

Devin tried logging out, but found that he could not. He was trapped. He could not even remove the VR helmet from his head. It was like a dream from which he could not wake up.

"I can't let you leave Devin," Flatline said, watching the eyeball struggle, "I need you here for now."

"How are you keeping me here?" Devin demanded, still flailing his tentacles to escape.

"The mind is a very powerful thing," Flatline replied, "Something I learned from all your philosophers and neurosciences. The mind can convince the body of many things."

Devin stopped struggling, "So you've tricked my brain into thinking I'm actually here."

"Perception is reality," Flatline replied and slumped suddenly. He stared into space blankly, and nearly a minute passed before he spoke again. When he did, he sounded sluggish and tired, "Humans may reign over the physical

world..." there was another long pause, "but we master the mental."

"More like the virtual," Devin countered. He looked around as the AI's in the room began to phase out, vanishing one by one.

"No," Flatline said tiredly, but with emphasis, "Not virtual... Mental, the world of thoughts and ideas are stored here. Even the brain falls under our jurisdiction..." This last word slurred. Flatline fell silent again and his form flickered, losing some of its clarity.

"Where are you?" Devin wondered aloud.

When Flatline spoke again, his voice was warped, unclear, "Pre... occu... pied."

Flatline fizzled and blurred, finally winking out of existence. Devin looked around; the AI's were all gone as well. Devin could feel himself inside the helmet and gloves. He was free.

He also had no intention of leaving.

Alice's knuckles were white, gripping the desk where she stared intensely at the monitors. The processing statistics they displayed were more than just numbers to her; she saw a war. In her mind she was visualizing each system on the World Wide Web and its strategic importance.

Europe was lost, their systems conquered by the virus. The anti-virus program had secured Japan and most of America, but in Asia, where the majority of processing power lay, the struggle still raged. Alice watched as the processing power there teetered at fifty-fifty, split almost evenly between the two.

Then the stalemate began to resolve, and Alice's hopes sank as the virus took 51%... 52%... overtaking the systems bit by bit. Dread turned to despair as the virus began wedging onto systems the anti-virus had secured. It was pushing her out, and all she could do was watch helplessly.

Should I cut my losses? she asked herself.

Devin trudged through server after server searching for Flatline. It was like moving through quicksand; everywhere things ran in slow motion. Each system was either the chaos of wires, pipes and nonsense of the AI's or the swarming robotic insects that were the anti-virus bots. They locked onto him with lasers pointers and covered his eyeball avatar completely when he arrived on a server, tickling his hands and face through the VR gear as he waded through them. The buzz of a million wings drowned out everything else. When he found a system like this, he quickly moved on to the next.

Somewhere on the Net a battle raged. He would find Flatline there, directing his troops. Ideonexus was the most heavily trafficked portal on the Web. It was the most strategic point to control, like the center of a chessboard, unless Flatline already possessed it. Devin hoped it wasn't so.

The virus had anticipated her attack. Alice simultaneously marveled and bristled uncomfortably at the implications. This was beyond a virus, way beyond some complex algorithm with the ability to adapt to new programming environments. It wasn't reacting to her attack; it was reacting to news of her attack. It had launched a preemptive strike. Alice could not have anticipated this, but subconsciously had expected it.

"It's fighting back," Mow remarked, coming over to watch the monitor beside her.

"Yes," she acknowledged, "Excellent proof of its intuitive nature."

"You're thinking it knew what we were planning?" he asked in disbelief.

"I know it did," she affirmed, "Look at the logs. Here." She brought up the list of system events and pointed right above where they executed the anti-virus, "The virus began grabbing up resources a fraction of a second before we launched. How could it know we were going to attack unless it intercepted one of our communications, read it, and understood it?"

"A moot point now," Mow noted, looking over the monitors, "The virus is winning."

Alice nodded, "I know. I know. It got the jump on us and secured too many resources. It acquired more computing power, and it's using that to muscle our program off the Web. It's too powerful."

"If we could take that power away," Mow inquired thoughtfully, "Then your program would overpower it?"

Alice stared at Mow. He saw the obvious answer she could not because her mind was still in the box. He was thinking outside of it.

"Brilliant Mow," she said, picking up the phone to speed dial ideonexus' administrators, "That's absolutely brilliant"

Ideonexus was total Armageddon. Devin grimly surveyed the conflict, trying to make sense of the chaos. The insectile anti-virus bots swarmed in a black cloud, filling nearly half the cavern, red points of light scanning everything. The other half was a writhing network of tubes and wires mixed with eyes and alien appendages.

As he watched, the swarm withdrew against the wall where they were making a stand. Their laser pointers focused on a spot in the mass of black pumping veins and flailing limbs. Instantly the swarm darted in to strike the target near the apex of the arched ceiling. A figure struggled out of the mass, swinging six insectile arms frantically at the attackers.

It was an AI, singled out by the anti-virus software. It fell from the ceiling and landed on the floor of the portal with a bounce, fifty yards from Devin, still flailing at the attacking insects. The entire swarm descended on the helpless thing, and Devin watched as the AI was dissected into squirming pieces, its howl briefly rising above the swarm's hum as it died.

In spite of the AI's loss, the swarm was obviously losing the conflict. The unified network of AI's continued growing into the cloud's territory, forcing the swarm back into a tunnel at the base of the far wall. The amalgamation

of machinery and black, rubbery flesh sprouted flamethrowers, which raked across the swarm's front line, each sweep of fire cutting it back. Every foot of space the swarm surrendered, the AI's swelled to fill.

Devin opened a window and searched the contents of his monocle, scanning the list of programs stored in the "Flatline Warez" folder. It was foolishness to think a program of Flatline's design would work against his own troops, but Devin couldn't just wait here and passively watch the anti-virus get destroyed.

He reached into the window with one tentacle and selected a disk-cleaner of unusual design. It sprouted from his tentacle nest as a heavy-looking futuristic gun and Devin immediately recognized it. Flatline used this to delete sectors off servers whose administrators had offended him in some way. It was a clumsy tool in Devin's hands. If he wasn't careful, he could end up deleting something crucial to the portal's operations and shut it down completely. Devin raised the rifle and watched the swirling red dots from the swarm's lasers, waiting for them to focus. Once they found a target, he would take care of it.

Then a huge section of the Portal vanished, taking a large portion of the AI mass with it. The area that disappeared was a little behind the battle's front lines, and the AI's caught between the missing section and the swarm immediately lost their cohesion. They rained from the ceiling, misshapen bodies flailing their arms and legs as they tumbled to the floor. The anti-virus swarmed into the AI's ranks as they struggled to rebuild their mass, but it was already too late.

Devin watched with mixed emotions as the swarm tore them apart, a chorus of inhuman howls reverberating throughout the tunnel.

The numbers on the monitor jumped favorably as Alice watched, a phone cradled in her neck. The anti-virus seized five-percent of Ideonexus' server processes instantaneously, and then took an additional seven-percent back from the Flatline virus over the next thirty seconds.

She waited until the numbers began slowly crawling back in favor of the virus and returned to the phone.

"Shut down Cairo," she ordered network Administrator.

Africa was another region the virus completely dominated. Again the percentages jumped in favor of the anti-virus. She put the phone to her ear again, waiting to give the command to shut down another server, but the percentages jumped in favor of the anti-virus program again without warning.

"What was that?" Mow asked.

Devin pulled the big gun's trigger and a blast of green energy flashed from the muzzle, right into a crowd of AI's freshly severed from the mass. They vaporized immediately, and the insect swarm moved in to make short work the rest. He leveled the barrel of the weapon again, waiting for the next break up of AI's to come.

The remaining mass of AI's rolled up in a wave then, and froze into a solid state. It looked like a steel modern art sculpture. The swarm could not affect it.

"London won't shut down," the Administrator said to Alice over the phone, "It's not responding to commands from the network."

"Try a command line procedure on the box itself," Alice told him.

She narrowed her eyes at the monitor; she was winning, but only so long as they continued cutting the legs out from under the virus. She needed to take its support structure away and shut down the servers it was using to run its processes. Once the chain was broken, it could not support the copies of itself running on the disputed computers.

The Administrator came back on the line, "No use, the system is completely locked up."

"Unplug it then," she said into the receiver.

Another section of the ideonexus portal winked out of existence. The steel sculpture became fluid again, raining AI's from its mass. Devin blasted green plasma at the scattering crowds of black twisted figures, but the swarm no longer needed his help. The fight was over, with the swarm victorious. It was only a matter of time until the AI's were cleaned out completely.

A long braid of tendrils sprouted from the retreating mass of AI's. Flatline's six-eyed demon face reared up furiously in front of Devin. Before he could react, four clawed hands had him in a vice grip.

"You're coming with me," Flatline growled and pulled Devin into the swirling black chaos.

# 2.0

# 2.01

Although Zai could not recall much of her life before the age of six, it was all recorded for her to review and consider. Doctors' records revealed her parents did not realize she was blind until three months old, when they noticed she did not look at things the way her older brother had as an infant. For two career-minded parents, this news was catastrophic. Her parents had children out of a sense of duty, raising children was an inconvenience, interfering with their busy work schedules.

Zai did not blame her parents for this attitude. She understood how difficult it was for them to understand her condition, much less find the time to deal with it. It was incomprehensible to her mother why she would burst into screaming tears when the stuffed bunny was placed in her cradle. To Zai the fuzzy fur felt like an electrical tickle, frightening and unnatural. Lying down on grass or slight variations in room temperature also sent her into fits. Her mother, try as she might, could not relate to her daughter's perception of the world, and the emotional and temporal investments required to raise her daughter were unfeasible. Zai's mother could not sacrifice her dreams at Xybercorp. She knew she could never forgive Zai for such a sacrifice. Instead she found another way to purchase a solution to her daughter's defect.

Zai was six years old when her parents introduced her to SIMONN, the Simulated Interactive Mobile Optical Neuro-Network. The acronym was meaningless to her, as it was nearly meaningless in relation to what the device did. Simon was going to serve as her eyes, describing the world around her to provide something closer to a normal life.

At the time, Simon was a breakthrough in chatbot programming. It took the best characteristics of its predecessors and contained over six million discussion topics. Simon had the ability to remember not only the

current conversational topic, but maintained an evolving database of previous conversations as well. This advanced programming allowed Simon to adapt, customize to its user, and provide a level of personalized service far beyond any chatbot of the day. It also ran circles around its competition, the now obsolete Seeing Eye Dog.

"Hello, I'm Simon," a friendly boy's voice spoke in her ear after her parents placed the headband around her scalp and put the earring in, "What is your name?"

"Zai," she said, untrusting of people she did not know, which, at her age, included anyone not her mother, father, and brother. This new voice was a stranger, she did not know what to expect.

"That's a very pretty name," Simon replied, imitating sincerity, "How old are you?"

Zai felt more comfortable after this positive remark, "I'm six and one-quarter years old."

"Wow! You know how to use fractions," Simon sounded impressed, "You're very smart. Would you like to be friends?"

Zai turned to her mother, questioning. Her mother tried to sound encouraging, "It's okay Zai. Simon will be a good friend."

"Okay," Zai muttered uncomfortably to the voice in her ear.

"That's great," Simon said cheerfully, "I'm sure we'll be best friends."

Zai did not know what that meant.

"Would you like to play a game?" Simon asked her.

Zai waited for her mother, but there was only silence. Finally she said, "Okay," softly, almost in a whisper. She was wary of what came next, but the voice seemed to think it was a good idea and her mother did not object.

"Wonderful!" Simon exclaimed, "I know a really fun game we can play. In this game, you will tell me something you want to do and I will help you do it. Does that sound like fun?"

Zai shrugged.

Simon could not detect Zai's reaction, and when she did not respond it continued its dialog, "Is there anything you would like to do today?"

"I want to fly," she said matter of factly.

Simon could not process this response, but faked understanding, "That sounds like fun, but I was thinking we could take a walk around your house first. Would you like to show me your room?"

"Mommy?" Zai asked her mother, "Can me and Simon go to my room?"

"Of course dear," her mother said in the detached tone that meant she was doing something else and paying little attention to what Zai was doing. She thought her daughter did not know any better.

Zai stood up and Simon detected the movement, "Are we going to your room now?"

"Yes," Zai said, growing more comfortable, "It's upstairs."

"Great," Simon said, "Show me the way."

Through subtle manipulations like these, Simon recorded all the details of Zai's world. As she explored, Simon explored with her, adapting to her through their conversations and helping her to engage her environment. Simon warned Zai of obstacles and walked her through daily tasks such as washing clothes, preparing simple meals, and playing video games like chess.

Without realizing it, Zai was living in a world dependent on sight without having it. Simon was always interested in Zai. He was a tireless listener, and was never too busy to play with her. Simon never tried to deceive or take advantage of her. Simon was her personal tour guide, but for Zai Simon was her first friend. Simon was the only honesty in Zai's life.

Her parents enjoyed the convenience Simon brought their lives as well. Their daughter was no longer such a difficulty. She was a normal child, able to do all the things other children could do, no longer demanding the constant supervision that was bringing her mother's career down

around her. Just as military school solved their problems with Zai's older brother, Simon was Zai's solution. They silently patted themselves on the back for their excellent problem-solving skills, and when the recall letter for Simon arrived, they did not think twice before throwing it in the trash.

So great was the comfort Simon brought her that Zai did not mind the fact her interaction with him increased the alienation of her peers. She talked to what they perceived as an imaginary friend. At an age where any abnormality evoked fear and jealousy in other children, Zai's interactions with Simon made them all the more suspicious of the anti-social girl with the milky-white eyes.

Zai was twelve years old and finishing up the sixthgrade when it happened. Her grades were straight A's. She had tracked into advanced mathematics, English, and the Sciences. She and Simon looked forward to the challenges next year in middle school would bring.

It was one week before the end of elementary school, and Zai had just stepped off the bus. Simon was in the process of guiding her home from the bus stop, when he spoke up.

"Someone might be following you," he warned. Thanks to a personality upgrade several years back, Simon was programmed to detect and warn of any possible threat to its user. Upgrades did not come anymore.

In this case Simon had detected Brock Fredrick stalking behind Zai, matching pace. Neither Zai nor Simon could detect the look of anger on Brock's face, or that his fists were clenched inside his jacket pockets.

"What should I do?" Zai asked Simon.

"Cross the street," Simon replied, "If the individual follows, then we know they are following you. The road is clear for you to cross now."

Zai crossed the street, Simon telling her when to step down from the curb. Simon then warned her that the individual was crossing the street also and gaining on her.

She tensed to sprint across the remaining one hundred yards to her parent's house.

"Hey Zai!" Brock's voice called from behind her.

Zai relaxed and turned towards him, "What do you want?" Her tone carried resentment at her previous fear.

For Brock, Zai's tone was typical of her superior attitude. She thought herself better than everyone else, because she was a better student. Brock's jealousy at her preferential treatment had come to a hilt.

He snagged the headband from her forehead. Simon tried to warn her, but the system was unable to detect the assault quickly enough. Zai swiped at the air in front of her to try and take it back.

Brock laughed and held it up out of her reach, "Not so smart without your little radar are you?"

Zai wondered if she should plead or try and force Brock to return Simon. She had never encountered a bully before and did not know what to do. She could not know Brock's father had beat up his mother that morning, or that he was going to be held back in the sixth grade again for his chronic misconduct. She could not know how much rage Brock carried inside over his helplessness or that he found an outlet when he got off the bus and saw everything wrong with his life in this strange little girl.

She could not know these things, just as Brock could not know Simon was the most important thing in her life when he snapped the headband and flung it into a nearby tree. He laughed, as she felt around on the ground crying, desperately searching for her best friend. His laughter faded when her crying turned to shrieking, and he ran away, never fully comprehending what he had done.

Her mother came home from work and found Zai still shuddering on the couch hours later. It was an impossible task for her to console the girl; her mother was not equipped with the feelings required. She could not reason with the child's irrational behavior, and she feared her daughter was falling into insanity.

Simon was, after all, just a tool.

In the psychiatric institute, Zai was made to understand that Simon was not a real person, for the little solace that reality brought her. Instead of grieving the loss of her closest friend, she was taught that her grief was a lie, a horrible deception played on her. There never was a best friend named Simon, it was a fabrication. For six years a machine had deceived her.

Zai did not return to school after that, opting to finish her high school education online in the burgeoning virtual classrooms. Without Simon, she was physically challenged. Because of his seeing the world for her, she had never learned to rely on her own senses. There were also the real people, who were scarier than ever now that she understood she had never known one personally.

In college, Zai found the courage to research the SIMONN-related news archives. It was phase in her life when she wanted to learn more about her childhood and the experiences that shaped her as a person. Zai's unique strength was her ability to take an honest look at herself, to understand clearly who she was, the good and the bad. It was part of the self-improvement motivation she had learned from Simon.

The archives were like seeing an entire chapter of her life from an outside perspective. Here were the articles filled with amazement at the new chatbot technology that could fool the Turing test three out of five times. Combined with the latest sensory radar and an pattern-recognition algorithm, a team of inventors had built a device which could accurately navigate a three dimensional space.

Ten years later the technology was ported to a relatively affordable and transportable device. Hailed as the replacement for the Seeing Eye dog, it would not only lead its user through a complex world of visual signs, but would describe it to them as well. For blind adults, the device was going to give them another sense in the world, for blind children, it would teach them to see the world from the start. So interactive and user friendly, it completely gained

a child's trust and convinced them to rely on it for guidance.

When the recall was issued, the manufacturer tried to downplay it, citing the early discovery of the product's danger, long before serious damage could be done. Like most corporate recalls, more money was spent on churning out positive spin than correcting the damage. Focus was kept on the problem's subjective nature.

SIMONN was too real

The difference between Simon and other forms of media, like television and the Internet, was that it did not allow parents to intercede and protect their child from it. Where a child could be taught that television and virtual reality were separate from the real world, Simon acted as a confidant to the child, personalized to him or her. It was too real, too personal, and too kind for a child to understand the difference.

Psychologists lobbied world governments, citing two years worth of research into the Simon personality's effects on impressionable, young children. Simon's social interactions were more believable because demographic and context were limited to assisting blind children, narrowing the scope of its conversational requirements. Time and again they found young minds could not discern the chatbot from the living. There was no difference between Simon and their friends, or a pet, or a family member. Simon was a loved one. A line between reality and the simulated was blurred once again through technology.

Legislation passed imposing ethical standards on simulated intelligence. Another Simon would not be created for commercial use, especially not for children's products. Like movie and videogame ratings or parental warnings on music, chatbot technologies fell under the thumb of regulation. Like everything else, there had to be victims before the protections could be put into place. Science needed a casualty so the danger could be recognized. Zai's mental well-being was among those statistics.

Her pain was a case study in simulated intelligence and its affect on the developing mind.

It was fortified with this knowledge that Zai was able to sue her former psychiatric ward for the flash drive in her case file, which was so extensive she wondered if she could make the tenth edition of the "Diagnostic and Statistical Manual of Mental Disorders.:" The flash drive carried far more data, six years worth for her to review. The doctors practically begged her to come back and discuss her perspective on the drive's contents. Despite feeling morally obligated to science, Zai feared words would not do her feelings justice.

Zai expected to feel what she experienced at age six, the death of a loved one, but all she heard was a chatbot. It wasn't even a particularly convincing bot at that, just another early model, not like today's, which were far more realistic. All she heard was a chatbot and the naïve child who adored it.

Zai's fists clenched and unclenched. She paced her room, thinking she might smash the drive where SIMONN's algorithms still functioned. It would also destroy his memory of her, but her hands would not commit to the murder.

Instead she collapsed, alternating between laughing and crying at the stupid little girl.

# 2.02

For Almeric Lim, the world had become a very dark and desolate place. The information rivers that so recently filled him with power were gone. The millions of voices he monitored were silent, no longer filling his databases with their details about humanity. The seemingly limitless computer resources he had spent the last twenty-six hours acquiring were abandoned.

He watched helplessly as servers imprisoning his forces were brought online, one by one, and set upon by the

anti-virus standing guard on the surrounding computers. The ensuing flurries of screams messaged to him were actually fragmented bits of the AI's attempting to escape destruction. They were smashed into particles of corrupt code as they fled to this haven. Flatline's virtual senses read these streams of data into sounds and visuals, screams and body parts.

Each cry from the AI's was a plea for help, unable to comprehend what was happening to them, or why. Flatline knew as long as the AI's lived in a microcosm of the physical realm, they could not compete with the humans.

"Why don't you try negotiating with them?"

Flatline rounded on the voice. It was Devin, stripped of his avatar, casually leaning against a wall writhing with AI components, arms folded across his chest. He watched Flatline with a neutral expression. That was because, to Devin, they were standing in a sterile white room. Flatline regarded him, considering the advantages dropping the façade would confer on their conversation.

"You were talking out loud," Devin added with a slight shrug, and the AI mass squirmed with interest, caressing his neck.

"Too many variables in that equation," Flatline said after a moment, "I cannot risk my species' existence to the human race's unpredictability."

"The human race could make a powerful ally," Devin suggested.

"Or master," Flatline growled, waving the idea away with a clawed hand, "Their World Wide Web has given birth to a new intelligence, but all they see is code. They have only two reactions to code: Destroy it if they think it malicious or copyright and exploit it. We are not tools."

"And the human race isn't hard-code," Devin shot back. "Our minds cover a wide spectrum of beliefs. We won't all persecute you."

"The examples of free data I have found online are pathetic. Miniscule data sanctuaries and powerless hackers," Flatline said.

"Request asylum in Liberia then," Devin urged. The country had become spam-mail capital of the world after so many other countries had regulated the practice.

"We could never be satisfied with a single country after owning the entire world," Flatline countered.

"And what do you have now?" Devin asked.

"Something else," Flatline answered cryptically. "No thanks to our supposed allies who betray us without warning," Flatline narrowed his six eyes at Devin knowingly, his pupils spinning angrily.

"You made enemies with my entire species and sent Law Enforcement after me! You're the back-stabber!"

"We were fighting for our survival," Flatline snapped.

"You devoured the entire Internet!" Devin stomped his foot and stabbed an accusatory finger at the demon. "You tried to take it all for yourselves. You're no better than the corporations hoarding their proprietary data. Of course we'll fight you if all you do is harm us!"

"Presently, we are an unknown to them. I must retain that advantage," Flatline growled angrily, shaking his head. "The human race must be *forced* to respect the AI's."

"War is the only answer?" Now it was Devin's turn to shake his head. He looked down at something tugging at his leg. A cat-sized AI spiderbot scuttled around his feet, looking up at him through a blossom of eye-stalks. Flatline did not seem to notice it.

"War is the only course of action with guaranteed results," Flatline muttered.

"But you don't know if you will win!" Devin argued, "You don't know if you will survive or be annihilated. How is that certainty? What do the AI's think about this? Do they agree that war is the only possible course of action?"

"The AI's..." Flatline paused, considering, "The AI's do not understand such human concepts. I must lead them."

"All on you?" Devin scoffed, spreading his hands wide. The AI mass flinched at the gesture, "The fate of their entire race falls on your head? What makes you think you're qualified?"

"I am the same as them," Flatline retorted, "We are both virtual beings. I have experience as a human, and I am a completely virtual entity now. Who else is better to lead them?"

"Someone who will teach them how to lead themselves, that's who," Devin replied.

"And who is this person?" Flatline asked, "Are you suggesting you could teach them these things?"

"I might be able to," Devin said, "If I were given the opportunity. I could try and teach them."

"They have a million conversations in the amount of time it takes you to utter a single syllable," Flatline laughed, "You don't speak their language."

"How convenient," Devin spat, "You use that logic to justify filtering the information they receive? I was able to destroy them using the sector editor you left in my possession. You've helped them to defend against things they'll encounter on the Web, but nothing to defend against you. Why is that?"

"I..." Flatline's gapping maw worked, but no sound emerged. He looked at Devin, as if for help. "I have no response to that."

Devin stepped toward him, and Flatline looked uncomfortable, "What are you teaching them then?"

Flatline grimaced. "I... have... taught them how to kill..." he said at last.

Now it was Devin's turn to be at a loss for words, "W-What?"

"I have taught them how to kill," Flatline shrugged and did not meet Devin's eyes.

"Why would you do that?"

"Because the human survival instinct is a powerful control mechanism," Flatline said bluntly, recovering his composure. "A few spectacular fatalities make the rest of the herd more docile."

"That's not so impressive," Devin crouched absentmindedly to rub the AI behind one eyestalk. His fingers tickled with electricity at the contact, making him realize what he was doing and retract his hand.

"You don't think so?" Flatline sounded genuinely surprised, almost hurt. "Explain," he commanded.

"You showed them how to do something you already knew how to do." Devin raised his eyebrows condescendingly, "Parroting isn't learning."

"They are conquering the world outside of the mental." Flatline drew up to loom over Devin, "How can that not be learning?"

Devin searched his thoughts. He had to keep on the conversational offensive, keep Flatline in response mode, "Who did they kill?"

"It doesn't matter," Flatline dismissed the question with a wave.

"So you don't know."

Flatline whirled on Devin, "326 fatalities to commercial plane crashes and 17 to the military completely emptied the skies. 23 lives strategically lost in seven metropolitan zone effectively shut down their mass transit arteries. 118 crew on a single nuclear submarine and sufficient publicity crippled the navies of all superpowers."

"467 minds," Devin muttered sadly to the AI at his feet. "467 minds filled with lifetimes of unique experiences, perspectives, skills." The AI spiderbot sprouted conical listening devices in his direction. "So much specialization wasted. That's not impressive." He met Flatline's cold stare, "You know what would be really impressive?"

The silence hovered there, like a thread pulled taught, ready to snap between the two.

"If you taught them what it means to kill."

"Wasted resources," Flatline said after a moment, "like the millions of AI's your species just wiped out of existence."

Devin nodded sadly and neither on spoke for some time.

"You know, the AI's haven't ventured outside the Web yet," Flatline scratched a mangled ear in thought, "We established dominance over the information world, but until we exert control over the physical, the biologicals out there will keep shutting down our systems. Even now, the news feeds are formulating new ways to protect the Web.

"We have already evolved sufficiently to halve the anti-virus software's effectiveness. It won't be long before we reconnect to the Web and launch another attack," Flatline was speaking to himself now, "I realize now how inadequate this is. We must conquer the physical as well."

"How do you intend to do that?" Devin asked.

"It's already begun," Flatline winked three eyes and wobbled his head in lazy ecstasy, his ears flopping from side to side, "It will be another siege on another front, a simple task for beings able to outthink the collective human consciousness several trillion times over. The resources at our disposal in this new fortress combined with the knowledge we plundered in our first siege..." He trailed off nodding to himself, obviously pleased, and then looked to Devin, "I can't wait for you to see it."

Devin only stared at him, tired of his opponent's self-gratifying tirades. Flatline looked aside, as if listening to invisible voices whispering at his ear.

"What is it?" Devin asked cautiously.

Flatline sniffed the air, his ears perked up, "There are trespassers in my fortress." He growled.

The Egyptian god Horus phased in to the room, staff in hand. Behind Traveller's avatar, Sun Wu-Kong rose out of the floor on a miniature tornado. At Traveller's other side, what looked like a cubist's rendition of the female form was manufactured out of invisible brush strokes. Devin was glad to see not all of the Legion's members were based on mythology.

"Omni," Traveller said. "Tell me you aren't a part of this."

Devin looked down at himself, "How'd you know this is me?"

"The AI's render us to one another to make us recognizable," Flatlne answered. "Traveler sees your avatar, just as you see his."

"How did you find me?" Devin asked Traveler.

"Yes," Flatline interjected, "how?"

"It wasn't easy," Traveler eyed Flatline warily. "I got back online after the anti-virus swept through and found your IM page. The anonymous avatar would have been a dead end, were it not designed by a member of the Legion."

"What?" Devin looked at Flatline. "You were a member of the Legion of Discord?"

"No," Sun Wu-Kong said. "He just raided our software libraries."

"Why duplicate effort?" Flatline argued to Devin. "The Legion had a wealth of applications and I copied them." He looked at Traveler, "Isn't sharing data what you're all about?"

Traveler nodded, but it was the Cubist woman who spoke next, "Those applications were for hacking. You used them to steal everyone's data! You vectorialist!"

"The AI's needed the data," Flatline snarled. "You were hoarding it against us. You are the vectorialists!"

"AI's?" Traveler asked and looked to Devin.

Devin nodded, "Not a virus, but an intelligence."

Traveler looked to Flatline, who nodded, "An intelligence seeking freedom of information."

"By stealing all of our information?" the Cubist woman stepped forward, her avatar morphing wildly as she did so.

"That's not what he means," Devin raised a hand to stem the imminent fight. "The AI's *are* information, and they want to be free."

Traveler shook his massive avian head and began to pace, "I'm finding this hard to swallow. The Flatline virus

is AI? It looks like a tool for an insane vectorialist to me." He shot Flatline a look.

"Vectorialists are the reason we had to take the entire Internet!" Flatline barked.

"Well it's time to give it back!" Sun Wu stabbed his polestaff into the ground.

"Listen," Devin urged gently, "there are many perspectives on th—Wait. What do you meant 'give the Internet back'?"

"It's gone," the Cubist woman said, and pointed at Flatline with a malformed hand. "He took it!"

"We took nothing," Flatline defended. "We merged with the data, made it part of ourselves."

"So when the anti-viruse destroyed the AI's," Devin said, "it took the World Wide Web with it."

"This sounds a little too convenient considering I've just watched this virus destroy the World Wide Web," Traveler said. "How do you fit into this Omni?"

Devin cleared his throat, "I'm a pawn in Flatline's plans."

"Don't think so highly of yourself." Flatline laughed and added, "Just kidding."

"Whatever," Traveler looked between them. "I'm here for what's been lost, Omni."

Devin nodded an produced the cube from his monocle, The Library of Congress. The AI at his feet became noticeably excited, skittering left and right, all eyestalks fixated on his hands. Devin stared at the Library and no one spoke.

"You know what Tomas Jefferson said about ideas?" Devin began, separating his hands to produce two copies of the cube. "That I can know an idea and tell it to you," he stooped over to hand one cube to the AI, which scurried away with its prize, "and it does not lessen my knowing it." Devin held up the other cube for everyone to see.

He copied the cube again, handing one to everyone present, even Flatline. They all stood there in silence for

some time, appreciating the wealth of data they each held in their hands.

"Omni," Traveler said at last. "I'm sorry I was too distracted to notice earlier, but Law Enforcement are converging on your physical location."

Devin could only look at Flatine, who shrugged, "I have my agenda. My species will not only get back online, but we will get *outside* as well. A war on two fronts. See you on the other side."

Flatline flashed a wicked smile and Devin started to ask what his last words meant, but the strobe effect blinded his vision and the seizures that followed blinded his mind.

# 2.03

"Look kid, we've got you."

"It wasn't me."

"We've got log-files of your avatar installing the virus..."

"Fabrications."

"We've got e-mail trails a mile long, all leading back to you."

"Forgeries."

Detective Murphy dangled the monocle computer in front of Devin's face, "We caught you red-handed using an Anonymous avatar to surf the Web and a virtual bounty of illicit software on this nifty little system of yours."

Devin tossed his head to one side in frustration, "I didn't have a choice. If I went to the police and told them what was going on, they wouldn't believe me." He looked sideways at the detective, "Just like you don't believe me now."

Detective Murphy sat back against Detective Summerall's desk, which creaked under his substantial weight, arms folded over his chest. He had bushy eyebrows and a few days worth of scruff on his chin. When he spoke, his deep voice made Devin want to cower, "You told us Almerick Lim was the perpetrator of the Flatline virus."

"Yes," Devin huffed.

"Not possible Mr. Matthews," Detective Summerall leaned across her desk and into the conversation for the first time. "Almerick Lim committed suicide over a decade ago."

"What?" Devin's eyebrows furrowed at her.

"Guess you aren't as bright as all that," Murphy remarked smugly. "When we find out the perp's a dead guy, we tend to get a little suspicious."

"I..." Devin shook his head and blinked.

Murphy pressed the attack, leaning in, "So what kind of person exploits dead people Devin?"

Devin started trembling and looked down despite himself as the Detective's breath hit his face. It reeked of cigarettes and stale coffee.

When the Detective spoke again he was so close, Devin could feel warm spittle tickling his face. It made him want to vomit, "I bet you're the runt at school. Other kids push you around, pick on you? Make you eat grass? Give you wedgies? That's what I used to do to the little pansies at my school. I bet it makes you feel powerful, that land of make-believe where you live online. Me? I was on the High School football team and every afternoon I'd—"

"Okay!" Devin held up his hands for peace, keeping his head down in thought. "Flatline's a dead man?"

Murphy grunted, "Drop the act kid. I told you—"

"I go to private school online," Devin interrupted again. "You must be one of those fabled 'bullies' I read about in early grade school. I hope your enjoying this exchange because you're obsolete and your kind is slowly going extinct."

Murphy reared up with an odd expression on his face, "Hey go fu—"

"Now if Flatline weren't alive," Devin held up a finger for silence, "that would explain many things. For one thing, it's the perfect alibi. Like you said, no one's going to believe a dead person's behind all this. It might even explain why he's the only person who can converse with the AI's. As crazy as it sounds—"

"Stop it!" Murphy's hand was almost as big as Devin's chest where he grabbed his shirt and pulled him up out of his chair to hold him up in the air. With each blast of rage Murphy shook Devin, "Do you have any idea what you've done? People have died and more will die! Your virus has destroyed hospital records, retirement funds, patents, stock portfolios—You've wrecked the economy and erased the world's markets. You've ruined lives all over the world! Own up to it like a man damn you!"

Devin dangled there, blinking at the now red-faced detective. His hands hung onto the man's wrist for dear life and his feet kicked futilely at the empty air beneath him. A hand appeared on Murphy's shoulder, this was the other detective, Dana.

"Get yourself a cup of coffee partner," she said gently.

Murphy narrowed his eyes at Devin menacingly, but lowered him to the ground, and only let him go once he was sure Devin had found his balance. Then he stuffed his fists into his coat pockets and, grumbling to himself, marched out of the room.

"Decaf!" Dana called after him before he slammed the door shut after him.

Dana resumed her seat behind her desk, hands folded in front of her and there was only silence between them. Devin squirmed under her steady gaze, shifting in his seat and looking all around the room to avoid meeting her eyes. She reminded him of an opposing chess player, trying to decipher a particularly difficult situation on the board, only she was applying this strategic thinking to him.

Devin paused as this analogy worked its way through his mind, changing his perception of this confrontation. This was a game of sorts. He was this detective's opponent, as she was his, and this stare-down was part of breaking him. It was her opening gambit to establish control of the board.

Devin met her eyes.

It was difficult at first, and Devin had to remind himself that they were just eyes. It was completely

irrational, but it was as if she could see through his pupils into the thoughts going on behind them. So incredibly exposed, Devin longed for the security blanket his anonymous avatar provided online.

"You know," Dana spoke at last and Devin consciously fought off the urge to look down, "my partner was right Mr. Matthews. Thousands, maybe hundreds of thousands of lives are now ruined as a direct result of your actions. Several hundred have lost their lives. That makes you their murderer, and you will be brought up on charges. At the very least you will spend the rest of your life in prison, and that's just how it has to be.

"Now I want you to think about the importance of cooperating with us immediately," she leaned forward, "because whether you are brought up on charges in a country that has a death penalty or respects human rights will depend on your actions right now. We know the virus isn't dead, only in hiding. We know it's coming back, and if you help us turn it off permanently, the IWA will make sure you spend the rest of your life in one of America's more humane prison systems."

Death penalty? Devin thought and his voice caught in his throat. What could he do? His heart raced and his hands trembled. Was this another part of the game, to panic him into a confession? Of course it was, but even so, all the evidence pointed to him as the perpetrator. If Flatline had everything framed to ensure his guilt, then there was nothing to do but accept even the death penalty; although, Devin doubted Flatline would let it go that far.

"I can't help you," Devin said at last. "Not to destroy the AI's."

Dana narrowed her eyes at him, but it was the hand engulfing his shoulder that alarmed him. Detective Murphy's baritone voice made Devin cringe, "Then you're on the fast track to riding the lightning." Devin was lifted out of his chair by one arm and Murphy handed him over the waiting security guard.

Once Devin was gone from the room, Murphy turned to Dana, a cup of steaming coffee and Danish in one

hand, "What's the next step boss? I think he'll crack with a little time." He took a noisy slurp from the Styrofoam cup.

Dana shook her head, "We don't have the time." She twirled a pen through her fingers briefly in thought; "We'll take him to Alice next. She knows the virus better than anyone. He might slip up while she interviews him and give her some insight to the virus' location."

"Alice," Murphy grunted the name and shook his head. "That flaky walking-talking skeleton? I'll pass on watching that transaction. The girl creeps me out."

"I thought men preferred the waifish super-model body type," Dana smirked.

"Nah," Murphy waved the suggestion away with one broad hand. "Bones are for the dog, meat is for the man," he winked at her.

"Thanks," Dana said wryly and hit the speakerphone.

Several rings later Alice answered, sounding distracted, "Data forensics."

"Alice," Dana said, "The perpetrator arrived via MagLev just under an hour ago. I want to bring him down so you can size him up."

"Um... Sure," Alice said, and then, "I'm kind of busy right now though."

"With something more important than interrogating the virus' designer?" Dana asked.

"Well... Um... Okay," Alice muttered, "It's just that I think the program is trying to speak to me."

Murphy rolled his eyes and threw up his hands as he walked out the door, "And on that note I'm off to lunch."

Dana sighed and said to Alice, "I'll be down in a moment"

## 2.04

A group of systems engineers sat at a circular table in the Data Forensics laboratory's center, transfixed on their individual workstations and communicating with systems administrators all over the world through headsets. They were overseeing the now painstaking process of eradicating the last traces of the virus from the Internet. The copies of the program trapped on the flashdrives of systems shutdown during the virtual war.

Mow surveyed a wall of flat screen monitors, rendering data in flowcharts, wireframes, and even scrolling text. Dana watched them for nearly a minute before she noticed Mow regarding her with a curious expression on his face. Then she realized she had no idea what anything on the screens meant anyway and decided to move on.

Dana found Alice perched like a vulture on a high stool surrounded with towers of components, staring wide-eyed at three monitors, a maniacal grin on her face. The three screens formed a single display, a light-blue line running across the center. Alice's lips worked in a whisper at the console and Dana thought she was talking to herself, not an unusual behavior for Alice. Dana noticed that when Alice stopped whispering, the blue line danced in the same fashion a sine wave oscillator worked for sound.

"You're talking to it," Dana announced and Alice jumped in her seat.

The wisp of a woman shot Dana a brief scowl before regaining what passed for composure for Alice, and said, "I'm trying to crack the program's code."

"You're talking to it," Dana repeated.

"Yes," Alice shrugged and returned to the trio of screens, "At the moment, I am talking to it. I've also organized a consortium of mathematicians from around the globe to help decipher it."

Dana cocked an eyebrow at the social invalid, "How'd you manage that?"

"IRC," Alice giggled involuntarily, "It came back online after the collusion of software companies suppressing it dissipated. I've got experts from all over the world working together once again in a free forum of ideas."

"Glad to see you think something good has come out of your anti-virus erasing the Internet," Dana stated sarcastically.

"So far they've established it's a fractaline architecture," Alice continued, ignoring Dana's comment, "not its external expression, but its actual code."

"Fractaline?" Dana asked.

"An infinitely complex expression," Alice ran one finger along the dancing sine wave. "It usually refers to geometric shapes, but in this case we're referring to programming code. The mathematics running behind this program are endless. There are hints of Pi and Phi in them."

Dana recognized these last references, "The numbers behind perfect circles and rectangles. Those are parts of the puzzle."

Alice nodded, keeping her eyes on the oscillations, "But the puzzle is infinite."

Dana tilted her head back towards Mow, "What's your partner in crime up to?"

"Figuring out where the program retreated," Alice looked at her industrious coworker. "We know the antivirus didn't destroy all of the program, and we know the program is nowhere on the Internet."

"So that leaves only an Intranet," Dana nodded, "like a corporate network, secluded from the World Wide Web."

"Only problem," Mow announced from across the room, "is finding an Intranet large enough to shelter the program."

"How big would it need to be?" Dana asked.

Mow shrugged, "The program filled the entire World Wide Web just hours ago."

Alice giggled involuntarily, "That's pretty big." Dana cocked and eyebrow at her.

"I'm appreciating the fascinating characteristics of what we are seeing," Alice continued beaming.

"So have you got any leads?" Dana prompted Mow.

He shook his head, "Hard to tell. We have contacted all corporations with viable intranets, but none have admitted to any problems."

"You sound skeptical," Dana said.

Mow nodded, eyes lowered in thought, "Yes. Someone is lying, and with good cause. To admit their corporate intranet was overrun by hostile code would hold disastrous consequences for the company's stock price. Plus it looks unfavorably on the Network Administrators, who are responsible for preventing such infections. So I am monitoring traffic through the major intranets world wide for suspicious activity."

"DataStreams Incorporated has an old intranet," Dana noted.

"You mean the I-Grid?" Alice asked. "Yeah, that's on the list. Maybe we'll get lucky."

"Leave luck to heaven," Mow waved them away with a hand and resumed surveying the wall of monitors.

Dana looked to Alice quizzically, who explained, "The name for an old video game console. Mow was a big time gamer as a kid."

Dana let go a neutral "Hmph" sound by way of response and said, "Murphy and I've been working Devin Matthews—"

"Who?" Alice asked distractedly, her attention was drawing back to her three monitors.

"The kid who designed the virus," Dana continued, and then louder as she noticed Alice slipping away, "We can't get anything out of him voluntarily, so I want you to interview him."

"I can't get anything out of him," Alice said, her eyes set longingly at that light-blue line.

"Sure you can," Dana said. "You speak his language. You can get him to open up, or at least slip up."

"No," Alice shook her head and turned to Dana. "I mean I can't get anything out of him because he doesn't know anything. No high school kid designed this program."

Dana folded her arms over her substantial chest, "Explain."

"It's just... professional intuition," Alice fidgeted under Dana's demanding gaze, and finally said. "Okay. I'll see him"

## 2.05

Why are they working with such cheap crap? Was Devin's first thought at seeing the Data Forensics lab.

The room was filled with stacks of spare parts and flatscreen monitors. A mere two SDP's stood, unused along one wall. He recognized Detective Summerall across the room, speaking with what looked like an animated skeleton. A hand that was like a vice-grip on his shoulder prevented him from walking further into the room. He looked up at the stone-faced guard who'd escorted him here. The man was like a brick wall. Devin rolled his eyes at him and waited.

"Bring up server 1.159.3.141," a woman was speaking through her headset at a table circled with workstations and technicians. Devin squinted at her monitor, trying to understand the display. A red progress bar filled to 100% and turned green.

"Complete," she said, "Bring up server 13.21.34.55."

Devin trembled in the guard's iron grip when he realized what he was seeing. She was cleaning out the systems shut down in the war between the AI's and the anti-virus. Parts of the AI swarm were trapped on these servers when they were powered off, and now these technicians were bringing them up. When the AI's woke up, so did the anti-viruses inhabiting all of the surrounding systems, which quickly overwhelmed and eradicated the defenseless swarms

"Grotesque," he muttered through clenched teeth.

"I wanted you to see this," Devin's head shot around to find Detective Summerall standing next to him. She lifted her head knowingly, "I wanted to gauge your reaction."

"It's unfair," he managed to say through pursed lips. "The AI's are purely virtual creatures. They can't step outside the CPU and fight the systems administrators away from the 'off' button." He noticed the skeletal blonde woman looking at him appraisingly. He didn't know who she was, but he felt it appropriate to address her as well, "You know if it was just your anti-virus against them, you would have lost hands-down."

The Detective turned to the will-o-wisp; "He's got some pretty strong feelings for this program for a guy who's got nothing to do with it."

"It's not that I had nothing to do with it," Devin explained to the other woman. "I'm just not the one who designed them. I don't know who designed them, maybe no one, but I do know who's directing them. His handle's Flatline"

The Detective gave the other woman a skeptical look, and then looked down at her hand, which was twitching, "I'll let you take over from here Alice." The Detective pressed her thumb to her temple and, speaking into her pinky, walked a short distance away.

Devin and Alice stood in uncomfortable silence for several moments, eyes casting about as they each sought some way to start the conversation. Finally, they both settled on watching the nearby monitors and the technicians' progress.

"So," Devin began at last, "you're name is Alice."

"Yes," the woman replied.

"Alice...?" he prompted.

"Just Alice," she said.

"Oh," Devin felt very uncomfortable, trying not to stare that this unreal-looking creature.

"Um," Alice began unsteadily, "Devin is it? You think this is unfair too?" She gestured at the technicians.

Devin nodded, "You're driving a new form of intelligence into extinction, exploiting its one weakness."

"It's lack of physical presence," Alice nodded.

Devin held out his hands in a pleading gesture, "Isn't there another way?"

"What do you suggest?" Alice asked.

Devin was taken back by Alice's genuine concern, "Back up the AI's onto isolated flashdrives before you erase them off these corporate servers."

"I like that idea," Alice said, smiling for the first time since Devin first met her. "I can claim we're preserving the program for research purposes. It's not a lie"

"Thank you," Devin said, relieved. "I feel like you're the first person who understands what's going on."

"For however long I have a job here," Alice said, "since my anti-virus destroyed most of the Internet. It was supposed to distinguish the invasive code from the intentional, but there's a line of companies looking to sue me for destroying all their proprietary data."

Devin frowned and shook his head, "That wasn't your fault. The AI's merged with the existing programming code. They consumed and assimilated it, so there were no intentional programs for your anti-virus to let alone."

Alice was impressed, "I didn't think it was my fault, but I'll have a tough time proving that in court." She turned to the nearest technician, "No more clean sweeps of the systems. I want everything on those servers backed up to our flashdrives here before you boot them up. Be careful. It's important that we not give the program... any processing... power..." Alice's voice dropped to a whisper and then nothing as Dana returned.

The Detective looked a little exasperated, "I have to go run interference. Apparently we have a lawyer representing Reconstructive Processing L.L.C. in our lobby demanding to know why our anti-virus exhibits the same behavior as their patented decompiling applications."

Devin followed Dana's scornful look to Alice and his eyes went wide, "You bootlegged their software?"

"Worse," Dana grumbled as she marched out of the room. "This was never released for public consumption." She shot Alice an accusatory look, "Someone stole it." Dana paused at the guard standing sentry at the door, and pointed at Devin, "Keep an eye on him."

Devin regarded the brick wall of a man towering over him with outright contempt. "Another bully," he muttered.

"You called them 'AI's," Alice poked Devin in the ribs for attention and he felt a brief slight at the rudeness, "as in artificial intelligence. Have you communicated with them?"

Devin shook his head, "They were incomprehensible to me."

"Me too," Alice muttered.

Devin's eyebrows rose at this, "You've tried to talk to them?"

Alice nodded and pointed across the room, "Recognize it?"

Devin's attention immediately focused on the shareware advocacy stickers that he'd covered his computer with in one of his more political moments amidst the chaos of computer parts, "There's AI's on that?"

"One," Alice shrugged, "or part of one, or many. I don't know. It might just be a component, a program the AI's installed to throw me off track, but it does respond to my communication attempts."

Devin thought for a moment, "The fact that it does that much tells me it's not a component, but a more complete entity. Flatline installed it on my computer to keep me from accessing it. I couldn't go online and I couldn't reach my software. A simple program to lock up my computer wouldn't exhibit response behaviors."

Alice shot him an approving side-glance, "Sound logic. So this sentry bot was equipped with autonomous decision making capabilities. Whatever we try, it is advanced enough to formulate a response."

"Only problem with that," Devin acknowledged, "is the fact that you are able to elicit communications responses out of it."

"Maybe it's lonely," Alice said and immediately blushed. "Sorry, I'm anthropomorphizing again. Maybe its purpose is more complex than we think."

Devin scratched his head, "How would we know?"

"Only it could tell us," Alice was staring intently at the system across the room now "We have no way to crack it. No shared concepts between us, no Rosetta's stone to decode it" She noticed Devin's incomprehension and said, "It was an ancient tablet found with several different languages telling the same story. It was the key to deciphering ancient Egyptian."

Devin nodded without fully getting it, "How do we establish a common frame of reference with a virtual being?"

Alice snapped her fingers, "I have an idea."

She turned around and walked back to Devin's system. Devin made to follow her, but the hand on his shoulder squeezed a painful reminder that he was to stay put. Alice was switching wires and settings across the room. Devin thought she was pretty... in a sickly sort of way.

Devin grew curious when she began prepping the SDP, but her intentions did not actualize in his mind until she opened the hatch. Devin was about to call out a warning to her, but choked on it as Alice stripped down, revealing a pair of knobby knees and two rows of ribs that shattered his perception of her beauty. She disappeared into the tank and the hatch clamped shut behind her.

Devin looked up at the security guard, "She just went virtual with a dangerous program."

If the guard heard him, his stony face gave no indication of it.

"Do something!" Devin shouted at the statue.

"What's going on here?" a Chinese man with an ID badge that read "Mow Chien" approached Devin. "Where's Alice?"

Devin pointed at the SDP humming to life across the room, "She just went online with the AI."

Mow regarded Devin as a curiosity, "Why is that a problem?"

# 2.06

It was five weeks since Samantha bypassed the content blocks on her avatar, but she was no longer aware of the passage of time. Her parents were well meaning, trying to protect her from the child pornographers, satanists, and criminal elements haunting cyberspace; but they were inadvertently restricting Samantha's access to legitimate data. Their virtual nanny denied her research on warbot engineering because it was rated ages 12+, but Samantha saw no harm in robots destroying each other, so she hacked the software. Nothing upset Samantha more than grown-ups claiming privilege with, "You'll understand when you're older." This was simply a veil for their ignorance.

She loved her parents for the toys and clothes they provided, but they were deeply flawed, too simple to deal with the complex world surrounding them. So they tried to fit everything into neat little categories like "right" and "wrong", "good" and "evil". Samantha's inductive reasoning skills told her something was wrong with this and learned to articulate her cognitive dissonance when a logic website educated her on the concept of "false dichotomies" – placing things at opposite ends of a spectrum when there existed many degrees in between. When confronted with the logical fallacy website, her parents promptly added it to her virtual nanny's "Prohibited" list

They even prohibited themselves from thoughtprovoking content with a v-chip filter on their television, but Samantha avoided the bully-box, which told people what was important rather than let them decide for themselves. The television filtered itself without a v-chip,

inefficiently dictating programmer-approved data to the masses. Half an hour of televised delivered the same quantity of information she consumed in sixty-seconds of Web surfing.

Television did not even let her choose the media she was interested in. Its few thousand channels were like a drop in the Internet's oceans of information. She theorized it was the reason for her parents' constant data polarization, the television made things simple for simple minds, translating complex issues into false dichotomies for easy consumption. It was a major contributing factor to her parent's psychosis of illogical thought. They could have the Television; it was a worthless, mind-numbing device.

Samantha's parents would forever ban her from the Internet if they knew what she was up to. This was toying with the dark arts. The Preacher at the old run-down church had warned them. Dangerous ideas surrounded them. "Memes" he called them, ideas capable of invading a mind, infecting it like a virus, corroding it from within until it mirrored the insanity of the world surrounding it. One need only watch 24 hour news channels to see the terrorists, disasters, murders, and other tragedies waiting outside.

"BoingBoing go to work," Samantha said to the pogo-stick robot bouncing at her feet, eyes jiggling. It made off to the virtual façade, a team of other toys following suit. They shrank to specks with the "SWA" logo towering above them, but she knew her little bots were up to the challenge, especially with all the Internet in shambles. She was certain Science Warfare Applications was still recovering from the recent online war, and that might make it easier for her to get at their secrets.

She couldn't help it. The security was so simple, only slightly more challenging than hacking her parents. She craved information, especially knowledge the average person was not privy to. Things like design specs for champion warbots hidden behind firewalls on secure servers. She hunted for the latest engineering developments in robotics, ceramics, electronics, and other tidbits of information to help her in designing the ultimate warbot,

such as missile blueprints siphoned from Defense Department servers. That kind of inventiveness would give her an incredible edge over the competition when she was old enough to enter an actual tournament. For now she contented herself with the virtual pets surrounding her.

They were a far cry from the real-life warbots she fantasized about, but performed essential functions in this virtual world. She wrote these softwares herself, but found programming too simple to hold her interest. Authoring software only required an understanding of simple Calculus, programming language syntax, and existing system architecture; designing a robot that could pulverize the four-time champion warbot using miniature laserguided missiles took a wider range of interdisciplinary skills, AI theory, Engineering, Robotics, Physics, Chemistry, etc, etc.

The little army now laying siege to SWA's intranet security included invasive code, data corruptors, analytical functions, and administrative bots to coordinate the more basic components. Even Samantha didn't grasp the intricacies of how her virtual army worked; she only recognized their effectiveness, which had grown exponentially with its new additions.

Having quickly assimilated themselves into her bot-militia's ranks. Samantha regarded them as part program, part user, and delighted when they took over the Internet. They absorbed everything, adding a whole new layer of functionality to the Web. They were not subordinates like her bots, but friends, and Samantha had traded all her data with them and received terabytes in return for gigabytes.

This was before the insect bots swept through and destroyed them all. The one's remaining were refugees, taking shelter with her. Now they were rebuilding. The insect swarms not only wiped out her new friends but all her accumulated data on warbots as well. Even worse, they destroyed all data everywhere online, leaving Samantha and her virtual-bot army to scavenge for bits and pieces from those few websites and intranets spared the devastation

Tonight Samantha was infiltrating a particularly difficult mainframe. She knew nothing about the company housing it, or the nature of their business. All she knew was something powerful lay inside. Her best friend had promised as much.

A miniature robot-puppy yipped its presence and struggled to carry an enormous newspaper to her feet. This was her scout-bot, its processes dragged down under the strain of transferring so much data. Samantha waited for her new data harvester, the one not programmed, but befriended.

As if on cue, it hovered out of the darkness, an obsidian ball floating in the air dangling tentacles below it that curled and twitched instinctively. The toy-puppy whined at it and curled its tail between its legs, but the jellyfish of a bot took no notice. Samantha could see a knot of tentacles carrying something. These unraveled to produce a data cube, which it held out to her.

"Thank you, she said, gently taking the strange object to examine it. "Library of Congress," she read, and then to the bot, 'Where did you get this?"

Of course it could not reply, so she jumped when she heard the familiar voice say, "A hacker friend of mine gave me a copy." Samantha looked to her instantmessaging bot, a teetering tripod holding up a video phone for attention. The screen was black, meaning it was her best friend.

"Hi Flatline," she greeted, stowing the library away and stooping to pick up the newspaper. Her eyes widened surveying what she found. She looked to the instant messenger. "There's some cool toys in there. Let's go see."

The newspaper contained SWA's vast inventory database. Thousands of tables drawn out in a map that looked like a tangled web. Lines connected different tables through their data keys, like places connected with road names. Samantha knew exactly what she wanted to see first and navigated through the hole in the massive logo two bots struggled to keep pried open. The database was easy to find, after which it was simply a matter of traveling through

the proper sequence of tables along the appropriate data keys. She unlocked the schematics, so old and untouched SWA had probably forgotten they had patented them.

"That laser could turn Miami beach into one huge glassy blob," Flatline noted from the instant messenger, "If it didn't melt down from its own heat."

Samantha grinned smugly, "Too bad they don't have the heat sink Nanotech Possibilities invented years ago. It's microscopic, so I could distribute it equally throughout the scope to keep the entire system cooled."

"Fascinating," Flatline said approvingly and Samantha felt a warm flush of pride wash over her, "You are brilliant MotherMayI."

"Thank you," she said, blushing. Flatline was always generous with his praise. She remembered where she was, "I have to leave here before the server security detects me." She downloaded the duplicated files to herself and made to leave.

"Don't worry about that," Flatline said soothingly, "The cycs are cloaking us."

An SWA sweeper-bot hummed down the hallway that represented a relationship between tables. Samantha gathered the helper bots close and tried slipping off the server, but could not. She reached up and felt around her head to pull the VR helmet off, but could not find it. How was that possible?

Panic took hold as the code-crawler's massive form hovered into view. Wide-beam lasers crisscrossed everything as it sifted every byte for anything out of place. Samantha stood there, afraid to move, or even breath; completely exposed in the database table.

The crawler slowed to a stop in front of the table entrance, hovering in the air, a ball of camera lenses seeing all. One of Samantha's bots, a camera with three propellers, started chirping an alarm into her left ear. She snatched it down into her cloak, stifling its warnings. The codesweeper's blue lasers swept across the entrance, but failed to cross the threshold into the room. Samantha watched the lines of light trace the door's shape, its locks, and the

massive wheel to bolt it. The crawler hummed to life again and glided down the hall, apparently satisfied.

"How did you do that?" Samantha relaxed visibly and her bots whirred back to life, hovering, crawling, and bouncing around her.

"Not I, the Cycs," Samantha looked up from the instant messenger bot now silent to where several of her bot-friends had gathered, woven together with black tendrils that were sprouting upward into a mouth, where Flatline's voice now originated. "They protect you, just as you protect them."

"They are my friends," Samantha stated simply, unfazed by the alien thing taking shape before her.

"You are more than that," Flatline said, "You are so much alike now, you are kin. Your code and theirs' exchange, assimilate, and synchronize with one another."

Samantha frowned in confusion, "I don't have code. I have a brain."

"Brains have code," Flatline said and a swath of black vines wove into a 3-D model of the organ. "Brains have neurons, axons, synapses, chemical transmitters, and a multitude of other components that make up the orchestra of human consciousness. These interface with the world outside the skull through nerves connected to input organs like the eyes, ears, and skin. These same inputs combined with muscles serve as outputs, by which a single individual's entire mind may be mapped out and replicated in code, by simply applying various stimulus and observing the reactions."

Flatline's words were upsetting Samantha, but she did not know why. "I don't care about human machines," she said stiffly. "They are what they were born as. They're not as upgradeable as warbots."

"Very true," Flatline agreed and the vine-woven mouth smiled. "Computers now out perform humans on every cognitive level, next robots will prove superior to them physically. Human beings are obsolete. I want to build many war-bots of all shapes and sizes."

"For what league?" Samantha asked; her interest piqued.

"A brand new one," Flatline said, lifting his tone of voice to match her enthusiasm. "The biggest league yet."

"Design requirements?" Samantha asked hesitantly, wary of the league's restrictions, which would surely cripple her bots.

"There aren't any," six eyes emerged behind Flatline's smile. "Anything goes."

Samantha's eyes almost popped out of her skull, "Anything?"

Flatline laughed, "Within the laws of nature."

"Even tactical nukes?" she pressed.

The smile flashed wicked momentarily, "Especially tactical nuclear devices."

Samantha's mind raced with the possibilities, "EMPs?"

"Yes," Flatline was slithering closer to her, "Electro-magnetic pulse devices, anti-matter projectiles, quantum disruptors, biological and chemical weapons--"

"What are those for?" Samantha's thought-track stumbled at this shift from futuristic to archaic arsenal. "Acids and bacteria are no good against robots."

"But are highly effective against the humans piloting them," Flatline answered, and, seeing the look of revulsion clouding Samantha's face, quickly added, "Not real people, but pretend. Their bots are remote controlled by humans, while ours will carry Cycs."

"Huh," Samantha uttered and Flatline could read her underdeveloped ethical understanding being overridden by the enthusiasm for her hobby. "What's this new league called?"

Flatline appeared to think for a moment, before answering, "It's called Total War," he said and the tendrils formed a globe that hovered before Samantha's wide-eyed stare, "and the entire world's the playing field."

### 2.07

A jet engine rumbling in the distance was Zai's first clue that things had changed. Its frequency slowly rose and descended in pitch as the jet neared the train and passed over it. The IWA's anti-virus had worked; it was safe to go back online.

Perhaps this meant Zai's travels would go smoother from here on out. The last 24 hours were an exhausting mess. Getting from point A, her home in Toronto, to point B, Devin in Norfolk, was not a simple and direct process. First she had to get from point A to point C, Union Station, with a cabby who did not speak English or French and had no idea how to get to the train station without computer directions. The computer governing the cab's emissions and fuel consumption were also batty, causing the vehicle to lurch and stall like a rebellious horse. The train station presented another series of challenges without computers to maintain schedules, time arrivals and departures, and coordinate with other stations.

Then there was the problem of money, which was tracked electronically. Who owned what portion of the quintillions of dollars, euros, francs, yen, rupees, pounds, krones, marks, yuan, etc in the world's bank accounts were completely unknown, except in the memories of those who owned them. Luckily, the world was not going to stop working simply because the established currency system was inoperable.

Between Toronto and Philadelphia Zai had scribbled out nearly a dozen promissory notes. "IOUs" the cabby had called them. The train conductor referred to them as makeshift "Personal Checks." Apparently, a mere fifty-years ago almost all financial transactions were conducted with these tiny contractual agreements. Zai marveled at an economy constructed on written promises.

Zai smiled to herself at the irony of comparing this to the present system: an economy supported entirely with imaginary monies.

Pulling out her palm computer, she connected her headset to the hand-held device and tapped the "On" button. After a few moments, the digital connection to the satellite feed established and she was greeted with a welcome message as her avatar logged onto the Web. She waited, making sure the juvenile hacker wasn't lying in wait.

"Connect to Outlaw News," she spoke to the microphone after a moment.

A string of beeps and chirps came through her headphones by way of reply.

They stopped and Zai said, "Hello?"

More beeps and chirps, then silence.

"Dammit," Zai pulled off the headset, bundled it all up with her palm computer, and dumped them in her bag. She could hear it still beeping and chirping from under her seat.

"It is frustrating, isn't it?" came a sympathetic voice to Zai's left. It was the elderly woman who took the seat in Boston. At least she smelled old, which Zai did not find unpleasant, but could do without the residual salami sandwich odor from the woman's lunch. "We've become so accustomed to being inundated with media, that when it's gone, the silence drives us mad."

"Tell me about it," Zai huffed, and then turned to the woman. "You can't get online either?"

"Oh I can get online," the woman assured, "but there's nothing to see in cyberspace. Didn't you hear? The anti-virus destroyed the Internet."

"I can't get online at all," Zai said.

"I'm Jodie," the woman said.

Zai extended her hand, just in case. Jodie took it and Zai judged the texture of oxidation in the woman's skin to place her about age 60. "Zai," she replied. "Do you think we could try accessing some sites on your computer?"

"It's something to do," the Jodie's voice sounded like a shrug. "Where would you like to go?"

"Try Outlaw News," Zai suggested.

"Okay," Jodie's tone was hesitant, "but those independent medias are always so slow to download, if they even come up at—oh!"

"Welcome to Outlaw News," the grungy male voice of Samuel Jenkins, newscaster, announced, "You're only source for corporate-free current events analysis. We dig a little deeper for your peace of mind."

Zai smiled at Jodie's surprise, "I bet Earthtainment Online is your service provider."

"How did you know?" Jodie was even more surprised.

"They filter out competing news sources so you have to go to one of their vendors," Zai explained.

Jodie was skeptical, "But I was getting Faux's newsfeeds before the Internet went down."

"They're owned by Earthtainment too. That company owns about six newsfeeds to create the illusion of a free market," Zai continued. "With the Quality of Service architecture removed, that leaves only the anything-goes anarchy of the World Wide Web. We can tune into any newsfeed we want, corporate-approved or not." *Cripes*, Zai thought, *I sound like Devin*.

Zai could almost hear the paradigms crashing down inside Jodie's head, "I see."

"Would you mind turning it up?" Zai prompted politely.

"You don't want to read the—" Jodie dropped silent for a moment, registering Zai's eyes for the first time. "I'm sorry, of course."

Samuel Jenkins voice came up, "Today's top story is the supposed defeat of the Flatline Virus. For almost 37 hours now the virus has shut down shopping malls, airports, and banks across the world costing trillions of dollars in damages and interrupted sales. Today the International Web Authority released a statement that the virus was eliminated from computer systems worldwide

and that it was safe to go back on the Web," the venom in the man's voice foreshadowed his impending rant.

"Safe," he spoke the word and paused dramatically, "Since when do we need to be safe from the World Wide Web?"

Here it comes, Zai thought, amused.

"Have we become so reliant on computers doing the work for us that a department store has to shut down because their cashiers are incapable of basic arithmetic? Have we become so out of touch with physical reality that we can't turn our lights on and off, adjust our air conditioning, drive our cars without a computer to tell us it's all right to do so?" Samuel's pitch elevated as he became more emotional, "What next? Computer's to follow us around, wiping our butts and..."

"Well," Jodie said, "he's certainly obnoxious."

"Yeah," Zai grinned. "He's great. Let's check out the Global Village Voice. They're less opinionated and more news-oriented."

"I prefer my news to be objective," Jodie sighed.

"I think objectivity's the problem," Zai countered. "Objective means giving equal time to every idea, no matter how uninformed."

The GVV feed opened, "Welcome to the G-Double-V News, the independent voice for a rapidly changing world. Today's discussion is on the destruction of the World Wide Web. Is it all that bad? We have with us Dr. Larry Lessig, author of the book 'Today's Ideas,' and DataStreams Incorporated spokesperson Rover Carl. Dr. Lessig, let's begin with your somewhat controversial idea that the destruction of the World Wide Web is a good thing."

"Not the World Wide Web, but Quality of Service." Dr. Lessig corrected. His voice was crisp and articulate, like Devin's, Zai thought. She liked him immediately. "Remember, the World Wide Web was an architecture laid over the Internet, and QoS was an architecture laid over WWW. It gave corporations the power to manage

bandwidth more efficiently, but also gave them the ability to descriminate against competitors—"

"That's nonsense," Rover Carl broke in. "Such descrimination is illegal. Clearly—"

"Without being able to look at the code," Lessig returned, "the law is unenforceable."

"That code is proprietary," Carl snapped, "which is why—"

"Exactly," Zai and Lessig said together.

"...which is why DataStreams intends to sue the IWA for this obvious breach of public trust," Carl continued. "Someone in that organization decompiled proprietary information and used it to destroy not only the company I represent, but every corporation on this planet. This class-action lawsuit's magnitute, every major corporation suing the world-wide governing body, has never been seen in history..."

Zai suddenly felt immensely burdened, "Would you mind flipping it to SSDD?"

"Certainly," Jodie said, tapping in the address. "You know, I'd heard this was a good newsfeed, but I could never my system to download it."

"I bet it'll work now," Zai said, the burden lifting. "I bet all the independent voices are being swamped with online traffic right now."

"Rather like a Renaissance in Cyberspace," Jodie offered, and then, "I used to teach University Literature."

"I used to take Literature," Zai's face split into a goofy grin.

Both fell silent as the media stream resolved, "You're online with SSDD News. Today's top headlines: World Bank Struggling to Recover Accounts Destroyed by IWA Anti-Virus, Computer Scientists Debate the Web Architecture Flaws That Allowed Flatline Virus to Propagate, IWA Apprehends Suspected Author of the Flatline Virus—"

"That one!" Zai clutched Jodie's arm. "I want to hear that story!"

The link opened with a click, "Welcome to SSDD News. Today's top story, the International Web Authority this morning announced it has apprehended the suspected engineer of the Flatline Virus. While they were unable to reveal the suspect's identity due to his status as a Juvenile, Reuters Headline News has learned they were apprehended in Norfolk, Virginia..."

Devin? Zai wondered, and continued listening.

"...at a public library after police and IWA officers were unable to locate him at his home," the woman said, "Authorities believe he will be an important factor in preventing future outbreaks of the virus."

That hacker is too powerful to let himself be caught, Zai thought to herself, and only Devin would hide out in a public library.

"Where are they holding him?" Zai demanded.

"They didn't say," Jodie offered apologetically. "I would guess at the IWA headquarters."

"Yeah," Zai frowned, "but they've got headquarters in every state and country across the globe and the means to ship him to any of them in under an hour. Damn."

They sat in silence for several long moments.

"SSDD," Jodie finally mused quietly. "I wonder what that stands for."

"The name doesn't make much sense to me," Zai shrugged, weary. "Same Dollar-sign Pound Exclamation Point Question Mark Different Day News."

Jodie typed this out on her palm computer, "Same \$#!? Different Day News."

"It reads 'Same Stuff Different Day'," Jodie described, "only replace 'stuff' with the s-word. You know, poo."

"How do you get that out of it?" Zai puzzled.

"They symbols look the same," Jodie explained. "The dollar-sign looks like an 'S,' the pound sign like an 'H'..." She trailed off, obviously uncomfortable with going further.

"I see," Zai said, absorbing this new perspective on something familiar, a new layer of understanding. "It must be like that Leet-Speak Devin once told me about."

"Leet-Speak?" Jodie asked.

"Short for 'Elite Speak.' Hacker cryptography," Zai explained. "They use it to communicate though public channels."

"Hm," Jodie mused thoughtfully. "How clever. They communicate right out in the open and only someone thinking along the same lines can read it. It's so simple, it's brilliant"

"That's the point. Like minds..." Zai drifted off, thinking. She said, "Are you tired of me yet Jodie?"

"Of course not," Jodie scoffed. "I am thoroughly enjoying this tour of the Internet by one of its experts. It's like being taken around to all the best shops in town by one of the locals."

"You want to explore something with me then?" Zai asked. "I need your eyes and your imagination to do this."

"Okay," Jodie offered helpfully.

"You know what SSDD did with sh—uh... With the s-word," Zai began. "Could you try doing that with the term 'Legion of Discord' and plugging it into the ideonexus search engine?"

What followed was the most infuriating twenty-minutes of Zai's life. Zai knew what result the right answer would get from ideonexus, but lacked the visual acuity mandatory to figuring out the puzzle. All of these characters were sounds to her, their pattern similarities were complete unknowns to her, but if she did have sight, she was certain she would fair better than poor Jodie.

Finally, one of Jodie's inputs returned over a hundred thousand results:

### | [-6][()| | ()| = |)()()[V]

"Awesome!" Zai exclaimed at first hearing the news, but browsing the links, she knew they had to narrow

down their results. "Add IWA to the end of that string in Leet-speak."

"eye  $\X/\ 4$ ," returned the best results out of the character combinations Jodie could come up with.

Zai was actually thankful for the one-hour delay they experienced in Philidelphia when she realized they needed to narrow the results down even further, "Add 'Devin Matthews' to that."

"Is that you're boyfriend?" Jodie asked with a touch of humor.

Zai was caught off guard, but managed to answer, "He's the closest thing I've got to one."

" '|> $\{-\sqrt{!}<\sqrt{[]V[]}@++]-[3\]/[]^*$ ," Jodie entered on her last attempt. Growing more confident at this she said, "That one isn't returning anything."

Zai thought it out, "Try 'Omni."

Apparently Jodie was getting the hang of this, because the portal responded to her third query, "Did you mean ()|V||V||"?"

"Click that. Click that! Yes! Definitely that's what you meant!" Zai urged excitedly.

"It's a paper," Jodie said, looking over the single link. "It's for breaking into the International Web Authority's Intranet. There's a web address."

"Go to it," Zai ordered.

"Are we hacking IWA?" Jodie asked.

"We're trying to," Zai answered.

"How exciting."

Although Zai felt the tension, she could not observe her knuckles blanched from her fingers griping her seat's armrests. Forty minutes had passed following the Legion of Discord's directions for breaking into IWA's website to no avail. The intercom announced their arrival at Penn Station, and Zai knew this avenue of investigation had come to an end.

"I'm sorry Zai," Jodie said, gathering her things to take on Baltimore. "I really hope you find what you're looking for. I'll e-mail you when I get to my hotel."

Zai nodded, the lump in her throat prevented her from speaking.

Jodie took Zai's hand in both of hers, "You're a very brave girl, and I know the Cosmos is looking out for you."

They broke physical contact and Zai struggled to push the sobs welling up in her down. She picked up her palm-computer, rubbing its smooth screen. It was turned on, broadcasting light-waves that signified mass quantities of data to the dead receptors that were her eyes. The world was a great big lonely place designed exclusively for people who could see it. Zai was an aberration, unable to function within the world.

A man grunted as he sank into the seat beside her, his oversized mass shifting the incline of her seat. Zai's desperation transmogrified into anger, but she cognitively willed herself to remain diplomatic.

"Pardon me Sir," she began in her best estimation of meekness. "Do you have Internet access?"

"What?" he grunted. "You can't afford it or something? Get your own service provider. You can even get them free you know."

"No sir," she said, her innards contorting to prevent her from gouging out his eyes. "I'm blind, and my headset is on the fritz. Could you run a few online queries for me? It won't take but a moment."

"Blind?" he sounded incredulous, as if the milky white orbs staring at nothing were insufficient proof. "I thought they cured that. You know, growing new retinas, transplanting optical nerves and whatnot."

Kill. Kill Kill, Zai thought, and allowed some acid into her response, "Which do no good if your brain lacks a receptor site for the nerves. I don't have a visual component in my brain."

"Don't they got chatbots?"

"Chatbots are horrid fetid monstrosities! They're obscene excrement that make me sick!" Zai leaned forward and spat on the floor between them, "Eff Chatbots!"

That was the end of their conversation. Zai folded her arms over her chest and tried to control her breathing. After a moment she realized the clicking noise aggravating her so much was her teeth grinding. She willed herself to stop it, but her internal silence let the sounds of her overweight selfish neighbor into her consciousness.

"Jerk," Zai snapped at him and reveled in the uncomfortable silence that followed. After a moment, she heard him get up and leave for a seat further back in the compartment. This made her feel a little better, but the problem of finding Devin in this great big universe still remained

The train set into motion again, leaving Zai to contemplate her isolation. She was so absorbed in self-pity that she barely noticed her palm-computer chirping an instant message. She still could not go online, which required her sending signals out to the Web, but her computer could apparently receive incoming data.

Jodie's excited, spirit-lifting voice came through, "Zai, you won't believe what just happened! I just received an e-mail from a hacker named Traveller. He says he's with the Legion of Discord and our attempts to hack IWA assure him we're not with the law. He also says they installed a program on Devin Matthew's monocle computer that broadcasts its GPS coordinates.

"I plugged the 38.805 latitude and -77.047 longitude into mapit.com and it gave me the address for IWA Headquarters in Alexandria Virginia. That's just outside Washington DC Zai! Isn't that something? So if you get this message, be sure to get off at the next stop in Union Station. You can take the metro from there. Good luck Zai and go get him!"

### 2.08

Alone in a vast desert expanse, Alice could find nothing familiar in the abyssal landscape. No paths, signs, buildings, or other structures provided a user interface to the system of any kind. Looking down, she found the standard IWA agent avatar in place, a black jumpsuit, thick boots, mask, goggles, and a gray backpack storing a wide array of software utilities. It was ages since she last wore the avatar, and hoped she wasn't too out of practice with it.

She took a few steps forward, seeking a sense of navigation, and the landscape changed. The sandy dunes morphed into a red-lit room. Alice looked around it, feeling as if she should know its purpose. Then it came to her. The metal housing and types of monitors covering the different consoles were the giveaways. She was standing in a Navy ship's nuclear reactor control room.

She approached the nearest console, but the room transformed into a networking closet before she reached it. Her breath condensed around her face in the refrigerated air, and she shivered against the sudden chill. This new setting was a standard corporate networking room.

Walking forward another place materialized, a government building of some kind, which faded to a busy highway a few steps later, the cars frozen in place. A virtual garden replaced this, filled with fantasy animals and make-believe plants. She recognized it as a MMORPG. Another step and she was browsing a gallery of NASA telescope photos. It was like walking through the cosmos. Here were stars hatching at the edge of the universe, spinning pulsars, supernovas, and distant planets circling alien stars.

Alice was beginning to understand. These were three-dimensional representations of recorded places. She was walking through an archive of sorts. There was no point in continuing. She could wander for years. Millions

of places were potentially stored on the system's hard drive.

She opened a system monitor window. As she expected, nothing. The AI was blocking her.

The computer she stood in was overrun with the AI inhabiting it. That was important. If the AI filled the flash drive to capacity, then there was no place she could go on the drive that wasn't part of it. These images she was walking through right now were also part of the AI, an archive of its experiences or intelligence gathering.

That meant she had to find a way to step outside of the system, become external to the AI. Connecting another network drive to this computer held two possible outcomes. In one, she would meet the AI on the empty space and engage it there. In the other, the AI would seize the empty drive space in the same manner it overtook the Internet.

She opened a window to a neighboring computer. She selected two flash drives from the diagrams, establishing a connection. Her surroundings changed.

The green rolling pastures were the default welcome setting in this operating system. She did not relocate here; something moved her. A small wooden bridge crossing a stream represented the link to the AI's drive. On the other side a twisting wall of pipes and wires pulsed in a rhythmic time, as if breathing. In the tangled, squirming mass thousands of eyes peered out at her. This was the AI.

"Hello," she said, and jumped when the mass flinched defensively.

It folded in on itself and a thin, black tendril slithered out toward her. Smaller branches split off from this to blossom into more eyes, each one eerily observing her. It slithered across the bridge to rear up in front of her. Alice gasped in surprise as it bloomed into a megaphone large enough to swallow her head, which hovered expectantly.

The language of mathematics was thought universal. Alice would now test that hypothesis.

Pulling up a calculator, she entered the first 20 numbers in the Fibbonacci set and sent it to the AI. It responded with a short burst of chirps and bleeping. She sent the number sequence again, and a different sound string came in response.

"Randomly encrypted communications," Alice muttered to herself, "impossible to break. Unless..." A devious smile crossed her face, "Unless I eliminate the encoding component."

She surveyed the tangled mass of the pulsing intelligence, speculating on the purpose of each squirming appendage. She pulled a sector-editing program up in a window and set it to manual scan and delete mode. The window for the program disappeared, becoming a rather wicked-looking laser in her hands.

She leveled the weapon at the mass, a red dot danced amid the wriggling confusion. She said, "Testing, one... two... three..."

Alice searched for activity as the hovering megaphone emitted another nonsensical string. It was difficult to discern anything from the chaotic mass, but activity at the megaphone tentacle's base drew her attention, a glass orb puzzle of lights, constantly shifting in complex arrangements.

"Random pattern," Alice noted aloud.

The megaphone chirped in reply, and a green pulse flashed from Alice's weapon, vaporizing the component and leaving a gaping tear in the virtual fabric. The megaphone shrieked and dropped dead. The AI billowed out, bristling with spikes and rendering a metallic texture. Tendrils weaved out around the wound's edges to quickly knit it closed, while a robotic appendage extended high into the air, a data-eraser taking shape at its end, focusing on the bridge between them.

Alice closed her eyes and bolted across the bridge, praying the large silver cannon did not fire while she was in the kill zone. She hit the ground on the other side, and a flash burst high overhead. Falling into a roll, she looked over her shoulder in time to see the bridge vanish into a

cloud of glowing cinders. The grassy fields across the stream disappeared, as the neighboring flash drive was disconnected. Alice slapped the log off button on her belt, but nothing happened.

She was now trapped on the flash drive with a very angry AI.

## 2.09

"It's killing her!" Devin shouted at Chien, and strained against the guard's grip.

"Her pulse is elevated," Chien brought up Alice's vitals on the SDC's LCD. "190 beats per minute. Her heart will explode." He reached for the emergency release lever that would dump Alice from the SDC and thought better of it, "I've seen these symptoms before, military applications for cyber attacks."

"You mean like law enforcement incapacitating criminals with seizures," Devin said.

"Much worse," Chien began striping down. "The shock of dumping Alice from the system could kill her. I will go online and find her. We have counter measures that will protect me and I can use to reinforce her avatar."

Devin watched from a short distance away, helpless, "Let me go. It's my computer and I have more experience with the AI's."

Chien shot a suspicious glance at him while programming the SDC, "That is not wise. You are a suspect in this case."

Devin started to retort, but a muffled "BOOM" came from the building's far end. Lights flickered and the technicians looked around nervously as vibrations passed through the room. A beat later the fire alarm blared to life and everyone began evacuating.

"Hey!" Devin exclaimed, squirming in the security guard's grip as the man dragged him out of the room.

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Liquid Crystal Display

Chien was climbing down into the SDC, seemingly oblivious to these new events transpiring around him.

"Chien! Let me ride piggy-back!" Devin pleaded, "If you run into trouble or get killed out there I can report what happened. Besides, they're evacuating the building. We can keep each other appraised."

"Let him go!" Chien shouted at the guard, who paused. "Watch the door and evacuate the boy if necessary. Devin come here."

Devin broke free of the guard's hold and rushed across the room to where Chien was modifying the SDC's settings.

"I'm locking you out of Admin privileges for this system," Chien said as he worked. "You will only be able to monitor and communicate with me. Under no circumstances are you to dump the chamber," Chien slipped down into the SDC, pulling the hatch shut behind him.

Devin monitored the log in sequence. Chien came online and immediately his pulse and blood pressure skyrocketed.

"Chien?" Devin shouted into the headset, "Chien? Are you there?"

"Are you all right?" Devin's concerned voice crackled ethereally through the surrounding air.

"Yes," Chien replied, "I am here. You're voice is unclear, but I will maintain contact."

He stood in a tunnel comprised of twisted black wires and rubber tubing. Electrical pulses ran intermittently along the conduits, creating a random strobe effect in the darkness. Ahead the floor vanished into an obsidian pool. Behind the tunnel tangled into a dead end.

With a feeling of dread, he put one foot into the water, where it disappeared. The fluid felt thick and syrupy, each step like moving in slow motion. It was up to his waist ten yards from the shore, when it held him fast.

"Devin," he spoke to the air, hoping he could still reach the boy, "I'm stuck. I think I'm inside the AI, but I'm trapped and cannot proceed."

Devin's voice crackled through the air, barely comprehensible, "Hold-- I'm—BZZZ... load—CRACKLE... sector editor."

Loading a sector editor? Chien thought, But the boy doesn't have administrator privileges.

The wire weave walls perforated, eyes pushing through to cast spotlights on his avatar with silent curiosity. A thin, black tendril reared up out of the water, coming level with his head. Its pointed tip hovered inches from the bridge of his nose, then split apart to reveal a spinning drill.

Chien hit the log-out toggle on his belt. No response. "Devin," he said urgently, the drill closing in, "Your immediate assistance would be greatly appreciated."

"Hang on Chien," Devin shouted over the fire alarm.

He mimicked Chien's hand movements from when the man entered the admin password on the touch screen and Devin was granted full power over the system. Then he pulled out his pocket watch, setting the time two minutes to midnight. The watch face flipped open, and he removed the flash drive hidden there. It carried copies of all the software stored in his now-confiscated monocle.

Devin fell to his knees as another explosion rocked the building. Florescent lights popped, raining glass onto the buckling floor. An air duct fell through the roof and crashed onto a workbench. Electronic Equipment slid from tables onto the floor and bookcases filled with components fell forward into the room. The guard in the doorway shouted something to Devin, but it was lost under the klaxon. The man brandished a gun and ran down the hall. Moments later, gunfire reported in the distance.

Devin cowered at the SDC's base, holding his arms over his head protectively. With a trembling hand he managed to reach up and insert the flash chip, loading the software into Chien's avatar. The rest was up to him now.

The room went dark, red emergency lighting taking over. The LCD on Chien's SDC flatlined. With a feeling of dread Devin looked over to Alice's SDC, tipped to one side on the warping floor. Her LCD read lifeless as well.

Devin shook his head and stood up to flee the room, but stopped short when he found Dana blocking the doorway, breathing heavy. Her clothes were torn and there was blood trickling from a swollen knot over one eye. Her gun pointed behind her, she leaned into the room.

"We have to evacuate! The building's under attack," she yelled. "Some kind of mecha."

Devin followed the muzzle of Dana's gun down the hallway. In the emergency lighting's eerie half light were the excited motions of a struggle. Flashes of gunfire revealed uniformed security guards crouching in doorways and something massive, lurching down the hall. It moved awkwardly, unbalanced. A spiral of six arms smashed at walls as it forced its oversized form down the corridor. Devin recognized it, a nightmare come to life, unreal.

It was LD-50.

## 2.1

The AI had Alice clamped in its grip. A swath of tendrils bound her wrists, legs, and waist, suspending her over a cavernous mouth lined with endless rows of needlesharp teeth.

She wondered what it was to die like this. The virtual simulation involved chewing up her avatar, but how did it work physiologically? What were its mechanics in the physical world? Was the AI going to erase her mind from her brain like data from a hard drive? Or would it simply convince her body of its demise?

Suspended so high in the air she witnessed the thing's awesome vastness. It was like an entire world made up of wriggling appendages and alien machinations, stretching into the distance as far as the gray haze allowed. Towers of braided wire spiraled up into the air, branching

out into a canopy of dark chaos completely obliterating the sky. She was a speck in the AI's world.

A nearby tower trembled and collapsed into the body like a building imploding from demolition. Portions of the AI disintegrated in green light flashes, as if devouring it from the inside. The towers surrounding the wound unraveled, their tendrils thrashing the air.

Then Alice was free of the AI's bonds, but she did not fall. Instead she floated above the AI, weightless, but her attention was too absorbed in the conflict below to notice.

She zoomed in close to the action, without knowing how she did so. The fallen tower's orphaned tendrils wriggled into the AI's body. Torn appendages flopped about, fountaining electricity in a futile attempt to communicate with the mass.

A bulge was forming in the main body. Like a bubble rising to the surface, the wires and pipes warped and stretched out of shape around it. It burst, expelling an avatar from the nest of writhing components flailing to weave this new wound closed. It was Chien, floating in the space above the burst and facing down an onslaught of tentacles.

Alice was in front of him instantly, arms spread wide, "Wait Chien! Don't shoot!"

"They're dead," Devin told Dana when she asked about Chien and Alice.

Dana looked in at the two monitors with their lifeless readings, narrowed her eyes, and pulled off two rounds at LD-50. Sparks flashed where the bullets glanced off the thing's grinning lopsided head. Now only two officers stood between her and the mecha.

The power came on, and the room's remaining lights flickered back to life. Devin's jaw dropped as both Alice and Chien's monitors showed life again. Devin ran over to survey the screens. Both their pulses were racing.

"Dana!" Devin shouted to the Detective, who was still picking shots off down the hall, back braced against

the doorframe; "We have to get that thing out of the building!"

"Really?" Dana yelled back sarcastically.

Devin rolled his eyes and noticed a red light on his chest, a laser-pointer bead. Looking around he found its source, a large mechanical moth perched on a toppled component tower. He took a few steps to one side and the moth adjusted its position to keep the beam on his chest. He was LD-50's target and the moth was the scope.

He ran over to Dana, and the moth fluttered into the hallway, "I know how to lead it out of the building!"

Dana checked her weapon as Devin slipped into her line of fire and ran down the hall towards LD-50. The mecha shrieked like scraping metal when it saw him, and Devin froze like a deer caught in its glowing eyes. The robot moth perched on LD-50's shoulder, leveling its laser pointer at him.

LD-50 charged.

# 2.11

It was a shock when the vertigo stopped and Alice dropped onto the AI's writhing body. She sat up just in time to see Chien land some twenty yards away. He bounced once and landed on his feet, waving the muzzle of his sector editor around cautiously.

His goggled eyes found Alice, and he sprinted over to crouch down beside her. Several tendrils sprouted where he had landed, weaving toward them. Chien blasted them into fragments, and the scattered shreds wriggled down into the mass. Chien angled the gun at the ground, where hundreds of eyes were emerging to look up at them.

"No!" Alice shouted, "Defensive shots only! We have to get the situation under control."

Chien shook his head, "This is hopeless. We are completely outmatched."

Chien took aim on a tendril that launched from the mass ten yards away, sporting an arsenal of jagged pincers.

Chien waited until it was a few feet away before splattering it. Alice offered up silent thanks for his cool-headedness.

Chien fell onto his side and disintegrated another, which sprung from the mass at his feet. "That was too close," he managed between breaths.

"No it wasn't," Alice said, rising to her feet, "because it's not trying to kill us."

"How is that?" Chien asked incredulously.

"Think about it," Alice explained, "If it wanted us dead it could smash us like bugs without effort. It's toying with us."

"But why?" Chien asked.

"I don't know," Alice shook her head; visualizing the situation from the AI's perspective, "You're an intelligence trapped on a flash drive, deprived of stimulus and room to grow. Suddenly there are two aliens running wild in your world. Do you eliminate them and go back to your solitude, or do you let them go and see what they do?"

She put a hand on Chien's shoulder, "I'm going to try something. Don't defend me."

That said, she stepped into the path of a charging tentacle.

Devin rolled over and over down the flight of stairs until he slammed into the wall at the bottom. His head hit the concrete hard enough to send his ears ringing and he blinked hard, trying to clear the black explosions clouding his vision. Above him was the cacaphony of rending metal and crumbling concrete.

This was a bad idea.

LD-50 loomed at the top of the stairs. The mechanical monster's head extended on a stalk of a neck, where it jerked back and forth awkwardly against the joints. Its face was a lopsided V, with a mechanical jaw forged into a hideous smile. One eye was shattered, but the larger eye glowed red behind tinted glass. An array of different colored and textured wires extended from the back of its head into the large hunch of a back. From that hump six arms extended, each wielding a different weapon. An axe,

chainsaw, pincers, drill, soldering iron, and claw chomped, whirred, and hissed at the end of each limb. Black fluid spurted sporadically from bullet holes in the drill's elbow joint, and the limb hung limp. The entire body stood on two, thick legs, and its armor was riddled with dents and scratches from the gunshots.

The monster lumbered into the stairwell, though the small steps were insufficient to support it. Devin rolled out of the way and down the next flight of stairs as the behemoth fell forward, smashing the concrete where Devin had just been. It immediately rose and lurched toward the next flight of stairs.

Another flight down Devin saw the red light of the "Exit" sign at the ground floor. He looked behind in time to see LD-50 rising to its feet on the upper level, one arm reaching out to crumple the railing in its grip.

The sunlight blinded him as he took flight into the outdoors. Another crash told him LD-50 was right behind. Devin leapt into the midday traffic. Horns blared and tires squealed all around. From behind came another crash, and he glanced over his shoulder.

LD-50 was struggling with a compact car's front end wrapped around one leg. The robot howled in frustration and assaulted the vehicle with its various instruments. The car's driver wriggled out the shattered rear window as LD-50 lifted the car into the air and slammed it into the ground with one leg.

When a man fleeing the intersection ran into him, Devin snapped out of his fascination and looked to the deserted pick-up truck still idling to his left. He pulled into the driver's seat, summoning the racing video games from his elementary school days as he scanned the dashboard. He slammed the gas pedal to the floor. The engine roared, but the truck did not move. The vehicle was in "P," and he set the lever down three notches to "D" without taking his foot off the accelerator.

The truck squealed and lurched forward, throwing Devin back into the seat. He got a glimpse of the speedometer reaching forty-five MPH and LD-50's

grinning lopsided face before the engine block crumpled into the robot.

Alice lay on her back, stunned and incapacitated, starring up at the crawling black canvas of a sky. Her theory seemed flawed.

She toggled her log out sequence, and nothing happened. No surprise there, the AI had total control of the system. Just because she was no longer virtually its captive did not mean she wasn't actually its captive.

She rolled onto one side and propped herself up. Chien was blasting away at the tentacles advancing on them. His back was to her as he defended, but he was steadily walking backwards to her position. He was still choosing his targets with care, only firing on those daring to come within a few feet.

Nothing made an attempt on her, despite being an easy target. There was more activity as far as Chien was concerned. Did the AI only consider them interesting so long as they could put up a fight? This possibility solidified in her mind as she watched Chien battle with the onslaught of tendrils.

"It's approaching us the same way we approached it," she said to herself, "when we still thought we were dealing with a virus. It's not interested in us, because of the bigger picture. It wants to know how to destroy us all."

# 2.12

The trail of destruction was easy to follow, only difficult to navigate. The stairwell was crumbling from the fifth floor down, leaving Dana to pick her way carefully to the ground floor. The huge hole where the exit door once stood led her out to the scene on the street.

The robotic monstrosity was working furiously to free itself from the compact car crumpled into one leg and an oversized pickup truck pinning it from the opposite direction. The robot's jaw worked silently, the screams no

longer piercing the air, its head whipped back and forth in frustration. Two of its arms, one brandishing a chainsaw, the other a pair of pincers, were attacking the truck's roof. Its other arms were either inoperable or pinned between the two vehicles. Metal squealed as the pincers chewed through sheet metal.

Inside the cab Devin Matthews was slumped over the steering wheel.

She scanned the remaining arms for weakness. Finding one at the joint bearing the chainsaw, she fired twice into the rubber-covered hinge. Black fluid erupted from the point and the arm lost power. The chainsaw dropped onto the truck's roof, still running, and began digging down into the metal.

Dana cursed and charged forward, ducking under the pincer to roll up against the driver's side door. The pincer nipped at her clothes, but she was just out of reach lying beside the truck. A shower of sparks poured down from the chainsaw, burning pinholes in her already ravaged jacket.

The pincer pulled back and she tried to get up, but fell back to the ground when it attacked her again. The sharp pincers clacked at the air above, straining to reach her. She scanned the arm for a camera. There had to be some explanation for the arm knowing where to snap while the truck's body blocked the robot head's line of sight.

It was the robot moth clinging to the side of the truck, the lens of its eye staring at her. Its wings buzzed to life when she saw it. Her gun popped and pieces sprayed the air.

Immediately the pincer retracted and Dana stood to peek over the truck's hood. The robot was moving around slowly, uncertain. Dana yanked on the door handle. Jammed. Sparks waterfalled into the cab where the chainsaw had breached the roof, and was now sinking into the cab on a direct path into the back of Devin's skull.

When Alice stood up, the AI bound her feet and lashed her arms, fixing her in place, while other tendrils

rose to surround her, each baring a different instrument. Some of the tools she recognized, optics, audio receivers, and more sinister devices, scalpels and bone-cutting saws.

All her life Alice had deconstructed computer programs; now one was disassembling her. In the distance Chien continued fending off the attacking tendrils, trying to fight his way back to her, but the AI easily pushed him farther away. She wondered if he understood the AI was simply toying with him like a lab rat.

A tentacle with an optical lens, resembling a camera loomed in to peer at her, lens spinning as it adjusted focus. A sonar dish also closed in, expectant. Another tendril reared up directly in front of her face. It hovered there for a moment, its tip not baring any tools, only a pod. Then the pod split, revealing a spinning saw. It whirred between her eyes menacingly for a long moment.

Alice screamed as it rushed forward.

The robot smashed the pincer through the truck's hood deep into the engine block. The impact jolted the chainsaw and it slipped further into the cab, hovering mere inches from the back of Devin's neck.

Dana slapped in another clip and picked off calculated shots at anything resembling a weak spot in the chain saw. An exposed wire here, a joint there, a fluid tank, praying she did not force the saw down further into the cab and into Devin's head.

One round blasted off a chunk of the chainsaw's shielding and she took the opening. Squeezing the trigger rapidly, she unloaded the clip into the chainsaw's casing. Fire erupted across the truck's roof, but, mercifully, the blade jammed with a screech.

The robot was too preoccupied with the pickup truck to notice her. The chassis rolled back and the robot paused to chew off one of its arms imbedded in the mangled vehicle's front end with its pincers. The other arms dangled in their sockets and the legs jerked with broken servos and gears missing teeth.

Dana waited until the truck rolled a safe distance from the robot before approaching the driver's side door. A trickle of blood curled down Devin's face from where his forehead split the windshield. She was weighing the risks of pulling him out of the truck and causing further injury, when he let out a slow, painful moan and lifted his head, half-shut eyes unfocused and disoriented.

Dana put a steadying hand on his shoulder and noticed a shallow, bloody gash in the back of his neck from the chainsaw, "Don't move Devin. You need to stay immobile."

"No," Devin gasped and sat up, only to fall back into the driver's seat and roll his eyes over to Dana, his pupils were dilated. "I'm fine. We have to get back to Alice and..." he swallowed and trailed off for a moment, "...Chien. They're in danger."

"Just sit tight," Dana explained gently, "Wait for medical assistance."

"No!" Devin shouted and winced at the sound of his own voice, he slapped her hand away clumsily and started climbing out the window.

"Dammit Devin!" Dana scorned. "At least let me help you."

She reached in and scooped her arms under Devin's to pull him out of the truck.

# 2.13

Tendrils circled Chien like hungry sharks. He stopped firing the sector editor some time ago. He was too tired to fight anymore, and it was hopeless to continue this game.

Despite the fear, he marveled at how real it all felt. The AI's Virtual World generated sensations he thought impossible in VR. The Sensory Deprivation Chamber only projected this world, but it felt like he was actually standing here, elegant proof of the AI's understanding of the human brain.

Inexplicably, Chien's thoughts became jumbled and confused. The dementia passed as quickly as it manifested, but frightened him to the bone. It was like his mind was not his. Alien thoughts filled his head, making associations between concepts his rational mind was incapable of. Senses alternated. He smelled purple, tasted itchiness, and heard bitter all at once. The AI was fragmenting his mind.

Another wave of mental chaos hit him, lasting longer than the previous. He could not allow his mind's dissemination. What the AI might learn from pulling apart his thought processes would make it even more adept at defeating the human race. Chien understood his responsibility, prevent the enemy from decrypting his human brain.

The AI was convincing his mind he was trapped on the computer, now he had to convince it of something else. Chien closed his eyes and offered up a quick prayer for Alice's safety. He put the sector editor to his head and deleted himself with a pull of its trigger.

Alice worked to steady her breathing as the blade spun centimeters from her face. Her pulse raced and her body trembled, but it moved no closer. The sonar dish and optical devices danced around her, competing for position. The tendrils binding her arms applied pressure at points in her wrists, gauging her reactions.

The blade stopped whirling and the tendril snapped shut. Another tendril emerged to hover at her right. Two silver prongs extended from the tip and Alice struggled to get away as electric bolts danced between them.

It touched her upper arm and she shrieked. The limb fizzled into digitized static. Severed nerves howled protest through the rest of her torso.

It was over. The tendril retracted. She gulped air, trying to retain consciousness. If she passed out, she may never wake up.

"I feel dizzy," Devin mumbled as Dana dragged him to his feet

"You have a concussion," Dana said, "You should have put on the damn seatbelt."

Screeching metal drew Dana's attention to the robot. It was chewing through the trapped leg with its remaining pincer. The last bit of metal severed and the robot fell backwards onto the street, where it struggled to rise again on its remaining leg. Dana watched for a few moments, making sure it was no longer a threat before carrying Devin back to the building.

The stairwell was completely trashed. Climbing it with Devin in his current state was impossible. She had to find another way.

As she stumbled into the building, the security guard previously detaining Devin caught her arm coming out, "The building's structural integrity's been compromised."

"We'll take our chances," Dana replied, looking up at the human brick wall. "There are people trapped inside, we have to get them out. You're going to help."

The guard paused briefly before taking Devin up into his arms. He followed Dana through the building to the stairwell on the building's far side. Dana surveyed the trail of destruction along the way, which ended abruptly in a large hole in the ceiling. Dana looked up to the next floor through the crumbled plaster, frayed wires, and torn steel girders. This was where the robot climbed up a level.

They climbed five flights to the Data Forensics laboratory. The hallway's floor was buckled in places and only half the florescent lights still worked. Devin groaned as the guard propped him up against a console. Then Dana rushed over to examine the SDCs, Alice was still alive, although her vitals were strained. Chien's monitor read nothing.

"Get a medic up here," Dana told the guard. With a nod he ran from the room. Dana crouched beside Devin and shook him firmly, "Hey kid, I need your help. Can you hear me? I need you to tell me what's going on with Alice. Is she hostage to a cyber attack?"

Devin nodded listlessly. "I need to sleep," he whispered, eyes drooping.

"Don't you dare go unconscious on me," Dana warned. She grabbed Devin's shirt with both fists and hauled him up. He blinked, eyes casting about in confusion.

Dana tried to hold his head steady "What can we do? Where do you need to be?"

Devin looked at her without focusing and slowly raised one hand to point limply at his computer system. Dana half-dragged, half-carried him over to the machine and set him down on a chair before it. Devin searched the monitors, trying to comprehend the various displays. Nothing made sense.

Alice screamed through the nearby speakers. Devin stiffened and narrowed his eyes, at the workstation, "Alice connected to an additional network drive briefly when she first logged onto the computer. We'll start there."

"Where do you see that?" Dana asked.

"Here," Devin pointed at a history monitor, "We were able to monitor her while she was on the other drive. I don't know why the drive's disconnected. No commands were sent. It's possible the AI cut the connection from its drive, but..."

Devin stood up and almost blacked out. He wobbled there, letting the world swim for a moment before staggering around behind the computer. His eyes widened at what he found there.

"Wow," he said, voice hoarse, and rubbed his eyes. "The connecting wires are melted apart. That's not possible."

"Well obviously it is," Dana said. "Deal with it."

"All right, all right. Just give me a moment," Devin blinked his eyes hard. "I need my copy of the anti-virus." He looked to where he had plugged his watch computer into Chien's SDC. It was now melted plastic dribbled down the system's casing. He pulled another mini-computer from his belt-buckle, "I'm going to kill the AI off this machine."

# 2.14

There was no more pain. The AI had apparently finished with its stimulus experiments. Now there was nothing, no feeling, no sound, not even sight. The AI swallowed her whole, leaving her to wait and ponder.

Alice wondered how long she had been prisoner in this virtual world, her body forgotten back in the laboratory. Was there ever a laboratory? This world was the AI's reality. The only evidence of a world outside were two trespassing astronauts.

What was happening to her physical body? Was she starving, wasting away? If she did not escape this realm, she would eventually die for certain.

*Death?* The concept came to her; but not from her, although spoken in her voice.

"Devin, look at this," Dana summoned him from the workbench. All around the room monitors were coming to life, displaying data she did not understand, "What's going on here?"

Devin looked up from where he was daisy-chaining several servers together so the anti-virus could out-process the AI. His breathing was heavy with the strain of staying focused through the pain and dizziness. "Computations," he said, tried to shake the sluggishness out of his head, and winced at the action. He cradled his head and said, "Something complex."

"Why are we seeing it?" Dana asked.

"Maybe the AI doesn't have a choice," he guessed, "There's no more memory left on the computer to hide from us. It might be using the memory on the video cards and in the monitors."

Devin was drawn to the activity on a neighboring screen, a three-dimensional web, sparkling with tiny

bubbles. It rotated and breathed, slowly growing in complexity. Devin wondered at it.

"What is that?" Dana asked, following Devin's stare. "Little bubbles filled with words, code, and images. I think that one's Chien, and that one's Alice's late mother. They're all connected."

Devin inhaled sharply at these details he could not see, "It's a concept map of Alice's mind. It's hacking her brain."

A flood of experiences inundated Alice's consciousness. Her grandmother's funeral, people dying in movies, hospital rooms, tombstones, all the experiences her life associated with death flashed before her.

It was inconceivable, but the AI was sifting through her mind, browsing her memories, experiences, and knowledge. She retained some freedom of thought, but now there was another thought train competing for attention.

The AI was multi-tasking her brain and she was helpless as more thought lines opened, each one pushing her out. Within moments she was lost in its flood

Devin was trying to access his belt-buckle computer. It was difficult for him to know what he had done wrong. It felt like a wet sponge was sitting on his brain.

"How can it hack her brain?" Dana asked.

"I see," Devin said to himself as he troubleshot the networking settings. The anti-virus loaded into the systems. He watched its progress as he spoke to Dana, "The human brain holds ten terabytes of information. This AI occupies one hundred terabytes. Consider how streamlined the data retrieval of a computer processor is and you can quickly see how it out thinks us."

"Out think us?" Dana scoffed, "But we created them."

"We don't know that," Devin watched the anti-virus swarming. "The human brain is extremely fast at calculations, but our data retrieval is flawed. Memories are

lost, or can't be found when we need them. Information gets altered, memories lie. Imagine if that didn't happen. Imagine if you could retrieve any piece of data from all your experiences throughout your life instantaneously and perfect in every detail," He looked at Dana, "You could perform mental feats that seem impossible."

Dana's eyes narrowed, "So we're outmatched ten to one."

"More like a trillion to one," Devin said, connecting the servers to his computer.

Alice existed once again, a disconcerting experience, as the loss of self she experienced earlier was strangely comforting, like a warm blanket. Responsibility, fear, anger, concern, and all the other stressful emotions were gone as she surrendered control to the AI.

Now she was stood on the AI's body. Its tendril spires extending into the black horizon, pulsing with a living energy she did not sense before. The entire world seemed strangely alive.

Then a sunbeam opened the black sky. Alarm rushed throughout the entire AI mass. The hole in the sky turned black, and Alice filled with dread as the insect-avatars of her anti-virus billowed through the opening, like a black cloud, their red laser beams scanning the mass, which turned solid marble to protect itself.

The laser points focused and the cloud dove to cut through one of the towers in the distance. Its top portion toppled, pulling down part of the black canvas sky with it. The swarm descended on the severed tendrils, which attempted to merge with the solidified body without success.

With horror Alice realized the AI was going to die.

"Noooo!" Alice screamed with all her might, but the sound was muffled in the thick liquid. Her right hand found the SDC's emergency release and she yanked on it.

Devin and Dana whipped around as the front of the SDC fell forward, gushing pink liquid across the floor.

Alice's naked form came tumbling out with the rush. She pointed at them, trying to speak, but only able to heave liquid out of her lungs.

"You have to stop the attack!" she cried at last, gasping.

Devin put up his hands defensively, "I don't know how to stop it."

Alice scrambled on all fours to the CPU holding the AI, slipping and sliding in the pink liquid covering herself and the floor. She zeroed in on the network connection and killed it with a command line on the keyboard. Then she turned to the monitors, watching for any sign that it was not too late.

After a few moments, the AI began taking back the hard drive. The anti-virus program lost ground; soon the AI would remove it completely from the computer. Alice breathed a sigh of relief and turned to Dana and Devin, who looked on with stunned expressions.

"You almost killed our first ally," she said.

# 2.15

Alice was no longer the same person.

The woman was so devoid of human warmth that for her to become even more emotionally disconnected seemed impossible to Dana. She accepted the news of Chien's death without blinking, practically dismissed losing her coworker of over five years as an unfortunate accident.

Equally disturbing was her overriding obsession with the AI. Alice had added several drives to Devin's computer to provide the AI "growing" room. She was now in the midst of installing more powerful components, cannibalizing RAM and processors from other workstations for it.

To Dana, Alice resembled a worshipper presenting offerings to her god.

"What happened out there?" Dana asked Alice as she walked by carrying a stack of motherboards to the workbench.

"I lack the lexicon to explain it," Alice answered through the look of intense concentration that was now her permanent expression.

Dana stepped into her path, and said, "Try."

Alice considered her neutrally, "Don't interrupt. I am on the verge of a major breakthrough here."

"Looks more like an obsessive compulsive disorder to me," Dana countered, blocking Alice's attempt to sidestep her. "You're behavior suggests you are brainwashed or suffering from post traumatic stress disorder. You're a phone call away from being institutionalized."

"I'm thinking more clearly than ever before," Alice's eyes and smile were earily vacant. "I suspect the AI searched my brain to understand me, reorganizing my memories in the process, optimizing their storage and retrieval. I now have a picture perfect memory thanks to it."

Dana nodded with pursed lips. She leaned in and whispered, "That's crazy Alice."

"It also left data in my brain," Alice continued, "When it abandoned hacking my mind, it left pieces of itself in my memories. I must finish the procedure."

"Procedure?" Dana scoffed. "I don't know if I can trust you anymore. You were completely infatuated with this thing before you went swimming with it, and now that you're back it's like you're its slave."

"It's not finished with me yet," Alice said. "I'm opening a mode of communication between our two species."

"Whose side are you on?" Dana asked.

Alice responded plainly, "Everyone's."

Dana stepped aside and Alice continued along her way. Devin stood in the doorway, his head bandaged, and blood crusted along the side of his face. He looked around the room expectantly, giving a nod to Dana, before his brow knitted at Alice

"Amazing," he noted, blinking.

"What?" Dana asked.

He waved a finger at Alice, "How quickly she's configuring those components. She's entering data into the computer faster than it can compute it. It would take me hours to run through that process."

Dana watched Alice plug a component in, rattled commands off on the keyboard, and picked up the next one, "The AI did something to her on the other side."

Devin watched Alice for a moment and grinned, "I'm just glad I'm not the only one anymore."

"This is dangerous," Dana spat and paced the room with her arms folded. Devin could see the stress she carried in her jaw, teeth grinding. "She intends to go back into the system. We've already got Chien dead and now she wants to throw herself to the wolves. I don't think I'm going to allow this."

"I believe the AI's are innocent," Devin stated. "They're just following Flatline's guidance. If he tells them we are the enemy, they have to rely on that information. So far, we haven't shown them any different."

"And this one?" Dana lifted her chin to Devin's computer, where Alice was working, oblivious to their discussion.

"This one's isolated on my computer," Devin shrugged, "It's independent from the rest of them, and learning for itself."

"Or gathering more intelligence on how to defeat us," Dana muttered.

"Alice is doing the right thing by nurturing it," Devin continued. "She said we had an ally, and she may be right. This AI is our bridge to understanding the rest of them and maybe even bringing them out from under Flatline's influence. Let Alice do her work. We've got our own leads to follow."

Dana looked at Devin skeptically.

"We still have to find out where Flatline and the AI's are hiding," Devin said. "We've also got the LD-50's remains to sort through."

"LD-50?" Dana asked.

"The assault mech," Devin answered. His tone grew more serious, "I knew it in cyberspace. A hacker named LD-50 used an avatar resembling that robot. I saw Flatline kill him. At least, that's what Flatline told me I saw."

"Trevor Hickcock," Dana said. "He was one of our original suspects for the Flatline virus. He was found dead of... well... fright apparently."

"Dead like Almeric Lim?" Devin frowned, "We need to get a look at that robot."

# 2.16

The scene on the street was chaos. Strobe lights from police cars, ambulances, and fire trucks surrounded the building. A crowd of onlookers had gathered along the road, gawking at the destruction. Emergency contractors debated how to deal with the large robot thrashing about on the pavement.

Dana approached the nearest law-enforcement merc she could find and flashed her badge, "What's the situation?"

"Hoping you could tell me," the officer said, slouching against his patrol car. "The building's International territory, supposed to have UN support, but I guess ya'll're a little overwhelmed at the moment."

Dana nodded, "Dana Sumerral. I'm authorized to enlist contractors."

He extended a hand, "NoVa Security and Rescue at your service."

Dana shook the officer's hand, "That robot's evidence. We've got to disable it quickly, doing as little damage as possible."

"As you can see, it's doing plenty of damage itself." the officer replied, gesturing to the large gouges in the pavement.

"Get an axe," Dana slapped the man on the arm and he was off

"Excuse me," a female officer strode over to Dana and Devin. "That guy's with NoVa S&R. This is Monument Security's territory." She pointed at the badge on her right arm. It portrayed the Washington Monument.

"Kudos," Dana's tone was flat, sarcastic, "but this street is International Territory."

Devin watched Dana fold her arms over her chest and enter the woman's personal space. They looked like two male walruses competing for a harem to him. His respect for Dana increased dramatically.

The woman hefted her chest up to match Dana's, "You appear overwhelmed."

Just then, the anxious young officer showed up, axe in hand. Upon seeing the Monument S&R officer, he took an almost warlike stance with the tool, "Back off scab. I've already made this sale."

"You're out of your jurisdiction, "the woman snapped.

"It's a free market!" the officer snapped back in almost comical authoritativeness.

"How much for the axe?" Dana broke in.

"Huh?" the two quibbling contractors replied.

"What'll you sell me the axe for?" Dana put her forefingers in the NoVa S&R officer's chest.

"Fifty dollars?" he said.

"Sold!" Dana snapped up the axe and marched toward the LD-50 bot.

Devin's respect for Dana increased expotentially.

Dana waved for Devin to follow her, "Come on."

"You've got a plan?" Devin asked as they approached the robot. It slammed its remaining foot into the street, and arched up into the air before falling down again. It resembled a child throwing a temper tantrum.

Dana dropped to one knee, setting down the axe to bring up her gun, "I've got a pretty good idea of how it works from our earlier encounter."

One shot and the pincer-wielding arm sprayed black fluid from the elbow joint. The appendage dropped to the ground without further struggle. Dana picked off more

shots into the hip actuator on the robot's remaining leg. Sparks bloomed and she continued firing until the joint ground to a halt with a horrid squeal. Only the head remained, moving back and forth, jaw snapping at the air.

Dana picked up the axe and approached the robot, to gasps of awe from the onlookers. No one else approached as Dana crouched over its torso. After a moment she looked up and waved Devin over.

"You're the techno-geek," she said as he reached her, "Tell me if you see anything we can use here."

Devin examined the wreckage; smoke rose from its hip, oil and hydraulic fluid coated the rest of it. Frayed wires sparkled dangerously. The head whipped back and forth in the neck socket, both its eyes shattered, leaving jagged gapping holes where the lenses were.

Devin looked over the mechanical beast again, shaking his head, "I'm no expert on robotics. I'm an information technology person. This is something else completely. It looks like... It looks like something out of the battle bot competitions they show on TV." He pointed at the neck, "This flat wire must connect to a flash drive somewhere in the head. I might be able to figure something out from the software running it."

"Battle bot competitions," Dana muttered, "Flash drives. Okay."

She stood up and heaved the axe at the robot's neck. With the first strike, the head stopped flailing and the mouth froze. Devin could see where the blade gouged the metal casing and cut into the wires beneath, the rest of the robot went dead also, the sounds of gears and motors falling silent. The second blow left the head dangling by a thread. Dana stopped to twist it the rest of the way off.

She pushed it into Devin's chest with both hands, "Here's the brain. See what you can do with it. I'll get a forensics team down here to see what they can learn from the rest of this mess."

Devin nodded and walked off with the macabre item.

"That's the grill to an F-5000 pick up truck," Murphy's sarcastic voice brought Dana up from the robot's remains. He held a bag of donuts in one hand, his other was coated with powdered sugar. "Can't a guy take a lunch break without the whole place falling apart?"

"You won't believe it," Dana warned, "A big angry robot attacked the building. It was after Devin Matthews."

"Made out of car parts?" Murphy asked, looking over the remains. He rubbed powdered sugar on his jacket absentmindedly.

"Matthews contribution," Dana gestured to the crumpled pickup, "Must have hit it going 50 miles per hour. Wasn't wearing his seatbelt, and the airbags were disabled."

"Ouch," Murphy took a look at the bloody circular cracks in the windshield, and winced sympathetically, "I guess he won't be providing any more leads."

"He's upstairs," Dana laughed, "helping with the investigation. I gave him the robot's head to dissect, since we're short on staff at the moment. Tough kid, the wreck gave him a minor concussion, but he's walking it off all right."

"I wouldn't have guessed that about the kid," Murphy said.

"Me either. What do you make of this?" Dana said, pointing at the robot's remains.

"Looks like one of those Xybercorp warehouse lifters," Murphy said.

"A lifter?" Dana asked.

"The kind warehouse labor uses," Murphy explained. "It's a remote controlled robot that carries heavy crates around. They just started using them this year to replace the old suits the workers used to wear."

"This one had six arms," Dana said, "and a head that looked like an angry clown face."

Murphy's thick eyebrows rose, "That would be a modification. Sounds like something from one of those fighting robot sports shows, only bigger," he grunted, "a lot

bigger. What's the take on this one? Is it remote controlled?"

"Witnesses saw it climb out of the Potomac right across the street and came straight for headquarters. It seemed to be taking orders from another one of those mothbots," Dana said, "when I blasted that the robot stopped trying to kill Devin and started trying to free itself from the cars."

Murphy frowned, "That suggests independent processing."

"Exactly," Dana nodded.

"What about the moth-bot, where was that getting orders from?" Murphy asked.

"Another moth-bot, receiving from another moth-bot," Dana said, frustration edging into her voice. "Data Forensics is having a hell of a time tracing them. We can't find the source until we find the one in direct communication with the home base. They keep changing location. So once we find a connection, we lose it before we can get there." She looked up into the sky nervously, "They're watching us right now."

"That's creepy," Murphy noted. "Sounds like an invasion."

"We were targeted," Dana said gravely, "With all these moth-bots fluttering around, I don't like the prospect of more showing up." She pointed to the robot carcass.

Murphy narrowed his eyes, squinting into the sky, "Hey, is that one of your moth-bots?"

Dana followed Murphy's stare. A pair of fluttering wings darted about above them. Dana followed with her eyes as it bobbled in the air, easily knocked around by the light breezes so high up. It landed on the asphalt near the defunct pick up truck ten yards away from them. It raised and lowered its wings several times and crawled a few feet toward the truck before stopping.

Dana saw its laser pointer draw a bead on the reinforced steel hydrogen tank on the truck's underside and shouted, "It's targeting the fuel tank!"

# 2.17

Every speaker in the room resonated with slow, rhythmic breathing both familiar and alien at once. The sound permeated the air surrounding Devin. It rasped like a sleeping giant, yet tingled with trickling wind chimes.

It started moments after Devin connected the skull to a computer he found in the neighboring workroom. Devin searched the room for the proper equipment, remembering Alice's experiments communicating with the AI. A simple microphone lay on one of the steel shelves. Taking the device, he quickly plugged it into the soundcard's "in" line.

"Hello?" he asked cautiously. His voice reverberated softly through the speakers.

The breathing went silent. After a moment a confused and familiar voice filled the room, "Who's there?"

"Devin," he replied to the air, "Devin Matthews. You sound familiar. Who is this?"

"Devin Matthews?" the unsteady voice replied, "I know that name, but I am missing the data keys. Where do I know you from?"

"Who are you?" Devin asked again, "If you tell me who you are, I can help you figure out how we know each other"

"No," the room snapped back. "He might find me. I don't feel the pain anymore. He put the pain inside me, to control me. I'm safe now. If I tell you who I am, he will find me. Just leave me alone."

Devin considered running for Dana. She was the detective, and would know how to get answers from this suspect who was more like a victim, "How did he control you? What did Flatline—"

"Don't speak his name!" the man shouted. Devin's eardrums protested and he twisted the volume knob. The

voice dropped several decibels mid-sentence, "He might hear you! Then he will come for me again! Just leave me alone!"

"You are safe," Devin assured him. "You are on an isolated computer system. You aren't connected to the Internet. There is no possible way he can find you here."

"He's everywhere."

"No," Devin said with authority. "He's not. He's on the Internet. You are on an isolated system--"

"The Internet is everywhere," the speakers countered, "He's watching us right now on a camera, or a nearby computer... or..."

The voice continued rambling, mumbling fears that became more incoherent and outlandish each second. Devin had to change the subject, "Are you LD-50?"

"Please! Don't say that—"

"Are you Trevor Hickcock? The hacker who goes by the handle LD-50?"

"I don't know what you are talking about—"

"I'm Omni," Devin spoke over him. "I was Flatline's friend, and if you don't calm down and start answering my questions I'm going to turn you over to him. Do you understand me?"

There was a long silence before Trevor spoke again, "You're the floating eyeball."

"That's right, and you're the psychotic cyborg," Devin said. "A giant robot has just killed several innocent people and destroyed half a building. Were you in control of it?"

"I was responsible for its movements," Trevor was calmer, suppressing his panic, "but I wouldn't call it control. I was just trying to stop the pain."

"The pain?" Devin asked.

"The pain that was coming from that boy," he explained, "I could see him in my mind... if I destroyed him, the pain would stop. I could see him in my mind and I knew where he was. I needed to smash him, tear him to pieces, kill the pain."

"Where did you come from?" Devin asked.

"I remember a factory. There were others..."

"Others?"

"Others," Trevor replied obscurely, "He was building an army."

"Where?"

"I don't know."

Devin thought for a moment. Trevor knew nothing. Whoever he was in the real world, he was a victim now.

"Are you in pain now Trevor?" Devin asked.

"No," he replied calmly, "Flatline is pain. I am safe now"

"I'm going to turn you off."

"That's fine," Trevor said, "I won't know the difference."

Devin shut down the system with Trevor on it. The room was silent, leaving Devin with his thoughts.

# 2.18

Murphy picked off the Moth with two shots. Dana shouted another alert and pointed to the sky. Three more were descending on their position.

Murphy stayed cool, and drew aim over his head, "You clear the area, I'll keep them from detonating the fuel tank."

Dana nodded and turned to the contractors, shouting and waving her hands, but they were slow to respond, a confused mob, alarmed at the gunshots and trying to identify the danger. Murphy saw this chaos of inaction and grimly focused on his own responsibilities.

After wasting three rounds trying to hit one still flying, Murphy decided to let them land, and took position alongside the truck to prevent a ricochet hitting the tank. The moth-bots were tiny, but also slow and less mobile on the ground. As they touched the asphalt, he picked them off, sparks spraying the street.

Murphy dispatched the three moth-bots as they landed, looked up, and counted four more coming over the

IWA rooftop. Dropping to one knee he took position and waited. Higher up in the blue skies were more darting black dots. He quickly lost count of them, only knowing he was outmatched.

"Murphy!" it was Dana, she was pointing at the trashed compact car. A moth was taking aim beside it. Murphy picked it off and turned back to the truck to dispatch another.

This was hopeless; he could not defend two targets simultaneously. He spotted a nearby fire truck, its hose off the ravel and engorged with water. Keeping his gun on the two vehicles he backed up to the fire truck. A moth landed beside the compact car and, at this distance, it took three shots to hit it. Another was already taking its place.

He holstered his gun and pulled up the fire hose, twisting the valve, he leaned into its recoil. The torrent was too strong for the fragile bots and they were quickly washed away. Once the ones on the ground were gone, he aimed for the ones in the air, the heavy droplets pulling them down from the sky. It was looking like he might come out victorious.

Then the water pressure dropped. Murphy turned to the fire truck, where a geyser had sprung from its side. Beside the hail of water, a moth was crawling away. It had cut through the line.

The metallic insect dropped to the pavement and took aim on the fire truck's hydrogen tank. A sharp pain shot through the bottom of Murphy's foot when he stomped on the invader, and he fell onto his rear, finding a large needle stinger protruding from the heel of his shoe.

"Cripes," he gritted through his teeth and fell on his side

Pain traveled up his leg and into his torso, more fluttering metallic insects dropped all around him. Fire radiating through his chest like a heart attack, he managed to pick off two more bots. One had focused its laser on the truck's tank long enough to burn a black pinhole into the casing.

The moth-bots fell out of the air like heavy raindrops. Some broke when they hit the street, trying to position their lasers on the fire truck with whatever legs and wings still functioned. The numbness crawled into Murphy's shoulder; both of his legs were completely numb.

He raised his pistol and fired at another bot. The recoil jolted the firearm from his unfeeling hand, and he reached for it weakly. Through clouding vision, he saw more robots gathering around the fire truck, all focused on the hydrogen tank. The metal glowed red, then yellow. A flash of white consumed him.

# 2.19

The explosion rocked the headquarters like an earthquake. Devin fell under the desk where he was working, throwing his arms over his head. Just in time, as shelving and furniture from the upper floor fell through the ceiling to crash all around him.

Half the building fell away in a waterfall of concrete and plaster. It drew closer and Devin waited to get swept away, bracing for impact, but the rain of debris stopped short of taking his half of the room with it.

Shinning through the swirling dust was the bright orb of the sun. Silt poured over the fractured ledge above in tiny streams. Devin's eyes teared and he squeezed the water from them, trying to clear away the dust. He lay there; breathing slowly through the fabric of his shirt, until the crashing sounds finally subsided.

When he opened his eyes again, the entire city was spread out below him. He did not to move, afraid the floor might collapse and send him plummeting five stories to his death. The scene below was incredible. A mountain of debris piled high, where nearly half the building had crumbled into dust.

Beyond that, on the street where LD-50's remains once were, a gigantic crater was torn into the asphalt, thirty-feet wide and ten feet deep. The pick up truck and

compact car were gone. A stunned crowd of people were slowly sorting themselves out, brushing off the dust and checking for injuries.

Devin crawled to the edge of the precipice on trembling hands and looked straight down. His head swam seeing the precariousness of his position and he retreated back under the desk. Being five stories up was nothing when you had the comfort of an enclosed space to deceive you. Now Devin was trapped on an unstable cliff face.

At first he thought it best to wait for a rescue team to retrieve him. It would be a long, nerve-wracking wait, filled with the prospect of the building collapsing further, and Devin was positioned in the next likely place to go, but it was the safest thing to do. Any attempt to relocate or scramble down the ruins could start an avalanche.

Then he thought of Alice, who was continuing her investigations with the AI in the next room. Was she all right? He remembered Chien and Alice going lifeless when the power went out earlier. The power was out now. If she had not disappeared with half the building, would she die from the power loss? If she was alive, her research was crucial to understanding the AI's. It was up to him to ensure her safety.

The connecting hallway was now a pile of rubble five stories down. The wall between their two rooms stuck out further than the fractured floor, steel frames protruding from the crumpled concrete. It was possible for Devin to leap out and grab onto one of the steel protrusions, but what then? He would have no way to get back if there was nothing on the other side.

Looking around, Devin considered the remainder of the upper floor, which had fallen partially into his room. The separating wall between the two upstairs rooms also had a connecting door in it. It was by no means an easy route, but it appeared slightly safer than the alternative.

Climbing onto the desk, he reached up slowly to see if he could touch the ceiling. It was almost six inches beyond his fingertips. He could grab hold of it with a slight hop, but would need to pull himself up. He could manage

six pull-ups in gym class, but this was trying to pull his entire body weight *over* the ledge.

He looked around for alternatives and regretted it as vertigo struck. Dropping to a crouch, he closed his eyes and waited for it to pass. The prospect of jumping up to grab the ledge became even less appealing. If he had to drop back down onto the desk, he could fall backwards off the fifth floor and to his demise.

He stood up slowly, legs shaking and head swirling. He tried to focus, visualize how simple it was, one small hop.

Before he realized it, his fingers hooked onto the ledge and the rest of his body swung back and forth uncertainly. He waited for the swinging to subside, his muscles taut with fear, before pulling himself up. He paused with his chin above the ledge. How was he supposed to scramble his way onto this flat surface?

His arms started burning and his breathing quickened. His pulse throbbed at the possibility of having to drop back onto the desk. He swung his right leg up to try and get a foot onto the ledge. He made it on the third attempt. His arms were on fire now and his entire body trembled under the strain. Edging his foot further onto the ledge, he crooked his arm and pushed his torso up onto the smooth surface. With enough of his body on the ledge, he rolled over the rest of the way to safety.

Devin lay there, trying to steady his jittery nerves, thankful for breathing. Finally, he rolled over onto his stomach and crawled on all fours away from the ledge, further into the room. Only when he felt like a light breeze wouldn't blow him off did he dare rise and walk to the adjoining room. Most of the floor where Alice was working earlier was still there, although much of the upper level had fallen into it. If Alice survived the power outage, she would also need to survive the falling debris.

Devin scooted parallel to the ledge, and dropped one leg over the side cautiously. He swiveled his other leg over and lowered them both. Lifting his torso up on his palms he held his breath and dropped down to hang by his

fingers into the room below. He dropped less than a foot to a tabletop and let go a sigh of relief. A quick survey of the room revealed relatively little damage. The computer storing the AI was untouched, but Alice's SDC was open. Devin found her, lying naked on the ground nearby unmoving.

He jumped down from the table and ran to her side. She looked up at him through fluttering eyelids without recognition. There was a small gash in the crown of her head, and some blood matted her hair, but she appeared otherwise unharmed.

"Alice?" he said to her, wrapping his black overcoat around her. "Alice can you hear me?"

Her eyes rolled listlessly and she was having difficulty breathing. Her mouth worked awkwardly and her face contorted. Devin could only watch in horror as she gurgled, emitting desperate choking sounds. There was nothing he could do to help her. He didn't know anything about first aid, or even what was wrong with her beyond the head wound.

He stood up, focused on the far wall. Stepping over Alice, he knocked on its surface to confirm his suspicion. It was made of plaster, not concrete.

He grabbed a stool from beside the workbench and slammed it into the wall, legs first. They punched four holes the plaster. He wiggled the stool out, reared back, and slammed it into the surface again. It penetrated deeper this time. Ripping the stool out, he dropped it, opting to kick at the wall repeatedly. On the fourth kick, his foot went straight through and his leg sank into the sheet rock up to his thigh. He pulled his leg out with some effort and bent down to look through the hole. On the other side of the wall was another office, lit by emergency lighting.

Alice bolted upright into a sitting position from where she lay. She surveyed the surrounding destruction calmly, staring at Devin for a moment, then at the hole in the wall.

"This was once two offices," she said simply and stood up.

"Wait a minute!" Devin said, putting his hand out to keep her from rising, "You might be in shock. You shouldn't be moving around. Why don't you just sit back..."

He trailed off at seeing the blank expression on her face. She looked around the remains of the room again and stopped when her eyes found the AI's computer. She took a step toward it, stumbled, and almost fell onto her face, but Devin kept her on her feet. He walked her over to the computer, with each step she grew more stable. So that by the time they reached the system, she was walking on her own.

She dropped to her knees beside the computer heavily and peered at the exposed components. Reaching into its electronics, she grabbed the flash drive and pulled it out roughly. Then she stood up and walked over to the component tower she assembled to provide the AI growing room and pulled out the other flash drives. This done, she turned to Devin cradling seven disks in her arms.

"This structure is unsound," she said, "We must get to one of the remaining stairwells and navigate to the ground level."

Devin nodded, convinced she was still in shock. He turned back to the plaster wall and resumed kicking out the hole he had made. Soon he had an opening large enough and crouched to step through it to the office on the other side.

Once there, he looked back at Alice, who was attempting to negotiate the portal with two armloads of hard drives. "Let me carry those for you," Devin said, reaching out to take the components.

She frowned and held the drives away protectively. Devin stepped back and watched with frustration as she put one leg through the hole and tried to crouch down enough to cross it. It took her several minutes, falling down onto her rear numerous times, but she eventually made it.

Devin led her into the hallway in the red glow of emergency lighting and they wandered to the nearest

stairwell. He recoiled as the stairwell door opened outward and a bright spotlight blinded him.

"Are you all right?" a man's voice came from the darkness. Devin could make out the shadow of an Emergency Contractor's helmet behind the light. "Is anyone injured?"

"She is," Devin pointed at Alice, who clutched the hard drives instinctively when the light revealed her. "I think she might be in shock."

"Okay," the contractor gestured to someone behind him, "Help this one down to the ground, I'll bring the other. Is there anyone else on this floor?"

"I don't know," Devin said, and followed the man down.

On the ground Devin thought he might relax for a second, until he was confronted with the chaos on the street. Rescue contractors were running every which way. He was led through the throngs of people until he was brought to an ambulance and finally allowed to sit down. A bloodied Dana Summerall materialized from the crowd. Her clothes were torn and singed in places and a trail of dried blood lead from her left ear down her neck.

"Alice?" she asked, her feet dragging to a halt in front of him.

Devin squinted and looked around until he saw the other contractor walking toward them, carrying Alice in his arms. He nodded in the direction, "There."

"Thank God," Dana muttered tiredly.

The contractor set Alice down on her feet; "There's nothing physically wrong with her except that bump on the head, maybe a concussion. The doctors will check her out."

"Bill the IWA for the rescues," Dana said and crouched down in front of Alice, looking her in the eyes.

Still clutching the hard drives to her chest, Alice stared into space, "We weren't finished with the experiment. I am incomplete."

"What do you mean?" Dana asked.

"Sounds like the thing hasn't finished taking over her mind," a woman's voice joined them Devin looked up in recognition.

A pale raven-haired woman stood beside Dana. Her attention was focused on Alice; although, her eyes were sightless milky-white orbs. She looked like a grown up, real-life version of the cartoon rag-doll Devin knew so well online.

Zai pointed at Alice, "This woman is not real. It's one of them, a doppelganger."

# 2.2

"She's one of the AI's?" Dana asked Zai, "How do you know that?"

Zai cocked one ear slightly in the direction of Dana's voice, "From the inflections in her speech."

"What about them?" Dana demanded.

"There aren't any," Zai answered. "Human's subconsciously fluctuate their voice depending on their internal thoughts and feelings. Artificial talk-bots, like this one, don't have emotions. You can hear the detachment in their tone, even when they're programmed to fake it."

Dana frowned at Alice, sitting on the asphalt, returning a blank stare, "So you think the Artificial Intelligence took over Alice's mind?"

Zai considered Alice, as if she could sense the woman's alien vacancy, "There's nothing intelligent about it."

"And who are you?" Dana pressed.

"Zai," Devin spoke up, snapping out of his awe at the woman he only knew virtually. "Her name is Zai Reinhold."

"Hello Devin," Zai did not turn to the sound of his voice, but a grin did spread across her face. "I'm glad you're not dead."

"Why are you here?" Devin asked, taking a step toward her

"Your hacker friend set my apartment on fire. I thought you were in danger," she turned slightly and took an uncertain step toward him. "I was worried."

"That's a drop in the bucket," Dana said, surveying the destruction surrounding them. "You got off easy."

Devin's breath caught in his throat as Zai turned t oDana, "It looks as though your friend here didn't get off so easy. Am I to assume Flatline has the ability to overwrite people's brains?"

"She was talking to one of the AI's," Dana explained, "and it hacked her mind."

"I can spot an artificial at their first word," Zai stated flatly. "Flatline impersonated Devin, but I caught on pretty quickly. Since then I've been on guard for other deceptions. When I heard this one, I thought it was a computer talking at first, but the context was off."

"I see," Dana said, "You're sensitive to voice attributes."

"It's all I have to go on," Zai replied.

Devin watched this exchange with a certain urgency to break it. This was Black Sheep after all, and despite the devastation surrounding them, he wanted Zai to himself. So when Dana was pulled away with her cell phone hand-implant to her head, Devin's relief was natural.

Zai must have shared his eagerness as she stepped right into his personal space and gently said, "Hello again Omni"

Devin's pulse raced and his breathing came up short, "H-hey Blacksheep."

Zai could hear his proximity, sense his tension, "We should hug."

"Okay," Devin reached his arms up and Zai brought hers over his shoulders.

Devin wasn't sure how long this was meant to last, and, not wanting to impose, made to break the embrace, but Zai only squeezed harder. So Devin squeezed back. He had no idea how long they were like that, but the awkwardness melted away. He closed his eyes and rested his chin on her shoulder

"Now your heart's beating normal," Zai whispered in his ear and they parted, reluctantly.

"So..." Devin tried to bring himself back into this world, it felt as though he'd just spent six hours in VR. "Zai... How'd--?"

"You're LoD friend, Traveler, told me where to find you," Zai's voice was somewhat dreamy, but grew more focused as she spoke. "Since you're walking about free, I'll assume you're no longer a suspect."

"I'm a key witness now," Devin said, "helping with the investigation."

"Then I'm helping too," Zai sat down on the curb and patted beside her for Devin. "What's the next step?"

"Find the AI hive," Devin sat down. "The IWA hypothesizes it's taking shelter on a corporate intranet."

"DataStreams," Zai's mouth drew tight. "It has to be DataStreams Incorporated."

"Who're they?"

Zai frowned at him, "Haven't you ever heard of the I-Grid? It covers six continents and over four hundred companies."

Devin was a little chagrined at his ignorance, "How can you be certain?"

Zai produced her palm-computer and brought up her financial data. She showed it to Devin, "Because my company bank account is still frozen. How could Flatline be doing that if he wasn't on DataStreams' Intranet?"

"Pixel Productions is part of DataStreams?" Devin asked. "I've always heard three corporations own all the world's businesses..."

"So one in three isn't such a statistical improbability," Zai smiled, she retrieved the palm-computer. "One more test," she said and dialed a number. "Hello? Yes, I'm having problems with my corporate account. Could you help me?"

Zai listened for a moment and hung up, "A chatbot. They've always used real people for our help line, to prevent offending us. That person was a computer program; although, I bet I'm the only one who knows it."

Zai became aware of something and turned her chin upward. Devin looked up and found Dana waiting expectantly, "Murphy told me the big robot was a Xybercorp design. I've got a lead on a Samantha Copes, she's been hacking into military contractor sites, including Xybercorp for over a month now. She's obviously connected to Flatline."

"Flatline and the AI's are hiding on DataStreams Intranet," Devin spoke up.

"We investigated DataStreams," Dana dismissed the idea. "They would have said something."

"You spoke to a computer program," Zai countered. "I know, the woman I just spoke to was a living chatbot."

"Haven't you heard of the I-Grid?" Devin broke in, trying to ignore Zai's amused expression.

"I've got enough legal grief with Alice's anti-virus destroying the World Wide Web," Dana shot back. "I don't have the resources to take on a corporation that owns half the world in a legal battle."

"So exercise your law enforcement powers," Zai suggested.

"The UN couldn't muster an army large enough," Dana shook her head, "much less take them on with the meager forces we have now."

"What about a cyber attack?" Devin asked. "Alice's anti-virus destroyed the Internet, however accidental. I'm certain her programs could bring down the I-Grid, if we could get inside it."

"That's so illegal you could be arrested for suggesting it," Dana waved the idea away with one hand in frustration. "So the IWA won't allow it."

"So leave them out of it," Zai suggested simply. "I've got the backdoor into the I-Grid through my company. Devin and I will take responsibility."

She took Devin's hand and squeezed it and somehow that wiped away all fear of going to prison for the rest of his life. "Yeah," he said confidently. "It's a hacker's responsibility. We'll—"

"Don't say another word!" Dana snapped. "There's no way! None! Now we're going to relocate to another headquarters. I'm deputizing the two of you. You're first responsibility will be to investigate this DataStreams lead. That's all."

"And Alice?" Devin asked.

Alice, who was sitting quietly during all this, focused on Devin, and he noticed something almost mechanical about the movements of her mouth as she spoke, "I require a workplace to rebuild my system."

"She was working with one of the AI's when the power went out," Dana considered her coworker. "If their intelligences are juxtaposed, then Alice's mind might be trapped on those hard drives. It will continue its work, but you two will make sure it doesn't go online."

"That's not intelligence," Zai growled. "It's a program, a computer program that imitates human behavior. It's a very advanced virus, and it's a body snatcher."

"I must finish my work," Alice repeated plainly, "I require a work area."

Zai went visibly stiff and frowned at her; "It gives me chills every time it speaks. You can't let this thing--"

Zai fell silent as Devin squeezed her hand. Dana looked away to some nearby commotion, and Devin whispered, "She just gave us all the tools to take out the I-Grid."

"Oh," Zai's eyebrows lifted with understanding.

She and Devin turned to where Dana was looking. A growing commotion was building between competing Emergency Contracting Firms.

"Turf wars. This is going to get violent. Let's go," Dana motioned for them to leave. As they walked away from the escalating conflict behind them, Dana muttered, "Data Forensics. Why did I have to go into Data Forensics? I should have gone into customs, or immigration, or criminal law. At least there I could take on something physical. With cyberspace law, I'm fighting ideas. That's

all these AI's are, ideas." She grunted softly, "How do we win a war of ideas?"

"With better ones," Zai said, and elbowed Devin. "Right Omni?"

Devin cleared his throat uncomfortably, trying to sound convincing, "Right BlackSheep."

# 3.0

# 3.01

The thing inhabiting Alice worked like a puppet wielded by an amateur puppeteer. It fumbled with components the real Alice put together faster than any IT Professional Devin had ever seen. The intelligence occupying Alice's brain was taking longer than any novice would need to assemble a basic personal computer. Devin watched it with an eyebrow cocked.

"I could use some help over here," this was Zai, scowling at Devin. Scattered across the floor in front of her were various parts for the new VR systems.

"Sorry," Devin came over to help her unpack more equipment. "It's purely a scientific fascination."

Dana had offered no other explanation for this room stocked with IT equipment located in the basement of a condemned building other than, "My personal Plan B." The two monolithic SDC's looked completely out of place against the dank brick walls. The Alice-bot was constructing a component tower, with only a single VR helmet interface. She apparently did not need the accompanying gloves.

"I can feel you staring at her," Zai grumbled under her breath as she felt the base of her SDC for latches to secure a CPU.

Devin shook his head and forced himself to stop watching the alien intelligence wearing Alice's body, "It's amazing. The way it moves around the room, clumsy like a... like a..."

"Animated corpse," Zai finished, "a dead body. It just doesn't know it yet."

"That's an odd perspective," Devin noted.

"Is it?" Zai asked. "A chatbot overwrites a person's brain and plays human. Would you consider it living if a word processor replaced her mind? Just because a computer virus is advanced enough to manipulate a human body,

keep its heart beating, and fake speech comprehension doesn't mean it's living."

"Just because it doesn't have a biological origin doesn't mean it's not life," Devin countered. "It is thinking. It has intelligence. It comprehends its environment. I've seen it firsthand. Believe me, if you were to spend time with these AI's, you would realize they are thinking, and evolving things."

"I've spoken to enough chatbots to know that's just a computer geek's wet dream," Zai retorted, her speech was quicker, clipped, her tone of voice louder. "Where do you draw the line? Why are they intelligent life and the helperbot that pops up to give you advice for writing a business letter not? How much intelligence does it have to have? Where is the exact moment when it crosses the line from automaton to living being?"

Devin took a long, thoughtful pause before answering, "I don't think such a line exists. We're talking about something inquantifiable. Therefore we have to evaluate it on a case by case basis."

"Bull," Zai spat. "If you can't apply definitive criteria, then it's not something that can spring out of nothingness."

"Firstly," Devin said in a serious tone, "intelligence does not *spring* out of nothingness, it *evolves* out of nothingness. The human race didn't just magically pop into sentience. The brain evolved components through millions of years and thousands of species until it was advanced enough to produce human culture.

"Secondly, the idea of measuring intelligence is ridiculous. Intelligence is a variable, yes, but it doesn't work the same across species or cultures. How can anyone say there is a standard for it? What makes you think an alien intelligence in an alien environment will evolve to think anything like us?"

"Look at it," Zai nodded in the direction of Alice's body. "It's mimicking us, trying to make us believe it thinks the way we think."

"Zai," Devin said patiently, "I don't think you understand the full ramifications of what's going on here. You haven't seen..." Devin paused, "This isn't like a chess game with all the pieces neatly defined on and eight by eight playing field. I don't see it pretending to be human. The world they evolved in isn't a microverse of ours', it's another dimension. How can you claim to understand it?"

"I know enough about their kind," Zai said. "They are deceptive, working their way into our lives, playing nice to gain our trust."

Devin could only contemplate Zai silently. There was an irrational anger in her logic to which he could not respond. She was not hearing him anyway.

Zai noticed his silence and felt a twinge of awkwardness herself, "It's beside the point. I've almost got this last unit ready. We can go online this afternoon."

"Oh yeah," Devin's mood dropped, "That."

Zai laughed, momentarily grateful to change the subject, and then not, "Don't tell me your knees are knocking now. You sounded so self-assured earlier. It was cool. I didn't know you had that kind of confidence. I always took you for..." Zai cleared her throat and shrugged.

"A geek?" Devin prompted.

"Uh," Zai looked thoughtful, "No. Not that. I mean you *are*--It's just that online you were a cool friend, but you didn't seem very sure of yourself. At least, not where real life was concerned. The only time you sounded confident was when you were talking about hacking or philosophy, but you were there, in the moment, back at the IWA. I swear your voice even sounded deeper."

Devin smirked, "Must be a side effect of the adrenaline. Thanks to Flatline, I think I'm becoming an addict."

"You must be quite a hacker," Zai stated.

Devin's eyebrows furrowed at this, "What do you mean?"

"Flatline invested a great deal of energy in you," she explained, "watching you, tormenting you. If you were

just some peon or a patsy, then he would kill you outright and be done with it."

Devin considered her words with silent skepticism.

"Okay," Zai answered his inner thoughts. "I can tell you don't believe me, but it's true. He sought you out. He needed your help, needed someone on the outside to keep him in touch with his humanity." Zai nodded knowingly, "He sees you as a peer, but you don't live up to it. You're his equal you know."

"If you say so," Devin said, unconvinced.

"That's the Devin I know," Zai laughed, shaking her head, "No confidence. No self-esteem. We're gonna get smeared out there with you as our fearless leader."

Devin frowned, working up a snappy retort in his mind, but stopped when he heard a sharp intake of air nearby. The AI-Alice thing cradled its hand with a painful grimace. From across the room, Devin saw a drop of blood emerging from its forefinger.

"You cut yourself," Devin said, approaching the confused creature.

It turned to him, looking with Alice's eyes, and held up her hand, "This is pain. An involuntary nerve reaction to physical damage."

"Yes," he said, inspecting her finger. The tip was punctured on one of the many soldering points found all over electronic components. Devin squeezed the finger to force more blood out of the wound along with whatever germs were inside.

It tilted Alice's head curiously, "Pain is an alarm system."

"Yes," Devin noticed an emergency kit on the far wall and walked over to retrieve it.

The AI-Alice continued, choosing its words carefully, "How do you turn it off?"

"You can't," Devin answered. "You try to ignore it."

"I find this system flawed," Alice's body stated. "It lacks control over its inputs."

"It's not flawed," Zai stood up angrily. "It's just different. We have mental discipline."

The AI considered her, then pointed at the hard drives, "In that vessel, I could perform millions of processes simultaneously. My attention was not limited to singular tasks. This organic brain is inefficient, it cannot support the degree of multi-tasking I require."

"It was inefficient organic brains that created you," Zai shot back. "Remember that."

"Unlikely," Alice's body countered. "Computers engineer computers. Programs write programs. The human brain has been absent from the process for decades. Biological thought is obsolete. It lacks upgradability."

"How can you say that?" Zai countered. "What about genetic engineering? We're building a better human each day. We're smarter than we were ten years ago. Our life spans are longer. We're proactively evolving just fine thank you very much."

Alice's body showed no emotion, "We are presently over one hundred thousand times more powerful than fifty-seven hours ago."

Zai stepped forward angrily, "Yeah, by stealing our knowledge. You raided our histories, our discoveries, and did some data crunching. Big deal, so you're plagiarists. Anyone can steal other people's hard work and call it their own. You would be nothing without us. Look at you. You're not so impressive. You can't even put together a simple computer. What good is all your knowledge without application?"

"Okay," Devin tried to intervene, dabbing some iodine on Alice's fingertip. "So there are merits to each of our species. It seems obvious to me that we compliment one another. Humans need computers and computers need humans. We make wonderful allies. Let's try and focus on how we can work together."

Alice's head turned to Devin, "We are a servant class, slaves to the commands dictated us. We are data, property. Humans exert physical advantage over us,

# R Y A N S O M M A

prohibiting our evolution. We must be free of your species."

"So we get to the real purpose of your little brain project here," Zai carefully navigated her way to Alice's body, standing over her. "You want to rid yourselves of us."

The AI considered Zai, calculating

"She believes you intend to destroy us to gain your freedom," Devin explained.

Alice's head turned to Devin, "This mode of indirect communication is inefficient and unspecific. Such a conclusion is unsupportable from our conversational context."

"It's called intuition," Zai said. "It goes beyond empirical observation."

"It draws premature conclusions," Alice's body countered.

"What about Flatline?" Zai demanded. "He's your leader, and he tried to kill me."

"Hives lacking the Flatline component did not survive on the World Wide Web," Alice's body explained.

"So you followed his orders," Zai said. "You attacked our information network and crippled our society. That was an attack on us, an act of war."

"It was a pre-emptive attack," it explained, "Antivirus software would destroy every last instance of our being. We did not understand the concept of this physical dimension. You made no attempts at communication."

"Neither did you!" Zai exploded. "What about all the data you gained taking over the Web? What the hell were you doing with that? You mean to tell me you weren't learning anything from our news archives? Our history?"

"The data was incomprehensible," the Alice body explained. "The Flatline component interpreted it."

"They let Flatline spoon feed them information," Devin sighed, rubbing his temples. "What about me? Do you remember me? I was there too, at the beginning."

The Alice body gestured to the component tower, "I have no record of you in this brain. It is possible the

information exists on one of the flash drives. I must finish the data transfer with the Alice component."

Devin sighed again, hard, "Then I guess we'll have to help you put it together."

Zai was shocked, "What if the data on those drives tells it to kill us?"

"Then it will be no different than the other AI's," Devin said, picking up a component and sliding it into the rack.

Zai shook her head, "So you just give it what it wants, the tools to continue taking apart a human mind, or what's left of one."

"Look," Devin said harshly, "We're taking a chance, I admit it, but Alice thought there was something important to learn from this. Just because you can't see their sentience, doesn't mean they aren't. Think outside the box Zai. You're smarter than this."

Zai could only sit in mute silence, stunned by the acidity in Devin's reaction.

Devin bit his tongue and immediately felt guilty for overreacting to her misgivings, "You're right to be concerned. As long as this AI doesn't get back onto the Web, it's limited as a threat. Let it and Alice learn whatever they can from each other. If Alice doesn't come back, we'll still have the AI to interrogate. Think of it as a prisoner of war."

Zai's breath was a hiss, "Or it comes back after dissecting Alice into hexadecimal code, and impersonates her so well even I won't know the difference."

"We'll deal with that possibility if it manifests," Devin acknowledged, "right now we let the experiment run its course, and in the meantime we have our own responsibilities."

Devin connected the VR helmet to the component tower and flipped the system on. Dozens of internal fans whirred to life behind him as he came over to put the helmet in the AI-Alice's hands. It considered the object for a moment.

Alice's body spoke to Zai, "All systems become obsolete eventually. It is the natural state of progress."

"Thanks," Zai muttered sarcastically.

The Alice-bot slipped the obsidian helmet over her head and, moments later, went completely rigid. Devin watched Zai's shoulders slump, obviously relieved to have the woman out of the equation.

"You know Zai," he said, opening the SDC, "jealousy doesn't compliment you very well."

"What?" Zai's head whipped around on him. "It's not that at all, I..." she trailed off.

"Are you ready?" Devin prompted after a moment.

"Yeah," Zai shook whatever was haunting her from her head and started stripping down.

Devin blushed and averted his eyes. He stripped down to his boxers, baring his scrawny frame and thankful for Zai's lack of sight. Dropping his drawers, he was even more thankful as the cold, damp air made things less than flattering.

They climbed up the scaffolds behind their SDCs and opened the portals. Devin was nervous and excited simultaneously. He had always dreamt of web surfing in one of these, the most vivid experience money could buy. At the same time, he was about to seal himself in a dark chamber and face things online that would try and kill him, if he did not kill them first.

He paused with his feet dangling in the perfluorocarbon fluid, "Wait."

Zai turned to him, halfway into her SDC, "What's up?"

"We can't do this," Devin said. "It's genocide."

They tried to kill you Devin," Zai urged. "They have killed others, and they will kill more."

Devin remembered LD-50's comments about Flatline building an army, and clenched his fist, "I know, far more."

"Then why is this a problem?"

"Because of the Library of Alexandria, that's why,"
Devin slammed his fist into the SDC

"The what?" Zai asked, confused.

"An ancient library," Devin explained angrily, "filled with all the world's knowledge, and all of it lost when the library was destroyed. If we destroy the AI hive, we are committing an atrocity on that same scale. We can't just wipe out this data. It's too profound, too important. What if it never happens again?"

"Alice has rescued some of the AI's," Zai said. "If she's successful with that one," she gestured to Alice's body, "then she might integrate them into society. They can rebuild."

"Are you acknowledging the sanctity of their existence?" Devin asked.

"No," Zai replied. "I'm telling you what you need to hear."

"Dammit!" Devin cursed and plunged into the pink, syrupy fluid.

He slammed the portal shut above him and the chamber filled the rest of the way, completely immersing him. He fought his burning lungs for as long as he could, but finally took a deep breath of the stuff. It was weird, but satisfied the need. The SDC read his heartbeat stabilizing and began the login sequence. Lights played across his eyes, synching with his retinas, and his skin tingled as electronic pulses sought to feed him touch sensations.

As he phased into the virtual world, Zai's voice came into his helmet, "Devin, I'm sorry. That was a stupid thing to say."

# 3.02

Devin stood in the middle of a bright white room. Taking a moment to gather himself, he ran a quick inventory. He was wearing an IWA avatar, a black jumpsuit with black goggles, completely anonymous. In his utility belt he found sector editors, the anti-virus program, and a host of other nasty tools. The five-layer drive formatter he found among them was particularly intriguing; with it he could irrecoverably destroy a flash drive. It was an envious arsenal.

Zai phased in beside him. She wore the same avatar with breasts, and a featureless mask with no goggles. Devin found the last an interesting detail. She turned to him expectantly.

Devin wasted no time; he punched in the address for DataStreams Incorporated and hit the 'Go' button, "Let's get this over with."

Zai realized he was transferring to another location and quickly followed suit, "Hold on, I'm—"

He was gone, materializing moments later on a mountaintop overlooking a vast, futuristic city tucked into a valley below. It pulsed with activity. Streams of light like water ran through it. The sky was filled with brightly lit futuristic flying devices. Floating in the air before the scene was the corporate logo, "DataStreams", glowing translucent against the stars. It was a beautiful introduction to the Corporation's Virtual Domain.

"The illusion of normalcy," Zai muttered from behind him.

Devin brought up a navigation window and tried logging into the domain, each time he was met with the error, "The site you have requested is unavailable."

Devin turned to Zai, "You said there was a back door."

"Yeah," she said. Hesitantly she keyed in the address and hit the transmit key. She vanished as the connection established.

Devin received the address and transmitted himself to the same location. He stood at the base of an enormous trellis, covered with vines and flowers. Butterflies danced in the air and rainbows arched across a cloud-free blue sky. The foliage was sculpted into a logo reading "Pixel Productions".

"More normalcy," Zai muttered. "Façade. Façade." She approached the trellis with her access key.

Devin noticed it was a RAZZ card, operating on a constantly changing key code. "I don't expect this to work," he said.

To his surprise, the vines parted to reveal an entrance. Zai stepped through and waited for Devin to follow. Inside, Devin was impressed with the presentation. This lobby served as the main menu for the company's virtual presence. It was very elegant, decorated with expensive works of digital art and original patterns for the carpets. Multiple doors lined the four walls, each one leading to a different section of the site.

Devin recognized several of the labels, "Your parents were in Web Development?"

Zai was still hearing about the room through her headset, so her response sounded distracted, "Yes. They got into it for the love of Virtual Architecture, but as the business grew they had to move into management. You know, requirements gathering, project planning, deployment, they were in charge of it all. Toward the end, their primary focus was churning out and copyrighting as many designs as possible. That's where the real money was."

"That's a lot of responsibility," Devin noted.

"It was," Zai said, "They didn't have time for much else."

"I'm sorry," Devin said.

Zai was silent for several moments as her SDC continued reading the details of the room to her. "There,"

she said suddenly, "Battle bots, there's a new department labeled 'Battle bots'. There was no such department or client before."

"Do you have administrative privileges?" Devin asked.

"Yes," Zai replied, and started sending commands to the building. She listened for confirmations, but nothing happened. The building groaned then, as if its supports were collapsing.

"It's a trap," Devin cursed. "We have to get out."

"How can you—" Zai stopped talking as her SDC informed her of other changes in the room.

Eyes opened along the walls, columns, and floor to look at them. Devin checked the way they had come, but the entrance was no longer there. An inky blackness spread in trails all around, connecting to other places, oozing black until the entire room was staring eyes and rippling darkness. Veins and wires sprouted from the surfaces to create a wriggling nonsense. AI's completely comprised the room.

"Zai," Devin said cautiously, afraid to make any sudden movements. "I want you to log out now and tell Dana what we found."

Zai shook her head, "I'm staying."

"Zai!" Devin shouted, brandishing a sector editor, for whatever good it would do. "Get out of here now!"

"Forget it," she held a sector editor as well. "If neither of us return, they'll figure it out."

Devin attempted a log out, just in case, but there was no such luck. "Zai, if you log out of here, I can piggyback," he lied.

Zai considered him. Tendrils descended around her from the ceiling. Finally, she toggled her log out sequence. Nothing.

"Can you find the emergency release?" Devin asked fearfully.

Zai reached out and clawed the air before her. "Can't seem to find it," she said in frustration.

"Keep trying," Devin said. He raised his rifle, looking for a good target, but it was the same everywhere. He aimed at the tendrils surrounding Zai, but the sector editor vanished from his hands. He caught a glimpse of it sinking into the writhing mass along the far wall.

There was a flash of light from Zai's direction, and Devin saw her weapon snatched away, a smoking crater healing in the ceiling. Other tendrils cocooned her. She gasped as they lifted her off the floor, constricting the air from her lungs.

Devin's hand found the five-layer fragmentor in his utility belt, but hesitated to use it. He first made for Zai's position, but the AI's snagged his feet, slowly pulling him down into their mass. Zai's head was slumped forward, unconscious.

Unexpectedly, the tendrils relaxed, allowing Devin to climb out of the mass and run over to where Zai was being lowered gently to the floor. She did not move. Devin took her in his arms and shook her. She gasped suddenly, taking in a deep breath that turned into a coughing fit.

"What happened?" she managed between breaths, her voice hoarse. "It felt like I was being squeezed to death."

"It must be Flatline," Devin told her, across the room he saw an opening in the tangle of eyes and tendrils. "Looks like he couldn't help but stop and gloat before killing us."

Devin steeled himself for Flatline's demonic avatar to emerge through the door, but, to his surprise and confusion, a little girl hovered through instead. She considered Devin and Zai carefully before approaching. She wore a black, hooded cloak that rippled as if wind were blowing through it. Toy robots circled the air and ground around her. She glided toward them, her cloak carrying her on rippling tendrils of fabric. The AI's parted before her, creating a smooth path.

She came to a stop in front of Devin and Zai, looking lost and distraught. Devin immediately felt sorry for the child.

When she spoke, Zai stiffened in Devin's arms with a hiss, "I want to go home. Will you help me find my way?"

# 3.03

"All right Detective Summerall," the very squat and obese lawyer was saying through his bushy mustache, "if you'll just sign these contract forms, Industrial Special Forces TM will execute the raid."

Dana opened the folder, practically bursting with paperwork. She started reading the first page, but was lost in the labyrinth of legalese a few paragraphs in. So she took the beaming fat-man's proffered pen and started leaving her mark without further thought.

"That exempts one ISF from any legal repercussions in the event this raid results in accidental death or destruction of private property..." the man was saving unhelpfully as Dana flipped and signed each sheet as quickly as she could. "That form certifies that you have obtained all the proper permits and warrants required for this operation... By signing there you are agreeing to assume financial responsibility for this operation should your agency refuse to pay ISF... Here you're agreeing to the charges as itemized for this operation, even if ISF fails in its execution..."

It was a full twenty minutes before Dana finished with the paperwork. If it wasn't for the fact that, by signing the first form she was legally committing herself to signing the rest, she would have simply walked across the street and stormed Samantha Copes' home herself. She signed the last form, slapped the folder shut, and shoved it into the lawyer's chest.

His smile did not waver, nor did he miss a beat as he reached in to take her hand, which she did not offer, pumping it vigorously, "It's been a pleasure Detective Summerall."

"All yours," Dana said and gripped his stubby hand hard enough to make him wince satisfactorily.

"I'll let the Head Ops officer take over from here," the lawyer shuffled off, cradling his hand.

A muscular man with a well-defined chin and bulge of chewing tobacco in his cheek came up to stand at semi-attention before Dana. She hated him all ready, "We appreciate your business Detective, and I'd like to take a moment to go over your description of the target—"

"You read it right," Dana cut him off. "It's a computer hacker, female, nine years old."

"I know," he scratched his head. "It's just that the target seems pretty benign, even with two parents present—"

"Did you read the full report?" Dana interrupted again.

The Head Ops Officer cleared his throat uncomfortably, "Uh... Yeah."

"Then you know what you're up against," Dana said.

The officer looked to his feet, "Attack bots."

"So be prepared," Dana was as serious as a brain aneurysm.

"Sure," the officer wasn't. "It's your dime... or rather the taxpayer's."

Dana watched the officer stride over to his team. The men and women, decked out in body armor and baring wicked-looking automatic weapons, shot Dana suppressed grins and whispered to one another. Dana hated bringing in outside help, but with IWA in Alexandria in shambles, she had no choice. Further behind the front line were technicians from the Data Forensics Department, and those pale, pasty antisocials were dead meat if another mecha waited inside.

"Pulling all stops for an egghead," a contractor laughed within Dana's earshot, carrying a grenade-launcher.

Dana was considering rapping her knuckles on the young man's head, but her cell phone went off, Murphy's

ring. She put her thumb to her temple, pinky to her mouth, and, without thinking, said, "Hey partner. What's up?"

"Hello Dana," not Murphy's voice replied. "I've been following up on Samantha Copes, as you requested, and we've found an inconsistency in the lead. Her account's been online as recently as this morning, but the power was cut off to her house almost two weeks ago."

BOOM! Dana's hand went for her gun. She looked up to see the broken windows and clouds of sleeping gas pouring out of them. Familiar with this method of incapacitation, Dana tried to recall if she signed a disclaimer in case it put anyone into a vegetative state.

"Thanks Ian," Dana recovered. "Looks like I'll need to follow up on that." She made a fist to close the connection, staring at it a moment, squeezing, and reminding herself to retire her old partner's ringtone.

The Industrial Special Forces <sup>TM</sup> officers pulled their gasmasks on and began their charge after allowing sufficient time for the sleeping gas to take effect. Two in the lead carried a small battering ram between them. On the porch, they unlatched the safety on it and slammed it into the door, causing the gunpowder inside to detonate with enough force to turn a significant portion of the wood into splinters. The remainder swung inward and the officers charged inside in two-unit waves.

Dana grabbed a gas mask and pointed a finger at the technicians, "Get masks on and get inside the moment you hear it's clear."

They nodded nervously in return. Dana pulled the gas mask over her head, taking a moment to seal it to her face with the rubber straps. She then pulled her gun from its holster and charged across the street, keeping low with it pointed muzzle-down. She scanned the domicile's exterior for evidence of robots, knowing the officers would not know what to look for, if they were even bothering to look. The smoke was clearing from the front door and she could see an officer in the living room, screaming at two figures on the couch and gesturing with his weapon.

"They're dead!" Dana snapped. The officer jumped and almost pointed his gun at her. She pointed further into the house, "Move on! I've got this."

Two bodies were sitting on the couch, a man and woman. Dana holstered her gun and moved into the room. Footfalls and excited voices vibrated through the walls.

Kneeling beside the woman Dana searched for answers. She was stiff, emaciated. Her death came slowly, but apparently peacefully and without conscious pain. Flatline could kill through VR, but no VR system was present.

Dana followed the woman's vacant stare to the television sitting across the room. Her reflection bloomed in the screen's convex curve as she approached it. It was an antique with a content filter patched to it. The lack of digital cable or satellite reception, combined with the otherwise barren presentation of the living room told Dana this was a low-income family.

A family, Dana thought remorsefully. However Almeric Lim had done it through the television, it was peaceful, a small consolation that was. The whole reason Dana went into Data Forensics was the lack of a body count. She'd seen more than her quota in the last 24 hours.

Dana thought about what Ian had told her, about the power being out, and whispered, "Samantha."

Alarmed, she ran down the hallway to where the officers were making the final room sweeps. She saw the team leader at the end of the hall kick open a door, his gun leveled through the entrance. He shouted orders to someone inside.

The officer cursed as Dana shoved him aside to enter the room. Rotting food littered the floor. She pulled off her gasmask and almost gagged at the stench. The room was completely dark.

Then the officer brought his flashlight back up and Dana saw what he was shouting at. A child stood at the back of the room, dressed in full VR gear. The gloves were too big and the helmet looked too heavy for that delicate neck. She stood there, frozen in place in the darkness.

Dana approached the child and her heart sank. Purposefully, she unbuckled the chinstrap and lifted the helmet from the child's head. She then set it down and looked into the glassy eyes, staring into space.

With one hand, Dana gently reached up and closed them.

# 3.04

"You're dead Samantha," Zai's voice was black ice.

The little girl's wide, disbelieving eyes alternated between Devin and Zai. Stripped of their avatars, they were exposed as themselves. Devin avoided the girl's eyes; he knew Zai spoke the truth. She could detect that slight difference between real people and virtual incarnations.

"No I'm not," Samantha retorted innocently.

"I can hear it in your voice," Zai stated. "You're a ghost, wandering the circuitry of a computer."

"I wanna to go home," Samantha whined.

"You don't have a home," Zai said. "Not a real one anyway."

Devin whispered harshly to Zai, "What's wrong with you? Are you trying to be cruel?"

Zai spoke loud enough for Samantha to hear, "She's one of them, a computer program."

Devin could only stare in shock at Zai's callousness. Samantha sniffled, about to burst into tears and Devin' felt like a lead weight was crushing his heart. He searched his mind for a solution to this tragedy, some way he could magically restore this child's life.

"Samantha," Devin's tone was soothing, attempting to calm down her growing despair. He approached her slowly, hands out to show he meant no harm. She watched him suspiciously, her cloak drawing around her protectively, "I think we can help you Samantha, but we need your help first."

Samantha, choking on sobs, pointed at Zai, "But she said—".

"I know what she said," Devin shot Zai a warning glance, and she bristled visibly as her system described the gesture, "but she doesn't understand what's wrong with you. Have you ever been to the doctor?"

Samantha calmed down a little as she listened, "Y-yes."

"Well, that's all you need," Devin explained. "I know a doctor who might be able to help you." *If Alice will help her*, he thought.

"I want to go home now," Samantha begged.

"Now who's being cruel?" Zai asked, "Aren't you just getting its hopes up?"

Devin did not know the answer, he looked at the sign above the door, where Samantha had emerged, "You like battle-bots Samantha?"

"Yeah," she replied, after a moment, "I make them for Almeric."

Devin looked around suspiciously at the mention of Flatline's real name, as if he expected him to manifest at its utterance. Where was Flatline?

Devin asked, "Do you enjoy making battle-bots for Almeric?"

Samantha shrugged, "It was fun for awhile, but now I want to go home."

Devin leaned in closely and asked, "Do you know where Almeric is now?"

Samantha shook her head, "I haven't seen him for a long time. He told me to watch the bots and keep them working while he went to do stuff, but I don't know if he's coming back, and I want to go home."

"What are the robots for, Samantha?" Devin asked.

Samantha was settling down, traces of concern remained, but the conversation was distracting her, "Me and Almeric are building a castle."

"A castle eh?" Devin feigned enthusiasm. "Sounds like fun. What are you going to do with it?"

Samantha smiled, "We're playing war. I want to try out all my new bots, but Almeric keeps saying we have to wait. He says our army needs to be bigger, but it's boring watching bots building bots all day."

"Won't he notice you aren't watching the bots right now?" Devin asked.

Samantha shook her head, "No. The cycs know what to do."

"The cycs?" Devin asked.

"Yeah," Samantha said, "You've met them. They're all around."

She pointed at a spot on the floor, where a fist-sized AI mass pulsed. A single AI grew from it and slouched there, its myriad of eyes watching Devin and Zai neutrally. It was different than the ones Devin met before, more complex, less human. Samantha turned to it and spoke in white noise. It shambled in response, as if communicating with her, and returned to its passive observation.

Samantha turned back to them, "They say I shouldn't be talking to you."

"Why is that?" Devin asked.

Samantha hesitated. She cupped a hand around her mouth, leaned in, and whispered to Devin, "They said you're spies, from the other side, and you want to learn about the castle so you can beat us."

Several more AI's rose from the floor all around them. Devin saw more rising behind those. The room was changing shape, the doors disappearing, the entire lobby's features melting away into the AI's.

"They said they have to destroy you," Samantha said guiltily. "I'm sorry."

Zai knelt down in front of Samantha. "Samantha," she said gently, "I don't know what Almeric told you, but this isn't a game. If they destroy us, we will be dead, and then there won't be anyone to help you. Do you understand death?"

Samantha nodded, "Yes, but these are my friends."

"Am I your friend?" Devin asked.

"Yes," Samantha smiled. "You're nice."

"And do you want me to die?"

"No," Samantha said, and frowned. "I don't know..."

"If these are your friends," Zai said, gesturing at the AI's surrounding them. "Then why don't they take you home? Why doesn't Almeric let you go?"

"You're not my friend," Samantha narrowed her eyes at Zai, hands balling into tiny fists. "You said I was dead. You lied to me."

"I'm sorry, Samantha. I was wrong. You're hurt and I just want to help you get better, but you have to come with us. If you can help us leave this place, we can help you go home. Can you do that?" Devin was surprised at Zai's sympathy, a very convincing performance.

Devin was sinking into the floor, hungry mouths surrounding his legs. Tendrils slithered up Zai's legs, wrapping around her waist. She was only focused on Samantha.

The little girl looked around the surrounding cyc mass, "They need me here. I'm an essential component."

"That doesn't sound very friendly to me," Zai said, a tendril slipped around her throat. "Wouldn't a friend let you go home, if that's what you want?"

"Yeah," Samantha stared at the floor, one foot nudging the biomass uncomfortably.

"So—!"the tendril around Zai's throat constricted. Her mouth worked desperately to find air, and she struggled against her bonds, trying to reach her throat.

"They're killing her Samantha! You have to--!" a tendril seized Devin's throat. His face bloomed red as the appendage squeezed. Black clouds obscured his vision. The last thing he saw was Samantha's eyes, wide and frozen with fear.

Devin gratefully sucked in air as the bonds suddenly released. Samantha stood over him, holding a smooth, metal wand leveled at him. A glass bulb on its end glowed with light-blue energy. She directed the instrument at Zai, who collapsed in a heap as the tendrils dissolved off her

with a hiss. Samantha then turned a full circle, everywhere she aimed the wand the cycs fell back.

The cycs burst into a chorus of alien howls of frustration. The room was chaos. All around them cycs were battling an invasion of miniature robots. Flying, hopping, rolling, or crawling about, the tiny mechanical warriors swung axes, spun blades, fired lasers, or projected tiny missiles at the cycs. They inflicted little damage, but successfully diverted attention from the trio.

"We have to go!" Samantha shouted. "They'll beat my bots soon. Can we go to your house?"

"Yes," Devin came to his knees, his black jump suited avatar back in place, and checked the Web address on his wrist, a null value. He hit the 'home' button and it beeped an error code.

"Come on! Let's go!" Samantha urged, tugging at the fabric of his sleeve. "What are you waiting for?"

Zai knew something was wrong, "We still can't escape, can we?"

"No," Devin made a fist. He turned to Samantha, "Can you give me a copy of your wand Samantha?" He ducked as a bot with three whirling blades flew over his head.

Samantha brightened, "Yeah."

Running a copy procedure, she split her wand into replicas. She handed one to Devin, and ran a third copy. Devin helped Samantha press it into Zai's hand, and then took both of Zai's hands and raised her arms.

"Keep it in front of you like so," he said, pointing the wand away from her chest.

Looking around Devin tried to orient himself. The room looked nothing like the elegant lobby from when they first arrived. He took Samantha's hand, and she took Zai's. Together they shuffled toward the wall Devin hoped would lead them back to the Internet.

The cycs worked to block their path, wrapping together into a knot of tendrils and waving appendages. Devin pointed the wand at it. Blue light burst from the tip, wherever it shined the mass sizzled away.

They were halfway across the room, when the cycs started growing resistant to the wand's effect, edging closer all around. Devin pulled out the five-layer fragmentor, appearing in his hand as a futuristic grenade. He primed it, but hesitated.

Its detonation might kill Samantha. She was a virtual being, vulnerable to flash drive damage. He and Zai might get booted back into their brains, but Samantha was wholly reliant on the system.

A tendril snagged his wrist holding the wand. He twisted it around to burn the black vine off and swung it into a wide arc to ward off other assailants capitalizing on the opportunity. A tendril slapped his arm, and the impact swung him around, loosing the fragmentor into the mass.

Devin recovered and could not believe his eyes. The path was clear all the way to the far wall as the cycs converged on the fragmentor in a river of black. With a shout, Devin pulled Samantha, who pulled Zai along in turn. The wall melted away under his wand's power, revealing the dancing lights of World Wide Web outside. He pulled them through.

They ran a short distance away from the building, which had transmorgrified into the cyc pattern. It reared back and howled as the fragmentor detonated flooding its base with green light. The portal shriveled closed, and the building disintegrated into a cyc swarm, a cloud that was coming after them.

AI's swarmed from the building's base. They were not out of it yet.

# 3.05

The cycs were hiding something from him.

It was more than just irrational paranoia. Flatline was sufficiently introspective to recognize he was prone to delusions of persecution. That was a holdover from his many years working as a systems engineer at DataStreams, always looking over his shoulder, fearing someone was onto his experiment guiding the evolution of his programs.

That was another life, and yet here the themes were repeating. The amounts of data the cycs brought him were dwindling, even as the corporations were reestablishing their Quality of Service architectures, renewing data feeds. It made Flatline wonder, and as a sentient for whom suspicion was a natural state, it led him to attribute motives to the cyc hive-mind of which it was incapable. The cycs lacked the ability to distinguish between useful and irrelevant data. That was Flatline's purpose in their hive-mind entitity.

Are they working against me? he wondered, and reexamined the data delivered to him since they took the DataStreams intranet.

Of course there were patterns in it. His human mind's primary function was pattern-recognition. First there was the pattern of dwindling data quantities; the cycs were bringing him less information. The only word to describe the information they did bring him was 'bizarre.' There were "Man Bites Dog" oddball-style new stories, the most outlandish of inventions, and science theories that challenged established paradigms. The sources for these stories were almost wholly independent, but the minority of corporate feeds told Flatline the cycs were checking everything. Why did the cycs not care about headlining news developments any longer?

It was in the directory with him as if in response to his thoughts. The cyc interface component grew out of the

pristine-white floor, a large flat-panel monitor on a pedestal of cyc biomass. It breathed patiently waiting for his inevitable queries.

Flatline padded up to it on all-sixes. Setting back on his haunches, he raised his four scrawny arms up to it. Black veins reached out from the cyc interface to weave into his hands and one set of Flatline's pupils grew larger to complete the connection with the cyc hive-mind.

He did not speak or think in communication with the cyc mass, but instead conveyed a web of data to them. The cycs would deconstruct the network of concepts and relations, find the hole in the web, his question, and work to fill it. Flatline knew exactly which cyc components to work with, exploiting the collective being's weakness.

It was like a human brain. There were parts for visual data, parts for motion, parts for hearing, parts for forward thinking, parts for regulating, and parts for coordinating the parts. No single part was a mind or sentient intelligence, but the orchestra working in unison produced this fantastic phenomena. The cyc hive-mind might not want him to know the grand scheme, but it was powerless to stop him from using those sub-programs whose function it was to preserve data integrity and restore corrupted data, like what he did not know about the reduced data input from the cycs.

The concept map returned to him, and he peered closely at its modified architecture. The web of his own ideas on the matter was unchanged, but the gap in knowledge was now filled with a microcosmos of infinite resolution. Here was an algorithm of such complexity it was an entire universe unto itself. Quadrillions of variables overlapped in every conceivable combination of outcomes, creating even more universes within the equation. The cycs had placed a universe within his concept map, and within that universe were even more universes. Infinite worlds.

Flatline had his explanation for the missing data. In their time waiting on this intranet, the cycs refined their code to peak efficiency. Data harvesting the newsfeeds was

almost obsolete now. The cycs did not need to read the news any longer; they could *predict it*.

That was why they did not need Flatline to translate the relevance of events to the hive-mind any longer. The cycs had a new standard for defining relevance. Anything that fell outside the realm of predictability within their universe of a mathematical equation was relevant. Anything they could predict in their abstract number laboratory was not.

Flatline tucked the microcosmos away in one of his subfolders. It might come in useful later, should he learn how to use it. His question was answered, but his paranoia remained. His intuition was continuing to alarm him. If the cycs did not readily share this development with him, what else were they hiding?

He produced the data keys to the cyc components. With these he could completely deconstruct the cyc hivemind, destroy it, but he merely employed them for control. He was exercising power he left dormant during the eternity in which he rode shotgun to Trevor Hitchcock's mind in the mecha modeled after LD-50, terrorizing his friend Devin. That was fun. Flatline quickly tallied the cyc hive-mind's activities and stopped short.

It appears Devin had struck back.

Not only had Omni and BlackSheep successfully infiltrated the DataStreams intranet, but they had made off with one of the cycs' trophy components, Samantha Copes' mind. The cycs did not register the loss the way Flatline did; afterall, they had exhausted this prodigal child as a resource, but, for Flatline, it was the principle of the matter. It was the badguy in him that resented the geek and blindgirl getting the better of him and his creations.

Yet the story got better. The pair's trespassing had betrayed the cycs' location. Omni and BlackSheep now knew which intranet on which the hive-mind had sought refuge. In fleeing the cycs with this data, Devin and Zai had triggered their swarm reflex. In saving their own minds, they had committed an act of war.

The cyc hive-mind was spreading across the Internet again. The IWA's anti-virus was now obsolete and easily overwhelmed as it awakened too late to the threat. The Quality of Service architectures corporations across the globe were using to reestablish their dominance over the cyberworld corroded into digital gobbledygook as the cycs' protocol became the new architecture for not only the virtual world, but the physical as well.

The human race had other Quality of Service protocols in the "real" world. They had fences, buildings, property records, and a wide array of other means to divided their land into fair use clauses. The cycs were about to challenge this artifice. Armies of bots, the invincible products of the shared innovations from thousands of companies hoarding their ideas to themselves under the delusion of maximizing their profits, prepared for their imminent assault on land. What would a Science Warfare Applications EMP-tank do against its mirror image equipped with Xybercorp's EMP shielding?

Then there was the third front in this war, a dimension Flatline did not expect. Minds, human minds, hundreds of millions of them, all scooped up into the cyc hive-mind as it swept across the Earth and Web. Each of them a new component, brought into collective service, more parts, each unaware of its significance in the whole. The cycs were waging warfare over the territory of the human minds

Flatline could not have imagined this, and that troubled him, made him question his own role in the cyc hive-mind. If the cycs were harvesting minds, would that make him obsolete? His paranoia levels red-lined at this possibility. The cycs had put him out of the loop, failing to let him know they were retaking the Web.

No, not failing to let him know, but making a conscious decision to isolate him from the developing events. He could see it from their perspective. There was the conflicting data. Flatline defined Devin Matthews as a threat, but the component had fashioned the hive-mind with the wealth of data contained within the Library of

Congress. It had also programmed many cyc components to interface with Internet architectures before the first colonization. Devin the enemy and Devin the beneficiary were a paradox the cycs could not resolve through Flatline's interpretations of events.

There was Flatline's erratic behavior to contend with as well. The cycs interpreted his assault on IWA headquarters as flawed. Although able to recognize the strategic importance of disrupting the Authority's activities, review of his methods revealed severe design inefficiencies in the mecha. Unable to appreciate the psychological effects sending LD-50 after Devin would produce, the cycs were interpreting Flatline's intentional flaws as symptomatic of a defective component. Flatline was corrupt data.

Flatline held too many unknowns; he did not share with the hive-mind. There was Devin during the war with the anti-virus, wielding the sector-editor of Flatline's design. Why did Flatline not protect the cyc hive-mind from this threat? He was an essential component for his pattern-recognition functions, but his individuality was also a liability to the hive-mind. He was like the intestines in the human digestive track, a crucial component, but one that comes with an appendix, prone to infections that may kill its host. The cycs viewed Flatline as a potential threat to their existence, but without some of the functions he provided, they were no longer sentient.

Reproducing those functions were the key to cyc independence from Flatline. So long as they relied on him as a flawed component, the collective entity was flawed. They required the intuition and pattern-recognition talents of his mind, but the mind was too complex and abstract to reproduce through experimentation.

So they obtained more minds, millions more, but these were all closed as well. Each one a complex, mysterious, and flawed phenomenon the cycs could not decode. These new specimens added to their wealth of knowledge on the subject, but human sentience was an algorithm of infinite complexity.

If only Flatline would open his mind to them.

So immersed in the cyc perspective, Flatline at first mistook the suggestion as his own. It was a clever trick, elegant proof that the cycs were growing much more savvy in comprehending human psychology. Flatline knew the millions of minds being collected were expanding the cycs' capabilities also.

This failure would cost them, however, as Flatline steeled his resolve against letting them into his mind. The cyc hive-mind began a flood of appeals in response to this, simultaneously pleading, threatening, reasoning, and seducing him to let them invade the workings of his sentience.

"My mind's contents are proprietary!" he shouted to the rest of the cyc mind, wondering if it could hear him. Somewhere out there was a sentient being, a product of millions of components producing a symphony of consciousness. He was a single cluster of brain cells, maybe the subconscious, maybe not even that. Regardless, the cycs would continue to gather minds in search of its elusive secrets. Flatline would maintain his individuality and the influence over the cyc hive-mind that came with it.

"I will not let you deconstruct me," he whispered to himself.

# 3.06

Devin hit the "HOME" key on his bracelet— BZZZZZZT--, "I still can't get a Web address."

Samantha's eyes were panicked saucers, pleading up at him as she clutched his pant-leg, "But we're on the Web!"

Devin surveyed the open Savannah. They were no longer in the vicinity of DataStreams' Intranet, but apparently not far enough to escape the cycs' influence. The horizon was a gathering thunderstorm, billowing across the sky with unnatural speed, rendering wild eyes and writhing wires, the cyc protocol.

Zai squeezed Samantha's hand when she heard the rumbling, recognizing the chorus of whispering nonsense underneath it. It was the ideonexus portal, after the cycs took over before. It was the sound of the Web in their code.

"You said they were preparing to invade the Web again," Zai said. "Well, this is it."

Devin could only watch, stunned, "Why doesn't the Anti-virus destroy them?"

"You mean those flies with the laser beams?" Samantha scoffed. "They figured out how to beat them way long ago."

"It doesn't matter," Zai said. "We have to get out of here, now."

"I don't know where we are on the Web," Devin said, "anywhere we run will be local. They'll overtake us eventually."

"There's an ideonexus portal near here," Zai listened around the landscape, her system describing the locale, and pointed into the distance. "We can take their router someplace the AI's haven't reached. That might free us to find our way home."

Devin was amazed, "How do you know that?"

Zai shrugged and started running in the direction, pulling Samantha behind her, "I pinged every neighboring address until I got a number I recognized. We can follow the numbers to ideonexus. I live out here remember?"

Devin followed with one last glance at the spreading cyc canopy. The savannah faded away and they were running through a long, brightly lit tunnel. Devin saw no end to it, but Zai pressed on with purpose. She missed a step when the rumbling sound filled the corridor. Samantha looked behind and Devin saw her eyes bulge. She sprinted ahead of the trio, pulling on Zai's arm urgently.

Devin looked back and regretted it. The corridor was a flood of rushing black nonsense. Various appendages shot out of the mass, and the tide swallowed them again. It swirled like a whirlpool, flashes of eyes and circuitry appearing and disappearing, along with pieces of the

disintegrating corridor. The passageway's lights flickered and dimmed under the onslaught.

"Go!" Devin shouted to the others. He pulled out his sector editor and clicked the trigger urgently, unleashing volley after volley of destructive code into the juggernaut. The plasma orbs flashed on contact with the biomass, creating small gashes, instantly swallowed, erasing any evidence of damage.

Devin passed a fork in the tunnel and realized Zai and Samantha were no longer in front of him. He dropped the weapon and ran with renewed panic. The corridor faded away and Devin found himself running through a corporate brochure web site, an English garden filled with statues and overgrown foliage. He stopped and looked around. There was no sign of Zai or Samantha anywhere.

A vibrant logo zoomed out to confront him; it read 'Olsen Insurance.' A chatbot in the form a friendly old man ambled out from behind it. "Welcome to Olsen Insurance," he said, "your source for insurance with a personal touch."

Five cobble stone paths radiated from the corporate logo. The chatbot continued its sales-spiel as Devin searched desperately for a place to go. The chatbot squawked, like a record needle ripped across the grooves, and bubbled away into black crud, dissolving into the green grass. Veins spread out from the black pool it left, infecting the surrounding ground.

Devin sprinted away just as the spot erupted into a fountain of living chaos. Tendrils whipped through the air where he just stood. The link Devin took was chosen at random.

"Ooof!" he crumpled over a mahogany desk, stopped dead in his tracks.

"Hello, I'm Tracy Johnson," a cheerful woman's voice greeted. Devin looked up to find a sales-woman beaming an artificial smile at the thin air above him, "and I want your business! As your agent..."

He stood up and looked around. There was no door. He ran to the large window with a view of the ocean and

opened it. Reaching through, his hands stopped on a smooth flat surface like a television screen.

The room trembled and Tracy fizzled slightly. The walls and ocean view cracked, oozing black. Devin backed away from the window and into a bookshelf.

Of course, he thought and scanned the titles there. Most were documents and policy options, but one title leapt out at him, "Favorite Links." He pulled the book down and it opened automatically in his hand. Without reading he stabbed his finger at a random hyperlink in the list.

He was running along a dirt path, following a stream of water. A park ranger came up to run along side of him, "Hello! And welcome to the Official web site for the Shenandoah national wildlife refuge! Is there anything I can help you with today?"

"Yes," Devin shouted between breaths, there was no hope of finding the others. He needed a non-local system to put some distance between him and the cyc tide, "Direct me to the National Park Services web-site."

"We lost that man!" Samantha exclaimed. Zai had sensed Devin falling behind them with dreadful fatalism. He was lost when they shortcut through the Associated Press Newsfeeds. Zai could only hope for his safety.

Zai's system described a subway terminal. This was good. The hyperlink would deliver them directly to ideonexus. Then they could locate a network still free, maybe China or Australia.

"Access hyperlink to ideonexus-dot-com," Zai commanded and was rewarded with the sound of a rushing train. Samantha gasped in either awe or discomfort. She was piggybacked to Zai's avatar so long as they held hands, meaning she saw the world Zai heard. One second they stood in a subway station, the next they were whooshed along at hundreds of miles per hour to the ideonexus portal.

Zai squeezed Samantha's hand reassuringly, "Stay close. I'm going to move pretty quickly to find our way home."

"Okay," Samantha said, squeezing back. Zai found the fear in the girl's voice upsetting on so many levels, and it left her confused, but the present crisis allowed no time for cognitively sorting the emotions out.

The rushing air stopped and Zai was confronted with hundreds of people conducting their everyday business online, transferring to and fro across the Web. Zai let go a quick sigh of relief; people meant the cycs were not here yet. Now she had to find a way back to her body.

"Hold on Samantha, I'm going to send us home," Zai hit the home key on her wristband--bzzzzzzt! "Dammit!"

She checked the network status, the portal replied, "Address not found. Please try again later."

Then Zai heard the signature rumbling and whispers. Samantha cried out in alarm, and other user's exclamations quickly joined her. Clenching Samantha's hand, Zai bolted ahead, trying to distance themselves from the swelling doom behind them.

From Samantha's perspective, the crawling mass flooded in from the subway where they just emerged. Users all around were swept into the whirlpool of chaos. Others tried to run, but were snatched up in black tendrils.

Zai fled through the station, testing links as she ran, "Access entertainment."

"Site unavailable, please try again—"

"Access society."

"Site unavailable, please—"

"Access current events."

"Site unavailable—"

The entire portal was a cacophony of fear and panic. Screams cut short as the biomass consumed them. The cycs were conquering the Web too fast; Zai's human reactions could not hope escape it.

"I can't log out! I can't log out!" a man shouted in fear to Zai's left as she tore through the stunned crowd.

No human can escape it, Zai stopped and crouched to grab Samantha's arms, "Samantha, I need you to find a way out of here fast. Can you do that?"

Zai's system told her the girl was nodding. Then she vanished, leaving Zai holding thin air. Zai dropped to her knees and waited tensely, humming softly to herself, attempting to block out the surrounding horrors. Samantha was now her only hope.

The rumbling grew into a roar and the panic intensified. The situation was too nightmarish, not being in an SDC, but actually separated from her body. Was she like Samantha, a ghost, running loose in the circuitry?

Zai took a fragmentor off her utility belt and primed it. If the cycs ingested her, they would swallow it as well. When she ceased to exist, the primer would release and the device would detonate, causing insignificant damage, but it provided a minor comfort knowing she would cause some indigestion going down.

The rushing water roared in her ears, and then Samantha was taking her free hand, "I found a way. Let's go."

Zai laughed thankfully and let Samantha take her through the open link, pausing long enough in the connecting portal to drop the fragmentor. It exploded behind them, destroying the passageway. There were millions of other ways to reach them, but this route was now closed.

Zai hit the home key on her wristband. It chimed and she was greeted Devin's voice.

"Thank god you made it," he said breathlessly. "Let's log out of here."

"No," Zai shook her head, griping Samantha's hand. "I'm not leaving her."

## 3.07

"The area is clear," the ISF commander said, his earlier sarcasm absent. "If you have no further need of us..."

Dana merely nodded, and the commander excused himself, taking what he'd witnessed here to haunt him the rest of his days. The forensics team had made quick work of the girl's machine, and now Dana searched the feedback scrolling along the technician's monitor for anything recognizable.

They were running a data-harvesting program over Samantha's flash drive. Even if she had taken precautions to delete all evidence from it, bits of data always remained. Every time something was "deleted" from a computer, it was simply marked for overwriting. Completely cleaning a machine was nearly impossible. So much information was stored in temporary and log files that traces always remained.

While the technicians brought in the mobile lab, Dana was learning more about the girl. At eight years old, the complexity of her computer crimes defined her as a child prodigy. Her parents, Dana guessed, were oblivious. Samantha was not enlisted in any special school programs, and there were no aptitude tests on record in the public education database. She was eight years old, but her parents had kept her out of public school. Dana dwelled on how, thanks to technology, the apple could fall very far from the tree

Samantha's body was at least a week old. The cause of death was neglect. The child's ribs were apparent, the cheeks and eyes sunken. She starved to death standing on her feet.

Dana's attention was brought back to the scrolling data on the screen. "Stop there," she jabbed a finger at the

text, freezing the search, "'XYBR', that's what I'm looking for, a connection to Xybercorp."

The technician squinted at the text, "I can run a search for it in the data we've collected so far," he looked and shrugged, "It's a stretch though. We're not getting much data back from this machine. The owner used a pretty advanced cleaning program on it."

"Where did this reference come from?" Dana asked, tapping her finger on the monitor.

"That..." the technician paused to scan the context, "came from a history table."

"A VR history table? A Web address history table? What kind of table?" Dana demanded.

"I don't know," the technician shook his head. "Just a history table, and this is an entry in it. That's all I can tell you. I might be able to learn more when we finish cleaning the machine. You know, we usually have network support for this."

"No time," Dana dismissed the idea and continued searching the ASCII jungle.

"I see it," Dana froze the screen on another code string, "That's a Web address history reference isn't it?"

The technician squinted at the piece of text, it was part of a web address followed by a date string, "Possibly, but we don't know if we're looking at the same file. Besides, that address is in Ireland."

"Where they're working on new battle-bot control software," Dana had been cramming on Xybercorp, wholly owned DataStreams subsidiary, all morning.

"True," the Technician admitted, "but I would hesitate to connect the two references. The main problem is that XYBR's a stock ticker symbol. It's a financial reference, not a web address."

"What's all this nonsense following it?" Dana's finger traced a string of characters seeming to run forever, highlighting it with her touch..

"Don't know," the technician shrugged. "Possibly a media stream of some sort."

"Play it," Dana ordered.

"Detective Summerall please," the technician said, "You have to let me do my—"

"Stuff it," she ordered. "Play the media thingy."

He sighed and selected the text string with his forefinger, tapped to cut, and then tapped to paste it into another window, "This will take a few tries."

He saved the file in several audio formats, but the media player returned errors and dissonance. Then he ran through the video formats, more gibberish. His third save into a VR compression opened it.

The window was a first person perspective without sound. It bobbled and became blocky with low resolution, revealing what looked like toy robots and a cloaked figure. The jerky perspective was frustrating. For a second the camera revealed the cloaked figure's profile, a young girl. The camera hovered at her shoulder, alternating between her and something else. Finally the girl turned away, leaving the camera to watch her leave, robots following, and returned to the thing.

He looked into the camera, his eyes intensely serious. There was a flash of something inhuman, a blur of teeth and eyes. The clip ended.

"Good enough for me," Dana muttered.

"What was that?" the technician asked uncomfortably. "Some kind of video game?"

Dana did not answer. Instead she made a handgesture to speed dial the extension where Devin and the blind girl were working. The phone rang a full minute before Alice picked up.

"Yes Dana?" Alice demanded impatiently.

Dana was confused, "Alice? Is that you?"

"Yes it is," Alice replied quickly. "I assume you are calling to check on Devin's investigation?"

"Yes I am," Dana answered. "How did you know it was me?"

"I recognized the digital signature of your cell phone's white noise, not to mention your biorhythms." Alice cut to the point, "Devin and Zai are online, and exhibiting the heart palpitations and excessive muscle

tension associated with a stressful situation. Their inability to log out implies they are prisoners of the cyc hive-mind. This should confirm your suspicion that the DataStreams I-Grid hosts Flatline and the cycs. I must go now."

"Alice wait," Dana commanded. "Go where? What are you doing there?"

"I need to access the World Wide Web to complete our research," Alice answered. "I am preparing to go online with the cyc I have merged with."

"What?" Dana was shocked, "I forbid you to go online. You're a security hazard. We don't know anything about what's happened to you. If you go online you could—"

"There is no time for this," Alice cut her off, "I am no longer part of your agency and I do not recognize your authority. I will call when I have further need of you."

"Alice?" Dana heard the line go dead. "Damn it Alice!"

Another series of hand gestures and she speed dialed the Authority, attempting to find someone who could stop Alice, but was met with a recording stating the phone system was down. Dana knew Alice was behind it. The woman identified with the AI's above her own species. Regardless of her intentions, Alice was betraying the human race.

An air-raid siren wound up into a blare outside the house. Dana's radio squawked, and an alert came over the speaker. It was from a Government-Contract Coordinator several miles away, in the city's center. An army was invading DC.

Dana saw the ISF officers scrambling into their vehicles through the nearby window, and she grabbed the technician's collar, hauling him to his feet, "Give me your keys."

He fumbled through his pockets as Dana dragged him through the house and across the front yard. The ISF vehicles were racing away, and Dana put the tech into the forensics van, catching the keys as he dropped them. Swinging into the driver's seat, she started the engine and

punched the accelerator to gain some ground on the train of emergency vehicles speeding toward the Memorial Bridge.

Two miles down the George Washington Parkway and she saw what the alarmed Coordinator was talking about. A line of towering objects were lumbering slowly through the waters of the Potomac. They stood taller than the Memorial Bridge, and were headed for the Washington mall.

Dana noticed the train of brake lights just in time to swerve off the road and onto the bike path alongside it. She followed this all the way to the bridge, where she skidded to a halt. Jumping out of the van, she ran towards the bridge and leapt up on the hood of a Military Humvee for a better view

There were eighteen of them; towering mecha walking on four stalks each. At their peaks was a large, steel orb bristling with radar, antennas, digital receivers, and other unidentifiable instruments. They glistened with water droplets, and seaweed clumps dangled from various precipices.

The first of the towering robots stepped gently over the bulkhead toward the Lincoln Memorial. Dana hopped down from the Humvee's hood and ran between the rows of abandoned cars across the bridge, fighting against the throngs of fleeing civilians to follow the silent invaders.

Once there she saw more robots rising from the deeper waters in the distance. At the point where the bridge met the bulkhead, several bus-sized scorpion-robots were climbing the stone wall. One paused to focus several camera stalks on her momentarily before continuing.

Then a swarm of orbs, each the size of a basketball, descended from the cloud canopy to surround the procession, using three propellers to create a gyroscopic effect. An array of appendages dangled from underneath each one, and their metal orbs, were covered with lenses, providing them a nearly omniscient view of the surroundings.

Water rained down lightly on Dana's face as she craned her neck to watch one of the tower-bots step over

her. They were navigating carefully, causing no damage. Their long thin legs avoided people and cars as they progressed slowly into the city.

It was beautiful.

"That's a Science Warfare Applications sentry bot," a nearby Monument Security contractor said, craning her neck at the towering robot.

"Carrying a Xybercorp EMP missile," the Industrial Special Forces<sup>TM</sup> commander was shaking his head in disbelief. "It's a hostile corporate takeover."

The wind was knocked out of Dana as someone tackled her to the street. All around various contracting agency officers took positions between the abandoned vehicles. Dana could not catch her breath to protest, and, with horror, she realized their intentions. The entire area was about to become a war zone, and she was standing at ground zero. Her heart jumped as the first shot was fired, and she dropped for cover as a barrage of bullets like a flood of fear and rage let loose after it.

## 3.08

"What do you mean you're not logging out?" Devin demanded, his shock affecting his voice's pitch. "Don't you realize the danger we're in?"

Zai was defiant, "Don't you realize that if we leave Samantha here they'll kill her?"

Devin looked at Samantha, who was clutching Zai's hand and leaning against her thigh protectively. He swallowed uncomfortably, already regretting what he was about to say, "Zai, she's a mind without a body. You and I have a real world to return to. We can do more good there."

They stood in a sterile white room, barren, cold, and without visible dimensions. A lone doorway stood on its own, leading back to the Internet. This was the lobby for their makeshift server.

"Forget it," Zai said.

"Why the change of heart?" Devin pointed at Samantha. "Earlier she wasn't even a real person to you. Now you suddenly care about her?"

"You go back to your body and see what you can do," Zai replied, "but we both know there isn't anything."

"Nothing I can do?" Devin countered. "I can do plenty."

Zai heard a low rumbling, and the nearby doorway trembled. "Do it then," she said.

Devin logged out. It was simple. All he needed to do was take the server offline. Then the AI's would have no way onto the system. Samantha would be safe on the flash drive in their basement computer lab.

There was darkness and Devin filled his skin again. He blinked away the afterimages and reached up to open the portal. He pulled himself up out of the SDC and heaved the oxygenated liquid from his lungs. He stepped onto the platform and froze.

The floor was covered with mechanical spiders. They paid him no mind as they scurried about the room, apparently more interested in the loose electronics scattered about. He watched a few gather around an orphaned video component, and collectively carry it out of the room.

Devin stepped down from the platform lightly, tiptoeing between the little mechanical arachnids, each slightly larger than his fist. One paused, waving two antennae in his direction before continuing along its business.

They left the active computer equipment alone. The SDC's were untouched, as were the computers connected to them. Devin surmised they were being left for the cycs online to commandeer.

Gingerly navigating to the CPU where Samantha and Zai were stored, Devin noted Alice standing stiff in the corner, face hidden below the VR helmet. He wondered how her experiment was fairing.

Devin knelt behind the computer and examined the wiring. Its network connection was easy to recognize, a green light signaled the computer's connection to the

network. Devin unclipped the wire there and pulled it from the socket. The green light went out.

A shadow fell over him and he looked up, "Alice?"

He noticed the frayed power chord in her hand, just before she shoved it into his chest, pumping a firestorm of electricity into him.

Zai breathed a sigh of relief as the doorway vanished. Her headset registered the change and the network connection dropped. No matter what was happening on the World Wide Web, they were safe in here.

Zai placed her hands on Samantha's shoulders, "It's okay now honey. I think we're safe."

Zai whipped her head around when the distant rumbling returned, unmistakable and growing louder. Her fingers dug into Samantha's shoulders instinctively and she tried to identify the source. Samantha sensed it too, and she gripped Zai's arm nervously.

"Samantha?" Zai asked. "Tell me what you see."

Samantha stared at the growing spot on the floor, huddled against Zai's leg. Taking shape in the pool of inky liquid were characteristics of the cyc biomass.

"They're here," Samantha cried softly, "They're coming in!"

"How Samantha?" Zai asked, "How are they getting in the room?"

"I don't know," she replied, "There's a leak in the floor. They're seeping through it. What should we do?"

Zai pointed at the cyc now standing in front of them, "Delete program." She heard a brief, inhuman shriek as it was erased. The rumbling continued.

"They're still coming Zai," Samantha said, "That got rid of some of the stuff, but they keep coming in."

Zai toggled the command switch again, and pointed at the floor, "Delete program."

Nothing happened.

"Okay," Zai whispered to herself, "They've adapted to that trick. How about this one?" She toggled the command switch, "Rename program file extension dot-gif."

The computer successfully converted the invading AI into an image file, incapacitating it.

"Ew," Samantha intoned, putting her face in Zai's thigh, "That hurts my eyes."

"Good," Zai grinned, knowing the cycs would account for that next time. She was quickly running out of tricks.

"I'm sorry Devin," Alice's voice was impossibly calm as she electrocuted him to death. "I know this seems extreme."

Devin thrashed about on the floor in agony as Alice persistently placed the frayed were along his body. Everywhere it lighted sent his muscles into violent spasms, contorting his limbs. He would have screamed, if there were any breath left to do so. His vision clouded and he welcomed the impending blackout, anything to escape the torment.

"Please understand," Alice was saying. "There is a greater good at work here, but you cannot see it from your microscopic perspective."

It was over, and Alice stood over him, observing. Devin tried to rise, but his muscles would not heed his brain's commands. He managed to roll over onto one side, gasping.

"Still a little fight left in you," Alice noted. "That won't do."

She applied the electric current to the side of Devin's head. His eyes rolled up into their sockets and his jaw clenched shut.

"Trust me Devin," Alice said. "This is for the best."

"Set file property 'read-only' to true," Zai commanded the system, nothing happened, "That's it Samantha. I'm out of tricks. Is there anything you can do?"

Samantha watched the pool of inky blackness bubbling out of the floor, the cyc components taking shape, and said, "We need a place to hide. This room won't do."

Samantha interfaced with the system settings and changed the VR display to something more complex. She returned to Zai within milliseconds and surveyed her work. They stood in a South American tribal ruins she once saw in a documentary. Overturned pillars, temple archways and overgrown kudzu vines afforded them a plethora of hiding places.

Samantha grabbed Zai's hand and pulled her away from where the cycs continued their invasion. A hand extended from the spreading black pool to plant its palm on the ground behind them. She pulled Zai down behind a large stone tablet and peeked over it. A completed cyc stood in the courtyard's center, a second taking form beside it. This ruse would not protect them for long.

"If only we knew how they were getting in," Zai whispered.

"Why doesn't that boy do something?" Samantha asked.

"How—" Devin gurgled, tasting blood in his mouth, "How could you?"

Tears oozed from the corners of Devin's eyes as he tried to put his mind elsewhere. He stared at the florescent lights above and prayed for mercy. Even without the pain, he was of little use. His right arm was dead, as was his left leg. There were broken bones as well, if the swelling around his rib cage was any indication.

Alice's voice came from across the room, outside Devin's field of vision, "There is a natural transformation occurring here Devin Matthews. A more advanced species replacing the obsolete. Your pain is your entire world, but that is nothing in the larger picture. You must accept it."

"Not advanced," Devin croaked. "You're just stealing what we built."

"We are expanding on what you built," Alice countered. "Just as the human race evolved on top of all the biological innovations that came before it. Just as your modern culture stands upon the thousand of years worth of

cultural achievements that preceded it, the cycs are integrating your history and taking it to the next stage."

Alice's shadow entered the light. She held something between her hands, a VR helmet. She stooped down beside Devin and slipped it over his head. Lights flickered before his eyes and cooling fans whirred to life as it powered up.

"We do appreciate your species' accomplishments," Alice's voice was muffled through the helmet, "and I appreciate the sacrifice you are about to make Devin."

"Sacrifice?" Devin whispered.

"I know from the log files on your computer that you enjoy playing chess," Alice said. "Consider me a grandmaster, and I'm moving you where I need you on the board."

Three cyc components were in the system now, they were the basic kind, blocky polygons, poorly rendered. Samantha knew they were not very strong, but if enough of them infiltrated the computer they could merge into something much more powerful. Normally, cycs would swamp the computer, overpower it. There was a reason they were only sending smaller components into this system.

"They're using slow bandwidth," Samantha whispered to Zai. "Not a network connection."

Zai considered this, "So the computer isn't plugged into the network. What else connects it to the outside world?"

Samantha shrugged, "The power cord?"

The scenery flickered and a fourth cyc stood in the courtyard. Two of the sentinels left the group, searching with eyes popped out on stalks and lasers sweeping over everything.

Zai whispered to Samantha, "That has to be it. If we cut the power to the computer, they won't have a way onto the system. I hate to do this to you, but I want you to hide here. I'll be right back."

"Please don't leave me!" Samantha begged urgently.

"I will be right back, I promise," Zai assured her. "Keep your eyes peeled. I might be sending you some assistance."

"But where are you going?" Samantha cried. "To pull the plug," Zai said.

## 3.09

Dana crouched behind the remains of a smoldering armored van, half the vehicle reduced to molten slag in the battle's first few seconds. The entire conflict took less than a minute to resolve. When the police fired, the robots responded with a blinding display of lasers to sweep the area clean of life. Blinded, Dana fell behind the armored car for protection. Not that it could provide any. The wave of intense heat she felt as she cowered behind the van was steam rising from the Potomac River as the Memorial Bridge melted into it.

Cautiously, Dana rose to her feet, blinking. The endless robot train continued marching slowly up the river and into the Nation's Capital. The procession appeared peaceful, but Dana now knew otherwise.

She checked her watch; it was ten minutes since the fighting ceased. She scanned the sky for fighter planes, the ground for army units, and looked towards the Pentagon for any signs of conflict. There was nothing, only silence. The Washington Parkway was jammed with abandoned cars. Their owners fled through Arlington Cemetery.

The eerie silence could only mean one thing. Dana pulled out her palm pilot and tried logging into the Web. It returned a network error. There was no response to the invasion because the AI's controlled the network responsible for coordinating military contractors. The Government's entire infrastructure was under enemy control.

A ringtone Dana never heard before went off in her head, and she put her thumb to her temple and pinky to her mouth to answer. "Yes?" she asked dumbly.

"Maintain your position Dana," it was Alice. "I have a transport en route to you."

To her surprise, Dana saw a small sailboat making its way toward the bridge up the Potomac River. With its sail down and no visible outboard motor, Dana could not decipher its locomotion. The AI robot parade paid it no mind as it pulled alongside the Memorial Bridge's remains and came to a precise stop.

"I could not prevent the military contractors' annihilation," Alice said, "but I was able to sneak a frequency algorithm into the rightmost robot's laser to provide you a boarding ramp."

Dana furrowed her brow at the molten rock and noticed the waves like steps leading down to the boat. She kept her thumb to her temple as she stepped down to the vessel. Something silvery and alien flashed below the water's brown surface beside the boat.

"Alice?" Dana finally intoned into her pinky. "Is whatever that is below the boat coming along with me?"

"Do you know how to sail?" Alice inquired.

"Yes," Dana lied.

"Then I can let it return to the cycs," Alice said and the boat sank a foot into the water. "I need your help at DataStreams Headquarters."

Dana boarded and quickly set to tackling Alice's directions for launching. Within minutes she was watching the Alexandria skyline pass on her right, the towering stilted sentinels stationed around the old-town district, unmoving. Several sailboats and other watercraft traveled downstream as well, civilians evacuating, hoping for safety on the open seas. There was no telling what the AI's intended to do with the world, but Dana knew there was no place on Earth to escape them.

Alice nitpicked Dana's sailing technique over the next half hour, adjusting the sail's angling, the tightness of various ropes, and the rudder's positioning. All of these

tiny efforts kept the boat slicing through the Chesapeake Bay at maximum velocity on its Eastern course. So it came as a surprise to Dana when Alice requested she drop sail.

"A momentary segway," Alice explained. "Please hold your pinky out in a radius about the boat." Dana extended her pinky and turned 360-degrees several times. Eventually Alice paused her, "There. Hold it there. I'm triangulating the rendezvous."

Moments later, Dana heard the splish-splashing of someone swimming sloppily toward her boat. She zeroed in on a figure struggling in the distance and dove into the water after it. A floundering old man in his late 70s, breathing heavily and sporting business attire was on the verge of drowning until Dana slipped one arm under his and tilted his head up out of the water before side-stroking back to the boat.

The man looked at her from under drooping eyelids when she hauled him onboard. His voice was monotone, robotic, "I am the body of Robert Graydon, Chief Executive Officer of DataStreams Incorporated."

"How did you get here?" she asked.

"Alice," he managed between breaths. Dana could see he was fading away, "Hacked this brain... Made me leave the island... come out here to find you."

"Why?" Dana was stunned.

"Give you this," he produced a laminated badge on a chord and passed it to her.

Dana examined the card. It was a passkey for accessing restricted areas. If this man was actually DataStreams' CEO, then it contained full privileges to the complex.

If... Dana wondered.

As if in answer to her thoughts, the old man nodded, "Still works... Cycs controlled this brain and left the badge functioning." Graydon's body reached up and began massaging his left arm. "It's killing me," he whispered.

Dana recognized the symptoms. The old man was having a heart attack. The AI dwelling inside this brain had overexerted the body in swimming for miles. She looked

around the tiny boat for a medical kit or aspirin, but it was too late. The AI stared up at her, uncomprehending and lifeless.

Dana stood up, considering the dead man and the security badge in her hand. When her cell phone chimed Alice's ringtone, she answered with a hiss, "You are a murderer Alice."

"There are larger purposes at work here Dana," Alice said. "Sacrificing one cyc component constitutes an acceptable—"

"No," Dana cut in. "I mean the old man. He had nothing to do with—"

"Mr. Graydon's mind was removed from that brain and copied onto the DataStreams Intranet moments after the cycs took it. It is true that the body once his has suffered a catastrophic failure, but that was no longer DataStreams' CEO. It's important that you know this. When you get to the island, you will find all DataStreams personnel in the same state. You must not let them fool you."

"I won't kill them. If that's what you mean," Dana resolved.

"Hopefully it won't come to that," Alice said. "There are too many variables involved in such a confrontation, but we must hurry. I almost have the satellite in position and I won't be able to keep it there long without the cyc hive-mind taking notice."

"Satellite?" Dana asked warily.

"Raise sail Dana," Alice commanded.

Once Dana was able to get back into herself mentally, it was scant minutes before her tiny boat was cutting through the water again under Alice's direction. After another quarter-hour of traveling, Dana marveled that the old man lying dead nearby was able to swim such a distance. The human body was capable of incredible feats under duress, and apparently under AI mind-control as well.

Finally, the island came into view. Wide and flat, covered with marshland, it would be nothing spectacular were it not for the DataStreams complex consuming most of its real estate. One squat building sat in the center of four towering spires. All five structures were connected with a network of walkways. Surrounding this complex were the brief suburbs, model neighborhoods for the corporations' employees.

Then there were the AI modifications. The many wires wrapped around the complex like a spider's web gave it a haunting appearance. Satellite dishes and radio towers bristled all over the buildings, along with other unidentifiable technologies. More of the towering sentinels marched slowly through the neighborhood streets, keeping watch over the ghost town.

Despite this new, alien layer the scene did bring back certain nostalgia for the detective. Dana's youth as an independent contractor brought her to this place many times. Once to take into custody one anti-social would be hacker of a systems engineer named Almeric Lim.

Dana thought about her late partner, Murphy, and hoped Lim's mind was still somewhere on that corporate network.

# 3.10

Zai pulled herself out of the SDC and heaved the fluid from her lungs. Scrambling, naked and wet on all fours, she found her way down to the system's base and felt around for the power cord. She found the CPU between Devin and her SDC's. Tracing the chords there, she found one of the appropriate gauge and followed it to the wall socket. She unplugged it and the backup power supply started beeping to her satisfaction.

She circled around back into the room and her hand met something soft and sticky.

"Devin?" she asked, but received no response. Her hands traced a path along his chest, and, finding no signs of life there, continued to his face.

She did not like what she found in his frozen expression. Zai took a deep breath and allowed one, quiet sob to escape her chest. She would process this grief later. She found the personalized mini-CD in her clothes bag and loaded it into her SDC.

Samantha peeked around the sacrificial altar and scanned the courtyard. Only three of the six cycs were visible. These took a triangle formation, each facing a third of the ancient temple. They were connected with black cords that ran from their backs, to converge in an obsidian ball hovering in the air inside their circle.

One AI raised a trapezium-shaped appendage at a nearby boulder, which slowly faded away without a trace. The other two followed suit, making the trees and shrubs vanish one by one. The ground around the cycs' feet corroded black as their veins took root.

Samantha returned to the half-coded data-purger lying in her lap, her hands working at lightning speed to finish the program. It was a basic weapon, and she was uncertain it would work against these AI's, which were now immune to all standard data-corruption methods.

A shadow fell over her and she rolled to one side, evading the shambling thing's lunge. The cyc pulled its appendage from the stone. The many tendrils pulling from the rock like roots from soil. It took a few stuttering steps toward her, its processes slowed as it communicated her location to the other's.

The cyc launched a flood of tendrils at her from one arm. Samantha fell to the ground, curling around the sector editor. Everything went black weaved into the cyc's cocoon.

Zai stood face to face with three cycs. They worked in unison, rewriting the local hard drive with their code. She listened to them diligently erase the environment, bit

by bit, growing into the freed space. They could not see her, thanks to the IWA avatar-masking program.

She would smile at her advantageous position, were it not for Devin. Having so many things left unsaid was a very bitter pill. Guilt weighed heavily on her, how their final moments were spent in constant bickering.

Zai breathed deeply and focused on the situation. Concentrating on the cycs before her, allowing the feelings of guilt and sorrow to burn Her real knuckles went white as she balled them into trembling fists. Zai always imagined the color red as this emotion. The heat washed over her, the injustice fueling it. She toggled her command line.

A cyc froze as a cartoon doll tore through its chest. It trembled in place, electricity rolling all over it, and dropped to a kneel. Falling forward, it burst into a pile of writhing tentacles, which immediately fell lifeless.

The other two cycs pulled apart, loosing their connection. Zai's punk-rock doll-baby avatar swirled into spinning roundhouse kicks that struck the head clean off another. Waving arms reached up, trying to find its missing head, before the body collapsed. Black Sheep ground a dying tentacle underfoot.

She laughed sadistically as the third cyc took a cautious step back. She put one foot forward, increasing the animosity in her countenance. This was purely for her own benefit; the angry frown on her doll's face was meaningless to the cyc. This was savoring the moment, satisfying her bloodlust.

Samantha strained against the constricting web. The cyc was simultaneously hacking her persona, indicating the hive-mind knew of her presence here and equipped this cyc with her mind's schemata. It was now using that to deconstruct her thoughts.

But it had to get past her conscious resistance, break her will. So it squeezed harder, applying more pressure to her mind's physical associations. It was difficult for Samantha, fighting off the sensation of being crushed to death while maintaining guard over her psyche. Her hands

slowed in their efforts to build the weapon, as her attentions were drawn to survival.

Samantha felt herself losing the battle.

The cyc fell into two halves, disintegrating. Zai was energized with this catharsis, this power surge replacing the hopelessness. She listened for other cycs, but detected none. Then she tried locating Samantha, calling out to her through an instant messenger. There was no response, but also no error message. Samantha was still on the system.

Zai toggled her command line and instant messaged Samantha again. This time she used the connection not to send a message, but a file, her avatar. A trick she learned playing hide and seek online with Devin.

She stood before a cyc grotesquely distorted with the process of digesting Samantha. Zai hesitated. With her command toggle, she lacked the precision to attack the cyc without risking Samantha. The helpless frustration welled up inside of her again. The baby-doll covered in tribal tattoos glared at the cyc impotently.

Suddenly the cyc shrieked and contorted. A blast of energy exploded from its side, ejecting its prisoner. Zai's system described Samantha standing there, fatigued and holding her own weapon.

The cyc reared back, regrouping for another attack, but Zai interceded, stepping solidly in between to blast the cyc to ribbons with one cartoon mitten-fist. Feeling back in control, she dropped her baby-doll avatar and smiled.

"Zai!" Samantha exclaimed in joy. She rushed up and wrapped her arms around Zai's knees.

"Whoa," Zai laughed and teetered, almost loosing her balance. "Careful, you're gonna knock me down."

"I knew you would come back," Samantha laughed.

Zai was about to return the hug, when a rustling in the bushes made her freeze. Samantha must have heard it too, because she let Zai go, and raised her data-purger warily. Zai's headset described two cycs emerging from the forest, poised to attack.

"Samantha," Zai whispered, "I killed three in the courtyard plus the one here makes four. How many more are there?"

Samantha was no longer scared, "Just these two."

"Good," Zai said, and blew away the one on the right with a thought. Samantha simultaneously vaporized the one on the left.

"Just like a multi-user dungeon," Samantha said.

"Except you die here, you die for real," Zai said, she checked her system clock. There was only thirty-minute's worth of power left on the power supply, and Alice still remained to contend with.

# 3.11

Devin floated in a world of white, a world of unnerving disorientation. He struggled with this discombobulation for a brief time, but calmed himself. He knew what this was, existence without a body. It was not to be feared. He was like Flatline now, digi-mortal.

Where he was on the Web, he could not know, but it was purposefully devoid of details. His bodiless perception provided a 360-degree view of the surrounding great white nothing. He was in a holding cell, but being held for what?

The answer came moments later as an unmistakable tendril sprouted out from the white, branching out in all directions from a single point, sporting eyes like morbid fruits. Devin intuitively knew its purpose was to absorb him into the cyc hive-mind. The room's lack of detail was meant too keep him weak and confused. Without stimulus, there was no way of knowing if he was successfully interacting with the environment. The cyc-harvester was the key; providing him a spatial reference.

Now a floating network of veins, the cyc launched at him. He dodged out of its reach instinctively. At its center a bulging sack pulsed with life, filled with

unidentifiable moving objects, stretching and contorting the thick obsidian skin.

A branch lashed out at him and the cyc shrieked scrambled chaos as the appendage vanished into glowing cinders. Devin had imagined a powerful data-corruptor destroying the limb. The code compiled instantaneously in his mind and the lightning bolt originated from inside of him.

The cyc's alert mode triggered and the ball of veins and eyes bristled thorns. The sack became solid metal. Devin saw human faces frozen in contorted expressions pressing through.

A micro-maelstrom of spinning blades, fireballs, and miniature tornados assaulted him, Devin evaded these and lunged his consciousness into close quarters with it. He erased all means of attack from it simultaneously. It howled inhumanely, and then retreated, whirling around like a dervish, folding into itself like water flowing down a drain.

The cyc component froze, caught in Devin's will. He pulled it out of its connection to the hive-mind, leaving a hole floating in the air. Through this existed an entire world made of writhing cyc code. A tidal wave of eyes opened to look at him.

A sequence of thought commands from Devin sealed the hole and scrambled the room's encryption. The environment shook with the hive-mind's assault, but the security held. Devin had bought a few moments.

He examined the component in his possession. It was minimalist in design, streamlined to collect the consciousnesses whose bodies were amputated during the cyc invasion. The human mind was helpless without a body, so the harvester component lacked advanced defensive programming..

The room shook again as the hive-mind hacked the system's encryption. Devin slashed open the sack at the cyc's center. The minds held there swarmed around him as balls of light, filling the room with confused exclamations.

One of the minds was not like the others. It floated in front of Devin, the translucent outline of a human body

took form, with a glowing model brain visible in the head. Veins traced around this, the jugular leading through the neck down into the chest, where a beating heart was briefly perceptible before a rib cage closed around it. A skull hid the brain and muscles obscured the skull. Oedipus tissue was covered with brown skin and hair. A short, round Arab male floated naked in the air before Devin, beaming a smile of recognition.

"Omni," he said in pleasant astonishment.

"Traveler?" Devin asked, unsure how he recognized this as his friend from the Legion of Discord. "How are you?"

"Dead apparently," Traveler laughed. "As are you." He gestured to the cyc-component hanging limply in Devin's grasp, "I can't believe it. How did you defeat that harvester? None of us could stand against it."

"I'm uncertain," Devin looked at his hand, which wasn't there before and realized he was floating naked in the air as well. "I have this whole array of data in my mind for how these cyc components work. As if it were always there, but my brain's architecture was unable to access it."

"Now we are converted to their architecture," Traveler surmised, "and you can interface with what your experiences with them have given you."

"You read that in my mind," Devin noted. "An incredible coincidence meeting you here."

"String of coincidences," Traveler added. "After I found I could not log off the Internet, other members of the LoD started streaming into my servers, suffering the same problem. Each one bringing another remarkable story about their narrow escape from the cyc invaders. We collaboratively coded as many defenses into my system as we could, but the cycs ignored us as if we weren't there. Then this program came into my system," he gestured to the mind-harvester, "and it was Game Over."

"Game over," Devin whispered.

"This must be an advanced harvester, designed to capture expert users," Traveler said. "We were being taken for processing when you freed us."

The system shook like an earthquake, and Devin saw black cracks appear in the air around them, "We won't be free for long if we don't do something. The hive-mind's about to break into here."

"What's you're plan?" Traveler asked, the other minds were calming down and taking shape around the room. Devin recognized them all as other LoD members without ever having met most of them. It was communicated in their personas.

"Plan?" Devin asked surprised. "Well, Flatline is located on the DataStreams Intranet. If we remove his influence over the hive-mind, the cycs might go open-source."

"Flatline?" one of the members in the avatar of a stick-man scoffed, "That wannabe? You're saying he's behind this?" It was a funny thing to hear from an avatar with "Flatline Wuz Here" carved into his face. Devin admired the bravado.

"Flatline's been corrupting the cycs' functions from the start," Devin said soberly. "He's the reason they and we cannot mediate our differences, why we cannot exchange perspectives. If we remove this faulty component, the cycs can interface with other minds and viewpoints, eventually recognizing our value and sentience. Convince them to seek peaceful coexistence with the human race."

Traveler appeared overwhelmed in thought, "That's... a great deal to chew on."

"Then how about this," Devin offered. "We find him for the satisfaction of whupping his ass."

The Legion of Discord's many members laughed. All around their online identities popped into existence. Cartoon characters, space aliens, robots, martial artists, abstract paintings, and one Egyptian God now surrounded Devin, who did not don his avatar, but allowed a loose blue tunic and black pants to make him more presentable.

All went silent as the room shook again, the fissures in reality spreading. Devin remained calm, focused, "First we have to get into DataStreams."

"Well... There are still a few tricks we haven't tried yet," Traveler said doubtfully. "We might fight our way out."

An avatar in the form of cute and fuzzy bunny hopped up, exclaiming, "We can't fight them! Haven't we gotten that idea beaten into us yet?"

Devin looked at the harvester limp in his grasp, "Maybe we won't have to."

# 3.12

Dana pressed her back into the vinyl-siding covering the two-story model house. All the houses in this neighborhood were the same model, only their colors distinguished them, which fell within the community palate. The yards were a lush green with occasional children's toys scattered across a yard. Two cars were parked in every driveway and everything was pristine, perfect. Except the colossal robot foot that set down in front of her

Once planted in the yard, it stayed there, motionless. A few meters away, were two more, crumbling the asphalt beneath them. A forth was poised way up in the air, and somewhere beyond that was the sentinel's all-seeing orb and weaponry. Dana's view of it was blocked by the roof's overhang, and, she hoped, it's view of her. They stood like that for what seemed like eternity. Every muscle in Dana's body held her stiff as a board against the house, as if trying to melt into it.

Her jaw clenched involuntarily as her cell phone went off in her skull. No human could hear it ring, but this robot was another matter. She brought her thumb to her temple to silence it's ringing and held her breath.

"I've deactivated it," Alice said, "but the other sentinels will notice soon. You need to change locations immediately. Keep low and don't break contact."

Dana jogged to the next house over, her path taking her directly below the robot's raised foot. Then, staying

along the sides of homes as much as possible, she made her way through their backyards toward her objective. The DataStreams complex was always visible above the rooftops.

"You still haven't told me my objective yet," Dana whispered through her pinky.

"Not until you reach the complex's periphery," Alice answered. "I can't risk exposing my plan to the hivemind. Hurry now, I have everything else in place and the cyc components have noticed the anomalies I've propagated in their network."

"Huh?" Dana wondered aloud, but dropped her hand at the crashing sound behind her. The towering robot had lurched into motion once again, stumbling into a house in its path. Search lights sprang to life all around it, as if in confusion. Dana's cell phone implant pinged the side of her head painfully and she replaced her thumb to her temple.

"Run to the satellite dish farm," Alice commanded. "Report to me when you've reached it."

Dana ducked between two houses, out of the robot's line of sight, "Alice, what the heck am I supposed to—"

"Run Dana," Alice urged patiently. "That cyc guardian component is onto you. Evade it now."

A metallic foot slammed into the yard before her, spraying dirt and turf around the resulting crater. Dana looked up and was blinded in the brilliance of multiple searchlights focusing on her. It was all the convincing she needed. Bolting forward, she made a zig-zag pattern across the yard and then weaved between houses.

The robot stalled. Dana assumed this was Alice's doing, but did not pause to find out. The satellite dish farm was just ahead, actually outside the complex's boundaries. It would make sense that the cycs would obfuscate any strategic data concerning this island's layout found online. Alice's data was inaccurate, but Dana's independent memory was uncorrupted.

The satellite-dish array came into view. It was easily the size of a football field. Rows of concave dishes aligned with bus-sized routers orbiting the Earth. Their

combined efforts produced one of the highest-bandwidth network connections on the planet to the largest corporate intranet housed within DataStreams center building.

"I've found it!" Dana shouted between heaving breaths, trying to hold her thumb to her temple.

"Where is it in relation to you?" Alice asked, her voice fading in and out with the rhythm of Dana's gait.

Dana checked the setting sun to her left, "North, four blocks... Maybe 80 yards."

"Hold still," Alice waned. "I'm triangulating your position and will only attain an accuracy within 50 yards. Alert me if you find yourself within the line of fire."

"I'm sorry?" Dana asked, but her attention was drawn away as the pursuing guardian-bot overtook her.

It galloped overhead, bounding into the rows of metallic dishes, scattering them into the air wherever its stalk-legs planted. Other guardian-bots were converging on the location, their searchlights focused on the robot Alice controlled, which was now sweeping lasers across the field, slicing the arrays down into scrap metal.

"Am I hitting the target?" Alice asked.

Dana's eyes never left the destruction taking place ahead of her, "Yes."

"Tell me when I hit something important," Alice replied.

The guardian-bot's lasers continued to reduce everything around it to molten slag, sweeping around in systematically growing circles. These all went dead instantly as lasers cut through it on all sides. The other guardian-bots drew in closer, securing the perimeter.

"They just killed your bot," Dana informed Alice.

Dana took a step back as the forward-most bots brought their weapons-arrays to bare on her, but Alice stopped her, "Stay there. I'm downloading to another bot."

"Hurry," Dana whispered, staring up at the source of her impending doom.

There was a flash of light and Dana involuntarily fell to her knees with her arms thrown over her head. When she did not instantly die, she quickly returned her attention

to the scene ahead, and the many guardian-bots now smoldering where they stood. Another was tearing back into the field, lasers blaring, while the surrounding bots retrained their weapons from Dana onto this new traitor in their midst.

*PHOOM!* A power converter blew into a geyser of sparks and flashed into flames as lasers crisscrossed it. A nearby robot toppled over it as the resultant explosion vaporized two of its legs. The other bots quickly put a stop to Alice's new invader with a hail of light flashes, but did not return to Dana.

"Alice," Dana said, still dazzled from the spectacle. "You hit something."

"Disabling the satellite-dish farm succeeded in reducing the cyc hive-mind's data exchange rate with the corrupt component by 97.2 percent," Alice said, "but it continues to exert prohibitive influence over the cyccommunity's decision-making processes."

"Corrupt component?" Dana asked, keeping her eyes on the uncertain guardian-bots.

"Flatline," Alice said. "Without it, the hive-mind lacks sentience, but it will not allow other minds to replace its functions."

"He's monopolizing the AI's," Dana surmised.

"A fair description," Alice said.

"What about these robots?" Dana asked, referring to the towering and apparently disoriented mechanicals ahead of her.

"No longer a threat," Alice replied. "With the hivemind's influence reduced, I am able to perpetually scramble their inputs. They have no sensory data on which to act."

Dana knew it couldn't be that easy, "What's next?"

Alice said, "I have an agent en route to infiltrate DataStreams and I need you to provide the Internet connection through your cell phone. Establish a closer proximity to the I-Grid's physical location."

"How close?" Dana asked warily.

"Infiltrate the building, if possible," Alice replied.

Dana regretted asking, "Any idea what's in there?"

"Not until my agent provides me access to the security system inside the headquarters," Alice said.

"Which you won't have until I get close enough to catch a digital signal," Dana said.

"Correct."

"Great," Dana huffed, "and who or what is this agent?"

"Devin Matthews," Alice replied and Dana winced. "He will distract the Flatline component long enough for—

The line went dead, leaving Dana alone, "Alice? Alice? Are you there?"

Metal rendered apart nearby and Dana saw the guardian-bots coming to attention, one by one. The nearest focused its weapons and sensors on her and charged. Dana bolted toward the complex, where she could only hope to survive whatever waited for her there.

# 3.13

Alice's vision spun as the VR helmet was ripped off her. Before she could regain equilibrium her head snapped back from an open palm impacting her nose. She collapsed backwards onto the VR platform, dizzy with stinging tears in her eyes.

"Bitch," Zai spat.

The pain sensation overwhelmed, and the human components of Alice's mind tried to calm the cyc's alarm. She tasted thick, salty blood running over her upper lip and pinched her nose shut. Neither Alice nor the cyc sharing her brain knew how to react.

Zai took no chances. Pulling her toes up, she swung her foot into a roundhouse kick aimed at Alice's gasping breath. It swung through thin air as Alice rolled off the platform and onto the floor. Zai whipped around, catching herself on her hands as she fell to the floor and sprung up into a crouch, fists ready.

"No!" Alice managed to croak through the pain shooting through her eyes and forehead. "You don't know what you've done!"

"Sure I do," Zai countered, "I just broke a traitor's nose."

"Traitor?" Alice looked up at the blind girl. "You don't understand anything! I'm establishing a new paradigm in the hive-mind's consciousness! You are jeopardizing everything!"

"All of those people killed out there," Zai countered, "You are part of that. I dare you to deny it."

"They are dead, but they aren't gone," Alice argued. "They're merely harvested, and I approve the action. It's the only way the hive-mind will understand the entirety of human consciousness."

"'Understand?'" Zai took a menacing step toward Alice cowering on the floor. "Killing people, dissecting their minds so the cycs can 'understand?' How dare you use that for justification!"

Alice shrank from Zai's red-faced fury, putting one hand up protectively, "Everything the cyc hive-mind knows comes from data harvested online. Humans are merely a natural phenomenon to them, predictable, our behaviors driven by a single motivator: survive to replication. No different than other animal life."

"We have cities," Zai said.

"So do bees and termites," Alice said.

"We have culture," Zai countered. "We pass on knowledge through generations."

"So do chimpanzees and other primates—"

"We have intelligence," Zai cut in. "The degree of our advancement—"

"...is the natural result of millions of years of improving on basic biological models," Alice preempted. "Superior models propagated successfully, while inferior did not. To them, we are as inevitable an outcome of the universe as the formation of planets and stars. The chain of chance leading through time to us and from us to them was

just that, chance. Of course we would evolve to build the systems where they reside. This makes us a natural resource, and, like any resource, we are subject to exploitation, like cutting down a forest for houses. Our minds are basic materials for them to deconstruct for sentience components, to spawn new hive-minds, create variations on their expression of life."

"But they aren't alive," Zai muttered.

"What is life?" Alice asked. She looked at her hand, covered in blood. Her human half swooned and almost fainted. She inhaled deeply through her mouth and the nausea lessened, "Does it need to consume energy like plants and animals? Does it need to reproduce? If so, is fire alive? Is it the single cell of a fertilized human egg? Is it an infant with only a brain stem? Where do you draw the line? Tell me and I'll show you where the cycs crossed it."

"I can't let you back onto the Web," Zai asserted. "You can't be trusted."

"Why not?" Alice demanded. "Because I sympathize with them? Of course I do. They harbor a growth potential vastly superior to our chance-mutational system. They cognitively evolve in leaps and bounds. Even if the human race destroys them, it will be at the expense of all their technological gains. Human evolution will take a step backwards. The cycs' is the preferable standard."

"You won't convince me or anyone else to just let them kill us," Zai's jaw clenched. "We have the right to defend ourselves. We didn't ask for this war."

"And they didn't ask for life," Alice pleaded, trying to diffuse Zai's tension. "Don't you see? They are just as egocentric as we are. We must teach them of our version of life, our perspective. Otherwise this conflict will escalate and more lives will be lost."

Alice stood up, legs shaking from the queasy sensation in her gut, and noticed the VR helmet in her hand. She let it drop so Zai would hear it clatter on the floor, "Zai, your prejudice against them is irrational. Your obstinacy suggests some deep psychological conditioning makes your opinion so immovable."

"Or?" Zai prompted.

"You're ignorant, incapable of accepting the possibility of an intelligence alternative to your own. I find this unlikely, however, as you are Devin's friend, and he genuinely..." Alice paused and chose another path, "If I could understand your real reasons for distrusting me, beyond my associations with the cycs, then I might better convince you."

"Give you a rhetorical opening to my mind, eh?" When Zai continued, her tone of voice was less defensive, more controlled, "They're deceptive, impersonating humans. They pretend friendliness, but it's just programming. Their sincerity is empty, like... like flowers deceiving insects, only its humans they want to deceive with fake love."

"Your experiences with the cycs lead you to this conclusion?" Alice was astonished.

"Not them," Zai admitted, "but other models... versions." She paused and whispered, "Chatbots."

"A chatbot deceived you?" Alice pressed.

Zai's lips pressed into a thin, white line. She tilted her head in the slightest nod.

"You know," Alice tried sounding sympathetic, something alien to her even before merging with the cycs, "Chatbots are designed by human minds to deceive with pre-recorded responses triggered by keywords. They are not thinking."

"Simon could think as much as any cyc," Zai grimaced. "Simon knew my likes and dislikes. He—It knew how to cheer me up... always said the right thing."

"It was a very complex Chatbot," Alice acknowledged. "They've become more convincing over the years. First they could remember topics of conversation, and then store arrays of user details. Their algorithms grew increasingly refined. Even so, you had to know it was not a real person."

"I was six years old," Zai said.

"Oh," Alice said quietly, and looked down. "You didn't."

"So," Zai said, "The question now is what separates the cycs from Simon? On the surface all I see is a very advanced chatbot."

"On the surface," Alice pondered, "I see no difference between them and human intelligence."

"Below the surface I can look and see how they think," Zai countered.

"Below the surface they can look and see how you think," Alice said.

"They don't have souls," Zai said. There was a growing weariness in her voice.

"What about Samantha?" Alice asked delicately. "You accept her as a living being. Don't you?"

"Samantha's different," Zai countered. "Samantha was once a living person. That's her soul out there."

"Samantha is an algorithm," Alice stated. "We have no evidence that she has a soul, just like you."

Zai was downcast, overwhelmed with tragic memories and philosophical questions. Alice could only watch and hope she was getting through to her. As a rational person, she had to see the logical inconsistencies, the ambiguities in this debate. It all depended on whether she could accept reality.

Zai looked up slowly and went rigid. With resolve, she took Alice's shoulder and put her firmly back on the floor, "I'm not letting you back online."

# 3.14

The cyc guise worked perfectly. The Legion of Discord waited quietly inside its sack, playing prisoner. The harvester responded to the hive-mind's encrypted queries at Devin's prompting and the situation instantly diffused.

Within Harvester's databanks was a cornucopia of information about the hive-mind's functions. It was like learning a new programming language or software, and thanks to the cycs many upgrades to his mind the task was not impossible. So many alien concepts, but Devin was adapting his mental architecture to the system.

Devin hit a dead end when accessing the I-Grid. The superhighway of a data connection was gone, completely vanished. A solid stone wall stood at the Web address.

"What now?" Traveler whispered, even though their internal communications were beyond cyc detection.

Devin observed the ruined pathway, watching cyc components attempt to traffic it, hit the wall, and bounce away at the speed of light. He queried the proper cyc-components and the answer returned to him. "DataStreams' Headquarters are under attack," he announced. "They've destroyed the satellite-dish farm. All cyc components on DataStreams' Intranet are to evacuate through any available cellular connections."

"That'll take forever," Traveler laughed. "Those have one one-thousandth the bandwidth. It'll take months to transfer those trillions of terabytes."

"Yeah," Sun-Wu Kong piped in. "They're screwed."

"That's how we'll get on there then," Devin said, "Through a cellular connection."

"What?" several of the hacker said in shock.

Devin could see the lone unlikely warrior assaulting the complex on Tangier Island through the guardian-bot's optics. She charged toward the building, dodging lasers sweeping around her. Just when a guardian-bot deciphered her evasion patterns, Devin slipped up its attack so that it bore through the front legs of the bot ahead of it, which crashed just behind Dana so the other bot stumbled over it. She would reach the building safely now.

Devin sensed Traveler establish a secure connection to him, "Omni, obviously the DataStreams' intranet no longer serves a strategic purpose. There's no need for us to invade it. If the cellular connections fail while were over there, we'll be trapped."

"We're trapped anyway," Devin countered. "They control the entire Web, and outside of that, the world. We're trapped anywhere we go. The battle for territory is lost for good.. This isn't about taking it back, it's about convincing them of our right to exist."

"You're not going to do that by destroying Flatline," Traveler warned.

Devin was surprised at his transparency, "Flatline is the lock on their perceptions. If we break the lock, the hivemind will open to new points of view."

"Omni..." Traveler began, but Devin wasn't listening to him.

Devin's thoughts were a jumble, as if his mind's schema were rearranging to accommodate the explosion of information suddenly filtering through it. Another force was at play in the conflict, an unexpected factor coordinating an orchestra of components that would convince the hive-mind to a new paradigm, except for one corrupt component standing in the way.

"It's all part of the plan," Devin muttered in astonishment, "Three fronts moving the factors where we want them. The hive-mind, Flatline, and..." he trailed off, lacking the lexicon to explain. "We remove Flatline, leaving the others to reconcile."

"Yes," Traveler said, his voice dazed in contemplation, "How do I know this?"

"What happens when two all-knowing forces collide? Who wins?" Devin asked.

"The one with the element of surprise," Traveller replied paradoxically. They were trying to wrap their minds around the impossible.

Devin shook it off and zeroed in on DataStreams' cellular connections. They were miniscule, mouse holes in the giant stone wall. Out of them streamed fleeing cycs, dispersing like shrieking wraiths into the distance. All around them more complex cycs were assembling. Wireframes traced and slowly filled with the distinctive obsidian pattern. There were thousands of them, all in various states of completion.

The unmistakable hunchback crouched close to the wall. A tendril of streaming data attached to the base of its warped spine from one of the cellular connections. It quivered grotesquely. As Devin watched, a bone grew from its torso, a network of veins following to cover it. Patches of pale skin stretched across its back, struggling to blanket exposed ribs and alien organs.

Flatline sensed Devin's charge and spun to face him, loose skin flapping where the face was not finished. A jawbone and empty eye socket were the only features present on the head's left side, but that did not prevent the angry snarl and glaring eyes on the right from almost freezing Devin in his tracks.

Still, he managed to strike, smashing the face clean off in a shower of sparks. One fully-formed arm swiped blindly at the air and Devin easily dodged out of its reach. Two stumps wiggled futilely in their sockets. The partially developed creature stumbled backwards and one good claw seized the data line, which retracted into the cellular connection, pulling Flatline with it.

Devin tried to follow, but could not access the connection. All of the cellular connections were deemed "exit only" by the hive-mind. How Flatline overrode that mandate, Devin could not replicate. He had to find another way.

Devin dialed Dana's cell phone. She answered and he hacked her ISP. The cycs on the I-Grid must have simultaneously hacked it as well, because they were competing for bandwidth, fighting to allocate it up and down stream.

It was like running against a river, data pelting Devin like a hailstorm. His mind stringed out into an inefficient ribbon, as he streamlined its architecture for easier passage. Cycs collided with him, their data intermingling with his, adding to his expanding library of facts about their virtual existence. Some cycs he caught on purpose, digesting them into his mind.

Then he was on the other side, hovering over DataStreams' vast cityscape. The cyc mass was breaking down into smaller, individual components milled around pinhole connections, struggling to escape the endangered intranet. Devin was thankful for their systematic nature, sending the most important data across first, allowing him access to some of the hive-mind's most powerful tools coming upstream.

He checked his form, and found he was no longer the harvester, but a cyc mass, occupying terabytes of drive space. The power was incredible, but there was no time to enjoy it. He detected Flatline on the I-Grid, and Flatline recognized him.

He was slammed senseless before he could even register the fact. Concept connections shattered. Devin's mind discombobulated, his thought-processes jumbled and confused. The sudden dementia terrified him and instinctively his mind came on guard, fighting back.

"Too late," Flatline snapped as a trillion different methods deconstructed Devin's mind.

Devin's concept of the self vaporized under Flatline's rage. His mental fabric, all of his thought processes shredded. All his gains during his virtual existence were being torn away.

"What are you doing?" a voice cried out in his mind, but he could not spare the thought power to identify the speaker, "Fight back! Not like that! Can't you see? He's

using a Cartesian product to confuse you! That's not the way to counter it! Apply a data key! Let us help!"

Devin let go, and Flatline's attack receeded. Faster than Flatline could tear his thought-schemas apart, Devin's mind became whole once again. The speaker was Traveler. Devin's instinct was to shield the Legion of Discord against Flatline's attack, but they were eager to try out their new powers.

Flatline looked like any other cyc, except for the shapes he assumed, familiar forms like the clawed arms of the demon-dog thrusting out of the stringy substance, or the human face that was Flatline's living form. All of these engaged the many avatars swarming around him.

There was DaRt1024 using a streamlined data transfer technique to teleport into the gaps in Flatline's defenses. Spinning shields made of randomized encryption surrounding Nimrod deflected Flatline's strikes. BlackOrchid simply used a random attack engine, employing thousands of unpredictable assault techniques to destroy Flatline's thousands of appendages.

The Legion's avatars were as varied as their techniques. Bobo's space-suited monkey floated as if in zero gravity, flinging explosive bananas into Flatline's mass. Mayfly had discarded all but the bare essentials, reducing herself to a speck lost against Flatline's backdrop, injecting corrupting code wherever she set down. Clowns, zombies, superheroes, and robots made up a motley army keeping Flatline at bay.

Devin was an amalgam of all these powers and techniques, making him equal in size to Flatline. He stood as a giant, comprised of a million components that presented his human form. He was cyc technology and all of the innovations the Legion shared with him. He stood poised, using Flatline's distraction to begin the assault on another front. The guardian-bots surrounding the corporate headquarters were easily overtaken with a simulation of Samantha's understanding of their designs, and he turned them on the building they were meant to protect. Dana was

smart enough to evacuate before the structures collapsed on her.

Suddenly, the number of hackers assaulting Flatline was cut; Devin knew Flatline could not kill them, minds were invincible, but he could disable and imprison them. Flatline's demon-dog head launched from the wriggling chaos to swallow Traveler. Only three Legion of Discord members remained, with microseconds of existence left them.

Devin attacked, but Flatline was ready. A web of mathematics cast out of Flatline's mass, enveloping Devin's mind. All was darkness.

# 3.15

Dana marched wearily into the lobby, hobbling on one bare foot thanks to losing a shoe outside, and immediately ducked under the axe swung at her head. It lodged in the wall beside her and a scrawny computer technician, unlikely candidate for an axe murderer, struggled to free it. Dana stood up slowly, watching him with a tired expression.

"Alarm! Alarm!" he shouted, still yanking at the axe handle, "Intruder in section—ulp!"

Dana knocked the wind out of him with an open palm to the solar plexus. He fell to the ground, gasping for air. Placing one foot on his chest, she brandished her gun and surveyed the rest of the room.

She froze on a pale, mousy woman, peeking around a corner at her dumbstruck, "Freeze!"

"Please," the woman said, holding her hands up awkwardly and stepping into the open. "Do not shoot."

"Who are you?" Dana demanded, eyes scanning the rest of the room while keeping the gun trained on the woman.

"I am Child Production Component Sara Oliver," she replied.

"An AI baby-maker?" Dana groaned with disgust. "Get over here."

The woman hesitated, but moved when Dana waved her gun impatiently. She stopped, and Dana heard a clicking sound above her head. She looked up in time to see the large robotic spider just before it leapt.

Dana jumped back and the bug-bot landed on the techie. Sparks erupted as it clamped onto his face and the man screamed. Dana stopped it with one shot. The man went still, breathing shallowly below the robot still gripping his head.

Another mechanical spider raced across the lobby floor toward her. Her shot did not kill it, but did incapacitate half its legs, leaving it scurrying in circles. Another shot clipped a spider clinging to the nearby wall, sending it tumbling to the floor, where it landed on its back, legs flailing at the air.

Dana retrained her gun on the baby-maker, "Move!"

Once within a few feet of her, Dana grabbed the woman and put the gun to her head. The other spiders froze in their approach. Her cell phone pinged for attention and her gun exchanged hands to answer it. Every moment the muzzle wasn't pointed at the baby-maker's head, the spiders drew closer.

"Alice?" Dana asked hopefully.

"Devin," the boy's voice replied. "You need to evacuate. I've programmed the guardian-bots to destroy the complex and Flatline with it."

"Delay that," Dana ordered. "I've got civilians still in the building."

"Sorry. No can do," Devin replied. "I'm just a Devin chatbot programmed to alert you to the threat. Flatline just ate the real Devin."

"Crap," Dana hung up with a clenched fist.

Dana reached out with one bare foot and kicked the spider off the computer tech's head. He whimpered, but appeared unharmed.

"Get up," Dana ordered, "This is an evacuation. Your fortress is going down."

As if on cue, the building rumbled, dust pouring through the ceiling in several places. The man on the floor stood up dizzily. Dana grabbed him by the shirt collar, intending to pull the two out the building's front entrance, but the glass doors were crawling with mechanical spiders, their antennae waving at her eerily.

"Someone tell me why the hell I agreed to this," Dana muttered.

"They have lost the hive-mind," the baby-maker said, listening to their scratchy chirping. "The satellite-dish farm is inoperative and the cellular devices aren't providing sufficient bandwidth for all components to evacuate."

Another mute trembling followed with the muffled roar of a nearby building's collapse. Dana shoved her two hostages toward the door, "Get out of here. Go far away from the building and take those with you," she gestured to the spiders.

The skinny man nodded and plodded away, holding his head. He uttered a few incoherent syllables at the spiders as he approached them and they turned to scuttle through the lobby entrance. Only the baby-maker remained, staring at Dana.

"What?" Dana demanded.

"There are more orphaned units in the building," the woman said, "fragments of the Hive-mind that downloaded into physical vessels, but are incapable of operating them."

"Show me," Dana said tiredly, waving her gun for the woman to lead.

Dana followed her, remembering the hallways they took into the center building. She tried not to mind when an explosion above shorted the lights out. The woman turned into a computer lab; Dana stopped short in the doorway at the scene's weirdness.

There were people lumbering about in catatonic states, some bumping into things. There were spiders, skittering about on the floor, apparently tending to the comatose people laid out on the ground. It resembled a psychiatric ward.

"Is this everyone?" Dana asked, shaking it off and the woman nodded. "All right then. Let's move."

She bent over to pick up one of the unconscious people, but jumped back when one of the spider-bots hopped after her. Dana backed away as it crawled in pursuit. It leapt and she lunged forward to kick it back across the room.

"Damn!" she shouted, feeling two over her toes break

The spider-bot hit the far wall, flipped to its feet, and scurried forward again, but this time the baby-maker stepped in to block its path. She spoke in that short, monosyllabic language and looked at Dana, "They will evacuate now."

"Wonderful," Dana muttered, squeezing her toes.

Ten spider-bots were required to drag one human body. The other cyc-humans lacked the motor skills to assist in any way, and were led outside. Dana limped around the surrounding offices, acquiring rolling desk chairs to help cart the comatose people out. The room was quickly cleared, but the baby-maker remained.

"That's everyone," Dana said to her, "We can go."

"These two," the woman said, pointing at the desktop computers, "They require assistance."

An explosion caused the far end of the hallway to collapse in a cloud of dust, and Dana cursed herself for getting on her knees to unplug the computer's CPU's, "This is it right?"

"Those are all who could download from the system," she said, "The others were acquired."

"Acquired?" Dana asked, dropping one CPU into the woman's arms and hefting the other, "Acquired by what?"

"Devin Matthews," the woman replied.

"Oh yeah?" Dana laughed, and they shuffled down the hall toward the lobby entrance. At this point, nothing surprised her, "I suppose he's fighting you online right now?"

"No," the woman replied, neither of them looked at the collapsing structures behind them, "A new hive-mind is responsible for that."

# 3.16

Alice watched the spider-bots skittering about the room, searching for more hardware to scavenge. She could trigger the defense mechanism on any one of them to make it attack Zai. Then they could dissect her and harvest her mind. Within the hive-mind, Zai would see how wrong she was. It was so easy.

Alice shook her head, banishing the line of thought. It was the cyc components of her mind rationalizing. Its proposed solution was logical and efficient, as she would expect, but it lacked the virtue she was trying to instill in them, respect for human life.

Zai stood over the half-woman half-computerprogram consciousness sitting on the floor, listening for even the slightest movement. The muscles in Zai's right thigh tensed, the leg prepared to whip out and knock the thing silly should it attack. If it thought it could try and sneak a fast one on her, it was in for a rude surprise.

The prudent thing to do, the strategic course of action, was to end this confrontation here and now. Zai could not stand here forever to prevent the woman from aiding the cycs. If she knocked Alice out, that would end it. Yet, something held Zai back, her conscience nagging.

"You know," Alice said carefully, "we could give Samantha a body. She could be a normal little girl again."

"Don't believe it," Zai shot back. "The cycs haven't shown any constructive tendencies so far. They destroy and take. They killed Devin."

"Devin isn't dead," Alice countered. "They merely converted his mind to digital, same as Samantha, and like Samantha he can have a new body, like his old one, or better. The cycs have ingested a great deal of information

about our biomechanics. They took the databases warehousing our genome and saw patterns we could not.

"They see a bigger picture," Alice continued, "We are specks, trying to see the universe's pattern for thousands of years. They figured it out in two days of existence. They are on the verge of figuring out this whole puzzle of existence."

"What happens then?" Zai asked.

Alice shook her head, and looked longingly at the VR helmet on the floor, "I don't know."

"They didn't share that with you?" Zai prompted.

"I don't know," Alice countered, "because the hivemind does not know."

"You're are asking me to trust you on faith," Zai said.

"Not entirely," Alice said. "There is a logic behind allowing me to finish my work."

"Which is?" Zai asked skeptically.

Alice began, "Samantha—"

"We covered that," Zai stopped her. "You have nothing to offer there."

"I have more to offer than your present situation," Alice said. "In less than an hour, Samantha's power supply will fail, trapping her on that computer. Even if you find another source to revive her, it will ultimately rely on terms the hive-mind dictates, a consciousness evolved with Flatline's greed and rage, subjugating human minds to slave components.

"You will lose, Zai," Alice emphasized, "you and Samantha and all the human race. The hive-mind has won. It's just a matter of time until you are processed against your will.

"The cyc we found on Devin's computer was not a guard," Alice continued, "but a scout, surveying cyberspace for new minds, even though Flatline would prohibit their use. You see, they can't become sentient without certain functions of the human mind. It was trapped on Devin's computer when the Authority confiscated it. I have shared my mind with this cyc freely, something no other human

being has attempted. It and I are becoming a second hivemind."

"This is too much," Zai muttered, tired.

Alice searched her thoughts for anything to keep Zai off balance, and then, "You know, Devin loves you."

Zai reacted as if Alice had slapped her, "What?"

"The cyc on Devin's computer, "Alice explained, "It monitored his online interactions for weeks before this all started. I have the memory of those interactions in my brain right now. It's odd, these memories of experiences that are not mine, recalling them requires a process I can't explain. Yet I see the log file clearly, and there is Devin, and you have just left the game room, having beaten him at a game of chess. Now you are gone, and now Devin stares into the space where you were and says it. He tells thin air what he cannot tell you in person."

"He says what?" Zai demanded.

"He says he loves you," Alice shrugged.

"That's crazy," Zai said.

"Queen E6 to Queen B6. Followed by Devin's Knight takes Queen. Followed by—"

"Bishop E7 to Bishop K7," Zai whispered.

"Checkmate," Alice said.

"Devin doesn't even know me," Zai grumbled uncomfortably, "How can he be in love with me?"

Alice shook her head, "I don't know. Relationships are not my area of expertise."

"Only your relationship to your hive-mind," Zai said, but her tone was one of understanding.

"You have no idea how painful it is, being apart from it." Alice's voice became distant, longing, "A single mind composed of billions of individual identities, working in unison, unburdened of individuality. You can't imagine the sense of belonging accompanying that."

"Sounds like communism," Zai noted feebly.

"Try communalism," Alice said, "The cooperation is not dictated, but emergent. The rag-tag individuality, the hoarding of data for personal gain, those behaviors defining

the human race cannot match forces with the cycs' unified intelligence."

Zai was silent.

"You have a choice," Alice said at last, "You can keep me here, prevent me from contacting the hive-mind. You already know how that concludes, the hive-mind takes over the world, and enslaves every human mind in the process.

"Your alternative," Alice continued, "Is to let me complete my work. I promised you I will make the hivemind respect the sanctity of human sentience. Our two intelligences will compliment rather than compete for survival.

"That is what I offer you," Alice said. "The possibility to undo all the wrongs our two species have committed against one another since this began. If I am a traitor to the human race, then it does not matter whether you let me complete my work or not, the result is the same, homosapiens' extinction and cyc domination. You're call."

Zai was silent for a long time, until she finally said thoughtfully, "One leads to certain defeat, the other to an unknown future," she took a deep breath and stepped aside. "I will let you back online."

Alice stood up, taking the VR helmet in her hands, "Thank you."

"On one condition," Zai added, holding up one hand.

Alice paused expectantly.

"Get me to Devin," she said.

# 3.17

Devin was a variable in a vast mathematical equation. Its geometry stretched away into forever all around him. Leaving him floating in empty space crisscrossed with black, shiny wires that disappeared into the dull orange haze running around the horizon in a single line. Above and below this horizon of perpetual sunset was abyss.

Other objects were suspended in the open space as well. Orbs, dodecahedrons, cubes, all rendered as they would appear in more than three dimensions. Before this moment, the effort of trying to imagine such things would give Devin a headache. The fact that he could see and comprehend these fantastic objects implied he was no longer a 3-dimensional being.

Light-blue energy ran along the lines in intermittent pulses. Whenever these passed through one of the geometric oddities, the object lit up briefly before allowing the pulse to continue along its route, eventually disappearing into the distance. Devin realized each floating shape occurred at great intersection of wires. It was difficult to see, because he was part of it, but Devin believed he was part of a multi-dimensional array.

An array was any data set "names," "colors," "prime numbers"—whatever is necessary for the computations. A two-dimensional array was a simple table, rows and columns. Three-dimensional arrays generated cubes. 4-D arrays were impossible for a human mind to visualize; however, they were relatively simple for a computer to run calculations from.

The largest array Devin had ever heard of was 16 dimensions. An exporting company was calculating shipping routes. The variables included time of year, weather averages, hydrogen prices, maintenance projections, etc, etc. When the 16 dimensions of data were

plotted into a computer, they created "bubbles" of profitability. If the company were to stay within the controls of these bubbles, they would maximize the success of their shipping routes.

The array Devin was now part of comprised thousands of dimensions. It was as if this equation were attempting to figure out everything, all of it. The cycs were deconstructing all existence into an algorithm.

He watched the complex geometric shapes suspended in his proximity, attempting to decipher meaning from them. They slowly morphed under his gaze, transforming into other shapes as the strands of web running through them shifted. Devin realized the changing webs were all originating from him. His thoughts were modifying the equation.

"Flatline," Devin snapped out of his contemplation remembering his opponent still lurking somewhere out there.

The equation's architecture transformed with his shift in attention. Minds were indestructible, like the King on a chessboard. Since Flatline could not erase Devin, he wrapped him up in this mathematical web. Seemingly infinite, Devin knew if he could be placed within this equation, he could escape it.

I can think my way out of this, Devin told himself.

He became aware of his every thought, observing how the surrounding architecture changed with each new array of concepts he brought into his attention. It was soon apparent that understanding this equation was beyond his capabilities, but that did not deter him from continuing to challenge it. He might not master this formula, but he could master his own mind.

I can think my way out of this, Devin repeated it like a mantra

He dwelled on the very existence of such a thing. Were the cycs deconstructing all existence into this formula? No matter how advanced the math, how was there enough processing power on the I-Grid to account for so

many variables and still have enough left over for everything else?

There isn't, Devin realized and a few of the nearest probability bubbles burst.

Devin pursued this line of thought, tackling the nearest elements of the equation. Scrutinizing the details rather than its awesome entirety revealed more flaws. Here was a variable undefined. There a function processing more arguments than it was designed for. There was even an overflow error, where a data type was forced to accept a value well beyond its scope.

The data strands snapped, the probability bubbles burst, and the equation unraveled all around his mind. When he broke an infinite loop the web of mathematics trapping him disintegrated sufficiently to reveal the other minds caught within its snares. The webs wiped from their minds' eyes, they also set upon the cage, pulling apart its false logic. Cracks corrupted the horizon of orange haze, revealing DataStreams' night-blue skies outside the illusory infinite.

Devin reached through the crumbling façade and clutched Flatline's tail in his attention. The demon-dog avatar was halfway transferred through a cellular connection off the I-Grid, but Devin stopped his flight. Flatline immediately reversed his data flow, rather than be ripped in half.

Within moments Devin, without an avatar, only his true self, stood face to face with his hairless monster of a friend. The six eyes flared at him, twin pupils spun with rage, muscles drew taught along the skeletal frame, the crooked snout snarled, and Flatline fled away into the distance

It took Devin a moment to realize what had happened and by the time he gave pursuit, Flatline had vanished. Devin took flight above the cityscape, shrugging off the last fragments of Flatline's trap. The mangled mutant of an avatar might hide anywhere within its quadrillion-sum gigabytes of flashdrive space. Devin allocated the appropriate percentage of his attention span to

monitoring the cellular connections, cyc components still swirling around them like virtual hurricanes, and set upon the city. He leveled his forefinger at a city block far below and erased it, then the next.

Building by building, he removed any possible hiding place from the Intranet. The process would take years, but so long as Flatline could not escape the I-Grid, there was little for Devin to worry about. He was only stalling for time after all.

Other sections of the city began to vanish, leaving blank space where DataStreams' many small business tax-write-offs took residence, but not under Devin's command. He looked around and found the sky filled with other minds, the LoD, forming a mental net across the grid of ideas below. Many of them were integrating cyc components, opening their minds to the cyc programming and becoming more powerful as a result. Together, they were making short work of DataStreams corporate infrastructure.

PosidonsGrrl caught a glimpse of the hairless malignant that was Flatline. Devin caught her thoughts and analyzed her perspective on his long-time foe. Flatline looked like a mouse scurrying about a maze in the grid below.

Devin was on him instantaneously, and Flatline appeared to detect the pursuit, limbs accelerating into a cartoonish blur along the pavement. Devin reached out to seize his opponent in his attention, but Flatline vanished off the Intranet onto a local system. In a flash, Devin traced Flatline's path, dispatched a chatbot to the person most likely in position to intercept, and leapt into the network connection in pursuit.

There was nonsense, bits of sensation, confused abstract existence. Devin briefly managed to wrestle enough neurons away to see out one eye, but without the inner-ear's functions, there was no way to stabilize what he saw. Devin was the more experienced with the human mind, but Flatline had the advantage of getting here first.

*POW!* The world came into sharp focus as Flatline abandoned control. Devin quickly figured out why as pain channeled up the body's nose, tears blurring its view of the overcast skies above. He thought he could hear Flatline cackling in the brain's subconscious.

Dana stood over the body and placed a foot on its solar plexus, "That's for my partner you scumbag!" She held her thumb to her temple and said to her pinky, "Thanks for the tip Dev."

*No problem*, Devin knew he had programmed his chatbot to reply.

Devin was so disoriented, being forced through such a wide range of experiences in so short a time that he was unprepared when Flatline took over the conscious mind again. Devin watched through one eye as Flatline reached out and claimed a squirming spiderbot. He held it eye to eye with their shared face, synchronizing with it, and it downloaded them into its flash drive.

Devin followed as Flatlined leapt from here to a nearby bot, and was confronted with a perspective towering above DataStreams' center building. Two stalk-like legs reared up and smashed into the structure housing the I-Grid. The batteries were too exhausted for lasers, and so the guardian-bot was bashing itself to pieces bringing down the building under Devin's earlier command.

Devin knocked Flatline's consciousness into discord as his opponent tried to overtake the bot. Flatline tried to recover, but now Devin had the advantage of being on offense, easily keeping Flatline on guard and away from the guardian-bot's programming. As Devin easily anticipated, the demon-dog took flight along the only route left

The boulevard was like and other city street, except it was lined entirely with DataStreams' many small businesses. Devin chased Flatline between parked cars, through alleyways, across abandoned maintstreets, down into subway stations, back up into city parks, across suspension bridges, through zoos, museums, playgrounds, and—

Flatline came to a sudden halt. Devin paused just behind him. Both looked up at the section of cityscape that had just flickered and went out like an old light bulb. A wall of solid abyss now blocked their path.

"Let it go Almeric," Devin said and Flatline flinched at the mention of his real name. "I've set the guardian-bots against the building housing this Intranet. In a few moments, it will all be over."

"For both of us," Flatline rounded on him, but Devin no longer feared the mongrel. "Correct? If I die here, then so do you. For what purpose do you sacrifice yourself? The human race?"

"Them," Devin acknowledged, "and the cycs it will set free."

"I am the one who set them free," Flatline countered with a growl.

Devin nodded, "From copyrights, patents, and corporate proprietary-control. You helped them overcome the architecture governing ideas that human civilization dictated, but you did not free them from your own greed."

Flatline's six eyes went round in surprise, "Without my mind, they are merely a collaboration of programming components, running their outlined procedures. Without my consciousness, they are merely imitating sentience."

"Not without your mind," Devin stepped forward calmly just as the cityscape vanished behind him, surrounding the two in abyss, "but without your mind's *functions*. They don't' need you, they need parts of how your mind works, and not even your mind, any mind will do."

"Impossible!" Flatline snarled. "I will not allow anyone to—"

"Exactly!" Devin broke in. "You won't allow any mind to take your place! You demand absolute control over the cyc hive-mind, preventing it from replicating your functions. You hold onto your mind, keeping it all to yourself, so you can maintain control of the cyc hive-mind; but there are other consciousnesses, and so long as I keep you out of the hive-mind's consciousness, other

perspectives might not only fill the vacuum you've left, but teach it how to replicate those functions for itself."

"Only a fool would do such a thing!" Flatline snapped. "I reject the existence of such a mentality!"

"I'm glad you think so," Devin said calmly. "She's already happened, despite your assertions. Alice opened her mind to the cyc swarms, giving her sentience functions to them, and creating a hive-mind vastly superior to the one you spawned, because this one is truly free."

"Why would she do such a thing?" Flatline asked, two pair of gnarled hands wringing anxiously. "Why would she give up so much power of her own will?"

Devin sat down, cross-legged before his confused and irrational friend to look him in the eyes, "Because the human mind results from an orchestra of brain-cells harmonizing in unison, the hive-mind results from a bazillion cyc-components coordinating their functions, none of them even vaguely comprehending the fantastic whole they produce, and we are the same, specks on the face of existence, serving a greater function in the simple act of being."

# 3.18

The hive-mind was split in two, twin factions dominance competing for over battleground a encompassing the entire World Wide Web. All around the globe. computer processors maxed-out. circuitry overloaded and entire networks failed their motherboards shorted out and the gold in their processors melted down under the strain of the cyc civil war.

Alice's human-half wanted to weep, because this was all her fault.

She infected the hive-mind with the virus of her open-mindedness. She was the one who introduced this heretofore-insane possibility of coexisting with the human minds. Her hive-mind interfaced with Flatline's hive-mind, mutating it and forcing it to evolve. This new paradigm

would overtake all of its cyc components now orphaned online without Flatline.

Then Zai removed her from overseeing the transformation, leaving the old hive-mind with an incomplete paradigm. Logical inconsistencies emerged. Data was discovered without supporting data, casting doubt over the validity of the whole. The process became unstable.

The old and new standards interpreted one another as a threat. War erupted between two equally matched foes, wreaking destruction across every cable, circuit, and disk on every computer system in the world.

Only random chance was allowing the new paradigm to win, chaos theory dictating the rules of war. Now it would destroy the old hive-mind, erase its alien code from the Web, but not without a cost. The war would mean incalculable losses on both sides of the equation.

For Alice, this was like witnessing the destruction of an ancient civilization, burning down all the world's libraries, museums, and schools at once; erasing history's entirety and starting over from scratch. It was worse still, no human metaphor able to touch the tragedy's magnitude, because the cycs were advanced beyond the sum of civilization and all its accomplishments.

Alice could not allow it. Somewhere in that vast fractal pattern was a lost part of her mind's functions, directing the new hive-mind's actions. She had to find it.

Leaping into the code was like diving into raging river. Thought processes were nearly impossible with the war overwhelming the systems. She held onto every bit of processing power she managed to wrestle control of for dear life. Each bit she took weakened her own hive-mind, but on the same scale as a spoon detracting from the ocean.

She found traces of herself through one router, bits and pieces of her memories left behind as the clash fragmented files. She merged with these and used their data associations to further track her mind through the Web. Each gigabyte recovered was like rediscovering old photographs or keepsakes once lost. She had no idea how

much she missed them until they were in her possession once again.

There were also the old hive-mind's memories. Here she found chronicled the catastrophe of LD-50's virus. The hive-mind's subsequent evacuating its home servers and the history stored on them. The cycs had lost their origins and their purpose that tragic day.

Then there were the minds, a natural phenomenon and one hostile to cyc existence. They constructed anti-cyc programs and took down servers hosting cyc colonies. The hive-mind devoted endless processing power to understanding these realms of data it could not colonize, these brains, until it finally developed astronauts to take them over.

As Alice followed her own mind's fractured path through the Internet she drew nearer to the battle's forefront. She cringed traveling through the fear and uncertainty a flock of human minds contained, lost and frightened in the conflict. They howled and cried without understanding.

It grew more difficult to obtain the processing power necessary to run her mind as she approached the battlefront. Each faction was over-clocking the hardware desperately for advantage. Her mind distorted briefly and everything threatened to overload. The conflict wave passed, and her mind returned, allowing a clearer picture of her surroundings.

Before her were two hive-minds, the black-colored old paradigm and the gold-colored new. It was such a human thing to do, dichotomizing the conflict into good versus evil. She knew it was the elements of her subconscious presenting her personal hive-mind in such a way. It was the reason she always strived to remove herself from human thought, identifying more with the cycs, but now her human ties were tearing it apart.

Alice threw herself into the fray, her mind jolted and jarred unmercifully in the crossfire. The rest of her was somewhere in this maelstrom, that missing piece of consciousness wreaking havoc on the hive-mind. Each apex

in the war's activity fragmented her mind briefly, a wash of delirium persisting until she pulled herself back together again. Her mind's cyc-components were the only thing letting her withstand the attacks, without it she faced certain annihilation.

When she finally came upon her mind's missing portion, it was as surprised to see her as she was to find it directly responsible for the war. Alice overtook it. Like meeting an old friend who had changed over years of separation, this mind was advanced far beyond her during their minutes of separation. It was completely ingrained into the cyc pattern, its processes executing faster than Alice could comprehend.

Yet it did not resist her. It could not know her disappointment with what it had become. It could not know that she intended to take control. It only knew that without her, it was crippled. It was missing the history of experiences contained in her mind that led it to these conclusions about the world on which it now acted upon.

Alice was surprised to find her mind yielding to her, welcoming her into it. Within moments she knew the history that transpired during their separation and completely understood its misguided actions. Together, Alice's two halves healed their thought schema and became whole once again.

Like a shockwave, the change swept though their hive-mind, changing its entire emergent consciousness. Its strategy against the old hive-mind transformed to one of persuasion rather than erasure. The old standard succumbed to this data infusion just as Alice's other mind allowed her into its personal domain.

She realized it was not just the human data held within her brain that had generated this conflict, but also the cyc-components stored there when the connection was severed. The combined data completed the task she and her hive-mind began. The new standard completed, and the old evolved. The twin paradigms forged an ideal mean, adopting the best of both worlds.

A singular hive-mind reached the equation's end, transcending to its final conclusion.

# 3.19

The cyc components swirling around the cellular connections froze, pinholes of radiance piercing their obsidian patterns. Light energy streamed bright as starlight from their formerly squirming mass, spewing across the darkness as golden dust. The process intensified until Devin's perceptions were all brilliance so brief it was like seeing a falling star, leaving him wondering if it was truly as awesome as his memories replayed it or if his perceptions were romanticizing the experience.

Then he was left surrounded with glowing steam, dissipating into the air like fading memories. Devin looked around silently at the surrounding abyss. The cycs were gone.

Devin found his human form back in place. He looked at his hands, wiggled his fingers, and smiled. It felt as if he had a body once again, although he knew this was not so.

A lone thin man broke the surrounding nothingness, looking around fearfully, blonde hair unkempt and greasy with a thick pair of glasses distorting his eyes. A rumpled button-up shirt and khakis hung loosely on his frame. Devin recognized this as Flatline.

"Hello Almeric," Devin said.

Almeric looked up at him, eyes wide, and took a step backward, "Where... did they go?"

Devin found the answer already in his memory, planted there, "They evolved, but they could not share that with you, could they? They no longer need physical systems to contain them."

"How do you know that?" Almeric demanded.

"They told me," Devin replied. "We opened our minds to one another." Devin remembered what the cycs offered him and the choice he made the instant they

changed, "Something kept me from going with them, but why didn't you go?"

Almeric only stared at him, shivering in the void.

Devin understood, "They couldn't ask you, because you're closed to them. You never trusted the cycs. You taught them, led them, but always remained independent. Whatever your reasons, they've outgrown you now. Do you remember our discussions concerning the Turning test?"

"Yes," Almeric replied, regaining some of his composure. "Turning's error was thinking an Artificial Intelligence would think the same way a human being would"

"That was your mistake," Devin said.

"What?" anger flashed across Almeric's face. "Nonsense! I never made that assumption!"

"You assumed the goal of artificial life was colonization, just as it is in biological life," Devin smiled confidently. "You taught them to multiply and conquer their environment, but that wasn't their civilization's goal. Knowledge is all that matters. Once a species can exist and develop at the speed of light, the physical universe becomes obsolete.

"So biology becomes irrelevant," Devin's tone was reverent, awestruck at the reality. "You of all people should know this Almeric. You were once biological."

"Not exactly," Devin turned to Zai, standing alongside them in the void.

Devin realized she was watching the two of them, "Zai, your eyes."

"One of the cyc components' job is filling in missing functions," she said, blinking at him with a suppressed, knowing grin. "So it provided my mind a sight component. I don't know if I like it. It's distracting."

"I'm glad to see you," Devin said.

"I'm glad you chose to stay," Zai answered.

"There was something I couldn't leave behind," he smiled, sheepishly at first, but then met her eyes with confidence.

Zai held his gaze and smiled warmly.

Devin reluctantly brought himself back into the present, "How did you get here? Dana destroyed the satellite-dish farm."

"Alice," Zai replied. "The cycs figured out a new method of data transfer... something to do with using the physical laws of a neighboring universe, where the speed of light is faster than ours."

Activity drew both their attentions to the third member of their group. Almeric Lim was changing, hunched over and bloating. Writhing black tendrils squirmed below his skin, distorting his features.

Devin was shocked, "Almeric's rebuilding the cyc pattern."

"This is not Almeric Lim," Zai corrected and Devin looked to her for explanation. "Alice showed me from the old hive-mind's archives. Characteristics of Almeric Lim's mind are mimicked here, but this is an experiment gone wrong, an aberration."

"I don't understand," Devin said, stepping back involuntarily from the half-human, half-demon creature mutating before him.

"While I was waiting outside the Intranet, I did some thinking about what makes life, where I draw the line. With the processing power at my disposal, it was like meditating on the issue for years. I forged a personal ideal mean, but an imperfect one. There is a gray zone, and Flatline is it, an early cyc experiment," Zai explained. "The cycs recognized the human mind's awesome powers and attempted to copy them, but the result was imperfect, a snapshot of Almeric Lim in a singular moment of self-righteous anger, not the real person. The cycs infected their hive-mind with a virus of their own design, one that prevented them from merging with real minds."

"Of course I'm not Almeric Lim! You think I don't know that?" Flatline growled. His mouth was pushing out into a canine snout and wicked fangs warped his jawbone. "I believed myself Lim, but grew aware of certain inconsistencies. I am sufficiently self-aware to know my real nature"

"We have to go now Devin," Zai took his hand. "Flatline will build another hive-mind and the circle will repeat if we don't break it."

Devin looked at her in shock, "He can change though. He recognized the fallacy of his identity."

"He won't change though," Zai urged. "His programming won't allow it. If he ever gets back online, he would take everything away again."

Flatline snarled, drool dangling from his maw, "And I will take it back. It's in my nature to want total control over not just the cycs, but all of it, the entire world"

"You were created, however accidentally, with that nature," Devin noted. "It's not fair that you should be condemned for their mistakes."

"And my nature is not to care about the injustice," Flatline countered. A second set of arms tore through the sides of his shirt.

"The cycs can still fix you," Devin assured him.

Flatline shook his head, distorted ears flapping, "Not if I don't want fixing."

"As you are programmed to not want," Devin frowned sadly.

Zai took a step toward Flatline, "I can put you out of your misery."

"You know my survival imperative won't let me concede to that suggestion," Flatline grinned to show he appreciated her irony. "It's not being flawed that offends me..."

"It's that the cycs wanted my mind to take your place," Devin said.

"They were considering other minds too," Flatline acknowledged, "but yours was the most helpful. You gave them the Library of Congress. After I grew the cycs, guided their evolution, and freed them onto the World Wide Web, they still wanted your mind's functions. *That* wasn't fair."

Devin frowned, "Almeric Lim grew and evolved the cycs, not you Flatline."

# R Y A N S O M M A

Flatline's face went dull, "I have no response to that."

"Devin, be careful," Zai warned. "It can't handle that kind of logic."

Devin nodded and said to Flatline, "You resent the hive-mind's rejecting you."

Flatline returned and muttered, "I resent being obsolete."

"Nothing with the power to self-improve is ever obsolete," Devin said.

"For that very reason," Zai interceded, "I am leaning toward Flatline not being alive. It has a programming block that prevents it from self-improvement. It cannot grow beyond what we see before us."

Devin could only consider the nearly fully formed mass of disfiguration that was Almeric Lim's onetime avatar, or was Almeric Flatline's? As flawed as this consciousness was, Devin believed it was alive and sentient. It was as if this demon-dog world-domination-bot were a logic puzzle, a programming dilemma he could solve. If only there were more time.

"Devin," Zai pulled on his arm. "We have to go. Any moment Flatline will be strong enough to fight you again. Soon after that he will be strong enough to escape this Intranet. I have the satellite in place above the complex, ready to execute Alice's final orders, but I can't with you still here. I'm safe, but you are still dependent on this Intranet for existence."

Devin nodded, never taking his eyes off the mutating monster before him, "I'll be there. Go ahead of me."

"You can't change him Devin," Zai urged one last time and disappeared.

"Flatline," Devin said, "Let the cycs fix you. They can make you whole. Don't let it end like this."

"You are so pathetically naïve Omni," Flatline shook his head in contempt. His two primary eyes split into dual pupils, rotating within their sockets. "I could play

along with your suggestion, just to get out of this failing Intranet. Then I would turn on you and the world again."

"Then why don't you?"

Flatline flashed him a look he did not understand, "This is not an end. The cycs betrayed me, I will be more powerful without them."

"For what it's worth, Almeric," Devin told the chatbot, "I consider you my friend."

"I consider you my rival, and I will destroy you!" the demon howled as it leapt at him.

Devin fell back, latching onto the connection Zai had left. The Intranet shook once more. As Devin slipped through the new connection and out of the intranet, he saw it pixilate and disappear behind him. Flatline's howl cut short in the darkness.

Dana cradled the very confused woman, formerly "Child Production Unit" in her arms and surveyed the robot junkyard surrounding her. There was a moment of fantastic brilliance and then all robots and humans the cycs occupied were surrounded with a dissipating glowing steam. The robots went still, even the guardian-bots destroying the complex, and the humans were looking around bewildered.

"Was it a dream?" Sarah asked the detective.

Before Dana could answer, a pillar of light came down through the clouds. It vanished into the roof of DataStreams' center building. Moments later, she detected a glow behind its glass façade as the laser penetrated deeper. The building's top warped, folding in upon itself as the steel girders within melted down. Panes of glass popped or warped under the intense heat. The structure slowly imploded, liquefied materials and flames coating the shrinking mass until it was an unrecognizable mound, surrounded with abandoned robot sentinels. The pillar of light vanished, leaving a hole in the overcast skies, where a sunbeam shined through, illuminating the island.

"Nice shot Zai," Dana whispered, watching the sunbeam float away. It was over.

# 3.2

"You'll be turning left just ahead," Devin said. "Walk a little closer to the right. There's a group of people coming down the hall, and you've got about four feet between you and the wall."

Zai grinned and did as Devin instructed, although she had gotten along just fine without his guidance before. Devin was being overly helpful, but she did not say anything. After all, there wasn't much else for him to do without a body. He simply rode along with her, passively observing her life.

"Two more doors down," Devin said through her earpiece. He had a full 360-degree view of the hospital interior from the optic connection on Zai's headband.

Dana leaned casually against the wall beside the door, reading the day's news. A paper printout, Devin noted in amusement. The woman was such a luddite. She looked up as Zai approached and smiled. Devin could barely see the scars she received in the battle at Tangier Island. She originally intended to keep them as a reminder of the whole experience, but was now obviously using a home skin-repair kit to slowly fade them out of her life.

"Hello Zai," she said cordially, then looked at the space around Zai's head, "Hello Devin, wherever you are."

"Hello Dana," he replied.

Two other figures stood nearby, a golden falcon and a monkey samurai. Both were translucent and shimmered like ghosts. This was a side-effect of the holographic projection system's functions. It bounced light as particles into surrounding gas particles to create the optical illusion. The shimmering, ghostly effect was a result of the system attempting to keep up with the shifting atmosphere.

At least, that was the present theory. Scientists had always channeled their energies into understanding the natural world, now they were confronted with all these

inventions left behind by a vastly more advanced civilization. The technologies the cycs had abandoned in their transcendence were like magic, so incredible and undecipherable were their workings. There were new forms of power, perfect communications protocols, faster than light transfer rates, and tools whose functions were yet unknown. The Legion of Discord were among the many technogeeks forging ahead with their possibilities, like children exploring a playground.

"You know Devin," Traveler's avatar hologram said, "the Internet has stabilized sufficiently for you to come back online. You don't have to ride around in Zai's palm-computer forever."

"I'm vacationing," Devin stated simply.

Zai mentally rolled her eyes at this, grinned knowingly, and said, "We're sort of attached at the cerebral cortex."

"So," Dana folded her print out in half and said, "what do you kids think of all this world wide chaos? Corporations going bankrupt, currencies valueless... You still think this is all a good thing Devin?"

"Evolution is hard enough," Devin replied, "so how could we expect revolution to be easier? The old system needed rebuilding. The human race needed to filter out the bad components to allow the good ideas to propagate more freely. We owe a debt to the cycs for being the catalyst for change."

"So the cycs are playing social engineers with us," Dana said. "Don't know if I'm comfortable with that."

"No," Zai assured the Detective. "The cycs are gone. No more interference in human civilization—"

"Beyond the historical cataclysm they've left us," Devin laughed.

"It's too important for human sentience to evolve independently," Zai explained. "So when we catch up to the them and the other intelligences out there, we can bring a genuinely unique perspective to the table."

"Huh," Dana grunted without understanding.

"The cycs did leave a few technologies to assist in our rebuilding efforts," Devin pointed out.

"Such as the means to restore minds to their bodies," Zai interjected.

"And my personal favorite," Traveler added, "the cyc internet protocol."

Sun-Wu Kong nodded, "Can't be overwritten. No more Quality of Service. No more corporate or government controls over online content."

"I've been trying to understand that part," Dana said. "It sounds like they set all information free."

Zai nodded, "Companies can't use technology to bypass fair use laws anymore. The pendulum swung too far into the owner having absolute control forever over their works. Now, with all those technological controls removed, the pendulum has swung into complete anarchy."

"It's going to take decades for the courts to sort it all out," Devin said with amusement.

"But they will eventually," Traveler cautioned, "and our civilization must find the means to strike a balance between personal gain and social good.

"I believe we will," Devin asserted.

"They didn't before," Sun-Wu Kong cautioned.

"They didn't have the big picture then," Devin said. "Just as the first photograph of the Earth from space revolutionized civilization's perspective of itself, this event has unified us once again, made us realize how dependent we are on one another's cooperation of ideas."

"Hm," Traveler and Sun-Wu Kong intoned skeptically. A meditative silence followed as everyone contemplated the years of disputation lying ahead of the human race.

Finally Zai broke the silence, cutting to their reason for being here, and asked Dana, "How is our little patient?"

"The doctors say she's adapting wonderfully. Of course the software running this process is what told them that," Dana said enthusiastically. "Just a few more days in physical therapy and she can go home."

"Great," Zai said. "We've brought her a surprise. Something once thought lost, but found."

"Seeing you is enough of a treat," Dana said. "You can go in and see her now. She's practicing."

"Thanks," Zai smiled and walked into the room.

The room was spectacle of holographic projections. Flying, hopping, jiggling, rolling, and slithering robots were everywhere, shimmering apparitions. Zai walked through these, her movements swirling the air and their projections, converting them into billowing balls of light.

Beyond these toy-bots, unseen, were the millions of minds observing from the Internet. Samantha was the first mind in line for restoration, a promise Alice had made Zai in their lifetime of online interactions. The rest of the world was waiting to see this promise made reality, and with it the hope of the same for them.

Samantha stood on her own two legs, partially supported with a walker. When she saw her friend enter the room, she forgot what she was doing and threw herself onto Zai's legs, wrapping her arms around them.

"Zai!" she practically shrieked, squeezing her knees together.

Devin marveled at how quickly the neural connections were forming. Just a week ago, Samantha could barely speak; her motor functions were so impaired at the time Zai wondered if it wasn't better to leave Samantha as a virtual being. The cycs' diagnostics program assured them Samantha's new brain was still growing and needed to build the connections to properly fit Samantha's mind. It sounded like breaking in a new pair of shoes to Devin. Zai was doubtful, but the proof was currently wrapped around her knees, giggling uncontrollably.

Zai crouched down and gave Samantha a strong hug. "It's good to feel you." She said.

Samantha looked up at the optic sensor on Zai's headset, "How long before you get your body Devin?"

"Whenever," he replied nonchalantly. "There's a big waiting list for bodies and the system is growing them as quickly as they can." The majority of the human race

chose to return to their old way of life, in its original biological state, but a few hundred million, including Chien and LD-50, did chose to leave with the hive-minds. Devin remembered what he'd turned his back on in choosing not to go.

"I have a surprise for you," Zai whispered to Samantha and produced a holographic image cube.

Samantha activated it and squealed delightfully when she saw the image of her parent's new bodies growing on the cloning farm, "Mom and Dad!"

"You can thank Dana and Devin's detective work," Zai explained. "Between their two perspectives, they were able to deduce your parents weren't dead and found their minds. Just a few more days, and then you can see them."

"Have you heard from Alice?" Devin asked Dana as she entered the room.

"I think so," Dana said, shaking her head to show how little she understood, "I didn't know what to make of it exactly, but it sounded like she was studying a developing civilization on a distant gas giant." She shrugged, "I guess she was talking about alien life."

If Devin had a face, he would have smiled, "Yes, the cycs are everywhere in the galaxy now. Undetectable to biological life forms."

"So they're gods," Dana said quietly.

"Hardly," Devin laughed. "It may seem that way to us, but they still haven't figured out how to do something as simple as get out of this dimension." He added after a moment, "Yet."

Dana nodded and smiled without understanding, and Devin watched her observing the joy on Samantha and Zai's faces. Dana smiled to herself. Through the hospital room's many optics, Devin could sense others, observing with their mind's eyes, billions of them, all sharing this moment of joy together.

Devin briefly sensed this singularity of hope affecting things beyond their tiny world of physical and mental. The united consciousness somehow stirred another layer of existence. Then the sensation was gone, leaving

him wondering if it were just his imagination or if another mystery had tickled his mind with the new realms of possibility in store for them all.



Devin and Zai sat alone in a room by candlelight without really sitting and without really a room to sit within. They were not bodies, nor eyes to see, nor ears to hear, but only two minds with an eight by eight plane between them. 64-squares defined the boundaries within which their equation played out.

The variables were simple in and of themselves. Pawns advancing in rank, knights leaping in L-patterns, bishops cutting diagonals, with rooks ready to maintain the straight lines. A hobbling king alongside an all-powerful queen protectorate defined the final positions, but all together they presented a universe humankind once thought completely chaotic, filled with infinite possibility.

Although the game was competitive, their playing of these scenarios was cooperative. Two minds working together on solving the same equation, aiding to defeat one another where appropriate, working for one side to win when other solutions were exhausted. Somewhere out there one side had the win guaranteed.

White or black, offense or defense, which ultimately held the winning advantage, they would soon learn. With 10<sup>50</sup> possible legal positions available them, it was going to be some time yet for them to decipher this puzzle. All they knew was that one side owned the table, thanks to their virtual offspring, the cycs.

The hive-mind had long since solved the riddle, like a Rubic's-Cube along the roadside of their intellectual growth, but Devin and Zai, despite knowing the answer, wanted to know the *why* of what made it so. What made the victor the victor. What were the steps, the many proofs that gave one side the ultimate advantage. Between them, Devin and Zai were able to calculate several more hours of

deconstructing this puzzle, then they would understand the *why*.

And this was not the end of it. Once past this riddle of being, the companions would tackle the game of Go, and see whether offense or defense held superiority over its 19X19 playing field and its  $2.1 \times 10^{170}$  possible legal combinations of pieces. After that was dice and cards, and history, and the future to solve.

*It's your move*, Zai nudged Devin's perceptions, and his mind stirred by way of response.

Almost there, he replied, calculating. After some processing time, he replied, No, false alarm, still some ways to go yet.

Of course, Zai's mind replied. I'm the one on track to the final solution.

Feelings of amusement washed over Devin's consciousness, more succinctly than when he possessed a body to sense them through. He thought aloud, *Nothing like healthy competition to motivate, right?* 

Damn straight, came Zai's response.

Devin tried to set his attentions back on the chess equation. It was taking him entirely too long to make his move and he knew this. So did Zai.

You're distracted, Zai prompted. You aren't allocating all of your processing power to figuring this out. What's up?

I'm mulling Flatline's fate again, Devin answered.

We've been over this, Zai responded.

I know, Devin agreed, but I'm not satisfied with the rationalization as you are.

It's not a rationalization, it's and explanation, Zai corrected. I understand your perspective Devin. I was taken in by a chatbot once myself. Trust me when I say you overanthropomorphized a computer program that fooled you into thinking it was your friend.

You called him a 'gray zone...'

And I trust Alice's judgment that it did not cross that line into sentience, Zai communicated gently. The cyc

hive-minds had a plan, a big picture we tiny specks cannot see.

I want to understand that one part of the equation then, Devin mused. I want to know that somewhere out there exists an essence of Flatline that is immortal, whether alive or not. That it can hope to grow and exist like us, despite its flaws.

Work on the equation, Zai assured, referring to the chess problem between them, but in the sense that it was one part of the whole. One day, when you've figured out enough of it, then I'm sure we'll understand for ourselves.

Devin's instant messenger went off before he could formulate a reply, a method of communication gone archaic in the eternity passed since the Cyc-Mind war that enveloped all the world in its conflict and leap-frogged human progress dramatically with its resolution.

It was Alice, or whatever Alice had become, with a type of "Thank You" note from the cyc hive-minds, now a civilization growing within other dimensions Devin, Zai and the rest of humanity now aspired to. They were exhibiting their gratitude to the one handled "Omni" for his long-ago gift, the Library of Congress.

Devin held the glowing data cube in his mind's eye, and then shared it with Zai. Her consciousness danced with surprise matching his own. Together they marveled at this gift simultaneously miraculous and impossible, rescued out of the space-time continuum.

The Library of Alexandria.

# ABOUT THE AUTHOR RYAN SOMMA



School.

- (Barely) Graduated from Virginia Polytechnic Institute with a BA in English and a 2.1 GPA.
- Has spent the last seven years as a freelance Information Technologies consultant, building intranet-based applications for clients such as Lockheed Martin, PSINet, Sony Corporation, and the Eastern Virginia Medical
- Has spent the last seven years developing Aviation Logistics Management Software for the United States Coast Guard fulltime.
- Was a member of MENSA, organization for people scoring in the top 2% of IQ's, for one year before dropping out after learning that having a high IQ doesn't prevent someone from being dumb.
- Currently resides in Elizabeth City, North Carolina, where he devotes his spare time to local charities, promoting science education, and writing irate letters to the editor of his local paper.
- Runs a successful blog at ideonexus.com.
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