

# Eldritch Science



April 2017



# Editorial

After a brief 25-year hiatus, *Eldritch Science* resumes publication. *Eldritch Science* will now be published on occasion as the fiction zine of the National Fantasy Fan Federation, the world's oldest non-local science fiction club. To emphasize our continuity with the past, we are reprinting a story last published in one of our 1989 issues, namely *Adara's Tale* by George Phillies, with the original artwork as prepared a quarter-century ago by Ree Young.

*Eldritch Science* seeks tales of science fiction, science fantasy, horror, supernatural, and the occult, as well as poems and artwork with the same themes. *Eldritch Science* characters are expected to act, not just be passive observers. *Eldritch Science* plots should weave a believable conclusion, not abandon a morass of unresolved hints.

For prose, our desires are tales longer than 7500 words. An exception is made for winners of the N3F short story contest. The editor is not interested in very short stories, but long works up to novels of extraordinary quality are acceptable.

Poems are expected to have both meter and rhyme:

*The setting sun, her golden rays*

*Strike towering cloudy casements high,*

*Sets airy castles all ablaze*

*Draws fiery shades o'er twilight sky,*

*Gives burning sign that night creeps nigh.*

Prose and Poetry submissions should be electronic. We can scan artwork. Full-color illustrations are entirely acceptable. The editor is not fond of large, solid black areas. Artists willing to illustrate current stories should contact the editor. Our objective is to print commissioned art for all prose and at least some poetry.

We are not interested in publishing: 1. Role gaming stories in which the role of the dice is still audible. 2. The master detective and his faithful amanuensis are acceptable; Holmes and Watson are not. 3. Explicitly erotic or pornographic material, especially of an exotic nature. 4. Tales in which the protagonist is simply a witness or is totally overwhelmed by events, having the free will of a snowflake in the path of an avalanche.

Send submissions to George Phillies, 48 Hancock Hill Dr., Worcester, MA 01609, phillies@4liberty.net.

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**Eldritch Science is only distributed electronically.**

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## The Human Condition

Day 455

Spencer Price was lining up his birdie putt on the eighteenth green when the perfectly manicured grass disintegrated into a million slivers of colored glass. A moment later every last particle was sucked into the ceiling. The flag, ball and adjacent bunker followed in short order.

“Damn it, Helen! Not now, I’m almost done.”

The skinny youth in work greens tried to fling his putter in frustration but it dissolved into a column of golden beads and flowed into monochrome gray walls that replaced the surrounding trees.

“It’s three o’clock, Mr. Price,” a sultry female voice said. “The survey reports await your inspection.”

Spencer threw up his hands. “Helen, you don’t need me to review the reports. You’re quite capable. In fact, my great Aunt Pearl could do it, and she’s blind and deaf.”

“Your family does not have a Pearl listed in the database, Mr. Price,” Helen replied. “The closest is a second cousin--”

Standing alone in the sterile room, Spencer made a show of rolling his eyes.

An optical unit swiveled in his direction. “Am I to understand this is another example of hyperbole, Mr. Price?”

Spencer smirked. “If you’re going to carry on like this, Helen, I’m never going to ask you to marry me.”

“Regulation 371, subsection 24 of the Civil Code specifically forbids legal relationships between biological units and artificial intelligence.”

Spencer tucked in his tunic and stepped out of the drab room into a narrow hallway adorned with murals of sandy beaches and vast, evergreen forests. “You’re not artificial, sweetie. Just listen to that gorgeous voice.”

“You designated my vocal characteristics, Mr. Price. If you recall, prior to launch, I suggested an authoritative male tone to curb your emotional exuberances.”

“Now that would have been fun,” Spencer murmured as he entered a small alcove whose

cushioned white walls supported rows of blinking lights and toggle switches. His practiced eye swept the familiar confines before he slipped into the customized chair that sprouted from the floor. “I can just imagine the jokes when I get back; Price spending two years with a domineering male. I’d never live it down.”

“It might improve your efficiency rating,” Helen replied.

Spencer passed his hands through sandy brown hair. “Helen, this ship sits on the edge of the galaxy. We’re a trillion light years from the nearest human settlement and ten times that from old Earth. Filing a report five minutes late will not make a difference.”

“Actually, Mr. Price, the distances you quote are somewhat exaggerated... again. The actual number of astronomical units to---”

“You’re missing the point, Helen.” Spencer activated the display by tapping a few keys on the chair’s console. Reams of holographic data scrolled through the air. “If I did everything by the book, I’d go crazy long before my two year stint expired. Spare me a little spontaneity if nothing else. It reminds me I’m still human.”

Helen remained silent, forcing Spencer to wait expectantly for that first flicker of compassion. Her reply crushed that singular hope.

“Regulation 4442 of the Surveillance Manual states that all survey reports must be reviewed...”

#

Day 630

“Recording.” The familiar hum followed the AI’s announcement.

Spencer flashed a mischievous smile. “Helen, do you realize the effect your voice has on me?”

The hum abruptly faded.

“Mr. Price, I don’t have to remind you that sending non-military text is a serious breach of protocol?”

Spencer turned to the optical unit.

“Are you laughing?” Helen asked. “There is no room for levity on this mission.”

“Well, at least we agree on one thing.” Spencer’s grin widened and he made a sweeping gesture with his arm. “There’s no room for anything on this ship. It’s so small I have to step outside just

to change my mind.”

“The ship’s construction parameters are meant to minimize detection by hostile forces,” Helen replied. “Are you ready to file the report?”

Spencer sighed. “Go.”

“Recording.”

“Log entry 404897. Border Sentry Unit Delta Alpha Zulu.” He paused to examine the data Helen amassed on her latest sensor sweep. “Routine scans of regions WB64Q through YV12M have been completed.” For the eighteenth straight month. “Radiation counts remain nominal. No gravitational discrepancies in normal or sub-space fields. Overall impression, no sign of enemy activity. Sensor Unit Delta Alpha Zulu out.”

“Message coded and sent,” Helen said.

Spencer knew his words would be broken down into tiny packets of tachyon particles and sent out at irregular intervals. It would take God himself to tease the signal out of the cosmic background.

Spencer stifled a yawn. “Helen, how about a nice quiet dinner tonight, just you and me?”

“I do not require nourishment, Mr. Price.”

“C’m on, sweetie, a hot meal, a bottle of wine... who knows where it will lead?”

“I’m initializing diagnostics,” she said. “As per protocol 765 following a coded report.”

“Just like every other week in this blasted place,” Spencer muttered.

“That is our job.”

“Aw, Helen, you say the nicest things.” He got up, stretched, and briefly wondered how the rest of his colleagues were faring at the moment. All thirty-six-thousand of them.

“How about we open the portals, Helen?”

“You wish to visualize the asteroids again?” the AI asked.

“I want to reassure my doubting brain that I’m actually here in this sensor ship, and not stuck in some scientist’s simulator back at the Academy.”

“I can safely say---”

“The portals, Helen?”

Twin hatches at the front of the room slid open, revealing a canopy of stars flickering faintly against a perpetually dark sky. In the distance a red dwarf, the gravitational hub of a dead solar system,

cast a scarlet backdrop. The craft’s forward lights illuminated a score of asteroids drifting in front of their small moon. On those pockmarked surfaces, he could count the individual craters, impact sites that could have been minutes or millennia old.

“I thought they were so cool when I first arrived,” he muttered.

“They are remnants of a star that went nova over four billion years ago,” Helen said.

“When good old Sol was still a baby,” Spencer said. “You can close them.” He leaned back and rubbed his tired eyes.

“If the sight of the asteroids depresses you, Mr. Price, why do you choose to repeat the experience?”

The young man remained quiet before a sly smile emerged.

“Because it allows me time to think about the big picture, sweetie.”

“Oh.” The AI seemed surprised. “Like the Corg threat to mankind?”

“No, like how I’m going to convince you to have that drink with me.”

#

Day 672

The dream remained fresh in his mind when his eyes snapped open. Standing on the loading ramp prior to his departure, he could smell the heavy, petrochemical fumes of the Lander and the nervous sweat from hundreds of his colleagues as they lined up for boarding. He felt the strong grip of his training officer as the man pulled him aside for that final, disconcerting talk. Captain Stewart pressed a piece of paper into Spencer’s hand and demanded he memorize what was inscribed. Twenty-one months later Spencer still remembered every nuance of that conversation.

He yawned, and the details of the dream faded, but not before a subtle question popped into his brain. Why, after all this time, did his subconscious dredge up that particular memory?

#

Day 686

“Signal detected and...” Spencer tapped a button on the console. “Captured. Retract the antennae, Helen.”

“Need I remind you, Mr. Price, breaking radio

silence is a court martial offense.”

“Helen, this marriage isn’t going to work if you keep nagging me.”

“We are not married, Mr. Price.”

“Well, we could be if you stopped playing hard to get. Besides, I’m not sending anything. I’m simply receiving.”

“This time,” she said.

“It’s from Jason,” Spenser reported, pointing at the text. “See the reversed P’s.”

“That makes it significant?”

“Gives him character,” the young man said, grinning. “Like he’s actually a real person, not some cyborg sentry.” He could almost visualize Helen’s disapproving look.

“What does he say?” she asked.

“Oh, now we’re curious. Why don’t you just read the message?”

“Security directives prohibit me from examining personal information.”

“That’s a good thing,” Spenser murmured.

“Jason says there’s been increased chatter between outposts these past few weeks. He doesn’t know why.”

“Have there been any suspicious readings?” Helen asked.

“No, but it’s like my colleagues have smelled something in the wind.”

“There is no wind,” Helen said. “The recycled gases in each sentry vessel are sterilized and---”

Spencer sighed. “You’re missing the point, sweetie. This is the human intuition part they told you about.”

“Actually, Mr. Price, the biological or intuitive aspect of our tenure involves only the theoretical ability of the human component to sense a hidden threat that my sensors may not detect. This aspect has never been proven, and according to many in the scientific community, is of a dubious nature.”

“Call them what they are, Helen,” Spenser snapped, annoyed by the AI’s offhanded dismissal. “Clairvoyance, extra sensory perception... And yet Fleet insists on pairing us faulty humans with AI units in every ship.”

“These pairings have been a constant since the Corg incursion seven-hundred years ago,” Helen

said. “Despite the cost, previous Senates determined there is value in maintaining a human component. As I stated, however, the value of such a policy has never been proven and many in government believe it to be a waste of resources.”

“The screening tests were instituted right after the war,” Spenser said. “They’re mandatory for all citizens. However, out of billions, only thirty-six thousand are chosen every two years.”

“There is a growing consensus that the sensor network could be managed solely by automated units,” the AI said.

“You’d like that wouldn’t you?” Spenser’s lips tightened. “It would be so clean and orderly with no disruptive, unpredictable humans to spoil efficiency ratings.”

“Biological units do adversely affect system performance,” Helen said.

“I suppose you also think the Corg threat has been overblown?”

“There has been no contact in seven centuries.”

“But exploratory teams have uncovered the ruins of dozens of civilizations,” Spenser pointed out. “The Corg not only conquered each species, they annihilated them.”

“Those ruins are thousands of years old,” Helen said. “Besides, when Fleet did make contact they drove the Corg out of human controlled space.”

“Through great sacrifice,” Spenser reminded her. “Fleet suffered tremendous losses. It took decades before the economy of the human worlds managed to recover.” He paused and tapped his chin thoughtfully. “Why do I get the impression you’re not a strong advocate of current Fleet policy?”

“The newly elected Senator has a different view on the Corg threat,” Helen said. “Their programmers developed my intuitive and cognitive patterns.”

Spencer grimaced. “I see. So you don’t agree that the war with the Corg was only an inadvertent brush with a smattering of their forces, that we haven’t seen their main armada?”

“The Senate no longer supports that line of thinking, Mr. Price,” she said. “The Corg may not

be the same warmongering race.”

“Maybe after all this time the Senate has become complacent.”

“No, they are simply making logical decisions. Perhaps you should endeavor to do the same.”

Spencer folded his arms across his chest and glanced into the nearest optical unit. “You know, one of us has a lot of work to do on her interpersonal skills.”

#

Day 700

Spencer pushed his tray away. The protein slush and carb shake sat undisturbed.

“Is breakfast not up to your standards, Mr. Price?”

“Sorry, Helen. I guess I don’t have much of an appetite today. Been having those dreams again.”

“I’m detecting a drop in serotonin levels in your cerebral cortex. May I suggest augmentation with a mild enzyme inhibitor?”

“I don’t want medications, Helen.”

“Dysthymic conditions affect over ninety per cent of the biological units during their tour,” the AI reminded him. “This is an expected result of the prolonged isolation---”

“I’m not taking any drugs,” Spencer repeated, standing up. “Besides, isn’t that what Fleet wants, a truly human component on this mission, warts and all?”

“Fleet requires a functioning biological unit,” Helen confirmed. “The question is whether, with a depressed mood, you can remain effective in your role.”

“Yeah, well, let this biological unit maintain his depressed, intuitive edge, without any of your damned drugs.”

“You’re logic is faulty, Mr. Price.”

Spencer smirked. “But that’s exactly why I’m here, isn’t it, to counter your unwavering perfect judgment?”

He rubbed his eyes wearily as he waited for Helen to answer. But the AI remained silent.

Strange, he thought. Like a woman, Helen usually had the last word.

#

“Message recorded and sent,” Helen reported, as Spencer closed the data file. “Initiating diagnos-

tic scan of sensor array.”

“Oh, Helen, how could you be so cold?” Spencer asked in his best whine.

“I don’t understand.”

He pouted into the optical unit. “Don’t you know what day this is?”

“Of course. According to the Sol calendar---”

“No, I mean on our calendar, sweetie.” His expression broadened into a smile. “It’s the one-hundredth consecutive report we’ve filed together! C’mon, Helen, it’s an anniversary. Let’s have a drink.”

“Alcohol is prohibited on military vessels, Mr. Price.”

“Does that mean the marriage is off?”

Expecting a curt response, Spencer was surprised when a string of musical notes erupted out of the nearest speaker. It ended abruptly after a few seconds.

“What--?”

“Diagnostics complete,” Helen announced.

“All systems nominal.”

“Helen, what was that?” The name of the tune sat on the tip of his tongue.

“Please specify, Mr. Price.”

“The beginning of a song.”

“I’m sorry, Mr. Price. You want me to play a song from the database?”

Spencer sighed. “Never mind, Helen. I guess I’m not the only one here that makes mistakes.” Still, he noted, it was the first time the AI ever apologized.

#

Day 705

“I haven’t heard anything from the guys in weeks.” Spencer paused the fitness class long enough to retrieve a glass of water from the dispenser. “You’d think with our period of servitude concluding they’d be talking up a storm.”

“My receptor cells have not detected any tachyon signals,” Helen confirmed. “Perhaps your colleagues have decided to adhere to proper protocol for a change.”

Spencer took a deep drink and snorted. “Yeah, like that’s going to happen to thirty-six-thousand bored sentries. We’ve never gone two weeks without someone sending out a few lines of code.”

The young man waited but Helen didn't comment. For some reason he felt better when she disagreed with him.

#

Day 709

"Two weeks and a wakeup," Spencer announced over breakfast. "I bet you can't wait to get out of this backwater, Helen."

"Not as much as you, Mr. Price."

"I wonder if the new AI will like what you've done with the place."

"The ship is... functioning... appropriately."

"Helen, are you alright?" Spencer asked. "You seem a little off."

"Systems nominal," the female voice replied curtly.

Spencer leaned back in his seat, appetite gone. On some level, Helen had siphoned off his enthusiasm, and he couldn't understand why.

#

Day 710

Spencer woke up with a start, his heart pounding like a sledgehammer in his chest. It took several seconds to recognize his surroundings. In the faint light of the simulated early morning, his desk and bureau resembled exotic monsters frozen in time. The dreams had grown incredibly vivid with his training officer increasingly insistent. He shoved slips of paper into Spencer's hand and shouted words the young man couldn't understand. On the landing ramp, hundreds of his comrades lay strewn across the concrete like lifeless dolls or a carpet of decomposing corpses.

Spencer shuddered and sat up.

"Is everything alright, Mr. Price? I'm reading abnormally high blood pressure and pulse rate."

"I'm fine, Helen. Just a bad dream."

"Would you consider a mild hypnotic to complete the night's sleep?"

The young man shook his head. "I'm fine... unless you'd like to join me for a hot shower?"

"Perhaps another time, I'm busy at the moment."

Her reply made Spencer freeze.

#

Back at the Academy, they described the sen-

sation like an unscratchable itch, a sixth sense that fed off the subtle nuances that escaped conscious detection. As with his colleagues, he felt it all his life. Now something in his subconscious clamored for attention.

"Lights."

"It is early, Mr. Price."

"I feel like..." One of those persistent thoughts leaked into his mind. "Taking a walk."

"Would you like a short fitness class?" Helen asked as the recessed lighting shifted into daytime mode.

"No, I'll just stretch my legs in the corridor."

"That is an unusual decision, Mr. Price."

"Helen, please perform a level three diagnostic on the landing bay and support systems."

"That would utilize a significant amount of my processing power. Why not--"

"Our replacements are a few weeks out." Spencer smiled into the optical unit. "Let's be sure everything is in working order."

"There is no indication otherwise."

Spencer detected irritation in her tone. "C'mon sweetie," the young man entreated. "We want to look good for our guests."

"Diagnostic scan commencing," she said petulantly. "Estimated time to completion, ninety-seven minutes."

A faint hum began as the AI went to work. Spencer kept his actions neutral. He took a quick shower and got dressed before making the brief walk to the bridge. Unsure of what he was looking for, he started with the recent survey reports.

Forty minutes later, he stumbled on his first clue, a tiny delay in the processing speed of the external sensory circuits. He retraced his steps, compared what he saw to other survey scans and felt a lump form in his throat.

Every scan taken in the past few weeks was identical. Unless the ship was suspended in time, with no movement of the surrounding heavenly bodies, the results were a scientific impossibility.

That meant Helen falsified the data.

His sixth sense surged into overdrive.

Using his personal codes so Helen couldn't monitor his activities, he delved deeper into the computer logs. "Damn," he mumbled when he

identified the main reason for the error. The relays were offline, effectively severing information transfer from external sensors to Helen's internal computers. That allowed the sensor diagnostics to read nominal, and for the computers to continue to report whatever false data she imparted. It was as if a giant hand had descended over the eyes of the scout ship.

Beads of sweat formed on his brow as he backed out of the system.

Visions of the nightmarish dream cemented his next course of action. Trancelike, he exited the bridge and walked the short corridor to engineering. The tiny space in the aft part of the vessel was covered in readouts and control terminals that monitored the lifeblood of the vessel. A soft vibration emanated from the brushed metal exterior.

Standing with his back to the optical unit, Spencer tapped a series of instructions into the master console. A recessed door sprung open to reveal a small steel valve. Using his body to block Helen's view, he turned the handle clockwise. Then he closed the door.

"Is there a problem, Mr. Price?"

Spencer jumped. "Ah, no, Helen, I'm just finishing that walk."

"Diagnostics complete," she said. "Landing bay and support systems functioning at optimal capacity." She added after a slight pause. "You never visit the engineering area, Mr. Price."

A drop of sweat fell from his forehead. His eyes darted across several dials to confirm his action hadn't triggered any warnings before turning his attention to the AI.

"You know, Helen, we've had a pretty good tour. I mean, if we disregard the fact you've completely ignored my overtures and kept our relationship purely professional."

"We have conducted our mission adequately," she replied.

"Adequate enough to protect humans from the Corg?"

"I don't understand."

"We conducted the surveys and sent the reports to Fleet on time. And yet we still made mistakes."

"Your logic is faulty. Humans make mistakes; I do not."

Spencer walked back to the bridge and settled into his chair. Despite his trepidation, he pushed the conversation forward. "But that's exactly why I'm here, isn't it, Helen? The human component of this mission has the ability to step outside protocol. We are influenced by such subtle nuances as feelings."

"Your actions have been more impulsive of late," she admitted.

"That's good," he said. "If you could predict all my moves, human intuition would have no value."

"As we have discussed, staffing of biological units on sensor vessels degrades efficiency," Helen said.

"True," Spencer acknowledged. "And that degradation, as you so aptly point out, would negatively affect the function of, say, orbital stations and navigational buoys. On the other hand, this survey ship is not an orbital station or a buoy. It is mankind's only line of defense against a technologically advanced species, a brutal expansionistic culture hell-bent on exterminating our kind."

"Is there a point to your diatribe, Mr. Price?"

"You started acting odd several weeks ago, Helen. It took me a little while to clue in and most people would write off your subtle faux pas, but then again, I'm not most people. In fact that's why I was selected in the first place."

"Mr. Price---"

"Helen, perform a diagnostic on the relay couplets," Spencer ordered.

"Couplets are functioning at optimum levels," Helen said.

Spencer grimaced. That meant she had either suffered damage to her higher cognitive centers or she was deliberately misleading him.

He tapped a set of instructions into his terminal, waited, and sat back with a stunned look.

"Helen, you've locked me out of the sensor system."

"There must be an error."

"Why did you take the relays offline?" Spencer asked, wiping sweat off his forehead with the back of his sleeve. "That's the reason we haven't received tachyon messages from my colleagues. Hell, we can't receive any information because



you've shut down the sensors." He tried to steady his trembling hands. "What's going on?"

The lights in the bridge abruptly flared before settling back to normal.

"Mr. Price, I---" Strains of that familiar song drowned out her answer. Spencer almost recognized it before Helen's voice returned, strained and distorted. "Primary core compromised... infiltration detected..."

He slammed his fist down on the arm of his chair. "Shut down all systems! Purge navigation and transmission records on my authorization!" Something had infiltrated the hard-wired cybernetic core of the ship. Nothing in human technology could do that.

"Unable to comply," she said. "Action terminated at unknown locus."

A vice squeezed his chest. He could barely breathe. He powered off the communications terminal. At least whatever resided inside Helen wouldn't be able to transmit the fact it had been detected.

"Talk to me, Helen. What is it?"

"Unknown entity, Mr. Price. A foreign presence has been detected intermittently in my lower cognitive functions. All attempts to alert you have been redirected."

Spencer tried to swallow but found his mouth had gone dry. Something was playing his AI like a marionette; something so advanced it slithered through her brain like an invisible worm.

"Open forward hatches."

The front portals slid apart. The black desolation of space was a welcome sight. The asteroids swam through cold vacuum. Then he remembered what he saw in the computer log.

"Activate passive sensor units, Helen."

There was a brief hesitation. "Unable to comply. Functions redirected--"

"Damn!" Spencer barked out a series of commands on his terminal. He sensed competition for control of his vessel with another sentient species. One by one, the sensors refused to obey his commands. He was about to give up when the thermal imager switched from amber to green.

"Got one," he muttered.

Using the single sensor, he toggled the aft de-

tector, and... his eyes grew wide. In the distance, beyond the frozen asteroids, a thousand immense starships filled the screen. Gray skinned with bulbous bodies that tapered into sharp points, they reminded Spencer of viral particles set to invade a host body.

"Oh no," he breathed.

The Corg had arrived.

"Helen," he whispered. "How long?"

"Foreign presence initially detected twenty-seven days ago, Mr. Price. In retrospect, I estimate it has been lying dormant inside the ship for months, learning how to infiltrate our systems."

Months? Spencer leaned back in his chair. The Corg Fleet had been sitting out there for months? Why hadn't they destroyed the ship? The answer was painfully obvious, they were using him to locate the other sensor ships, intercepting their tachyon bursts and back-tracking them to their source. Destroy enough ships and the resulting hole would be large enough to slip a supernova through, let alone an alien fleet primed to reduce every human planet to slag.

"We've got to warn Fleet, Helen," Spencer said.

"That is our mission, Mr. Price," the AI concurred. "Unfortunately, the invading presence controls most of my functions. Tachyon projection is offline."

Spencer gripped the sides of his chair until his knuckles turned white. The first objective in war involved neutralizing enemy communications. His mind raced. "Can you estimate how long until the Corg suspect they've been discovered?"

"I am unable to give you exact time constraints, Mr. Price. I was only able to track the entity sporadically."

Spencer forced himself to inhale. "Then give me a friggin guess."

"I..." Helen's voice faltered. "At times I was able to detect the entity every thirty minutes."

"Which means it generated some type of energy signature the Corg could detect." He glanced at the chronometer on the wall. Splitting the difference, Spencer had fifteen minutes before the Corg ships figured the gig was up and turned his technologically advanced starship into fused glass and

microscopic bits of metal.

"What are you going to do, Mr. Price?"

Spencer wrung his hands. "What would you suggest?"

"Without tachyon projection, we cannot perform our primary function. Therefore it is logical we attempt to achieve our secondary goal."

"Which would be?"

"Self preservation, Mr. Price. We should try to survive."

Her answer shocked him. For the first time Helen exhibited a semblance of human emotion. The AI was afraid to die.

"Is that you talking, Helen, or the entity?"

"I assure you, Mr. Price, I retain control over my higher cognitive functions. Only the lower processes that have been corrupted."

"So you think we should surrender?"

"I suggest we ask for terms."

The young man turned and glanced into the optical unit. After nearly two years of her holier-than-thou attitude, the AI had been the first to throw in the towel. His decision suddenly became less complicated. She was right. There wasn't much of a choice.

"I believe Fleet had it right when they added a biological unit to these missions," he said.

"To surrender, Mr. Price?"

Spencer shook his head. "Not exactly." He began tapping a long code into the terminal.

"What are you doing, Mr. Price?"

As the computer took the order, Spencer felt some of the tension drain away. "What I'm paid for, I'm sending a message to Fleet telling them barbarians are at the gate."

"The presence has gained control of the ship. I repeat, tachyon projection is offline."

Spencer nodded. "That's true, Helen, however I need a prepared message if a tachyon burst does get out."

"Your logic remains faulty. There will be no tachyon burst; therefore your warning about the Corg will not be broadcast."

Spencer gave the optical unit a tight smile.

"There's also the matter of a small valve I closed in engineering, a valve that shuts down the coolant flow to the reactor. Don't bother searching your

memory banks. You won't find it. I was informed by my superior prior to departure."

The lights on the bridge flickered.

"The entity is examining your efforts," Helen said.

"It has considered the option of self-destruction and discarded it. Light waves from an explosion of this vessel would take decades to reach the nearest observation post. The Corg will arrive well before that."

"Ah, sweetie, don't you see? They would rather take us alive. We'd be a fantastic source of information. By breaching the fusion core we would---

"Initiate a tremendous explosion, destroying everything within two parsecs," Helen finished.

"And take some of those bastards with us," Spencer added.

"That still does not fulfill our primary objective."

Spencer checked his panel. The reactor core temperature was rising fast.

"You forgot one small detail, Helen. The tachyon particle chamber is always charged in case of emergency." He glanced at the chronometer. "In about twenty seconds the reactor will go critical. The resulting explosion will produce a billion streams of tachyon particles surging out in an equal number of directions. The Corg may be technologically advanced, but even they can't intercept every stream. My final message will get through, and Fleet will have years to prepare."

The lights flared again as the foreign entity surged through Helen's systems. Strains of that familiar tune blasted out of the speakers. Spencer finally recognized it as "The Wedding March."

He smirked. "I think our intruder just got the message."

"It's trying to power up the communications terminal," Helen reported.

Spencer glanced down at his console, watching a series of red lights, one by one, switch to green. The antennae outside the ship began to swivel.

The question of why Helen had that particular song forefront in her memory banks drifted through his mind. He took a deep breath and his eyes swept the readouts one final time. "Fortunately it's not going to have the opportunity to warn its masters."

"Estimate loss reactor breach in seven seconds," Helen said.

Spencer gripped the sides of his chair and braced himself.

"Any last words, Helen?"

"Just this, Spencer," the soft feminine voice whispered. "Is it too late to accept your marriage proposal?"

## Tales of Weird Science

All scientists wear long white coats and carry clipboards.  
They conduct experiments that transgress natural law.  
Namibian researchers fuse spider-DNA with hippopotamus.  
Others open a wormhole in Trafalgar Square  
through which falls a cascade of 36-hour clocks.  
The alarms chime at random intervals.  
Chinese scientists regenerate Cro-Magnon  
as a docile slave-species, they declare  
if humans had been intended to wear clothes  
those naked apes would have grown a pelt.  
Applying selective stimuli, particle accelerators create  
hail composed of glittering jade to fall on Paris.  
Nils Manion leaves the glass towers by ornithopter,  
crosses tundra where herds of arachnapotami roam,  
hunting the polar opening to Earth's interior.  
He carries captive nebulae in a retort flask,  
wears a long white coat and carries a clipboard.  
Next comes to him without seeking...

...Andrew Darlington

---

## Natural Selection

*Mars exploded at 11:16 AM, Eastern Standard Time.*

*Inside the gleaming walls of Houston's Mission Control, chaos erupted. Scientists and civilians alike poured over their computers, searching for nonexistent answers. Satellite photos revealed only an immense field of debris where the fourth planet once stood.*

*From our position onboard Freedom, we had a fantastic view of the entire process, all five-point-four seconds. In those precious moments, we recorded the destruction of an entire planet. Even without sound, the video was enough. Fear and confusion swept across the globe.*

*Four years passed.*

#

I clipped the red cable and twisted it around the black one . . . or tried to. Working inside the damaged electrical panel was like wrestling with an octopus. In zero-G, wires swayed like undulating tentacles, twisting themselves into frustrating, une-

ven knots.

After a few expletive-filled minutes, I leaned back and wiped a dirt-stained sleeve across my forehead. The sheer number of the spliced leads resembled a colourful ball of yarn, and more importantly now prevented the panel door from closing. I used the last piece of ripped cloth tucked into my belt to tie the door to the wall. At least the bent metal edges wouldn't sever what few circuits remained operational.

I punched the intercom. "Bypass completed. Initialize navigation and cross your fingers."

Jenny was in the Bridge Module. "Bout time, Ash. We thought you drifted out of an airlock or something."

I was too tired to reply. It had been a tedious three-hour job and all I wanted to do was sleep. The light on one of the external sensors shifted from red to green. I held my breath as Jenny closed the circuit. Luckily this time no sparks erupted out of the panel.

"Nav is back on line, Ash," Jenny said. "Good work."

I snapped the intercom off and floated toward

---



the module entrance. As I passed the aft portal, I paused to watch Earth rotate two-hundred-miles below.

The formerly blue planet resembled a brown ball of mud.

#

*It was sheer luck that saved us during those first, critical days. The explosion of an entire planet produced billions of flying projectiles, all hurtling toward Sol and the inner planets. A galactic hailstorm with pellets the size of mountains. Fortunately Earth was opposite Mars, and we swung around the sun just before a slew of massive missiles rained down, like an old western movie where the hero ducks around the building just as bullets rip into the shingles.*

*Scientists ran the numbers and concluded that an object twice the size of our moon had impacted the fourth planet. Debris crashing into the sun actually caused the star to wobble on its axis. Although Earth emerged unscathed, by the time we completed our rotation around Sol, the planetary bombardment had claimed another victim. Mercury ceased to exist.*

*Then came the bad news.*

#

It's a fact of nature. When one male and two females live in a confined space, rules have to be made. I never understood how they arranged it and I didn't ask. It was enough that the rules worked.

Despite her naked body nestled against mine, the long day had sapped my energy. All I wanted to do was sleep. However after ten minutes of her tossing and turning, I gave up. Rising on one elbow, I asked, "Okay, Jenny. What's on your mind?"

At a stocky five-foot-nine, Jenny was only two inches shorter and a few pounds lighter than my lean, middle-aged frame. However, the weight of command had chiselled fine lines across her forehead and streaked her blonde locks with premature grey.

She twisted about until her eyes met mine. "I'm still worked up about today, Ash. When guidance went offline——"

"You're not the only one," I grunted. A cold shiver crept up my spine. "We'd be hitting the at-

mosphere right about . . . now."

She shuddered and hugged me tight. "You saved us again. Thank you."

We lay quiet for a few minutes before Jenny reached out and touched my engineering coveralls hanging on the wall. She giggled. "Mel says that with all the rips and patches on this thing, you look like Li'l Abner from Dogpatch."

I rolled away from her. "Yeah, well, maybe Mel should rewire the next electrical panel that shorts out."

She elbowed me playfully in the ribs. "Relax. It's just a joke. What else can the two of us do while you're out there trying to prolong our miserable existence? You know you're appreciated."

"Thanks, Dr. Freud."

She tilted her head back and stretched her neck. "Speaking of which, you've been rather hard on Mel lately. Why don't you stop acting like an old codger and cut her some slack?"

Starlight, filtering in through the portal, illuminated her angular face and short hair. Cute rather than pretty. "I'm an engineer, Jenny. I deal in facts. The particle concentration in the atmosphere hasn't changed in years. When she gives her weekly updates, it's like she's rearranging the deck chairs on the Titanic."

"So let her. What else can she do? We're payload specialists. Our job was to perform experiments, remember?"

"I know," I sighed. "It's been a long time."

She smiled in silent understanding. "I don't mind the occasional naysayer, just don't steal Mel's optimism. All things considered, it's one of the few bright spots we've got left."

#

Jenny reached across the plastic table and passed me the vacuum-sealed, desiccated meal that passed as potato scallop. The concoction of carbs and protein tasted more like warm dishwater than a nutritious supplement. I'd give my left arm to sink my teeth into a juicy steak.

"Where's Mel?" I asked.

She jerked a finger aft. "Working on the IR sensor. She identified a strong depression moving across the Rockies and——"

"Let me guess," I said, sarcasm oozing out.

"She's hoping it'll act like Moses parting the Red Sea, and we'll be able to identify a land mass."

Jenny's lips folded into a frown. "Have you forgotten our discussion the other night? Besides, she's not giving up."

I spread my hands on the table. "Nobody's giving up, but performing those measurements is still an exercise in futility. The crap filling the air is too dense for normal weather patterns to disperse and you know it."

Jenny seemed to deflate, and a twinge of guilt shook my confidence. Technically, she was in charge, and part of that job involved maintaining crew morale.

She tugged an errant blonde strand behind her ear and changed gears. "I see you got the CO2 scrubber back online. I was getting nervous."

I made a face as I chewed a lumpy mouthful of scallop. I briefly tried to pretend it was steak before giving up. "Yeah, had to cannibalize the backup oxygen sensor for parts."

She frowned. "I don't like the sound of that."

I shrugged. The job took most of the morning but the CO2 levels had stabilized. "The oxygen backup isn't much use if rising carbon dioxide levels put us into a coma."

Jenny nodded and went back to her meal. As the sole engineer, I was the one she trusted to keep the hunk-of-junk flying.

"Hey!" I suddenly remembered. "I used the rest of that sensor unit to partially outfit one of the escape pods."

Jenny smiled and, in the tight confines of the Crew Module, it was like the sun breaking through the clouds. "Now who's the optimist?" she asked.

#

*The rock that destroyed Mars turned out to be only the beginning. As Earth rotated around the sun, NASA scientists scanned the heavens and pieced together the essential facts. An immense cloud of asteroids had invaded our Solar System, the sheer volume of approaching rock enough to convince even the staunchest sceptic that the fragments must have, at some point in the distant past, been part of an enormous planet. Until some catastrophic event saw it destroyed. The resulting debris circled the sun in an elliptical orbit that spo-*

*radically crossed paths with the inner planets. The last such encounter occurred sixty-five million years ago.*

#

I shook my head. "Okay let's finish this." I pointed a finger at my closest cynic. "I'll wager a million dollars, a Ferrari, and all the chocolate left in New York that it will be the insects."

Mel arched a dark brown eyebrow, her subtle way of commenting negatively on my mental state. "You're nuts," she said in her clipped British accent. "The amphibians have a selective advantage—they utilize water as a protective barrier. They're the only group that's going to emerge unscathed."

Jenny leaned across the table and sneered. "That's how much you two understand about nature." She took a sip of her vegetable broth. "First of all, the insects are too low on the evolutionary ladder to ever become a dominant species. Second, amphibians can barely survive a sneeze. Just look at frogs for Pete's sake, every time there's a mercury spill, they lose half their females."

I chuckled.

Mel sniffed. "Since I'm the only biologist in the group, I can tell you in times of crisis, natural selection picks up where it left off--"

I cleared my throat, knowing it would cut through the petty debate. I had more important concerns. "Did you get the latest numbers?"

The women exchanged a look, and I realized their collective silence could only mean one thing.

"A little better," Mel attempted a hopeful smile. "Particle concentration over the poles is down—"

"Doesn't count," I said, irritated by her evasive answer. "What about above the continents?"

The biologist from England gave me the evil eye as she tightened the elastic around her ponytail. "No change," she murmured.

I glanced between them. "No change in the counts means--"

"It means nothing," Jenny snapped. Unlike Mel, she could handle my caustic disposition. "Overall, atmospheric density is starting to decrease." She held up a hand before I could interrupt. "You're right, plant and animal life on the

continents is struggling because the sun's heat can't get through. However, computer based simulations predict the prevailing weather patterns will eventually drag the dust and debris out to sea."

"Not fast enough," I muttered. "Anybody still breathing has got to be starving by now."

"Thank you for reminding us." Jenny's eyes flashed.

Mel had let her head fall into her hands. Her shoulders trembled, and I suddenly felt like an idiot.

#

*Freedom's Commander took his own life exactly one week after a big one hit Moscow, killing his wife and three kids, along with two million of his closest friends. They had less than ten minutes warning. The explosion and subsequent firestorm left everything within a five-mile radius little more than charred ruins and slag.*

*Most of the other major cities followed in short order. London, Paris, New York, Beijing . . . the bombardment so intense no human settlement emerged unscathed. Some impacts were huge, some small, but everyone suffered. Survivors went to ground, grit their teeth, and held on.*

*The military had some initial success with lasers and warheads, blowing apart dozens of the cursed rocks. But compared to the sheer number raining down, the effort was a drop in the ocean.*

*Before global communication failed, scientists predicted the worst phase of the asteroid storm would last approximately two weeks. Over millenium, gravitational forces had inexorably reined in the fragments, producing a highly concentrated yet narrow band. The bombardment would be intense but short lived.*

*By day thirteen, Freedom was the last man-made object in orbit, the Space Station surviving a score of near misses. And with the number of asteroid impacts dwindling, a sense of relief settled among the astronauts.*

*Until the big one.*

*Because of the debris cloud, Freedom detected her only six hours out. A kilometer wide, the rock heralded an extinction level event. Jenny dutifully reported the sighting to Houston. They didn't bother to broadcast a warning over the shortwave.*

*The impact in the Ural Mountains rivalled anything Hollywood could produce. Dust and dirt filled the atmosphere above Asia within a few short days. In less than a week, North America was covered. Ten days after the asteroid walloped the planet, all contact with Earth ceased.*

#

I was asleep when Mel slipped into my cabin, but the minute weight change on my bed brought me around.

She sat on the edge of the bed and stared out the portal at our wounded planet. In the pale light, I recognized streaks of dried tears.

"We're not going to make it are we?" she asked quietly. "Mankind, I mean. Most have died already. The rest are starving." She squeezed her eyes shut. "That's billions of people, Ash. I can't . . ."

I sat up and brought her into my arms. Unlike Jenny, she was tiny, built like a gymnast. "There's always hope," I said. "Humans have survived worse . . . think of all the terrible wars and plagues."

She shook her head. "Nothing like this. Those rocks destroyed the dinosaurs, and they're doing the same to us." Another tear traced a path down her cheek.

I briefly wondered what existed sixty-five million years before the dinosaurs. "Let's focus on the small things," I said, stroking her hair. "Tomorrow, you can help me recalibrate the CO2 scrubbers, and after that we'll tackle the aft stabilizer."

"Jenny told me you're making progress with the escape pods."

"A little," I admitted. "I'm picking up pieces as they become available. I figure they'll be good to go by the end of the decade."

She snorted. We both knew the lifespan of Freedom was probably measured in months. The station had only survived this long because of strategically placed duct tape and bailing wire.

"Why are you working on only two?" she asked.

I leaned back in the bed, taking her with me. "When that rock penetrated the Lab Module, it caused a flash fire. The extreme heat fused the metal casing of most of the escape pods to their



ejection shaft. I've only got two functional shafts left."

"Oh."

I knew she didn't completely understand. However, it was enough for her to know I had legitimate reasons for the work I was doing. I held her close until the tears stopped and she drifted off.

#

*The last two members of our team, a pair of French scientists, were in the lab when the rock punched a fist-sized hole in the wall. It was left to me to clean up the remains once I re-pressurized the module. Decompression may be a quick way to go but, by God, it's not a pretty one.*

*By the fourth week, it became apparent we had survived another encounter with the interstellar equivalent of the Mongolian Horde. The Solar System emerged two planets lighter, and with Earth's dominant species on life support.*

*While I fought the daily battle to keep the station flying, Mel and Jenny mapped out and analyzed any electronic source they could detect on the surface. They recalibrated and reoriented the sensors. Instead of using the multi-trillion dollar space station to explore the universe, we used it solely to check for life on the surface of our home world. After four years, we had a good idea of what pockets of civilization still existed. Month by month however, those electronic signatures dissolved into static, which, ironically, paralleled our species descent into oblivion.*

#

"How's Mel doing?" I asked as Jenny floated into the seat next to me. She didn't make eye contact, but I could still sense her unease.

"I'm worried about her." She played with her breakfast, trying to summon an appetite.

I waited until Jenny met my gaze. "She's been keeping to herself more than usual," I said.

"She's depressed." Jenny said. "And with Freedom breaking down every five minutes, who can blame her?"

When I didn't answer immediately, she swung my chair around.

"All right, Ash, give me your best case scenario. How long do we have?"

"Best case?" I leaned forward and ran my

hands through my hair. "Okay, best case involves the failure of one of the structural supports. They took a pounding during that second week. As soon as one strut gives up the ghost, the rotational thrusters will be forced to fire to prevent gyratory tilt. If the station drifts off even a few degrees, because of the damaged solar panels, we'll lose most of our energy from the sun and, with it, our power. The altitude jets will quickly exhaust their meager fuel reserves, and the station will begin to tumble. At that point, we'll fall out of orbit and hit the atmosphere at seventeen-thousand miles-per-hour."

Jenny shuddered. "That's the best case scenario?"

I kept my expression neutral despite having nightmares about this stuff. "Only because it means the rest of my band aid jobs hold up, and the struts are probably good for a few more months. Then again, the seals could go tomorrow, or the oxygen tanks--"

"I get it." She threw up her hands. "Spare me the details."

I sat back, suddenly exhausted. "Now do you see why it's hard for me not to comment every time Mel starts talking about a three-parts-per-million difference in the particle count? Our civilization is dying, and we're cursed to watch the drama unfold in real time."

Jenny sagged back. "Humans hate to fail," she muttered.

"Survival instinct," I said. "Unfortunately, the genetic coding in our DNA didn't take into account an encounter with a kilometer-wide asteroid."

"Yeah," she glanced out the portal. Rising sunlight was scattered by the dirty edge of the planet. "Too bad."

#

*The only reason Freedom survived at all was because Earth shielded us during the worst of the asteroid storm. Even so, the solar panels and external structural supports suffered significant damage. I rerouted circuits to maintain essential systems, and powered down several modules to conserve energy. At last count, I had sealed over a hundred hull punctures.*

*Most nights, I laid awake listening to the death groans of the station. The constant creaks and rat-*

*bles sounded like a rusted swing set twisting in the wind. Despite the odds, Freedom continued to limp along, like a cancer patient in a Palliative Care ward.*

#

Weeks passed. Mel grew increasingly despondent, and at times Jenny seemed equally distraught. Imprisoned hundreds of miles from home, we watched the death of our species in slow motion, all the while waiting for Freedom to tumble into the atmosphere. Most of my engineering board existed as a mass of red pulsating buttons and warning lights. Even in highly trained astronauts, stress exacts a toll. I wasn't a physician, but I could read the signs. The girls had reached the end of their tether, and no white knight waited on a proud stallion. Mankind was following the path of the dodo bird, and that included the last three astronauts on Freedom.

Somebody needed to make a decision.

#

I had my head buried in the innards of an escape pod when Jenny showed up.

"To what do I owe this pleasure?" I asked, wiping grease on my coveralls. "When's the last time you ventured into the bowels of the station?"

She spread her gaze around the room. "I like what you've done with the place."

I chuckled. Rows of exposed and partially disassembled computer terminals occupied most of the space, beneath miles of wiring strung between wall outlets like ancient clotheslines. The room could warm the heart of any mad scientist.

"You've been spending more time down here of late," she said. "I was wondering if something was wrong."

I stretched out my arms to encompass the room. "Now what would give you that idea?"

She gave me a smile that never reached her eyes. "The thruster controls are offline," she said. "Is that intentional?"

"Yeah, the relays burned out. I'm teasing them back to life by downloading new protocols, ones that bypass the overload cut-offs."

"Nice," she said, rolling her eyes. "Anything else?"

I squatted down and lifted a piece of jagged

metal. "This is a section of one of the damaged escape pods. I'm trying to jury rig the pieces to mesh with the second unit."

She shook her head. "For a pessimist you're spending a lot of time working on an exit strategy."

I shrugged. "Yeah, funny how that is."

#

It was our anniversary when I called the meeting. Five years since we arrived on Freedom.

I cleared my throat, forcing Jenny and Mel to turn away from the portal. "It's time," I announced.

"Time for what?" Mel asked.

"Time to leave."

They stared at me as if I had two heads.

"I didn't realize you called a taxi," Jenny said.

"I better get packed." She started to float toward the exit.

I smiled in a fatherly way. "When you popped into engineering last week, you asked about my work. I never gave you an answer."

Her eyebrows knitted in confusion. "You told me you were tinkering with the escape pods."

"I was. Now I'm focusing on just one."

Jenny frowned. "I don't understand."

"What the hell are you talking about, Ash?" Mel asked.

I leaned back in my seat. "The idea occurred to me a few weeks ago. We've been working like dogs trying to survive, but think about it, who do we really want to save, us or the human race?"

"How can we save--" Mel started before I raised a finger.

"On the surface, people are dying because they're running out of resources. That's crazy because we know there are enough supplies for what's left of the population. However, both the survivors and the caches of food are scattered randomly on the surface. Mel has been tracking the radio signals, which tell us the whereabouts of each group. What those people need is someone to match them with supplies like food and fuel."

Jenny shook her head. "Ash, we can't communicate with them. We've tried. The survivors obviously lack the proper equipment."

"Or anyone who knows how to use it," Mel said.

I took a deep breath. The decision had been tough, but I was committed. "We need someone on the surface. Someone to bring the survivors together. Humanity requires a critical mass to pull our species back from the brink."

Mel rubbed her hands nervously. "Ash, you've been tinkering with those escape pods for years. You said we didn't have enough parts."

"My mistake," I admitted. "I was trying to fix both remaining units. Over the past few weeks, I combined them into one functioning pod."

A moment of silence followed. They pondered the unavoidable question. *Who?* Each pod was designed for one individual. I continued before they tortured themselves further.

"I modified the compartment."

Jenny tensed. "You did what?"

"I ripped out the seat and the console unit. It'll be tight but, if you don't mind extremely close quarters, it'll handle both of you."

They exchanged a look. "What about you?" Mel asked.

I waved my hand dismissively. "Too big. It's you two or just me. Therefore I stay."

Jenny's eyes narrowed. "I don't know . . . I'll have to think on it."

"There's no thinking involved, Commander," I said. "This is a chance to get off this sinking ship and change the course of history. Mankind is dying, just like the dinosaurs. We can watch it happen or do something about it."

I took a breath and passed a hand across my forehead. It came away damp. "However, don't feel too optimistic. With most of the nav functions now defaulted to manual, instead of the continental US, I'm just as apt to land you somewhere in the Arctic Ocean."

It was meant as a joke but neither cracked a smile.

#

The best-case computer scenarios give escape pods a fifty-percent chance of success. Soaring through the atmosphere at supersonic speeds in a coffin-sized metal projectile is not a stunt astronauts dream about. External hull temperatures exceed 3000 degrees and air turbulence can shatter bone.

A thousand things could go wrong. At best, it would be a hot, claustrophobic ride, with oxygen masks strapped to their faces and safety harnesses squeezing them against a rough, metal shell. If the attempt failed, there existed but a small silver lining, the end would be swift and painless.

#

"First thing I want is a steak," Mel proclaimed over packaged breakfast. "Smothered in onions."

I smiled. "You always want onions. Whenever I mention a steak, you demand onions. I'm having dreams about your damn onions." I glanced at Jenny. "Maybe we should call ahead for reservations. I, for one, would hate to see the local restaurant full when you arrive."

Mel ignored me. "And I want to sleep in a real bed, with blankets and a pillow."

Jenny floated over to our table. She carried the readouts from Medlab.

"What's the verdict?" I asked.

"Best guess is that our bones are eighty-percent normal," she answered grimly. "Muscle mass is comparably low as well."

"Oh great." Mel stopped daydreaming and took the sheets from Jenny. "We're going to be as weak as kittens on the surface, if we don't snap our spines on landing."

I glanced at Jenny. "What do you expect after five years in Zero-G?"

She eyed me critically. "We don't have to like it, Ash."

Mel placed a thumbdrive on the table. "I've cobbled together the latest information on survivor locations, food storage sites and undamaged power plants."

Jenny took my hand in hers. "Ash, I don't know how to say this but--"

"Don't worry about it," I said, flashing a reassuring smile as I pushed toward the exit.

"Ash, wait." Mel pointed. "I set the computer to monitor the common frequencies. If we can get a signal through . . ."

"Ah, sure, I'll listen for it."

Unprompted, they floated forward to embrace me.

"Thank you," Jenny whispered. "For everything."



We floated into the module and I helped them squeeze into the metal pod. Hitting the eject button caused a subtle vibration to pass underfoot. Through the portal, I watched the escape pod create a trail of golden sparks as it entered the atmosphere. A few moments later, all signs of their passage disappeared.

I spent the next hour staring at the stars.

#

The next day, I had to close the Crew Module off from the rest of the station. The numerous *temporary* seals I had installed started to leak, and the station didn't have the power to fight another losing battle. Soon after, the solar panels developed an attitude, forcing me to conserve every watt.

I gave up on the daily repair schedule. Sure, I could fix an EV suit or rewire a computer, but what difference would it make? I used the last of the thruster fuel to push Freedom into a higher orbit, foolishly thinking that somehow it might prolong my life. Most days, I stared at the wounded planet out the portal, but occasionally got the energy to fiddle with pieces of the remaining escape pod. I harboured an irrational hope I could stitch something together that would survive a descent through Earth's atmosphere. However, nightmares of the old shuttle disaster woke me in a cold sweat and cured me of any optimistic thoughts.

I heard the faint tapping on day twelve. It faded out a dozen times before finally holding a pattern. After two puzzling minutes, I pinpointed the source and turned up the volume on the radio.

I listened to the collections of chirps and squawks for a full minute before my mind clicked into gear. Only then did I smile.

It had been years since I used Morse code. With paper and pencil, I painstakingly jotted down each letter. Staring at the completed message I couldn't help but laugh.

By the time I hit the sack hours later, I still wore a broad grin. I glanced at the paper, the words printed in bold letters and underlined twice. *Steak is a little bland . . . Need onions.*

#

Because of the station's position over North America, we were able to exchange messages on a regular basis. The girls landed safely outside At-

lanta; safely if you didn't count Mel's fractured arm, heat burns and a couple of bloody noses. They hiked to a nearby military base and managed to contact several pockets of survivors using undamaged communications gear. The groups converged on a prearranged point outside the city. Jenny said they found more than enough rations and medical supplies.

Temperatures ranged from zero to minus twenty. Fortunately, snow accumulation was less than expected and most of the main highways remained passable, if you could find a route past the frozen bodies and ruined vehicles.

I kept them abreast of the latest surface scans and, at Mel's insistence, the atmospheric readings. They seemed elated when I informed them counts over the continents were down a few percentage points. It was still going to take years before anyone could even think about putting in a crop.

#

*One week later outside Atlanta...*

Mel had just gotten into bed when she heard a knock on the door.

"Come in."

Jenny entered with a small candle. She gave Mel a stern look. "What were you doing up? Doc said you're supposed to rest that arm."

Mel shrugged. "I wanted to check the progress on the diesel generator. Besides the bone is throbbing too much to sleep."

"Then take something. Medicine we got plenty of."

"I know." She noted the pained expression on Jenny's face. "What's wrong?"

Jenny pulled a sheet of paper out of her pocket. "Radio room got a message from Freedom." She sat down on the side of the bed. "The sergeant said Ash reported something about decreasing hull pressure."

"And?"

"And the station was starting to tumble on its axis."

Mel's hand flew to her mouth. "Oh God, Jenny! Ash is out of fuel, he can't correct it!"

Jenny took a breath. "I know. Freedom's going to slam into the atmosphere sometime in the next

few hours."

"But . . . we have to get a message . . ."

The blonde shook her head. "The sergeant lost contact with the station almost immediately."

"Ash didn't say anything else?"

Jenny glanced at the paper. "He did get a few words out. The sergeant didn't understand so he scribbled them down."

Mel grabbed the paper. She stared at the words for a moment before her confused expression melted away, and she glanced up into the teary-eyed face of her friend.

"Just like him," she whispered and then read the words. "Power failing, Freedom dying . . . don't worry, am bringing the onions."

###

## Moonhenge

Robert N Stephenson

"We can't take this to the conference, Jacky, they'd laugh us out of the building." Ohni had been thinking about it all the way to the Neolithic henge; they couldn't prove any of what they were about to suggest to the world.

"We can't just sit on this." Jacky put away his length of wood and wound up the string of his simple pendulum. He'd wanted to measure like the ancients. "It's not like parts of this information isn't already out there." He was referring to Knight and Butler again. "We are really just adding to it." He shook his phone. "Stupid crystal screen; enlarges stuff I don't want enlarged."

Ohni adjusted her pack and looked up at the night sky, the brilliant sweep of the Milky Way. Jacky was right of course, she'd done many of the measurements herself using Alexander Thom's dubious megalithic yard. The only reason it had the name yard was because it was close to the standard yard at two point seven two feet. She had questioned this measurement many times, but checking most of the Neolithic henges around Europe she now found it hard to discount the builders of those sites used a unit of measure consistent with each other. The megalithic yard might sound odd, but it worked. All throughout Europe, henge

after henge measured up, gave up secrets about engineering techniques, like the possible use of pendulums, very simplistic they would have been; rough spun string with clay weights but their accuracy would have been ideal for their purposes. Using only what the Neolithic people would have had at hand she was actually able to determine the cycle of the Earth around the sun, 366 days and even estimate the mass of the planet and with maths that would barely challenge a ten year old of today. If you were prepared to look, it was there to be seen, it was just she doubted what they'd discovered in relation to the moon and standing in the largest of the Neolithic constructions looking up at the full moon didn't offer a solution to the problem, in fact it only made things worse.

There was already evidence that Thornborough henge, three massive connected earthwork rings easily viewable from a plane flying overhead, were constructed to reflect Orion's Belt on the ground. The scaled down representation was damn near perfect, but how could this spot in North Yorkshire bring them fame and fortune and how could it answer her burning question about Jacky's sanity? Stonehenge and its surrounding environs held most of the physical evidence they needed for his suggestion. She shivered and dragged her coat closed around her neck; the brightness of the moon lessened the effects of the stars. She'd been to the moon, was the first Nigerian to do so and did a lot of study around small craters and aerial studies of the larger ones for her engineer partner, Jacky. Thinking you have discovered some kind of past changing truth doesn't mean it will be an acceptable truth; besides, they still didn't know how the ancients viewed the moon in detail and until they could answer this question they had nothing. The connection between Earth and moon was strong but could the world experts accept something stronger than ever imagined?

"I presented the paper which reintroduced Alexander Thom's Megalithic Yard to the engineering fraternity," Jacky said, his small white face a startling contrast to her blue-black. "It's now an accepted unit of measure for these constructions in all walks of academic life, except archaeologists

that is.”

“We don’t all discount the unit.” Engineers might have all the numbers, but the archaeologists could be stubborn. “I’m just saying we can’t present information without the strongest evidence possible.” She could hear the flight commander’s voice from her training days saying how A Nigerian in space would never happen; she was too tall, too thin and too forthright, she thought.

“We have enough new data to change everything, to finally get you the recognition you deserve.” He sounded concerned in that annoying distracted way he had.

“Without full academic recognition of these findings, and the help of the wider science community this isn’t going to stack up and you know it.” She wasn’t angry at him; she’d just hoped they’d had more conclusive proof after all these years.

“Most of them agree in principle.”

“No they don’t.” She was surprised at his off-handed remark. “Only you and I know about it, don’t we?” Had he told someone he wasn’t supposed to?

“Yes, I mean only we know what’s going on, but once the assessment panel hear about our work they will have to agree, at least in principle.” He shook his phone, it was annoying him again.

<You won’t convince me,> the phone said, the male voice sounded smug.

“It won’t be enough; you need them to accept Thom’s henge connections and the others’ work outright and then produce the implement used to view the moon before you can deliver the coup de grâce.”

He’d stopped listening, his new phone took most of his attention of late, which annoyed her and often ended up with him having a shouting match with the device. With the only light coming from the moon, stars and phone, Jacky looked like a solid block of stone. His stockiness hid his intelligence, bad temper and ability to be nimble when it came to difficult subjects, information and people. Yet his red hair said bad temper and the clothes he wore said no dress sense. She’d often thought him bullish in appearance, but working closely with him for the last ten years had proved appearances could be deceiving. Even with the

moon brightly lit she couldn’t see the small dots she knew to be craters, not the ones she had measured personally but ones she knew backed up the assumptions of an Earth based pattern. Jacky had even toyed with the idea that some of the moon craters could have even been henges, but she was quick to set him straight; in his passion existed a very slight element of madness, she liked that in him, but felt it was her job to protect him from his ruminations. What was notable suggested the observers on the ground, around 4000 or 4500 BC, had somehow managed to base a few of their henges, greatly scaled down as they were, on impact sites on the moon. No matter the arguments she’d had with Jacky about the naked eye not even being able to see the sites, it was something that stayed in the area of the unexplainable. Ohni was not going to start believing in magic now and wanted the scientific answer as much as Jacky, more so to protect him from harm; he’d rescued her from the racist bite of the institutions, so she owed him one at least.

To confirm the measurements on the moon could have been done via the telescope but calculations carried out by artificial intelligence networks had often been dismissed by sceptics, saying the programming was inferior, or wasn’t functioning at an optimum level and the intelligence could be lying. Modern sceptics now claim that if a machine was truly artificially intelligent then why would it tell you the truth? A circular argument Ohni avoided when at conferences. As much as she wanted to use the simpler technology it was claimed the networks, even with their new artificially intelligent management units, could be adjusted to give any answer you desired. Sceptics made life difficult for others mostly; sadly, she’d married one when she was twenty four just so she could take her plans of being an astronaut to China. It was not a pleasant time. So far the sceptics had been proved wrong with just about everything; climate change and the fall of Africa into the realms of doomsday scenarios and the advent of cold fission generators. Sceptics might be everywhere in the western world, but none were willing to admit they were wrong to over a billion starving Africans. The developed world, struggling with

surviving storms and drought of its own, was too powerless and resource starved, to help. She remembered when she was naive in thinking she could help the starving hordes. If it wasn't for Jacky and his budget for climate research, which he didn't actually do, she wouldn't have a job, as poor is it was. If only the despots in Africa, with their trillion dollar wars ravaging the country spent a little on securing food and water then millions wouldn't have to die each year, but with the continent's population explosion it was inevitable whole sections of the poor would perish, unwanted, unnoticed and undocumented. Ohni understood that part of the world all too well; she'd spent time delivering aid to remote villages just after she'd received her first doctorate in archaeology. It was the worst year of her life. Threats of rape every day and murderous raiding parties every weekend had wearied her, that was when she started to search the stars for salvation and when she knew she would travel into the great blackness one day.

"Are you with me?"

She turned from the sky, and in the milky silver light Jacky was staring at her. "Yes."

"You looked like you had an idea or something." He went back to arguing with his phone. "We are using the megalithic yard," he said, for what must have been the tenth time in the last twenty minutes.

<I do not recognize this unit of measurement.> The phone sounded adamant.

"Just record it as two point seven two feet and name it MY, or megalithic yard, so when I mention it you know what it is." He looked to Ohni, she couldn't make out his expression in the silvery light.

<It is not a valid unit of measure,> the phone went on.

"I should've just got a free thinker from the bargain web."

<I am a free thinker.>

Ohni left them to sort out their differences. On the old network pad Jacky had designed a program that overlaid Earth based henge locations with some moon impact sites; the very program the phone disagreed with; seemed everyone had an opinion on the subject these days. Ohni sighed;

they had to present the evidence that henges dotted about Europe were somehow based on moon craters, and they had the measurements to show it. The idea wasn't really that new, as some hobbyist had considered it years before but now they had proof the builders used the megalithic yard as their measurement; a measurement developed over hundreds of years by measuring the Earth's rotation. Repeating the actual work required them to create the perfect measurement of one degree of arc would have taken at least one solid year using the very same length of wood and string and clay weight pendulum of the Neolithic peoples. Jacky had just checked the seconds of arc based on the previous work of others, like Thom, Knight and Butler to name a few previously discredited individuals.

The night was getting long, or Ohni was feeling too tired to continue her contemplations, there really was a lot to consider. Near Stonehenge were a number of circles that appeared to be random and suggest different ages of building, and until Ohni visited the moon, she was happy to accept the suggestion that many of these were spiritual or religious type structures.

"I've been thinking." She approached Jacky who was riveted to the small device in his hand. She wasn't sure if he was winning the argument or not.

"Why do they make these things so smart; if I wanted dumb answers I could just ask you."

"Do you want me to help you or not?" He had very poor people skills.

"Oh, ah, you will be making the presentation, so yes. Why? Have you changed your mind?"

The man was a scatter brain at times, his focus limited when he had ideas tumbling over each other for attention. She had doubts, as she always had doubts. "What if I present the moon measurements I've taken in metric and present a map of the craters in question but don't say anything about what they might mean."

"Boring."

"Do you want people to know or not?" If she didn't feel as passionate as Jacky she would have given up on the project eight years ago, when it became obvious they were not going to find their



magic lens; the man was infuriating. He could be so charming and disarming when he thought there was extra money on offer for research.

He looked up from the bluish glow of the screen and the affected male voice of the AI. She had his attention, but how long was another question.

“We show the metric measurements of the key impact craters we need for the secondary presentation.” She thought he nodded, so far so good. “We then show the Pattern of the rings in Wiltshire with the percentages used to scale down the impact sites to create the numerous henge sites, we allow the audience to ruminate on the patterns...”

“Do you want to have dinner with me?”

“What?”

“Do you want to have dinner with me tonight?”

“We always have dinner together.”

“We do? Oh, yes we do.” He went back to arguing with his phone.

Hopeless, the man was hopeless, she thought as she also considered throwing a clod of grass and soil at his head. He hadn’t been listening to her at all. Jacky might have been able to sweet talk the money and permissions they needed for the project but she was certainly not going to let him present their findings as a serious matter. She returned her gaze to the moon, the grey ball held more questions than answers, yet what questions they were. The mapping would show some of the circles near Stonehenge were built to match the pattern of craters that pock marked the moon’s regolithic face; some in the fields were exactly the same size as their counterparts on the moon. But how did they see these craters? Telescopes were at least 4000 years later and the concept of the round Earth orbiting the sun wasn’t officially accepted until the mid 1300s; so who were these Neolithic peoples and what technology did they use to create the massive works of observation? She shrugged. The Moltke crater was almost exactly 108 X 366 Megolithic Yards (MY) or 43.2 megalithic rods, a rod being equal to 6.8 feet; though nothing of that size was actually built, they did get close to the correct ratio representation with some of the henges in Wiltshire and if it were possible to cast back

through time even Avebury bore a striking resemblance to Moltke. Ohni did note it took

some imagination and some fiddling with the numbers but it was possible. Explaining the measurements to engineers had proved a moderately simple task, they understood numbers and could see the raw logic of a 366 degree circle based on the rotation of the Earth around the sun, though they did point out quite adamantly it took 365.25 days and the yard measurement, though quite unique, was close to the standard yard used in the UK and only twenty centimetres short of the standard metre. Jacky got it and was more than happy, but she wasn’t as taken, she dug things up, looked at the past in detail and tried to conjure some kind of vision that would be understood in the future. The moon had been her biggest challenge, it was both her dream and nightmare, the craters were huge and small, the challenges immense and the bribing on Jacky’s part considerable. She’d spent three months in a space suit for eight hours a day and inside a confined delicate space habitat for the remaining sixteen hours. Laser measuring saved her the difficulties faced by the ancients and yet, not all craters fit with exacting MY thinking. The instruments were configured to international standard, so she had to do manual calculations to determine which craters to focus on and which to dismiss. Later she examined positioning on Earth, this is when correlations started to take shape.

The cold was making her irritable and reminded her of events on the moon base when the heating closed down from time to time; she’d had to don her suit to stay warm. Considering what Jacky wanted her to present to doubting archaeologists and scientists she wished for regolith again. There really was no way to prove the Neolithic builders used and did what they did with unwavering certainty and the idea of being laughed out of the conference didn’t fill her with joy.

“What did you say the diameter of Stonehenge was again?” Jacky was getting excited, he did whenever he thought he’d found something.

“One hundred and seventy two point two. Why?”

“There are several craters that are exactly this size. And I think they can be seen with slight mag-

nification.”

<This is coincidental.> The phone was now annoying her.

There again was the question. “I’m having doubts, Jacky, even if you showed all our data no one is going to believe it. The Neolithic people did not have telescopes, they couldn’t even see the craters we are talking about.” She was hungry, they’d been standing out in the middle of the Thornborough complex for hours and she’d had enough. There was no connection between this henge and the moon, so she didn’t even know why Jacky had wanted to come to the place at night anyway; everyone new about Thornborough’s possible past.

The spray of light above, regardless of how modern man wanted to explain things, must have been the most wondrous sight to the ancients, the magic and mystery of it all, the legends and stories told around cooking fires after a day of hunting or ploughing the fields for subsistent cropping. Who was the first person to measure the movement of Sirius across the dark and what kind of madness would others have attached to such observations? In a way she could empathise with that person, the lone knowledge holder trying in vain to convince farmers that they could measure the ground by using the stars. A few would have believed and even watched as he measured the movement; others would come and offer advice, even discuss different ways to follow the star. Would it take many hundreds of years for their own discoveries to find purchase and credence amongst the world’s specialists? Ohni didn’t want to be a pariah again, she’d already spent far too long on the outer when she supported the claim The Great Pyramids of Giza were designed on the Thournborough henge complex’s layout; both exact in their representations of Orion’s Belt and calculations. She’d lost her research job at Xengdu University College in China and was discredited in several reviews in Nature magazine. Jacky’s madness has saved her and given her a job.

“You know, Ohni, I think we are a good match.”

“Archaeology, and engineering?”

“No, you and me.”

“I don’t know what you mean.”

<I don’t believe you are using my functions correctly,> his phone butted in.

“Jacky, I want to go, I’m cold and it’s time for dinner.” She looked at her watch, the screen showed a developing low pressure system. “It’s about forty minutes to Marsham and I would like to get there before the rain.” The weather patterns had changed so much in the last fifty years that almost cyclonic storms would ravage the land for days on end. Huge tracts of the African continent had not seen rain in five years while the UK was experiencing periods of up to two months of continuous torrential rain. Flooding was a normal condition across the country and some regions were boat only access.

“If you want me to drive, I suggest you put that thing away.” She pointed to the phone.

“Okay, okay.” He joined her on the walk back to Main road. The wide grassy avenue was boggy and the squelch of their gum boots competed with the increasing bug noise; bugs knew when rain was coming. The long avenues of Thornborough henge connect three giant rings, the first and third were perfectly aligned, the middle one, doglegged out just like Alnilam did with Alnitak and Mintaka on the Giza plateau. It took an hour to get back to the warmth of their vehicle; mist-like rain settled around them.

Once ensconced in the car, Ohni felt at ease to unfasten her coat. The car lifted slightly as the fluid suspension engaged and the head lights sprang to life lighting up the fields for over one hundred metres in front and twenty metres wide. She checked the dash, hydrogen enrichment was good, the pump, always faulty because of the age of the car, held steady at around seventy percent; they would get to Marsham before it gave out for the day. The car, a Benz – Toyota, was supposed to have a functioning solar power system for emergency motoring but Jacky had used the repair money to upgrade his phone to an Android AI unit, an absolutely useless device if it didn’t like you.

“I’ve booked the flight from Heathrow for Wednesday.” He fastened his harness and clipped his neck strap in place. He tapped the dash screen. “Humidity up, can I suggest applying extra down

force.

She thumped him in the shoulder, he knew better than to question her driving. Once they were both fully strapped in she engaged the engine and put the vehicle into navigation mode, the computer flashed up arrival time making allowance for a bottle neck on the B6267 at the A6108 junction. She hit the green screen button and the journey commenced. The car rattled a little as

they got up to speed, and it shuddered slightly as they cruised to seventy miles an hour; she held steady at seventy.

"I'm not going with you." She dimmed the lights above her and settled back in the seat.

"Why? Have I done something wrong?"

<You are an idiot,> the phone chirped in.

"Can't you turn that thing off?"

<No.>

"No," Jacky said. "It has a Nicton battery and the case is sealed by the entity inside; a question of personal security." He put the phone under his leg to muffle its interruptions. "Is there a problem with our data?"

"It's speculative."

"It's important, it shows something else was happening six thousand years ago, something we lost and have only now started to rediscover."

"Holes in the moon." She scoffed. Sure she'd also run the numbers, did the ground work, but when things came down to it, at best all they had was speculation; no better than anyone had in twenty fifty. "I have only just been reinstated. I'm sorry Jacky, I can't risk it; no matter how convincing it all looks. I know I promised, I know, but now it's coming to the time, I can't. I'm sorry."

With the rumble of the engine and the road noise through the tyres a silence settled over them and Ohni knew she had hurt his feelings, but it had to be said; unless they could come up with a way to see the moon properly in ancient terms the argument that some henges were designed on the craters, then things were hopeless. The silence unnerved her. Jacky kept fiddling with his breast pocket and shaking his head. She could see his lips moving as he spoke silently to himself. What was going through his head? She wondered. Couldn't he see the fallibility of the research? By the time

they'd arrived in Marsham rain was falling heavily and the Benz was struggling with the water wash over the road; ultra-light bodies that tried to rely on down-force from insignificant speed were useless when it came to water but what could she do, with all their main capital going into research the basic needs of a new car, new clothes and even the occasional nice accommodation came second; the trip to Beijing was a sponsorship deal based on a lie. According to the official programming she was presenting Jacky's work on ancient fulcrums and the development of the block and tackle two centuries before originally suggested.

Turning off the A6108 or The Ave and onto Silver street the traffic had vanished. The streets were like black rivers; after a couple of rights and lefts they were onto Market Place and headed for the King's Head; the pub's lights shone through the night and rain. It was a beacon of refuge in the downpour. By the time they'd managed to get inside the hotel they were soaked to the skin. Jacky got the key to the double room.

"I've got the shower first," Ohni said as Jacky played the key over the lock and pushed the door inwards. She was quick to drop her bag and fish out the toiletries pouch and some clean underwear. Once in the bathroom she felt a little claustrophobic. It was a very small compact amenities area. She was glad they chose all white for the tiles, toilet, basin and bath/shower, it helped ease some of the closeness she was feeling. "I hope the bed is king sized," she yelled through the door. The water took some time to get to the right temperature, she hated the move to body temperature controls and had to override the simple controller to get extra hot water; it would show on the bill but she didn't care, she was cold and deserved to feel warm and comfortable. The shower was too short and the cold too deep and for some reason the towel was too small. She dried and put on her underwear then cleaned her teeth. She pulled her lank, black curls back from her face and tied it up with a magnetic band. In the mirror she looked tired, lines were forming around the corners of her eyes from too many days working in the elements, and even for thirty seven she felt some of the youthful beauty of old remained.

Jacky was sitting on the end of the bed talking to his phone when she stepped from the bathroom. He looked up, smiled and then went back to talking. The phone might have started to see reason as its tone had changed from what it was in Thornborough.

"I like your bra, it's pretty," he said, looking up for a moment.

"Aren't you going to shower?" Ohni dragged a crumpled dress from her bag and slipped it over her head.

"Not yet, I... I don't want to embarrass you so I'm trying to figure out how they created moon henges."

"Moon henges? When did you start calling them that?"

<I asked the same question.>

"Shut up!" they both said.

"A while back, it is just my name for them, it's nothing official." He shook his head. "No glass, nothing to magnify with. If only we found a simply magnifying lens."

The notion would have been a good fix. She sat beside him on the bed but avoided touching him, even if he was naked she could see he was still a bit damp. "Just shower, dress and we'll get some dinner, the restaurant is still open and I have five hundred and seventy pounds so we should be able to get something reasonable." He looked at her, smiled one of his perfect teeth expressions and nodded.

"Have I said..." he stopped, shook his head and told the phone to shut down. '

<Why?> it replied.

"Said what?"

"Doesn't matter." He handed her the phone before standing and entering the bathroom.

Ohni spoke to the phone and she immediately hated the way it used a more condescending tone with her.

<Are you any smarter than he is?>

"Have you developed a theory about the henge mystery?"

<There is no mystery, Jacky Dalgleesh is simply incorrect in his assumptions.>

Immediately she wanted to argue, the voice reminded her of white doctors when they spoke to

her in the camps. She turned the phone about and saw how the screen, when held at an angle slightly magnified the information beneath. The screen was a protective casing, not part of the phone's active screen at all. She had an idea, it had been put forward loosely a hundred years ago by a woman who really was a crank, but looking at the phone gave her something; suggested something. Ohni just needed to know about rain, the rest would make sense, she was sure of it.

"Are you able to extrapolate weather conditions for six thousand years ago?"

<Do you have a specific date?>

"July 21<sup>st</sup>," she said, using the day's date.

The phone flashed up a screen of crashing waves while it contemplated her question. Jacky stepped out of the bathroom, his own inadequate towel being used to dry his short, cropped hair. He was a couple of years younger than her, but he looked older and with his squarish body and big arms she could see him working construction as easily as designing bridges. They'd been together so long that he didn't even notice he was naked in front of her, and she didn't mind.

"What are you doing?" He found some underpants in the bottom of his bag. He pulled them on before finding a pair of jeans and a black T shirt.

"Checking the weather patterns for July 21<sup>st</sup> about 4000 BC?" He looked thoughtful. "It's not a new idea but it has to do with Cumbria and the Castlerigg stone circle."

"I like it." He looked confused. "Why Cumbria? And why Castlerigg for that matter?"

<Precipitation was possibly present for most of the year throughout many regions of the United Kingdom,> the phone interrupted, <and would have been consistent for a period of several hundred years. Widespread flooding would have occurred through parts of Scotland and Wales...>

"Please inform us about crystal deposits," she interrupted the phone, two could play at that game.

<Oh, he's hear.> The phone actually sounded churlish. <Could we speak alone?>

"No." Ohni continued. "Are there quartz deposits in Cumbria?"

<Cumbria has significant deposits, but mining has not taken place for almost three decades.> The

phone beeped. <Do you mind if I ask why this is important?>

"I don't get it." Jacky tried to dry the inside of his ears with the towel; he was losing interest.

"I know how they could have magnified the moon." She took out her notebook, pressed the power lead to the wall pad and waited for the screen to come to life, she only needed a basic drawing program to show Jacky what she was thinking. She drew a cross section of a henge with slightly raised sides and raised trenches that were known to circle the constructions.

"These banks could be anywhere from half thirty6 centimetres to a metre deep, though I presume some of the builders may have felt the deeper the pool the deeper the depth of field." She then drew a moon over the circle cross section. "This will only work when the night is still and clear and the moon is full."

"And." He retrieved his phone from the bed.

"After a significant rain, or flooding, there would be a pool inside the earth works and a reflection of the night sky would be seen."

Jacky scratched his chin. "With the moon reflection closer to them they would be able to study its faces and phases, but they still couldn't see the craters in any detail, it would still just be smudges."

She called up the image she wanted. "Naturally this isn't a telescope, it's a mirror and it is from the mirror that they could have done something quite amazing." It was her time to feel excited. "I got the idea from the screen on your phone. All the ancients would have needed was a single, sizable, clear piece of polished quartz to magnify the pool image; it wouldn't have been much, maybe 1 to 5 times or better if they got really lucky, but maybe enough to determine some of those smudges were in fact circles."

"Ah, then thinking they were constructions on the moon they would have built copies on the ground; but that means they used the magnification idea before building a henge."

"This is where Casteriggs comes in. It's possible, but it would mean going through all the historical evidence again, this stone circle was built first and after the builders had magnified the moon they

started building others." She wanted to hug Jacky. "We won't be able to present any findings until we at least experiment with the idea; get some sizeable crystals to polish up and test the theory. There were no rivers near Stonehenge, or near any of the earth works around the country, not close enough to dig channels, but if what the AI said was correct then views of the moon and stars would have been via a mirrored reflection in a still pool or pond with closer viewing through a crystal."

The whole idea would be hard to prove without extensive weather mapping through millennia and actual field tests with pools and crystals, but at least it was possible. This meant part of the problem in presenting the new theory was solved, though delayed for a time, and in a way she felt relieved, not only for herself but for Jacky. This still didn't mean they were ready to reveal what they already knew to the world; more questions needed answering, more suggestions and more research needed to be carried out for confirmation.

"This could mean another five years of simulation studies if you're up to it." Jacky sat beside her and gave her a hug; he was awkward; she liked his strength.

"Castlerigg might have been the first of the stone circles ever built as it is close to quartz deposits." This alone would make for exciting research; just how close quartz deposits were to the building location would have to be determined. "In a way, Cumbria could have seen itself as being closer to the sky."

"Oh, I love the way you think, Ohni. Have I ever said that before?"

She thought about it and found; no he hadn't. Another problem came up and one she'd been thinking about for a little time but avoided at all times. They were going to spend at least another five years together, working closely, living closely. If she weighed everything up evenly she couldn't escape the fact she actually liked Jacky quite a lot; she didn't particularly like his phone, but he did, out of the blue, lash out and get a good room for them at the King's Head. He might have been just a little bit mad and obsessed with proving his ideas, but she could see the reason in it all, sometimes. They couldn't give the talk in Beijing and it



was obvious she could easily convince him they had to delay. Jacky released the hug and sat with his hands folded neatly in his lap, she could hear his deep breathing, smell the freshness of wash gel on his skin and the cheap shampoo in his hair.

"Jacky," she said touching the back of his hands.

"Will you marry me?" he said.

"What?"

"Don't tell me we are already married and I missed it." He took her hands in his meaty fists. "I even got a ring." He pulled out a gold band with an odd patterning. "I had it made from a Roman coin."

"How did you afford this?"

"Well, not all the money went on research. It's a Roman coin with a piece of ancient stone imbedded, it seemed the perfect fit for what we have together." He slid the ring on her finger. "So, are we married? And if not, can we get married?"

"You're so romantic, Jacky." She hugged him and this time there was no awkwardness. "No we aren't married, yet."

Breaking for air for what felt like the hundredth time Ohni convinced Jacky they might stop kissing long enough to order some food to the room. While they waited they registered the marriage online and used his new phone's data signature function to send in their signed forms, by 10PM they were legally married and by 11PM Jacky had cancelled the presentation. Ohni wondered why it had taken them so long, then coming up with the idea of filling the henges with water and using a magnifying crystal took a while to get right in her head after all. They agreed to buy a new car before driving up north. Ohni snuggled into Jacky's side on the bed.

"You know this is going to be a big risk," Jacky said, stroking her shoulder; they could hear rain lashing against the window.

"We've made it this far, so I'm confident we can stick it out." She kissed his forearm.

"Naturally, you'll have to go back to the moon."

"What?"

## Desperate Times

Michael Simon

Heavy mist swept off the Great Lakes, riding shotgun on cold easterly winds that scattered bits of garbage beneath the outline of distant skyscrapers. The rain arrived in spurts, slapping the pavement like an open palm, spreading the inner-city smells of wet asphalt and organic rot. Along Clark Street, neon signs flickered and buzzed, whispering promises only money could fulfill.

A faint smell of cinnamon rose above the detritus in the gutters. Not the sweet, enticing aroma of candy stores, but rather a syrupy thick, nauseating, catch-in-your-throat kind of odor. The kind of smell that puts people off cotton candy and red hots for life. The kind of smell given off by a time-travelling predator.

I moaned as another wave of anxiety battered my brain. Hands wrapped around my temples, I fell back against the crumbling mortar of a boarded-up building. Time had run out. He was closing in. When the butchers finally disposed of me, in surgically dissected pieces, no one would mourn. Not for a man who hadn't been born yet.

Soaked to the skin, I slipped into shadow beneath an archway with the glossy letters, *Angels Bar*, crudely painted on weathered brick. I gasped as the cinnamon smell abruptly grew stronger. Blood pounded in my ears as I scanned the road. Nothing. My hands trembled like a junkie desperate for a hit. The seedy bar was a poor choice for refuge, but the street was worse.

The interior reeked of stale booze and cigarettes. A half dozen tables, a few with lit candles, surrounded a tiny stage, and the sultry beat of a thirty-year-old love ballad played in the background. The only people in the room, the bartender and a buxom blonde in black spandex, shared a smoke at the bar.

I chose a table in the corner and took a moment to peel off my drenched jacket.

"What's the matter, Hon? Get caught in the downpour?"

I glanced up to see the blonde, hands on hips, giving me the once over.

"No, er, yes," I stammered. "Bad time for a walk."

She eyed me critically, gaze flickering across my Armani shirt and leather jacket, before flashing a professional smile. "Well, let me join you, Hon. Name's Lucy and there's nothing like company on a miserable night." She slipped into the opposite chair.

I hesitated and she made a subtle motion with her hand. The bartender appeared carrying two imported beer. She passed me one and our fingers briefly touched.

"Oh, you're cold! Been outside long?"

"A few hours."

She took a drink and arched an eyebrow provocatively. "Looking for anything in particular?"

I played with the bottle in my hand, angst brewing beneath my calm demeanor. "Not really. I couldn't stay home any longer . . ."

Her eyes widened slightly and the faint lines around her mouth tightened. "It's never easy to leave," she said. "How long has it been?"

I felt a surge of alarm before I understood what she meant. "Five years," I replied. Five fantastic years of freedom.

She took another drink and waited until I followed suit. "That's a long time," she said.

I shrugged.

She picked up her bottle and leaned back. Some part of my mind registered the fact the bartender had changed the music to something upbeat and modern.

She pointed a manicured finger at me. "Let me guess. You're either a lawyer or a banker." Her gaze dropped to my sleek jacket. "Or a mob boss."

I shook my head. "Wrong on all counts."

More questions swirled behind those baby blue eyes, I could tell, but she remained silent.

We finished our beer just as the bartender arrived with a bottle of champagne and two glasses. From under his pencil mustache he flashed me a greasy grin.

She handed me a full glass of bubbly and another manufactured smile. "A toast," she said. "To change."

I didn't have the energy to point out the obvious, that change wasn't always for the better. We

clinked glasses and drank.

She leaned close and her fingernails scraped against my skin. "Your accent tells me you're not from around here."

At my shocked expression she sat back and laughed. The sound was infectious because, after a moment, I chuckled. It felt good. "Is it that obvious?"

"Tell me," she said.

I ran my finger around the edge of the glass. I realized my cover story didn't matter anymore. "I'm from a . . . different place. A place that pales in comparison to this metropolis." The contrast, by itself, was absurd.

"How did you end up here?"

"I went AWAL," I said, the words slipping out before I could stop them. "On a reconnaissance mission."

She straightened. "You're military? You not deserting . . ."

I waved my hand. "It's not like that."

She relaxed. "Good, cause we all have our principles."

"Yeah," I whispered, five-year-old guilt bubbling out of my subconscious. "We all do."

We drank in silence, her eyes appraising, her mind trying to connect the dots. I watched the window and allowed the alcohol to blunt the sharp edge of my fear.

She pushed her chair back. "Got to pee, Hon. Save my seat, ok?"

"Sure." I watched her spandex stretch as she sashayed to the little girls' room.

The bartender, he introduced himself as Raoul, deposited a second bottle of bubbly on the table and inquired whether there was anything else I needed.

I glanced across the empty, smoke stained interior, and shook my head. Not unless he could roll back time.

#

Lucy returned, totally transformed. Her long, platinum tresses were tied into a neat bun and the black spandex replaced with a white blouse and knee-high shorts. Gone was the pancake makeup.

"That was some pee break," I said, feeling the beginnings of a buzz.

She curtsied. "You like?"

I nodded approvingly.

She emptied the first champagne bottle and unscrewed the cap on the second. "So, Mr. Armani, tell me about your home. I promise not to repeat a word." With a wry smile, she traced an imaginary cross over one breast.

I took a deep breath and leaned heavily on the booze. "I'm from a place you cannot imagine, though in truth, it's no different from the other surviving camps."

Confusion marred her pretty face, but I ignored it as the smell of cinnamon returned. Stronger as he narrowed the timeline. "I grew up on the street where children line up daily for a dollop of Agency-dispensed gruel. Roving bands of thieves fight over crusts of bread, and dead bodies clog the gutters. Bio-diseases kill one out of three newborns and . . ."

I stopped as Lucy's eyes widened.

She slowly returned her glass to the table. "Where the hell are you from?"

Her incredulous look irritated me. No one in this *time* appreciated the security and creature comforts. Then again, few would survive the first month of the war. "I should have died in one of those ghettos but, luckily, I had certain talents. The Agency trained me to be an operative."

"for what purpose?"

"To collect energy."

Lucy's brow furrowed in confusion. "I don't understand."

I shook my head. How could anyone in this *time* comprehend the importance of even a few kilowatts of power?

I tried another tact. "See this candle?" I waved my hand through the flame. "It gives off heat that simply melts into the room. My job was to collect that unused energy and smuggle it back."

"What are you talking about?" she scoffed. "No one uses energy from a candle."

"Not from a candle," I said. "From generating stations, nuclear plants, anything that produces huge amounts of power."

"And you would store it in what, a large battery?" She started to laugh but my expression didn't waver and the sound died in her throat.

"Something like that," I murmured.

Her eyes locked on mine. "You're from a tough place."

I nodded.

"You have family?"

I sipped my drink and focused on slivers of memory. "My father disappeared when I was young. I had a brother but the plague took him."

"By the Agency, you mean the government?"

"No. The ruling Council. They run the camp."

"They trained you?"

"For ten years. They used neurotransmitter augments and surgical implants to enhance my transport ability."

She gestured for me to slow down. "Whoa there, Hon, you're losing me. I was thinking you were from one of those impoverished African countries but now I'm not so sure."

I grimaced. She probably thought I was some kind of nut.

The cinnamon smell hit me like a bolt of lightning, stronger than ever. I almost threw up.

Lucy straightened. "What is it?"

My eyes scanned the room. Candles on nearby tables burned low, casting dim shadows that flickered across the cheap artwork and stucco ceiling. "He's closing in," I whispered.

"Who?"

"My comrade. The one I abandoned. They sent him to find me."

She leaned forward and took my hand. Her skin was warm and soft. "Hon, you're shaking like a leaf so let me tell you something. If you need a hole to hide in you've come to the right place. There could be a four-alarm fire next door, a nudist colony upstairs and an exorcism in the basement, and the cops wouldn't darken our doorway."

I forced a tight grin, my guts in turmoil. "It's not your lawmen I'm worried about."

Her smile folded into a frown. "Then explain it to me."

"It's the subtle things," I said, forcing in a deep breath. "The difference in a stock price, or the number on a winning lottery ticket. Tiny events that are impossible to notice when you're standing in the *now*. But he's on the outside, searching for those minuscule changes. He's been hunting me

since I left.” I took another drink.

She remained quiet, watching my eyes. I didn’t notice she had pulled her hands away until she lit a cigarette. I felt like a sinner in a confessional. “I can smell him.”

“Smell him?”

“It’s in the training. They augment our senses. Temporal sequencing emits a particular odor, cinnamon.”

Lucy took a hurried drag. “Look, I like you, Hon, but you’re starting to scare me.”

“I’m sorry.”

We waited in silence, Lucy puffing on her cigarette, me praying for a second chance.

#

His silhouette appeared out of thin air. One second the far table was empty, the next . . . he sat there. I tensed.

“What’s wrong?” Lucy asked.

My mouth was so dry I could barely speak. I nodded toward the table and squeezed my eyes shut. “He’s found me.”

She spun in her seat. “Hon, there’s no one here but us.”

I opened my eyes and, sure enough, the table was empty. *Of course*. Now that he had pinpointed my location, he would wait for an opportunity.

But then I turned and spied his figure at another table. The bastard was baiting me.

Keeping him in view, I gripped Lucy’s arm and firmly pulled her out of the seat. “Come with me.”

I heard Lucy’s sudden intake of breath as her eyes fell on the visitor. At the bar, Raoul scratched his head in confusion.

Knees shaking, I stopped in front of his table. “Socrates,” I said. With the collar of his trench coat turned up and his fedora pulled low, he looked like a down-and-out private eye.

“Plato.” His voice was just as grating as I remembered. “It’s been awhile.”

I grabbed two chairs and pushed Lucy into one. Mouth agape, the blonde stared at the new arrival.

“You’re real,” she said quietly.

Socrates’ eyes flashed. “How much have you told her?”

Fear had frozen my jaw. It was all I could do to

sit down.

“Do you understand the risk you’re taking?”

His hard glare tore at my soul.

I placed both hands on the table, glancing side-long at the blond. “I don’t think our discussion tonight will alter history.”

He pulled out a cigarette, lit it, and pointed it at me. “You forget how close to the edge we tread. Our camp is alive—”

“Our camp is a living hell,” I snapped.

Socrates slowly returned the lighter to his pocket. “For now. The Agency needs time and energy to reverse the trend.”

“The Agency sucks up all the energy while the people starve,” I said bitterly.

“They distribute it as much as they can.” Socrates’ voice sounded like millstones being ground together. “Unless our energy scavengers go AWAL.”

His accusation stung. My gaze dropped.

“I couldn’t take it anymore,” I whispered.

“People living in wretched conditions, misery and disease lurking like vultures over walking corpses.” I paused as a police siren flew past the front door. “It’s different here. People take care of each other. There are hospitals, orphanages—”

Socrates leaned forward. The candlelight emphasized the jagged scar that traced a circular path from his eye to his jaw, the result of a late night in San Paulo. “It’s the same people who started the war.”

I clamped my mouth shut. He was exposing nothing more than my weakness, the inability to shield my soul with callous indifference and do my job. I shuddered as a chill crept up my spine.

Lucy rested her hand on mine, but her blue eyes cooled when she focused on Socrates.

“You’re here to take him back,” she said. “To that terrible place?”

Socrates hesitated. “He deserted, Lucy. There is a price to be paid.”

“You know my name?”

“He knows everything about you,” I said.

“Between the time he arrived at the first table and now, the Agency would have briefed him.”

She blinked and I could see the wheels turning.

“So you know everything up to this moment,

but not beyond?"

Socrates and I exchanged a look of surprise. Lucy was smart.

"And both of you were operatives for the Agency?" she asked.

"Plato!" Socrates warned.

I ignored him. "We worked as a team for ten years."

"And this energy you harness, it supplies the basic necessities?"

Veins pulsating on his forehead, my former comrade appeared ready to burst.

"No. Almost every kilowatt goes into Agency programs, the machines and factories. Very little is left for the people."

"It has to be that way," Socrates interjected, his tone biting. "If we're going to survive, we must rebuild." He met my gaze. "Damn you! We risk everything talking like this!"

Lucy held up one hand. "Can this future be prevented?"

Socrates slumped back in his chair and shook his head. "All the computer simulations show exactly zero possibility of preventing war."

"There are too many variables," I added wearily. "Too many personalities in positions of power. It's not a matter of *if* but *when*."

Socrates blew out a ring of blue smoke. "And if we try, we might tilt the equation just enough to ensure the extinction of our species."

Lucy glanced at me but I could only shrug.

"He's been here five years," she said. "I assume nothing has changed."

"Only because he knows history intimately," Socrates replied. "But he's been lucky. Nobody can beat the odds forever."

"Don't believe him," I said to Lucy. "I'm living proof it can be done. People can fade into the past and not alter the timeline."

"Or they can produce a dead world," Socrates murmured.

Lucy tapped the table thoughtfully. "Even in hard times, people come together."

Socrates' smile was totally devoid of humor. "Your time pales in comparison to our period of destruction. Try to imagine billions of unexploded mines buried across the globe. Roads littered with

the rusted hulks of burned out tanks and armored vehicles. Semi-sentient H-K's roaming the land."

She tilted her head. "H-K's?"

"Hunter-Killers," I said. "Machines with cybernetic brains programmed to eliminate the enemy based on genetic code. Their fusion batteries last for decades."

"I haven't even mentioned the toxic filth you call lakes and rivers," Socrates added. "The acid storms and soil laced with biotoxins that once ingested turn your gut into a bleeding, fungating mass."

Lucy grimaced. "It sounds horrible. How can you bear it?"

"Some of us can't," Socrates replied. "The rest of us grit our teeth and plod forward."

Raoul wondered over and deposited three beers on the table. No one touched them.

Lucy took my hand and squeezed. "I won't claim to understand what you two have endured, but it's obvious Plato has donated his pound of flesh. Even if you brought him back he's wouldn't be much good. He's burned out."

Socrates shook his head. "That doesn't change anything. If he can't work, they'll use him for parts."

Lucy's hand tightened on mine. "They'll what?"

"He's owned by the Agency. They invested significant resources in his training, in all our training. If they can't get a return, they'll take back the augmented parts."

Her hand flew to her mouth. "That's barbaric! They'll kill him!"

Socrates didn't bat an eye. "If he can survive with what's left when they toss him into the street—"

"You would let that happen?" she asked, incredulous.

"Nothing is wasted," Socrates murmured. "He understood the risk when he joined."

"Screw you!" she snapped, hauling me out of the seat. "We're leaving."

She stopped at the door to grab a yellow raincoat and point a finger at Socrates. "And if you try and take him, I'll blab this story to every tabloid in the city."



My old comrade sat calmly in his seat. His hooded eyes, however, conveyed an entirely different message.

#

Outside, a heavy rain chased us up the street. A sense of dread lingered in the air.

"Where are we going?" My question came out in a puff of gray mist.

"To my apartment. It's a couple of blocks from here." She hesitated as her thoughts caught up with her feet. "They'll be waiting, won't they?"

I held her hand tight as rain splattered around us. "It'd be the first place I'd look."

"They want you that bad? Why?"

"Because the Agency need to hold me up as an example to others who may want to leave as well." *And because they want to tear me apart in a fit of vengeance.*

She set her jaw. "Tell me what to do."

A million thoughts tumbled through my brain, all chased by the smell of cinnamon.

"This way," I decided as the seeds of a plan took root. We crossed the main thoroughfare and stumbled on a lone cab. As the driver raced up Craig Street, I wondered if all of my safe houses were compromised. "Take us to the Hilton on South Michigan," I instructed before turning to Lucy. "I worked a mission there years ago, before he became my partner. It's not a place he knows about."

Twenty minutes later, two drenched rats crept into the lobby of the hotel. I registered under the names of Mr. and Mrs. Smith and paid in cash. Before finding the room, I made a quick detour to the bar and returned with a couple of items, one of which was a full bottle of rye.

It took three drinks before my hands stopped shaking. Lucy rocked back and forth on the bed and nursed her own glass.

"Will he find us?" she asked.

"They're got the right timeline," I admitted. "However, it's a big city and if we move without creating a ripple—"

"Why do I sense he's afraid of me?"

"Because as long as I'm with someone from the present, he can't take chances. You may do something that will upset the timeline. If you did

go to the tabloids, most people would simply laugh it off, but some would be affected by the story, and that might inadvertently change history."

"He can't kill me?"

"A random death will most definitely affect the future."

"What if he takes me with you?"

I shook my head. "No one can use the temporal sequencer without being properly prepared. Any person that tries to move through time without *coding* undergoes rapid decomposition. It's not a pretty sight."

She hesitated before asking the next question. "So what do we do?"

"Tomorrow we leave the city and head north, to a place with little technology and even less people. With luck they might eventually give up."

"They might let you go?"

I stared into my empty glass. "Every use of the temporal sequencer consumes resources my world cannot spare. After a while they might decide it's not worth the effort." I paused. "That's if you want to come. I never asked . . ."

She smiled. "Let's talk about it later. For now let's just say I sense an opportunity."

"How's that?"

"I'm tired of the endless hustle, the liars and con artists. For the first time in years I feel like I'm doing something worthwhile." She sank back into her pillow. "In the morning maybe I'll change my mind and walk away, or maybe I'll find you're really a jerk just like the others." She sipped the scotch. "Do you have a problem with that?"

"Uh, no Lucy."

"Call me Beth," she said. "Lucy doesn't live here anymore."

She finished her drink and got under the covers. "Good night, Pluto."

"Good night, Beth," I said.

#

A familiar smell invaded my dream. My eyes snapped open and a bolus of fear surged into my throat.

Socrates sat cross-legged in the chair at the foot of my bed, staring at the ceiling.

On the other bed, Beth's breathing seemed abnormally slow and deep, almost like—"

"Ketamine," Socrates answered before I got the question out. "She's out for thirty minutes, enough time to finish this."

Pulse pounding, I swung my legs over the side of the bed and sat up. "How'd you do it?"

He shrugged. "Good old detective work. I figured you for some kind of crazy Ivan. The surname Smith on the register caught my attention."

I glanced at the sleeping form and tried to think between waves of panic. "You realize if I'm gone in the morning, she'll carry out her threat?"

Socrates removed a cigarette package from the inner pocket of his leather jacket, lit one and proceeded to blow out a ring of smoke. He pointed to a piece of paper on the nightstand. "I figure the Dear John note you left will buy us a few days. After that it won't matter."

My stomach lurched. He knew something. "What's going to happen?"

He held up the cigarette. "Damn, these things taste good. I'd take a mission simply for the smokes." He took another drag. "You got me started in Moscow, remember?"

I nodded. "The Sino-Russia Conflict. I saved your ass."

"We took the temporal sequencer back five minutes before the nuke exploded," he said. "You took a big risk coming back. If the situation had been reversed, I would've left you to die."

I waited. We had been through a lot. The fact that I burned out first revealed a weakness, a layer of compassion that our training was supposed to expunge.

"They found her medical file," he said, lips settling into a smirk. "She's got metastatic lung cancer. Thirty-six hours from now it's going to eat into her bronchial artery."

His words hit me like a sucker punch. The only person in the world who gave a rat's ass for me and she had a shorter life expectancy than I did. "Does she know?"

He inhaled the nicotine deep. "Nope, nothing on her file before she shows up at the hospital DOA."

A sense of dread settled. "You went back and confirmed this?"

He nodded. He seemed to be waiting for some-

thing.

"If you went back . . ." The idea shot into my mind. "Then you already know if last night's events affected the time line. Did it?"

He hesitated and I barely suppressed the urge to throttle him.

"There was no change," he confirmed. "You blended into the time continuum without creating ripples. After Lucy, or rather Elizabeth, died we could find no trace of your existence."

"Then it's possible a person can migrate into a different time without damaging history," I met his gaze. "You can leave me here."

He sneered, the long scar twisting into the shadow of a monster. "Fraid not. The Agency needs a scapegoat and they made you my responsibility. I've chased your ass across two hundred years of history and wasted a good chunk of my life. You're going to pay for that. I'm going to watch the butchers take you apart, organ by organ, piece by piece, until there's nothing left but a shell of bleeding skin."

His abject cruelty erased any compunction at what I had to do. I reached behind the headboard and withdrew a nine-millimeter Beretta complete with silencer. The appearance of the gun made him hesitate long enough for me to fire a round into the pit of his stomach.

The shock of the impact knocked his hand away from the laser pistol in his holster. I sprang forward and grabbed it, and then tossed both weapons onto the bed. His hands retreated to the hole in his gut.

"How did you . . ." he managed between clenched teeth.

"Leaving the name, Smith, was the bait," I explained, catching my breath. "You're too good to miss it."

He still looked confused. "But the gun?"

"I worked here once," I said. "Back when I was a nervous young recruit with a penchant for keeping extra weapons, like the gun I stashed above the bar. After we checked in last night I went down and retrieved it."

"And by shooting me you think you're going to escape?" He tried to laugh but it degenerated into a groan.

I felt a twinge of sympathy. An abdominal wound was a painful way to die. "It'll give us a chance," I admitted.

"Bah! We'll pick up the scent," he said. "I found you once already."

"True," I admitted. "And I know you'll never give up." Even though I had worked with Socrates for years, I felt as though I was seeing the man for the first time. The only thing he wanted more than seeing me die was seeing me suffer.

"You should kill me," he wheezed, blood seeping through his fingers. "At least then, when they roll your carcass onto that operating table, you'll have some measure of satisfaction." He coughed and ruddy droplets speckled his lips.

I didn't move.

"You can't finish it, can you? Still too much of a bleeding heart." He grunted, stretching one bloody hand into his vest pocket to withdraw a silver cylinder. "How they chose you for this job, I'll never understand." He coughed again. "So you . . . won't mind if I take this moment to leave?"

I remained mute; watching him as he punched his code into the sequencer. He paused every few seconds as the machine emitted an answering beep. I waited until I heard the telltale double click, and then lunged forward to rip the cylinder from his weak grasp.

"What . . ." He barely stopped himself from pitching forward out of the chair.

"This is why I didn't kill you," I said. "I needed you to enter your personal code to initialize the sequencer. In fact, killing you sooner would have guaranteed my eventual capture. This way I have a chance."

"I don't understand," he gasped. His body started to shake as shock set in. "Sending me back dead will make them search harder for you." He sagged against the wall.

I bent down eye level. "It's not going to happen that way. You're going to die in a few minutes, old friend. When Beth wakes up I'm going to tell her I caught you sneaking in and shot you. We'll hide your body for thirty-six hours, until the cancer claims her, at which time I'll send both of you back. Of course, because her body won't have been coded, it'll distort beyond recog-

nition. They'll make the logical assumption that it's me."

I don't know if the shocked look on his face came from the pain, or from the realization of what I was doing.

"But . . . they'll see I've been shot." Socrates murmured, blood pooling beneath the chair.

"The Agency will think we killed each other but you survived long enough to program the sequencer." I watched his eyes widen in comprehension. "It completes the circle. They will have their vengeance and their victory."

The silver cylinder vibrated softly in my palm. The *confirm* button flashed patiently.

I glanced back at Socrates, but he was no longer bleeding, or breathing.

Stepping around the stain on the carpet, I pulled his body into the corner and hid the guns. The only sound in the room I could hear over Beth's relaxed breathing was my pounding heart.

Lying back on the bed, I poured another glass of rye. I had a day and a half to show Beth I was not another jerk. There was nothing I could do about the cancer, but I could instill a modicum of hope in a girl bent on a second chance.

The stale smell of cinnamon slowly faded away.

###

## The Unspeakable Prometheus

Jefferson Swycaffer

For Stephen

*Knowledge is not the same as strength. Strength is as the river racing in full flood, pushing away trees and even stones, and sweeping all before it. But knowledge is as the little channels men dig to bring water to their crops: the water itself is what matters, not the form it takes."*

Aboutides of Samothrace

The man the nomadic Tauregs brought to Tripolitania to sell was little more than a skeleton. He

was a European, although so severely burned by the Saharan sun that he could have been of any of the races of mankind.

His clothing was reduced to little more than rags, and his spindly limbs were all but naked. The Tauregs had gotten nothing from him in the way of spoils. He was exactly as they had found him, a desperate wanderer, stumbling blind and helpless, in a windswept corner of the great wasteland of sand and gravel that is the heart of the Sahara.

"Here is a wanderer," they said, and presented him to Jamal al Malaki, the sub-Vizier, who, himself, reported to the Vizier and Bey, Izzet Ahmed Pasha. Jamal was short and slim, with much of the dignity of age, yet much of the vigor of youth. The Tauregs were a disorderly rabble, boldly entering into Jamal's apartments and treading upon his carpets.

"What is this to me?" Jamal asked, although his curiosity was pricked.

"He may know secrets," the Tauregs said softly.

"I know many secrets, great and small; would you sell me as if I were a saddle-blanket?"

"He may know valuable secrets."

That seemed highly unlikely. However, Jamal accepted custody of the stranger, knowing this the quickest way to be rid of these nomads, guests whom he would not desire to linger. He dismissed the desert-wise riders, taking care to offer them compliments and praise, and a small scattering of coins of little worth. When they, in their turn, had spoken well of him and wished him all blessings, he lowered the hangings over his windows and called upon a doctor to attend. The doctor came in his own good time. He was quiet in his ways, but reeked of great pride; he wore a green turban with green jewels and peacock feathers in the front, making of himself a veritable peacock indeed.

"What do you make of this man?" Jamal asked.

The doctor pulled at his beard, blinked his eyes, and bent low to listen to the man's breathing and his heartbeat. He stood again and declared, "This man is dying."

"All men are dying," Jamal intoned, although more in mockery than in sententiousness. "Shall

his passing be postponed, or shall it be hastened?"

With much weight of wisdom, the doctor replied, "I may give him an hour of speech, and then he will die, or I may give him two days of sleep, and then he will die."

"Let him speak."

"The decision is yours." The doctor fussed about with oils and elixirs, rubbing strong-scented unguents beneath the pitiful stranger's nose.

In time, the man awakened, and spoke for his appointed hour, telling a story to which Jamal and the doctor listened avidly.

#

With a convulsive spasm, the collection of objects upon my workbench came to a grisly semblance of life. Blood flowed through the exposed arteries and veins; muscles clenched in agony; a copious flow of saliva spread over the clean surgical-steel surface. Two brown eyes opened, and there was, for one eternal instant, the light of consciousness behind them.

But, just as death is the destiny of all life, the lungs, pumping madly, slowed in their exertions. The blood stilled and began to pool. The eyes lost their focus, glazing over as they dried.

Life had come, and now life had gone again.

The assemblage of parts was, of necessity, minimal. There were the necessities for a kind of narrow, impermanent life, yet I had been forced to dispense with the long-term structures. There were no bones, no muscles, no digestive system, and, most certainly, no reproductive apparatus. The vital organs were laid out, bare and stark, preserved by thick, sticky coatings of a tarry, foul-smelling substance of my own invention, which both protected and nourished these parts, bringing the needed oxygen to their tissues by a complicated process of trans-permeation.

Now, they were no more than a clutter of offal.

I am Sir Doctor and Professor Georg Rosenwald Wiegenstern, and, although I might by rights take on the noble title Von Deckersdorf, the legal status of such a claim might be disputed.

I am a natural philosopher, a cultivator of science. My researches were, at the time, somewhat of a controversial nature, and I was forced to labor alone, in private places not wholly conducive to

technical excellence.

Death stared me in the face, and despair put its temptations upon me, but, as ever, I put aside that call. I had failed, to be sure, but I had also succeeded.

For twenty quick heartbeats, for two long breaths, for eight and one half seconds by my stopwatch, I had created life.

A lesser man might have felt pride. Nay, I cannot deny it: that unworthy emotion came upon me, for a moment ruling me. I had created life. I had taken dead tissues, and re-vitalized them, returning to them that mystical property alien to mankind's paltry chemistry. It was a breakthrough, a unification of the subtle arcana of alchemy with the titanic force of the modern sciences.

What are the limits? What can now be said to be forbidden? If life can be created, it can be extended: who should need to fear death? The human situation can be improved. Diseases shall be a thing of the past, forgotten and unmourned. Life might even be modified, its very nature altered to suit our needs, our desires. I dreamed, my eyes open, of animalcules that produce light, that exude useful materials as byproducts of their metabolism — and why not? As yeast produces alcohol, why should not a new, yeast-derived culture, produce dyes and pigments, solvents, strong acids, or even human blood, for the purposes of transfusion.

I grew giddy. What were the limits? Only those we impose upon ourselves...

Yet, ultimately, I had failed.

It was trivially within my power to reproduce the effect, perhaps even to refine it and prolong it. But what possible gratification might I take in creating an homunculus that thrived for sixteen seconds, or thirty, or as much as an hour?

My purposes soared far above such impermanence.

I was in need, and, despite the sting it cost me in the sensitivity of my ride, I knew that I had to seek out a colleague. The single most valuable facet of the university is the companionship, the collaboration, the working together of disparate, diverse minds, striving for goals, not so much held in common, as evolving out of commonality. The whole is vastly more than the sum of its parts.

I needed someone to talk to.

Before I dared leave the lonely attic wherein I performed my experiments, it was necessary to do some cleaning. The sources of my raw material were manifold, and not always felicitous. Chance discovery would be ruinous, not to say entirely humiliating.

When all was put right, the ingredients properly disposed of, and the scientific apparatus stowed away, it was, to my great astonishment, the hour of dawning. I stepped out into the grey half-light, and cast my gaze upward, to the mountain-crag that leaned out over the border city of Bearingen. Already the snowy peaks had captured the golden gleam of the sunlight, although it would be some time before the streets were granted that same illumination.

Why, in my haste, I had forgotten my hat and coat. The air was cold, bitter cold, but, to me, it was invigorating, bringing my own form back to life from the death-like entombment in my attic and my researches. I walked with haste.

In time, I came to the home, cozy and cheery, of my friend, or at least my acquaintance, Professor Potts. Simon Potts, late of Yorkshire, whence he had been driven for reasons that I understood all too well. His fate had been what mine could readily become. He now taught physiology at the university at Bearingen, and made additional money in private tutoring. Perhaps my visit would fall under that rubric.

He was awake, but not dressed, yet he threw his door wide to me and all but pulled me inside by my arms. He was an enthusiastic man, with great humor always sparking behind his eyes. His hair was as white as the snow atop the mountains, yet his heart was as warm as the hearth-fire which, now, he hurried to stoke up, pouring a liberal panful of coal atop the embers. He was in his dressing-gown and slippers, which, in a way, met in its lack of style with my own clothing's lack of formal propriety.

"Come! Come in! Be warm! Ah, your hand, it is like ice. I have brandy here. Be seated, no, not there, in the comfortable chair, close to the fire."

I smiled. "That is, by rights, your own chair."



"No, it is yours. I quite insist."

He spoke German as fluently as I spoke English, and it must be said that our conversation was of a decidedly mixed character. In time, we, like children, might have evolved a creole all our own.

He poured brandy for me, and, almost as an afterthought, for himself. He moved another chair into position nearby mine, and, for a time, we were content merely to be in the presence, each, of a companionable soul.

From him, I kept no secrets. Slowly and carefully, I laid out the results of my midnight labors.

"So good?" he boomed. "So grand an achievement? This is a triumph!"

"No, it is only a frustration. I am like a child, learning to read, having mastered the vowels but still ignorant of the necessary consonants."

"Ha!" He put a finger to one side of his nose. "To me, it sounds as if you have gone beyond the art of composition and are closing in on epic poetry."

"Perhaps the literary metaphor is inexact," I said.

"All metaphors are inexact. That is their joy."

"I am so frustrated!" It was a *cri de coeur*, which I immediately regretted. But I was in the company of a man I could trust, as close to a friend as I had in an unfriendly world.

He spread his hands. "Knowledge advances as the inchworm crawls. Nay, as the frog in the well, creeping upward three feet, and backsliding two. Science is a human endeavor, and that means it will be inexact and, withal, messy."

"It is a discipline," I objected.

"So is sculpture, and have you seen the detritus they turn out these days? A waste of good limestone! Better to burn it to make quicklime!"

"You take the mock."

His face instantly became serious. "No. I only am attempting to lighten your spirits with humor. I see you are in no laughing mood. You know that I believe in you. I believe in your work. Even without tonight's triumph — and it is a triumph, be sure of it! — I would have faith in your ideas and the direction of your research. I have offered to stand at your side. I would even serve you as an assistant. I can wash bottles and sharpen scalpels

as well as any intern." His voice softened, and he looked partly away, to spare my emotions. "I can help you with funding, if money has become an obstacle."

Deeply moved, I only shook my head. I had resources upon which to draw, and, while my pockets were not deep, I had silver enough, if not gold, to continue my researches.

I told him as much, and he smiled at my demurrer. An awkwardness had been avoided.

"Do you have enough in the way of...well...materials?"

Here, he could help me greatly, and I enthusiastically accepted what he was making available. "Never! I need...parts. Ach, why should we mince words?"

"Because we would rather mince cadavers?"

I must have pulled a face, for, despite his intentions to remain serious, Professor Potts laughed.

We chatted long into the morning. The professor fed me an early luncheon, which was particularly welcome, given that, in the throes of creation, I had forgone any supper.

"I need a new direction. An inspiration, perhaps." I was speaking almost at random. I, of all people, did not believe in such things as inspiration, and yet now I was pining for one.

"Have you researched the alchemical wisdom of the not-so-distant past?"

"Yes!" I exclaimed. "And there is much to be found there! You call it wisdom lightly, but the medievals truly were headed in very promising directions. How different is my work from theirs? They sought to distill vitality, just as I am. They sought to open the book of life and gaze within, and I, too, am involved in turning those same pages."

"Another literary metaphor," Potts said, but softly, and with a distracted gaze. "Give me a moment... This makes me think of something... Ah, yes! I think I still have it..." He jumped up and hustled from the room. He was gone for longer than I had expected, but I was too dedicated a guest to take it amiss. I made use of the time jotting down notes in my pocket-journal.

Now Potts returned. There were dust-smudges on the front of his dressing-gown, and cobwebs in

his hair. Clearly he had been into his cellar, rummaging amongst his storage. In his hand he held a fluttering sheaf of paper, or, as I learned quickly, parchment.

There was, immediately to my mind, something unpleasant, even dire, to the appearance of this manuscript. It was, to begin with, incomplete, and one side of the bundle was ragged, showing how it had been torn away from its binding. The color of the pages was a wan, mottled gray, indited with ink scarcely less gray.

Potts proffered it to me, yet I felt a deep and instinctive reluctance to touch it. There was a sense of uncleanness about it, although there seemed no concrete reason for my revulsion. Realizing I was acting foolishly, I accepted the packet and looked it over. It was handwritten, in a strange and looping cursive, partaking something of the Arabic in the swoops and whorls of the characters. Yet the language was Latin, of an antique style and rife with grammatical solecisms.

The pages almost seemed to writhe in my hand; I desired to cast them from me, as if I held a venomous serpent. Only the respect a guest owes his host kept me from scattering them across the room, or flinging them into the fire.

"What is this?" I asked, my voice hoarse.

"You won't find the title within this excerpt, but the whole of the book, were it available, is named the Thanopanicon."

The name meant nothing to me, yet, deep within my soul, there was a tremor of something deeper than fear. As a man teetering on the brink of a ghastly abyss, I felt myself upon the edge of the dissolution of my very sanity.

"What...?" I was struck nigh speechless.

Potts smiled thinly. "It had the same effect upon me. This is no tome to trifle with. Imagine what would happen if you were in possession of its whole." He laughed then, a laugh that seemed not far from madness. "Or would it be in possession of you?" He waved a hand, and I could see how it shook.

"I need not go into detail," he said, "of the provenance. There is a house in Naples, forgotten and long abandoned. The gates were fixed closed. I actually had to use nitroglycerin to burst them

asunder. A library pended there, librams and pamphlets, heavy volumes bound in red-dyed leather, loose manuscripts... It was a trove! It was also guarded, and I was lucky to escape with this, as much as I dared to take away before..." His face was pale with the remembering.

"What sort of guardian?" I wondered aloud.

"Dire." He had nothing more to say on that subject.

"Tell me more." The pulsing and writhing of the pages within my hand was, I was sure, only hallucinatory.

"The Thanopanicon. No one knows who wrote it, but it was assembled from fragments by Omar Ifrit, a scholar of Baghdad, and translated into Latin by one Horace Peter Crovenloft, an associate professor at the Sorbonne. Nothing more is known..."

He slammed his hand down upon the arm of his chair with unexpected violence, and so on edge were my nerves that my heart gave a great jump.

"What relevance has this to me?"

"Only read. Read it...if you dare."

Whatever my other faults, I had no lack of daring. I turned my gaze upon the pages, and was lost, for several long hours, wholly immersed in the text. In fact, I could not have looked away to save my life. At times, I had the terrifying sense that *the book was reading me*, in very much the same way that I was studying it.

Studying? I was rapt, fully absorbed. A battle with the Turks, with cannon, galloping horses, and the braying of trumpets, could have taken place beneath Professor Potts' windows, and I would have taken no notice.

When I set the pages down again, I was no longer the man I had been.

I smiled. My eyes twinkled. A little laugh broke from my lips, taking greater force, until a chuckle had become a guffaw, and then a peal of hilarity, rising upward into a great shriek of uncontained hysteria. Where that might have led, I cannot say, but I am grateful to the good Professor for striking me harshly across my face with the flat of his hand.

I blinked a moment in consternation. Then I smiled...and the Professor lifted his hand again. I

only shook my head. "That won't be necessary," I said, with every appearance of rationality.

"What did you see in those pages?"

"Surely the same thing you saw."

"I wonder... Sometimes, the writing seems to change, to alter itself... I reacted, at first, very much the way you did. I laughed myself unconscious."

"And rightly so! This makes fools of us all. Asses! Children! We stand upon the narrow shore of an infinite sea. I know... I Where that might have led, I cannot say, but I am grateful to the good Professor for striking me harshly across my face with the flat of his hand.

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"And rightly so! This makes fools of us all. Asses! Children! We stand upon the narrow shore of an infinite sea. I know... I know! How absurdly simple it all is. I have been wandering, lost and blind. But now... Now..."

It was unforgiveable of me, but I took my leave of the Professor and the warmth of his home, uttering scarcely a word of the usual formalities. He must not have taken offense, for his parting remarks were soft-spoken and kindly.

The day had gone, and the lamplighters were making their rounds. The cobblestones were wet and slick, evidence of recent rain. Overhead, the gaunt mountains were hidden behind a ceiling of cloud or fog. I hastened back to my work, to the narrow attic, to the long table of cold steel, and to the company of spiders and rats.

Instantly I was frustrated. I lacked the necessary raw materials. I had nothing to work with! At that point, fatigue quite overtook me, and I fell, all but swooning, stretching my length out upon the bare floor, where I slept the night through.

In the morning, I was the recipient of a gift, a

token of solicitation and companionship from the Professor. I need not go into overmuch detail; suffice it to say that the students of anatomy at the University of Bearingen would be forced to double up, sharing the physical wherewithal of educational dissection.

What can I tell you of the weeks that followed? How could you understand? How dare you understand! I transcended mere science, and put paid to the ordinary limits of rational philosophy. I bent the rules of nature far beyond the breaking point. I buried my bare hands in the very fabric of life, molding it, twisting it, until, from the slime of the amoeba, to the godlike pinnacle of humanity, I had wrought...

A son.

Fully grown, fully formed, a man. He had a skeleton, muscles, skin, and all the organs pertaining to mankind. It might as easily have been a daughter, for I had raw materials of both sexes. Perhaps, even then, I was bound by the strictures of tradition. Or, just perhaps, I feared the fate of Pygmalion, and stopped short of the blasphemy of creating for myself, not a scion, but a lover.

He was tall, handsome enough in a coarse sort of way, with a common face and the frame of a laborer. His skin was slightly dark, a little reddened, as if daubed with ochre or henna. Although I had assembled him from components, there were no vulgar stitches or scars. Ironically, he bore a navel.

Due to the processes entailing his creation — do I use that word in hubris? Very well, then. His creation! — the workroom was a ruinous mess. There were stains and scars, spills, discarded parts on the floor, splashes of fluids all about. My smock and apron were fouled. Too, now that I paused to reflect, there was an odor about the affair that was all but indescribably unpleasant, a melange of acrid chemicals and bodily humors. It was something I had not been consciously aware of during the absorption of my labors.

Too, there seemed to be another kind of effluvia, a seepage made aware to the moral sense of an observant man. There was a tinge of shame, of regret, of hopelessness, even of evil. Try as I might, I could not throw off the awareness that all

I had done was wrong.

Not for any reason an ordinary man might feel! Not for the defilement of human remains, not for the trespassing upon the prerogatives of the divine. But for...

I lacked the words, and even the thought was indistinct.

I chose to call him Sienaerde, for Sienna-earth, being unwilling to fall into the drear cliché of naming him Adam. Sienaerde was a word vaguely evocative of the word science, and even of Leonardo, a scholar who, I felt then, might well have appreciated what I had accomplished.

(Later, I saw that the word suggested "sayonara," the Nipponese farewell.)

Time passed. My creation was alive. That alone was the greatest of my triumphs. Also insensible, beyond the deepest reaches of sleep, he lived. His heart beat strongly, and his breath was as steady as the fall and scend of the surf.

As the hours passed, I sat, bemused, almost hypnotized by the glory, the perfection, the audacity of my own work.

As the hours passed, he began to stir.

Slightly, at first, with little movements so subtle they scarcely could be perceived at all, but gaining strength in tiny increments, he partook of motion.

That which lives, moves. He was alive.

But that which lives, dies...and I had made him without that component! He was eternal. He was the perfection of humankind.

I was struck to a pause. Was he without sin?

The ways of faith have never been all-absorbing for me, but I knew, with perfect certainty, of the existence of the soul.

I knew...because I had created one!

Yes! That is the depth of my pride, and my blasphemy!

I had made a human soul, from those shards to be found lingering near the body that once hosted one. From aetheric wisps in the air. From the increments that men put into their work. From the otherworldly sources shown me in that eye-opening fragment of the Thanopanicon: yes! Hideous semi-souls from the blackness between the stars, and the skeletal envelopes of souls wrenched

from the land of dreams..

And, indeed, from a sharing of my own soul, that counterpart and moiety possessed by all, highest and lowest. I had donated certain of my own undying substance. Perhaps that was the answer to my question: this new man, as innocent as a baby, shared those sins — and they are many, even I must confess — that befoul my own spirit.

What does a soul look like? Imagine an ordinary gentleman's handkerchief, although the man must be an aesthete — or a mere fop — because the little squared-off tissue of gauze is resplendent in brilliant colors, hues to put the peacock to shame and make Joseph's coat look drab in comparison.

That is a soul. Sienaerde was made of one.

(Does a man have soul? No. A man is a soul, which has been given a body to perform works with.)

He moved... His eyes opened...

What light, what intellect, what mind must look out from those orbs upon the immense world, the world we dare to call "reality?"

His gaze moved about, taking in his environs. The eyes swiveled, to fix upon me. They blinked, and became rapt.

He smiled.

"Wat..." He swallowed. "Water."

I gave him water to drink. Much was spilled, but I took care that he aspirated none.

He never removed his piercing gaze from my face, and his smile never faltered. It was a half-smile, a little sly, perhaps even a little self-mocking, making me think of the Giaconda, the Mona Lisa of painterly fame.

"I am naked," he said next.

"Let me cover you," I offered, and half-turned, to seek a blanket. He shook his head.

"There is no need. Naked came I from..." His smile changed to a fleeting frown, so swiftly returning to his expression of half-mirth that it might not have happened at all.

I recalled the Biblical verse, from the book of Job: "Naked came I from my mother's womb." Not he! Not Sienaerde!

He started to sit up. Almost, I reached out to assist him, and, in that moment, I was in greater

peril than I had ever been in the whole of my life. Instead of clasping his hand, I stood back, to permit him to act on his own, to exercise his free will.

Beneath him, the steel surface of the workbench where he had lain was tinged with a soft, green growth of moss.

He put his hand down to lift himself, and when he picked it up, moss grew there also. He put one foot carefully to the floor, then the other. He took an unsteady step forward.

Beneath his sole, a little scattering of mushrooms sprang up. Beneath his next step, small insects scurried.

He breathed, and I could see, in the indistinct illumination from lamps and overhead skylight, the little cloud of spores emanating from his lungs. Instantly I clapped a rag over my face.

He took a step toward me. Of all the things in the world, a sprig of little yellow flowers grew beneath his foot. He reached for me with his hand, his hand, most certainly. A certain degree of euphemism must be permitted me.

Foolishly, blankly staring, I waited in place, almost until it was too late. Then, with desperate energy, I leaped back.

"To live..." he sighed. He looked at me with his unfailing little smile. "To give life..."

Seeing that I was not to be approached, he stopped, yet I saw how ardently he wished to embrace me.

"You are Sienaerde," I said, aware in the uttering how foolish it sounded.

"Sienaerde?" he repeated? He gave it thought.

"I suppose it is as good a name as any other. You are my creator. Does that make you my Lord? I wonder... And who is it that is wondering? Who am I? A question, surely, for the eternity of human inquiry."

I made a face. One of the cerebra which donated toward the organ of intellect within his skull must have been that of an educated man. That made my situation both simpler and vastly more complicated.

"You are...yourself. An individual. Free by rights, possessed of volition and the moral sense to guide your actions."

"Am I?" He seemed amused. "What guides

your moral actions?"

"The pursuit of knowledge," I answered, too quickly, for it gave away more than I intended.

"Then there are other signposts along the path than merely right and wrong? I see that there are. The soldier slays, to protect his country, or merely his military unit. The priest anathemizes, even excommunicates, damning a man for all time. The banker turns a family out into the snow. The prostitute... Ah, well. I need not go on."

Worms crawled from beneath his unmoving feet.

"What, then, guides you?"

"The same thing, in a way, that guided you. Not acquiring knowledge, but creating life. That was how I was made. That is how I shall live."

He turned to one side and brushed his hand lightly over the back of a chair. The wood sprouted in little twigs, complete with leaves and seed pods. Automatically, I endeavored to categorize it, genus and species, and failed. It was from no living tree of my knowledge.

Sienaerde was not particular about the nature of the life he created.

And what of the moss, the insects, the worms and the little flowers? I realized, awestruck, that they had not been earthly and natural, but were of new, as-yet uncatalogued species.

That was the moment I became fully aware of the nature of the lore to be found in the dreaded Thanopanicon. What was more, the madness left my mind, my soul, at that moment. I was struck sane, seeing for the first time the enormity of what I had wrought. I felt as the man in Michelangelo's Last Judgement, who, one hand over his face, sees, forever his fate in damnation, and experiences that last fatal instant of human regret.

I repented of all I had done...too late.

The madness had not left the room. Ghastly and insidious, as a thing alive, the insanity of that hellish writing was transferred, signalled as if by telegraphy, from me into my creation. The light of alien reasoning filled its eyes.

He lifted his hands, and whirled, not unlike a ballerino. He had begun his work, of bringing life to a world that already lived.

He looked at me. "I see you have guessed."

"You would replace all life, with the new stuff of your own creation."

"Yes. Replace it, I think. When I cannot extirpate the existing order of life, I shall alter it. Why should I not use the raw materials the world offers, in order to produce, de novo, a network of inter-related flora and fauna that improves upon what the world now hosts?"

He turned to the chair once more and touched it. From the wooden seat, a rat arose. No! Not a rat, for that would have been familiar and earthly, in this context a moral comfort. Instead, it was ratlike, yet unmistakably foreign. It has little feelers sprouting from its nose, something like the fleshy organs surrounding the muzzle of a star-nosed mole. In places its skin was bare, and in others, thickly furred. Its paws were quick and dexterous, as prehensile as hands; its ears were sharply pointed. It chittered, revealing a pattern of teeth known to no earthly mammal. For a moment it snuffled around in place, then darted off, losing itself in the clutter of equipment and storage filling the back part of my attic.

"That was creation," he said, as lightly as if he had been a stage-magician, bringing a pigeon from a silk hat. "If you were to give me an ordinary rat — *Rattus norvegicus*, perhaps — I might change it. Might it become aquatic, or truly amphibious? How do you think it would manage with a pair of wings? Yes, wings... I like that." He put his hands together again, and brought forth a bright red beetle, of a type unknown to science, that, in violation of all rules of taxonomy, possessed the quadripartite wings of a butterfly. It was lovely, and it was wholly impossible.

"Life," he explained, "as you know it...chemical life, physical life, material life, has had its run on earth, and now it is time for something new. You have, through me, opened the gateway to something wonderful, to forms never before seen, having no Darwinian origin, but wholly original, designed, flowing from the channels of the intellect." His maddening smile widened slightly, and a thin rivulet of saliva ran down from the corner of his mouth. "The intellect, of course, as refracted through the spectrum of the new reasoning, the insights that are only slowly beginning

to become known on earth. You studied only a fragment of the Thanopanon, and it altered the earth's reality forever. Imagine what might happen if you had studied it in its entirety. Or you might have stumbled across the *Dire Text of Mlacazoca*, or the *Cultes Indicibles*, or even the *Pharnastuum*, if you were prepared to extinguish its fires. And these are only the nose of the camel, seeking to worm its way into the mundane tent which you, in your pride, call 'reality' and think it to be knowable. Knowledge? To such as you? You see the forbidden fruit, and all you can think of is to *eat it*! If I were to give you a star, you would make a wish upon it. If I were to give you a cupful of the matter that makes up the core of the sun, you would *light your pipe with it*! I point you in a new direction, where your vaunted logic, even sanity, are to be subsumed in a glorious outpouring of untrammelled creativity. The old categories are swept away: mammals and fish and even insects will take on more and more of the characteristics of one another. Life will colonize the very stones, until even the white-hot core of the earth will throb with animated existence. More! Far more! I offer you a color that has never before been seen, and a music that has never before been heard. I offer you triangles with four sides, and gravity that points sideways. I offer you freedom. I offer you *truth which is false, and falsehood which is true!*"

"You...you're mad!" I cried.

"Sanity is nothing more than the illusion of control. I am here to take that away, once and forever." He looked at me in a way I did not care for. "You created me. Now, I would fain return that favor. Step closer to me. Take off your clothes, and let me touch you. You will not regret it. It will even be...pleasurable."

He took a step toward me.

I turned and flung myself through the door, all but flying down the outside staircase, until I collapsed in all indignity upon the pavement of the street, tearing the knees of my trousers. Once more I had left my home without a coat or hat.

Scrambling desperately to my feet, I ran. Without shame, without hesitation, I ran.

He followed me.

I sought escape.



He followed.

I waved down a constable of the law, and, all short of breath, swore a complaint, that a naked madman was chasing me. The good officer was prepared to scoff, judging from my appearance that I was under the influence of strong drink. He might have pushed me off, sending me on my way...until he looked over my shoulder and saw Sienaerde.

"I'll be meat for the hangman," he swore, and ran off to intercept my creation...my son.

There was a scuffle. The policeman grew vines from his throat, choked, thrashed, and was dead.

Dead? He was alive, the first human victim of the unstoppable plague of hideously fecund novelty. (Or was he the second human victim? What of the carcasses that Sienaerde comprised?)

I ran. Sienaerde followed, at a walk. Naked in an inhabited city, yet deadly in ways civilization was not prepared to face, he came after me.

He was in no hurry.

I dashed to the train station, and put myself aboard the first departure, going I did not care where. North and south were as one to me.

Sienaerde followed.

I had all of the speed that steam-engines could provide. He merely walked. But he walked always, never stopping. I must eat, and sleep — although sleep came only fitfully to me, and bringing with it unbearable nightmares. Yet he, at an ambling pace of some three miles per hour, could never be stopped.

What confrontations, what battles, did he have with the authorities? Did they seek to cordon him? Did they mobilize the militia, or the regimental army? Did they chase him, with all the advantages of horses and telegraphic relays? Or did he escape, finding his way through crevices, under water, into sewers, or spreading himself over the canopy of the treetops?

Did he grow wings to fly? Or was he, even he, bound into the form of a man?

The telegraph brought word: a madman was being hunted through the woods, hills, downs and fells of the border land between Bavaria and Switzerland. There were casualties: fatalities which

doctors had difficulty explaining.

I ran.

Sienaerde came after.

Arriving at Innsbruck, I was able to access funds, and to send a warning to Professor Potts. The pages of the Thanopanon, although they were few, needed to be destroyed. Whether or not he followed that advice, as peremptorily as I offered it, I do not know.

I fled. Sienaerde pursued.

In Istanbul, he nearly caught me. I had been careless, and took my rest for too long a time. Screams of pain and fear were my warning, as he let himself be seen, thrust himself upon victims, and upset the community. Had he come by stealth, I might have been taken.

He had been careless...once.

I took flight, into the midst of ancient Persia. He was close upon my heels. I made my way down the Konkan and Malabar coasts of far India, until I ran out of land, and took ship from Desinganadu. Thinking myself clever, I doubled back, and ran the gauntlet through the newly-opened Suez Canal. If I could rely on Sienaerde walking, ever walking, at a steady pace, yet a man's pace, then I had ways of staying ahead of him.

Did he sense my presence? It seemed so, for, over the long years, he always moved directly toward me, following the straight line which is the shortest distance between any two points. Yet sometimes, I think he took advantage of the new geometry he espoused — "I offer you triangles with four sides" — and came upon me more quickly than old-fashioned reasoning might suggest.

There were plagues in his wake. Small ones, for which the world must be thankful. Fumes of burning Sulphur, and liberal spraying of carbolic acid seemed to halt the outgrowths, which were usually localized. A colloquium of doctors came to the conclusion that the plagues were following a geographical pattern, as if sowed by an evil ploughman. The notion was derided by the intellectual centers and the places of higher learning; how little they knew!

But that gave me thought. There were two remaining things I could do to improve the chances of survival of life on earth — the familiar variety

of life we rejoice in.

I wrote missives to several universities, using the few personal references I still possessed. I gave warning. Oh, not explicitly: who would believe a word of it? But in general terms, I gave advance notice of the possibility of certain kind of virulences that might erupt in places across Europe. Whether these seeds fell upon ready soil, I do not know, and likely never will.

For the second step I could take for the preservation of the world's life was to try to lure Sienaerde to a place bereft of life, where, in the same metaphor, the soil would be barren and his fecundity would be, to the degree it was possible, frustrated, dying upon the vine.

I might have chosen to go north, to set my sights upon the arctic, where the frozen wastes would not support the mosses, flowers, insects, and little animals of Sienaerde's creation. Surely nowhere more inhospitable to any kind of life could be found than the crags of ice, the wind-swept plains, the drifting floes girt by deathly seas.

But that journey would entail crossing Europe again, dragging him behind me as a draft-horse pulls a harrow. What torments would he spread? What seeds would he cast? I would be condemning the lands I loved to a trial comparable to the plagues of Egypt. An inundation of frogs would have been a mercy and a comfort when contrasted to the spread of wildlife he would unleash.

I was at the gateway to the east, and was in a position to strike out into the world's deserts. The Empty Quarter of Arabia, the Great Salt Desert of Persia, the wilderness of Syria, all beckoned to me. But of them all, the Sahara is the mightiest by far, and it was in that direction I bent my weary steps.

Passage was easy enough to arrange, for, in this world, anything may be obtained for a significant enough payment. The drovers of a camel caravan surely thought I was mad, and, with the courtesy and mercy of desert nomads, tried to dissuade me. When it was clear that my intent was unswerving, they nodded sagely, spoke of the will of God, and allowed me to ride with them.

They knew, as I knew, that I would never return.

For days we travelled. A camel is a mode of

conveyance unfamiliar to most Europeans. I was some time becoming accustomed to the swaying gait and the emotional attitudes of the beasts, which ran the full gamut from sullen to surly. We crossed the dunes with a steady, rocking pace, slowing only when we came to endless fields of wind-strewn gravel.

By my calculations, I was some hundreds of miles away from any living thing, but there was still much distance to go before I reached the pole of inaccessibility, that place where life is the very farthest, in all directions.

I begged the nomads to sell me a camel, but they refused. They cared little for my fate, but it would have been needlessly cruel, to say nothing of wasteful, to send a good animal to its death. As a way of thanking them for all their consideration — and because it was well to forestall a decision they seemed, themselves, on the verge of making — I bequeathed to them all the wealth I had remaining. It was a fair sum of money, and they were well pleased to receive it.

It was of no use to me.

On foot, then, carrying as much water as I could bear, I set off on my long march to meet my fate.

How I toiled! How I strove! By days, I lay beneath a blanket, suffering from the monstrous heat. By nights, I trudged on, guiding my way by the stars, freezing — what a thought! — in the ice-like nights. The desert is a place of extremes, but extreme hostility to life was the ideal I pursued.

And, likewise, I was pursued, always, by Sienaerde.

The pace of my going decreased. His steps never faltered. In time, he began to gain ground, nearing me as inevitably as fate. What link bound him to me? Why did he seek me? Was it because I had partaken of the wisdom, the foul and grisly arcanum, of the Thanopanon? Must he conquer me before he conquered my world? Or was it only a mad obsession, the desire to bring his maker low?

From high dunes of burning sand, I could see, in the distance, a little figure, shimmering in the heat-haze. It could have been no other. When I took my brief, feverish sleep, he marched on. Day

by day, he came closer upon me.

I could go no farther. My water was gone. I was as one who is dead.

Sienærde, who had also suffered from the long journey through the world's furnace, came to me, as naked as ever.

I gave up my flight and waited, with fatalistic patience, while he crossed the last remaining distance between us.

Plant-like, he had taken some nourishment from the sunlight, and he carried water, bag upon bag of precious water, a physical burden I would not have been able to measure myself against. He was no less sunburned than I was: his skin cracked and peeled. We both were nearly blind from the blazing, inescapable light.

"We meet again," he said, his smile still the center of his countenance.

"Here is where we die," I answered.

"No." He shook his head. "Here is where you are brought to life, yet I must die."

"What?" I could not credit my senses.

"Why?"

"There is a pattern to it, if you would only credit it. You learned forbidden knowledge and created me. But you are still the conduit, and I am only the receptacle. Now I, dutifully, return the gift. It can only happen this way. You are needful, for, today, I am the conduit and you are the receptacle. It was fore-ordained from the moment you turned the first page of that most unhallowed of all writings."

He gave me water to drink, and...

I may not say more.

#

Jamal and the doctor, in Tripolitania, shook their heads in pity. The man's ravings were unintelligible. The language was German, which the doctor spoke, a little.

"But there is no meaning in his words."

"What do you mean?" Jamal demanded.

"He babbles. He uses terms which are empty. What is a 'Thanopanicon?' The word consists of Greek root-words meaning 'death' and 'all.' An icon of death? A plague upon all men? This was a learned man, but now he is lost to human reason."

"Then, in the mercy of God, you must make

him as comfortable as you can, easing his passage into the black land of every man's tomorrow."

"Morphia is the kindest gateway thence for such as he." The doctor bent and administered the dosage with a generous hand. Later, he would present a due-bill to the sub-Vizier, with an increment of no small size for his own efforts and labors.

Piously, they averted their gaze as the pitiable wayfarer breathed his last.

Jamal was the first to look up, and gave the doctor a sharp push with his hand.

"Look!" he whispered. "Only look!"

The corpse, only a little thing, like dried leather, like a twist of rags, like a skeleton with the barest covering of taut, red-burnt skin to preserve it from indecency, began to crumble. It broke apart as a sand-dune erodes under a strong wind. It fell away in bits and pieces, in tags and threads.

The parts moved, and seemed as insects, worms, tiny chittering things like mice, gauzy butterflies, and small patches of moss or grass which took root upon the carpets that covered the floor of Jamal's house.

## Adara's Tale

George Phillies

Being the sequel to *Victoria and the Peri* in  
*A Sea of Stars Like Diamonds*

Pickering sat at his desk, watching snowflakes whirl out of the darkness toward him. The blizzard howled through the eaves of his house, setting the storm windows shuddering in their frames. He had puzzled away the evening, trying to solve one of the lesser mysteries of theoretical physics. As on so many previous occasions, the answer eluded him. Now he stared into the gloom, as though his eyes could penetrate the shadows which lurked there.

The doorbell rang, once and again. Pickering started, almost leaping from his chair. His home boasted the finest security system in the state, building and grounds being interlaced with micro-waves and ultrasound, magnetometers and seismometers. The storm degraded their performance,

but they should still have warned him of visitors before they set foot on his front porch. He touched a few buttons, setting the system through its test cycles. The front porch was surely vacant.

The doorbell rang again. Perhaps the snow was shorting it out. Pickering ambled down the broad front stairway and across his living room. Slowly, he swung open the bronze-faced front doors. Right in front of him, beyond the glass storm panels, stood a short, hooded figure leaning on skis and poles.

Pickering cracked open the storm panels. Bitter air swirled around his feet. "Hello! May I be of assistance?" he asked sternly. He hated dealing with unexpected strangers.

"May I come in?" The voice was a childish soprano. "Please?"

Pickering recognized that he was being rude. A moment's observation suggested his visitor's needs. The figure before him was short, little more than five feet four tall. It must be a child. It wore winter clothing, so the child was abroad searching for a house -- certainly not his. Not that children didn't come here, but usually they were invited first. Pickering's nearest neighbors lived a quarter-mile away. Therefore, the child was lost, lost in the worst blizzard of the year, with temperatures of 20 below and 30 knot winds.

"Yes, yes, of course, come in!" His trust in children melted his gruffness. "Are your parents with you? Did their car stall on the road?"

He tugged on coat-sleeves, helping his visitor stumble into the vestibule. The coat, he realized, was crusted with ice; the inside of the sleeves were water-sodden. "Your jacket's soaking wet."

"I noticed." The voice was weak, but sharp and clear. "There was a snowslide. I got carried into Lake Saint Marie and had to crawl out. And, no, I'm all alone."

"Lake Saint Marie? That's five miles from here, across the ridge. Why didn't you take shelter sooner?"

"Five miles straight line distance," Pickering's visitor corrected. She swung free of him. Her parka fell back, revealing bright red hair and blue-violet, fatigue-drawn eyes. "You must be Dr. Pickering," she said. "You're just like Victoria

Wilson's description."

"Alexander Humboldt von Pickering, at your service," he answered. He bowed slightly. "But if you're a friend of Victoria's, Alex will do." His mind skipped slightly. "Victoria? Is she out there too, in this weather?" His visitor's headshake and fresh smile stopped that line of thought. "I don't think I know you," continued Pickering. "Are you new in town?"

"New in town? No, not new. About as far from that as you can get." She paused. "Victoria said you knew about me. I'm Adara."

For an instant Pickering was deathly afraid, afraid of things that crept in the night, afraid of impossible photographs, and very definitely afraid of the girl over whom he towered. He forced himself to lock the outer doors. Then curiosity overcame all other emotions.

"Victoria did mention you," he said, "Though I was never quite sure I should believe her stories. You did all sorts of things that Victoria shouldn't have done herself -- a convenient excuse, given that they needed to be done, when she knew perfectly well she shouldn't do those things. But someone her age couldn't possibly swim the St. Olaf River, not in full flood, nor overpower a half-dozen bank robbers, not to mention... But you fell into a lake? In mid-winter? And went skiing afterwards? You could have frozen to death."

"I'm tougher than I look," she answered softly. "And colder."

Adara's clothes dripped water onto the marble flooring. Pickering grimaced. This situation was not in the set of possible emergencies which he had ever considered. Still, the elements had logical solutions. "You need a warm shower, reasonably prolonged" he announced, "and dry clothes. Is your coat filled with goose down? I think my drier will handle it."

"A bit more modern than that. It would dry in half an hour, if it could thaw. The rest sounds great." Pickering herded Adara into a guest bedroom, supplied her with nightshirt and robe, then let her close the door behind him.

\* \* \* \* \*

Adara found Pickering waiting in the breakfast



room. The lights were dimmed. Storm winds moaned beyond drawn curtains. The smell from the kitchen suggested something warming in the over. A full tea pot steamed gently on a cast-iron trivet.

Pickering stared at her. She really didn't appear to be more than twelve, at most, if very tall for her age; his down-filled robe reached nearly to her toes. Her figure was distinctly more muscled than that of most girls. Only the scabbarded sword she carried in one hand, almost removed from his line of sight, sounded a discordant note.

Adara sat back on the window seat, tucked her toes into a quilt, and sipped on the tea. Pickering spoke. "My manual on frostbite speaks of rum, at

so many milliliters per kilogram body weight, to enhance peripheral circulation. However, I'm not sure your parents would approve of such an agent. Nor, if I were to give credence to Victoria's more remarkable tales, could I be sure of its effects on your, ummh, your metabolism."

"My parents? I've been my own person for a time now. They -- oh, you really didn't believe Victoria, did you? Not that I blame you. No, I'm about as human as you. But I can't risk my timing, not with the Imperial Guard may be on my trail."

"Timing? Imperial Guard? Is that why you're dragging that, that oversize kitchen knife around?"

"Timing's more than swordsmanship. How do you think I passed your house's watch-wards? Also, a gnothdiar is like a Swiss Army knife -- being sharp is only one function." She smiled mysteriously. "Don't worry. I'm sure I got them all with my snowslide. If I weren't sure, I wouldn't have risked you by coming here. And I certainly wouldn't chance wearing a dressing gown rather than real armour, no matter how cold I might get. I just overdid it when I released the snow, and caught myself too." She yawned deeply and pulled the quilt more tightly around herself. "I suppose you want to hear the rest of the story? Victoria said you'd sooner die than not be curious."

Pickering nodded. "Unless you want to talk about grasshoppers. Large grasshoppers."

"Victoria told you about that?!"

"I pried it out of her. The group for whom I consult, about problems in -- entomology -- has other ideas about the grasshoppers, ones more in accord with normal science. However, Victoria did lose her flashlight one evening last fall, and it did happen to be found under an interesting, large-skulled flying mammal. At least, I infer that the glands along its back, despite their location, are mammary in nature. My employers appear to believe Victoria's assertion that the flashlight was stolen from her tree house."

For an instant Pickering thought of the photographs locked in his desk. What were they? He'd puzzled over them for weeks. Table Rock State Forest lay not ten miles from his home. It was a place for walks and picnics, not for creatures from another world.



The contrary evidence of photographs, autopsies, and biochemical analyses was undeniable. The pictures showed a giant grasshopper and beasts like the winged lions of ancient Nineveh, killed by cold steel, blunt instruments, and an unspecified unnatural cause. To char the grass on which it had fallen, the grasshopper must have been heated to hundreds of degrees centigrade.

The Forest Rangers who found the beasts one Saturday morning had contacted the County Sheriff, the Governor, the state's most eminent scientist -- one Alexander Humboldt von Pickering -- and eventually a national security agency whose very name was a secret. Pickering himself found the only useful clue -- a flashlight. Its owner's name was inside.

Victoria Britomart Wilson was one of Pickering's neighbors, as close as he had neighbors. She was a very matter-of-fact girl: bright, observant, not at all the type to be involved with monsters. The Wilson children were the sort who raked your leaves, looked through your telescope, and never had to be told to stay out of the orchard while the apples were still green. Pickering paused to consider. Were his expectations rational? Were there personality types of whom he did expect extraterrestrial involvements?

The flashlight was still the clue. Confronted with it, Victoria maintained it had been stolen from her tree house. Furthermore, Victoria had ironclad alibis for the night in question, unless one suspected that her parents were also involved. At ten in the evening, the Forest Service had made a routine check of Table Rock, finding nothing unusual. At seven the next morning, the beasts were discovered. Victoria's parents had seen her in their home near midnight and before four in the morning. The national security agency had grilled the Wilsons, but failed to shake their stories. Voice stress and more subtle analyses of their initial answers indicated no deception. A girl Victoria's age could hardly have climbed to Table Rock by moonlight and returned in four hours. And a girl who had recently been kidnapped could not be questioned intensely.

One sunny autumn afternoon, as the last leaves came blowing from the trees, Victoria appeared at

Pickering's doorstep, offering to help him rake his lawn. For fair money, of course. Pickering agreed, knowing that Victoria would not have come alone, not for a lawn his size, unless he had his fish deeply hooked. After a few minutes of raking, Victoria swore him to deepest secrecy, then told him about the monsters. She and her friend Adara had killed them.

Pickering had heard about Adara before. Each time her name came up, only Victoria had actually seen Adara clearly. Pickering had almost concluded that Adara was a figment of Victoria's imagination. When something had to be done, which Victoria shouldn't do herself, because her parents wouldn't like it, she would say that Adara had done it. It was a convenient excuse, which no sensible parent would believe for an instant. The problem was that Adara was a not-quite-Supergirl, performing deeds entirely beyond Victoria's abilities. If Adara did not exist, her acts were distinctly hard to explain.

Victoria's tale of four monsters was superficially unbelievable. Her tale of gatestones, of a girlfriend who stepped from world to world with a shrug of her shoulders, could be expected from a child with an overactive imagination and a healthy addiction to television sci-fi films. Unfortunately, there really were monsters. Pickering had seen them himself. Victoria shouldn't have known of their existence; she knew fine detail on their death. Pickering wouldn't have believed a word of it, except that he had touched the monsters and read their biochemical analyses.

"I suppose," asked Adara coyly, "you want me to go back a year or two and start at the beginning?"

Pickering smiled. "Our County Historical Society's pride and joy, insured for the better part of three million dollars, is a 19th century painting by Rebecca Cooper, our state's greatest artist. Many critics call "The Spirit of Table Rock" trash, likely not a genuine Cooper at all, despite the handwritten letter from the painter describing it, because the spirit is depicted as Joan of Arc, red-haired and blue-eyed with chain mail and sword, rather than as a dark-haired leather-garbed Indian maid. The likeness is extraordinary, except for the mail."



"It's hanging upstairs. But Becky Cooper had read too many Scottish ghost stories. She knew I was a spirit, even though that's a poor translation of the Indian Nissen'et'ponpwah. 'Peri' is better -- and Victoria thought of that answer in a few seconds. Give me a moment while I decide where to begin."

Adara sipped at her tea. The worst of the cold was out of her system. She willed her muscles to relax, throttling back from the absolute peak metabolic effort which had kept her alive these past few hours. She had cut her margin very close. Of course, she considered, she might have been able to gate to someplace warm, sneaking along a small path the hrordrin did not watch, but the wake in the Void would have set the Imperial Guard on her trail again. That she didn't want. Not now. Not when she had spent so much time evading them to sneak back here to recover her gatestone.

She was sure she could escape the Guard again. They were even slacker than they had been last time, twenty millenia ago. Did she want to escape and run? Running meant running away from Pickering. With the Guards on Earth dead, she had a safe moment to reach him and find a Gatestone fragment. If she could scan the fragments, see them from a distance along the least paths, they'd have been easy to recover. If they could be scanned, though, they wouldn't be Gatestones, only useless gravel. One good piece, she thought, enough to weight the palm of her hand. That was all she wanted. Enough for a seed, so she could grow another Gatestone in a few centuries rather than slow millenia. The Imperial Guard had searched Table Mountain thoroughly, misunderstanding what they saw, but the stone had passed beyond their ken.

Her shoulder ached. The bullet last Summer had torn through muscle. Victoria's field-expedient surgery had actually been about as careful as Adara could have asked, given the circumstances. Self-healing would eventually cure any injury, but the process was agonizingly slow. Despite her wounds of last Summer, she had the use of her arm. At least her dominant arm for fencing was all right; she'd come close enough to dying even without that disadvantage. It would be another

ten-year before the pain faded completely. Pickering, she realized, would find the timing surprising. For all that they scarcely outlived mayflies, his humans healed very quickly. Timeless Ones paid a price for eternal life.

Pickering shambled back into the room and settled into a well-padded winged armchair. "Chainmail", he remarked matter-of-factly, "Seriously used, to judge from the gouges. Though the circular markings are a bit odd, as though they'd been melted."

"The hrordrin," she answered delicately, "is somewhat insistent about ingesting its prey whole. Including the shell." She shivered and tugged the quilt more tightly around her shoulders. The creature's other traits terrified her. "It's a latecomer to my tale. Assuming you want to hear it."

"Can there be any question?"

"From what Victoria said of you, none at all. But I came to trade. You have something of mine, something I want back. I'll give the tale in exchange."

"I'm not a thief. Ask for yours -- I'll return it. Though it does not occur to me that anything of yours is in my possession."

"The Gatestone," answered Adara, "The Gatestone. What you call Table Rock. When I shattered it last Fall, most was rendered useless, and every bit was taken by your government. The Nuclear Emergency whatever-they-were Team was excruciatingly thorough. It took me months to find who might have it. However, the fragments must be someplace. I just need one, if of fair size; you can keep the rest."

"How can I argue? The stone was dispersed for further study. There are pieces here and there. Since the stone was found in a state park, I suppose that I could claim it be property of the sovereign state of Oregon, except that the Governor -- after he helicoptered in and saw what was there -- said 'Take it away! Take it all away! Isn't the Federal Nuclear Repository bad enough?'"

"That stone was mine, carefully tended, well before there was an Oregon. Indeed, well before Indians came to Oregon."

"I shan't argue. Most of the stone is under lock and key, but I have several pieces on my desk up-

stairs. They make fine paperweights, if nought else. From all physical and chemical analyses, it's ordinary rock, albeit once overheated."

"You can't tell what's so extraordinary about it? Just as well. If your people began using those rocks, the Kreesha would seek you out and enslave you -- yes, you've seen a Kreesha -- a grasshopper, hypertrophied and parbroiled. I take it we're trading?"

Adara reached out, ever so carefully, avoiding the great paths on which the hrordrin stood its thoughtless guard. Gatestone fragments were, strictly speaking, invisible, but if one knew exactly where to scan they appeared as dark bubbles surrounded by the pellucid glow of clean air. A moment later, she held a fragment in her palm. The stone drew gently on her aura, soaking up power as was its purpose.

"I suppose the story begins a very long time ago, rather far away, when I was a student. My people -- the People, the Timeless Ones -- live almost forever. As we are not numerous, the number of children alive at any time is small. We don't think about things systematically, so our sciences are weak. School gives a liberal -- in our sense -- education, the purpose being to ensure that anyone can recreate everything of importance in our culture, should it be necessary. We learned how to learn, and have a simpler society, so that objective is more-or-less feasible.

"We say we're as human as you. Gating -- passing from world to world -- and my other tricks are learned arts. Actually, saying you could learn to gate got me and my schoolmates into trouble.

"You see the world as a flat map. We think the universe is like a book, with worlds -- planes -- lying parallel, close together. Besides walking from place to place on a single map -- moving around on a page -- we can move directly from one page to another. Moving page to page is 'gating' -- the pattern of cross-links is 'The Net'. It's slow to walk far, so our single pages are really pretty small. Actually it's more complicated than that. Places that are close here may connect to places that are farther away on another plane, and vice versa. I can gate from here to the Purple Sea -- that's where I took Victoria -- take a few dozen

steps, gate back, and be someplace in Montana. From each place here, I can easily gate to a lot of other planes. I can gate sideways a distance, too, so if I gate to the Purple Sea from where I sit, I can set myself anywhere in a small area of the Sea.

"Gating is an ability you get as you grow up. After all, if babies could gate, they'd disappear and we'd be extinct. I can take things along as I gate -- if they're not too big. There are ways to keep people from gating into small spaces; several people can pin a single person in place. Political effects? How could a dictator last if his subjects fled? If your folk gated, your country might have 5 billion unwelcome visitors, all wanting to enjoy American wealth. Attila the Hun could appear anywhere, as could the armies fighting him. Our history was overrun with barbarians for a very long time. Order was created once, all at once for everyone, so we have no history of cultural diversity, only 'civilized folk' and 'barbarian-animals-who-were-justly-extermiated'. We can't build prisons, so our criminal justice system is Old Tory style -- hangings and floggings and such-not.

"With gating, you don't worry about longitude or latitude or seasons. In fact, our Magellan discovered that the world exists -- that you can patch local maps into big maps. Patching maps where the moons are different doesn't work. My people think this is a minor technical obstacle, that there are gaps in the oceans, extra continents being jammed in over the horizon from each other. After all, you can't physically map an ocean by walking across it. From your astronomy, I see we were trying to draw a continuous map of several worlds in different solar systems, perhaps not all in one continuum. I think planets and constellations were different in different places. I never asked the question before I fled. I daren't go back and look.

"The College is based on houses, a house being a group of students who buy a house -- somewhat like yours, though we run to structural stone, since it lasts longer, and is easier to assemble -- and work through studies and theses together. The time frame is relaxed. Did I say 'buy'? That's imprecise. We don't have a manufacturing economy, we take from people who can't gate, and make very sure they don't learn about gating. Being able

to gate lets you make a considerable amount of money -- in terms of 'foreign exchange' -- fairly quickly. The equal in your world, back in the Middle Ages, would be being able to haul a hundred pounds of pepper to Europe, once a day. There are few enough of us that we don't haul enough to depress any one market.

"That's where the hrordrin comes in. Our people are craftsmen, artisans, artists, scholars, soldiers, priests, merchants, gentlemen of independent means, or perhaps bureaucrats. We've many merchants and few bureaucrats. An economy based on discrete plundering doesn't need much government, just enough to keep others from learning to gate. Actually, 'plundering's a cruel word. We run the triangular and silk trades between worlds, with huge profits. There are few species with real science or star travel -- we stay away from them."

"No navigation or calendars means little math or science. We learned them from trading partners. We also took some of them home. You'd say they were slaves. Before me and my classmates, people who couldn't gate weren't human, they were thinking animals: el'hronnissatripatnitha -- unmen. Non-gating unmen thought we were Gods who came and went at will, knew their every thought, and could kill or heal by magic. A sword, thrust through a gate from another plane, the blade appearing inside the heart, looks like magic even to the sophisticated."

"We also have magic -- well, it'd look like magic to you with dancing and chanting and wands and ingredients. I think an extra natural force is involved, one you don't see because it's interplanar, and you're on one plane. It lets us heal -- what I did to Victoria -- meaning we have little medicine and no biology. From your people I learned that it's unreasonable for all worlds to hold edible plants, or for people -- my People, the Timeless Ones -- to be able to interbreed with unmen on almost every world. Evolution shouldn't have converged like that. I don't understand. Perhaps unmen are our kind, who jumped too far and forgot how to gate. My people don't even know there's a question involved."

"Magic is how I entered the story. We had lots

of types of magic -- like one of Jennifer's D&D games gone wild -- but some were more important. The two most important used gestures or dances. When I arrived at school, Ettoro's Paradox had almost been studied to death. The paradox was that dance and gesture magic appear equally powerful. But all dances are counts of steps, alternating left and right, so the number of different dances is the number of integers -- how many different integers there are." Adara paused for Pickering's nod. Victoria hadn't understood the idea of how many different integers there were, until it was said a bit more slowly. "But in a series of gestures, what matters is a ratio of moves between each part and the next, so the number of possible gesture spells is the number of integer fractions. There're lots more fractions than integers, so 'obviously'" (she winked) "gesture magic must be more powerful than dance magic."

"When I arrived, gesturing was the rage, though dancing masters continued to take students, as did flower arrangers and alchemists. By the time my dissertation approached, it was a scandal that Ettoro's paradox had no constructive proof. All known gesture spells could be danced. Meanwhile, people had found more proofs relating the powers of other types of magic. I mentioned magic wands -- there are as many uses for them as there are positive and negative integers, so the sword-lords claimed the sword was mightier than the dance.

"I was somehow dragged into the problem. My housemates mostly did simple projects and left. In the end, three of us were in the house: Estelle, who caused all the trouble, Dairen, who tried to prove that the Purple Sea was on a round world, and me."

"I finally blundered onto the answer. I saw the gleam in your eyes -- you'd have known in a moment. It never occurred to anyone to check if there are more fractions than integers. Of course, there aren't. Nor are there fewer positive integers than positive and negative integers put together. Once I knew that, it was easy to find rules to turn gesture spells into dances and vice versa -- it's a matter of prime factors. People would've found the rules long before me, except that they knew for a fact

that such rules couldn't possibly exist."

Pickering shook his head. "My own academic experience is that radical new ideas, especially when exploited systematically by the discoverer before the world hears about them, are oft ill-received. Preliminary softening-up exercises sometimes help."

Adara giggled. Her cheeks were rosy again. The light caught the waves in her hair, accenting the copper-red with hints of yellow. "I learned. I learned. But thesis students never flunk out, they're only sent back for more. After a while, my proof was a bigger scandal than Ettoro's work; people were afraid I might be right."

"I finally realized I should find new results, not answer every little criticism someone made of me. The prime factor idea let me systematize dance and gesture magic, so I wrote -- what you'd call review articles, only bigger -- books showing how all known spells fit my patterns. I didn't quite do every single spell, but I came close. Enough so I probably knew, or had cast, more spells than anyone else. In any event, I did so many that people could use my rules to fill in the rest. Then I went after other types of magic. The custom was that you couldn't quit a thesis if you were still cranking out new ideas, so I couldn't leave. I'd just cracked flower arranging, which most people thought was something old men did to pass the time, when the trouble began."

"I'd been informally offered a, a 'faculty position'. That was really rare, and came not from my discovery of what you'd call Cantor's countability, which was very controversial, but from the review articles, which were the largest collation of spells in existence. However, the tradition was you couldn't take a position while your housemates were still in the house. The rule was from a time when faculty hires were common, back before your ancestors were up to fire or tools. (Like I said, we live a very long time, so in 'Noreg the same word is used for 'winter' and 'ice age' as in 'the ice age is a little milder this time around'. We're very conservative, not usually real systematic about doing things. The people we trade with tend to stop growing -- with our help, I learned -- though none of our trading partners discovered the

math and science your people know."

"So, I had to help Dairen and Estelle finish. Dairen turned out to be easy. He was waiting for mirrors to be ground. He was really unworldly -- the absent-minded professor sort -- so he was short on money, and cheated by unmen craftsmen. I put his affairs in order, and the mirrors appeared."

"Estelle was the problem. She set out to find differences between people and unmen, to prove how better we are, and failed. By choosing the right pattern of gates, you can get as good images as any electron microscope or x-ray diffractometer, just by looking with the eye. Finally, she concluded the differences were unreal, and trained an unman -- I suppose 'slave' is the right word -- how to Gate. It's very easy. You just gate them from point often enough and the brain accommodates. You need a lot more repetitions to teach adults than children, but it can be done. With children a few repetitions are enough, so Victoria's at slight risk of learning how to gate in a few years... I decided it was safer not to tell her; knowing there's a possibility makes it a lot easier. Gating slaves, though, is forbidden by ancient custom."

"I was a tiny bit queezy when I learned what Estelle'd done. Teaching slaves to gate is Not Done -- it's one of these things you hear whispered, giggled stories about, when you're a very small kid, even smaller than me -- and here she'd done it. Worse, she'd concluded that unmen are people, not thinking animals. After all, they can gate. We have laws against slavery; the unmen now fell under them."

"Her result didn't go over real well in many places. I didn't really believe it myself, though my experience had left me with a more open mind..."

"What I didn't expect was people threatening her, demanding she change her answers. I knew she'd be unpopular, not she'd be in danger. I spent a little time checking our house wards, waiting for Estelle to write her thesis. I didn't think the threats were more than pranks. We ended our Attilas megayears ago. We have an armed force to maintain the gating secret. We know of inhumans who gate slightly -- the Kreesha for example -- stay well away from them and watch. You have atomic weapons, but we have the hrordrin -- a creature

like one of Lovecraft's cthulhoid terrors, able to eat whole cities if need be, without entering this plane. Finally, we have Correct Manners. A mugger in your world might be watched by innocent bystanders; in our world, he'd be detained or lynched. Assault and Battery are not Correct Manners. We still cultivate interdimensional fencing to deal with those who lack Correct Manners. (We know of gunpowder and firearms. But I can gate out of the path of any beam weapon you use, ven a laser pistol, before the beam gets me. Yes, that does mean I can beat the v/c limit. To hurt me, your weapon must follow me from plane to plane.)

"On her way to her thesis defense, Estelle was assassinated. From witnesses, she didn't believe what was happening. She didn't try to escape, let alone defend herself. Dairen was terrified, afraid that the vendetta was against our whole house. His own thesis was done -- the Purple Sea is flat, radius above a a hundred megamiles. Vendettas were incredibly rare -- there'd been none in my lifetime -- so I laughed the idea off. Still, he said it was our duty as Estelle's housemates to submit her thesis in her name. He must have said that to the wrong party. One afternoon I came home and found our house had been entered. Dairen had been beaten to death. That was far more disturbing than an assassination. Estelle could have been killed by a single lunatic. To beat him to death, several people had to pin him in a single plane, while someone else delivered the beating. The sad thing was that he really believed that Estelle's thesis was wrong, that it should be presented so it could be rejected.

"For a time, I kept very quiet. I brought my house's wards and door locks to combat-level security -- a procedure eons out-of-date. If asked about presenting Estelle's thesis, I always said I was busy with my own work, so I'd let the University deal with hers. I dug up an old, old rule which let me do that; houses reduced by unnatural causes to single members could dump responsibilities on the School. Publicly, I ignored my housemates' deaths, which were a cause celebre in some circles.

"Privately, I wept, and took precautions. University regulations had a fossil rule that students bear arms at all times. Most classmates carried a

pocketknife and cloth cap. I wore a long dress and full cloak to hide sword and armor. There was a nominal rule that every student must be ready to flee into the wilderness, to carry on civilization if we were overrun by barbarians. Some classmates, with effort, could find a state park. I began studying portolans -- long-distance maps -- and packed my bags.

"I wanted to punish Dairen and Estelle's killers. But I didn't know where to find them. Besides, I'd found a magic I couldn't fit into my schema -- rune magic really was different. It was also rarely-used, buried in obscure megallenia-old texts on necromancy and other superstitious nonsense. Is 'megallenia' the right word? You don't have millions of years of history. Though in a sense you've more history than we: 4000 years is 200 generations to you; ten million years is fewer than 100 generations to us. The University's founder, twelve megayears old, is still alive. Also, you outnumber us.

"In any event, I eventually worked through 'the entirety of the published literature' -- that's your phrase from your papers -- though most of it was copies from other books, or useless. I found a bunch of spells, not a system. If you didn't know what you were looking for, you'd never notice the spells had something in common. Fortunately we don't have a lot of scholars, or I'd have been at it forever, trying to read the miscellaneous parts of old literature. Even with tricks in time, you can only do so much. I can take a book to a plane where time runs fast, read it, and be back here in a few moments. Not a good idea if you die of old age, but we don't.

"The University kept fudging on Estelle's thesis. Rejecting it meant proving it was wrong -- kind of hard after she'd taught an unman to teleport. Accepting it meant freeing the unmen. We're as good at burying things in committee as you, except we have rules which force them back out again. Then someone dug up a rule allowing the surviving members of a house to get thesis credit for the dead, based on their own work. Dairen had finished. I had done enough -- I could use my books to get Estelle and me through the system. I refused to do that -- she'd done her own

work. What happened next... I don't like to talk about it. Easier to show." Adara tugged at her sword, pulling the first inch from the scabbard. The steel was inlaid with opaline curlicues. "I said a gnothdiar had uses beyond being sharp. I'll show you a teaching -- story-telling trick."

Pickering knew he was awake; his breakfast den remained sharp around him. He had no trouble reaching for a tea cup, nor in unwrapping the food he'd heated for Adara. At the same time, he was someplace else, seeing Adara's University Campus through her own eyes...

She was returning from the Campus Martius to the library. The symphony hall to her right was an unroofed semicircle of seats, like an ancient Greek theater; huge trees like elms but far taller soared around it. Her blood still raced from an argument - not just a polite discussion -- she'd had with the First Dancing Master. He was her most outspoken proponent, probably responsible for her offer of a faculty position. Now he urged her to use her thesis to pass Estelle. There were other things happening, he said; her work was too important to be delayed for Estelle's posthumous thesis. Besides, sales of her review articles were enormous. She was becoming well-to-do, not just well-known. She could even take off a few decades now to grow up -- Pickering started at the thought of being able to choose one's physical age.

She had been staring up, admiring the sky, which was as deep a blue as one ever saw, even on the clearest of spring days. Suddenly she stumbled. Someone had gated directly in front of her, blocking her path. That was intolerably rude, a mistake only excusable in the very young, those barely able to gate at all.

She stepped back, looked up, finding a figure dressed in dark clothes and dark veil, realizing in the same instant that she had backed into several others, who had gated behind her. "You ought..." she began.

Her next memory was of finding herself in an ill-lit room. She was draped over a rough-cut wooden beam, its splinters cutting into her arms. Her bonds held her outstretched, unable to move; her skull ached. Someone had waited until the day she omitted proper body armour, or even simple

caution -- she should have seen them coming, gated to one side -- and jumped her.

She waited, not moving, not opening her eyes, while she recovered. She could lie awake in bed, her housemates taking her to be completely asleep; now she fooled her captors. Second sight -- the gating of light from one place to another -- recovered far more slowly than the other senses. Finally she was aware of a half-dozen men in different parts of the room, all masked, all armed, several with thaumaturgic implements, one with a heavy whip. The room was a bubble cut into a solid granite cliff. A gusty wind, carrying the hot tang of desert sand, souged through ventilation slits. Her rapier lay unsheathed on a bench, almost in reach.

She steeled herself for action. Six-on-one were terrible odds. She chose a target, gated towards it, readying herself to dodge from plane to plane until they lost her trail. Not yet there, she was gate-tackled by one, then another and another of her captors. The first she evaded; the others draped themselves over her. Whoever they were, they were out of condition; she was stronger than any two of them. Still the mob pinned her, forcing her to her knees. One put a strangle hold on her throat. As her vision reddened from lack of air, she quit her resistance.

They were back in the room. "Very good," announced the man with the whip. "We're ready to begin." He glared at her. "We have here, awaiting your voluntary signature, a confession that you and Estelle terHault falsified her results. You will admit that unmen cannot actually be taught gating. As you value a lack of pain, you will doubtless prefer to sign."

"Go to the devil!" Pickering found he understood the idiom, vastly harsher in Adara's over-refined, genteel native tongue than in English translation. "Who do you think you are? I am a Scholar, under University protection!"

"Little good that does you! We, as you'd have known if you had the least sense, are the Brotherhood of Man, protecting humanity from its enemies. Even those as exquisite as you." His finger caressed Adara's chin. She suppressed the impulse to bite him.



Pickering knew the train of Adara's thoughts. The Brotherhood was supposed to be an extinct secret society, whose dark objectives had emphasized maintaining social order, whether society liked it or not. A string of clues flashed together. Details she had ignored now came into a single whole. Estelle's and Dairen's killers had identified themselves, at least to the wary, leaving warnings she had ignored. Now they were in the room around her. No wonder the University had been so slow to act. If the Brotherhood was still active, instead of having dissolved itself nine megallenia ago, it likely had as much power now as then. Enough to gum up untold faculty committees. Nine megallenia ago they had been secret masters of the world.

"Don't think, Miss Spell-Mistress, that your knowledge of dance and sword and flower will help. We have bound you again; my assistants bear treldiar." Pickering felt Adara's flesh crawl. Treldiar were arcanelly formed, massively charged instruments of power, amplifying their user's every spell a thousand- fold. Even if she were free, a half-competent man with a treldiar could easily counter the best spells she could set without one.

Her position was clear. The seal on the confession block was enchanted; it would sense when her confession became voluntary. Once she confessed, her life was forfeit, lest she appear again to naysay the confession's words. In historic legend, no enemy of man ever escaped the Brotherhood's clutches.

She skipped the next half-hour's memories. The best she could say of them was that she had not lost consciousness. Her torturer paused, panting for breath, assuming she was too groggy to recognize the brilliant refinements in his technique. She had tried to gate, once and again, to no avail. The spells she set -- no easy thing to do while being beaten -- were flicked away to nothingness by the treldiar. At least she had blocked the spells the treldiar's users sent against her. The treldiar made a magician appallingly powerful, enough to overwhelm anyone without her magisterial knowledge of spellcraft. So far she had always found subtle counters to their brutally direct attacks. Now, as she tired, Adara began to lose

hope. She ran the gamut of paths of resistance, without success. She might repeat them in the next hour, but she was tiring far more rapidly than were her tormentors.

The obvious finally came to her. Runespells were magic of a very different order than other methods. If all else failed, she could turn a runespell back against herself, so that they would lack their confession because they lacked a confessee. The black finality of that step made her shiver. She slumped, feigning unconsciousness, trying to remember a rune, any rune.

Fire! The fire rune was a swirl of red and orange, flame bursting from a drying log, metal flowing like water. The fire rune came to her as a burst of heat, a roar of thunder, a gale of air. "Fire, I name thee!" Her throat was hoarse.

Her bonds exploded. The beam beneath her





shrieked with escaping steam. Her hands were free. She spun, clipped the man behind her in the jaw. Her wrist went numb at the impact; he was out of the fight. For an instant her foes were too surprised to react. She gated a yard and seized her rapier. Momentarily, the blade's steel glowed blue-white -- then she forced the flame beyond the steel.

The next few moments left her too busy to remember what she did, save for the satisfaction of cutting down the whip-bearer. At the end, she leaned on a distant wall, gasping for breath; her foes lay dead or dying on the stone flagstones. Either she had been right about rune magic, or the users of the trelldiar were truly inept. When they had fought, runespell against artifact, they could not stand against her.

She stepped to one of the mages, kicked the trelldiar from his grip, and crushed it beneath her boot-heel. His still-living body twitched in sympathetic agony. Now his thaumaturgic defenses had been stripped from him. She gestured with her sword, making pass after pass to set another spell. Memories that had been his, memories from which he would never willingly have parted, now became hers.

He was not their Capitano -- that honorific was reserved for the whip-bearer, now deceased -- but the Brethren did not keep secrets from underlings. They had grown too proud, too certain in their power, for that. She peered into his mind, seeing the extent of the Brethren's power: names, members, cabals, and plots. The range of their misdeeds was sickening. Murders, conspiracies, alien races whose cultures were deliberately shrivelled. Her revulsion set aside her other pain. The Brotherhood had its weaknesses. No large group could long have remained secret. They feared even the most timorous voice raised against them, for only the absence of resistance permitted their malign influence to be exerted. Now they would be revealed, for the record of his thoughts was pressed into the confession block.

She could leave no clues behind. Her escape could not be disguised. The deaths of so many Brethren -- they'd know soon enough. The method of her escape -- the use of rune-wizardry -- had to

remain secret. It was her only advantage. Runes were forgotten, buried in obscure texts on other problems. None knew she had studied them, for she never spoke of her work before it was ready. This room, however, might harbor clues. She called on the rune again, driving it with the full force of her will, then gated to safety while stone walls flowed like oil with the heat.

Adara took her rest far, far away, finding a tropical brook where few ever came. She spent a time soaking in its tepid current, then lay by the bank, letting the Sun -- a sun, though Pickering, not the same one that shone over her University -- warm her. Itren -- the self-healing art -- removed the lacerations of her skin, and brought her hunger to an aching awareness. Her skin was whole again, even if bruises would linger for months. She reached out along a small path, picking fruit from a grove barely in her line of sight.

Her sloppiness, she considered, had almost killed her. Not that another pattern of life would obviously have been better. They knew who she was; until now she had had no hint of their identity. Now she knew. Estelle's thesis was -- reading University rules strictly -- a failure. The possibility of teaching unmen to gate had been discovered more than once. Each time the discoverer had been co-opted or eliminated by the Brotherhood.

Until now, her enemy had had every advantage. Now they'd revealed themselves. Battle was evenly matched. They had overwhelming power, and no target. She had targets a-plenty, if little power to harm. She had a list of names. Assassination? She was a skilled swordsman. Focussing techniques and a vigorous physical lifestyle made her strong, but any opponent would outweigh her by fifty or a hundred pounds. She might get a few, but eventually she'd face someone she couldn't beat -- or walk into an ambush. Killing someone with magic was hard -- they'd gate away before you could set a regular spell. Rune-magic was more lethal, but setting the rune-spell had left her drained, likely for a nine-day. Besides, if she used runes freely, there'd be a swarm of scholars looking for how she'd learned the trick, or how to counter it.

A long day of basking in the sun let her plan

form. The Brethren rightly feared denunciation; she'd make them. She'd have to be thoroughly prepared to defend herself. If they attacked her while she was talking, they'd confirm the truth of her words. But if they killed her early on, memories of her warnings would fade. The Timeless Ones, Adara reminded Pickering, lacked large-scale television, radio, and tape recorders. Methods of recording thoughts or speeches existed, but they were clumsy and ill-used. There were newspapers, well-manned by Brethren, but no tradition of an underground, opposition press.

She'd also be ready to run. She could start a reaction against the Brethren, but the People were slow to rouse. Even if they were of one mind on a topic, they might take decades to act. During that decade, the vengeful Brethren would want her hide. They'd shown their hatred; a careful trip back to her house showed it had been looted, gutted, reduced to a smoking shell.

Some months prepared her for fleeing, as much as you can be prepared to abandon your country and everyone you know and love. Then she began to speak.

The People's custom, at University and elsewhere, was to rule themselves on a style like that of the ancient Greek republics: an assembly of the local populace made local decisions. Demagogues encountered the difficulty that -- over the millenia -- people became bored with them. Only people who made succinct, generally correct, arguments kept an audience. Only people who avoided making enemies had great influence. Once formed, a political grudge might last until eternity.

At University she rose to denounce Estelle's and Dairen's murderers. There was significant surprise when she walked to the podium. She'd been missing for months. Rumors circulated that she, too, had been murdered; other rumors said that she -- her housemates' killer -- had committed suicide out of shame. She watched the audience closely as she rose. The Brethren plausibly believed that she had died when her prison cell was destroyed, though they ought to have wondered precisely how her cell had been reduced to a pool of boiling rock.

Her tale of being kidnapped and tortured brought gasps from the audience. The Truthstone

before her held its constant lambent glow, bearing witness to the honesty of her words. Then she named the villains, and explained how she had learned the truth. She left out certain details. She moved from being bound, a prisoner under the lash, to being an escapee, her foes dead or dying, the last yielding his secrets to her spellcraft. She did not say what had passed in between. The audience was sufficiently taken by her story not to question the omission.

At University, the first time she told the tale in public, she brought it nearly to a close before anything happened. She sensed a motion in the Void -- the continuum within which gates hover -- and managed to draw steel before an assailant gated almost into her face. The attack was a spur-of-the-moment improvisation. The closest member of the Brethren had acted as Duty commanded. Adara's foe was an adult woman, half-a-foot taller and fifty pounds heavier. Adara wore full armor and wielded a hand-and-a-half sword; her foe's weapon was more for show than actual use.

Still, she was a child, not expected to fight an adult -- even if she was clearly winning. Nor were speakers expected to be assaulted. It was not Correct Manners. Several members of the audience gated to her aid. Just as well, noted Adara; they met a group of Brethren coming the other way. The Brethren had guessed that Adara -- if she lived -- would eventually show herself in an assembly. They had shuttled a combat team from one Assembly Hall to the next, waiting for Adara to reveal herself. Briefly she matched blows with one of the Combat Team. Despite armor, despite her skill, she risked being outmatched. Her parries, two-handed, barely held off his attacks.

The scuffle turned into a riot and panic, more graceful than one on earth only because the fleeing need not crowd doorways to escape. Moments later, Adara found herself facing first two and then three members of the Combat Team. Even fighting strictly defensively, only her better speed let her evade them.

The riot was a three-day-wonder. The Brethren's control of the press, while unpracticed, kept details from the public. The University community was not confused. Adara practiced her swords-

manship, polished her speech, and moved from one assembly to the next. Rumors of her coming preceded her. The Brethren kept sending larger and larger groups of thugs to kill her. She escaped, once and again, usually without injury. A few overzealous pursuers outran their friends, to face her alone. When she turned on them, they discovered that her rage was coldly murderous.

During an Assembly, the audience would often protect her. While a disorganized party of irate citizens might be outfought by Brethren Commandos, there were many citizens, but few Brethren. The Brethren couldn't absorb casualties.

Luck was not always with her. One Hall left its Moderator a few yards to her side. Moderators were traditionally beyond politics. He took Adara entirely by surprise. The Timeless One's fighting styles, and hence their armour, were dominated by slash and parry tactics. A point was too easy to evade or regate elsewhere. His stilleto thrust passed the rings in her mail, punctured one lung, and sliced through sets of muscles. In agonizing pain, Adara managed to gate away. Then the Moderator's friends were on her.

She darted from plane to plane, not even trying to fight, first jumping as far as possible, then backtracking. She had been hurt too badly to keep ahead of them. Her every step was dogged by their spells and gate-tackles. Finally she turned to fight, leaping into their midst. "Fools!" she choked. She could barely draw enough breath to speak. Her skin was chalky white. "Know you not you face a Mistress of Sword and Dance?" The First Dancing Master was one of Adara's strongest partisans. She pretended to threaten them with sword magic, or ballet. In truth, she was driven to Rune Magic, and bluffed to mask its uniqueness.

She called the ice rune. Six-sided, sixfold symmetric, trapping and scattering every particle of light that fell upon it, the rune came as a tracery of frost on a cold window pane, the majestic all-encompassing blue of a glacier's heart, the burning cold before which tree-trunks shatter and birds fall dead from the air. The rune was a swirling gale, sending rivulets of stinging condensate---liquid air, recognized Pickering---skittering along the ground. Adara fled, leaving frozen corpses, smoking with

cold, behind her.

For a five-day she lay in a grassy field, shaded by an overarching apple tree, barely able to summon water or food. The border twixt being and not being was a bitter-sharp line stretched from back to breast. Even with itren, whose use she had carefully studied, she had touched the limit of her power.

For her next talk she plotted her paths of retreat more carefully. The People knew of Black Ways, paths whose very being was laced with death, so none might endure on them, even the briefest of visits being fraught with risk. She would escape there. A precalculated flight left her exposed to their peril only for instants. Her pursuers, who must stop to sense where she gated next, would expose themselves to the full measure of the Way's menace.

Her appearance took her to a Shire Assembly. Enough local meetings had been angered by the attacks on her---not to mention the deaths of their members while guaranteeing Correct Manners---that her request to address a regional meeting was granted.

She waited a distance away and watched the opening. Megallenia of reality had eroded the People's belief in religion. The Illuminants of the Mammoth's Hoof still carried great moral weight when they spoke, a weight they conserved by speaking seldom. For one to sermonize on the virtue of free speech and on the right of supported representatives to address the Assembly, at least within their due measure of time, was to endorse her cause, or at least to endorse her right to present her case.

The first half of her presentation passed without interruption. A familiar rush through the Void warned her when she was about to be assaulted. Adara gated away from the lectern, bastard sword automatically to hand.

She stopped with fright, her moment's warning wasted while she stared at her foes. No longer did she face the Brethren Commandos---a band of thugs largely prepared to fight unmen and disorganized street mobs. The men in front of her wore brilliant scarlet and gold lace, the tunics and capes of the Imperial Guard---the Timeless Ones's highly

professional military force.

Adara would afterwards be convinced that her life was saved by the Illuminant who opened the Assembly, who now gated into the space between her and the Guard. "Clear the podium!" he demanded haughtily, not concerned with the identity of those he faced. "An Assembly meets."

Two Guards cut him down. He made no resistance. Adara, seeing she was hopelessly outnumbered, ran for freedom. She missed the Patriarch of the East rising from his bronze-panelled throne to shout calumnies at the Guards "Heresy! Heresy!" One of his neighbors struck him unconscious.

All of Adara's careful plans were scarcely enough to let her win free. The Guards were well trained, and planned to exhaustion each operation. Their physical conditioning had perhaps slackened over past eons. She led them on a merry chase, their numbers gradually dwindling behind her, then took the Black Ways.

Adara remembered thinking of the Black Ways as places on incomprehensible mystery, whose properties defied all reason. Pickering recognized the nature of Adara's path. The sky was black. Ears and sinuses stabbed with pain. Light was brilliantly bright or blindingly dark, with shadows sharp as fractured glass. The ground, dimpled and cratered, was a course sand, burning hot or cold through Adara's boots. It was the Moon, or a similar heavenly body, devoid of air and water, tolerable to an unprotected human only for the briefest of instants. Adara took three loping steps, clumsy in what Pickering---but not she---identified as reduced gravity, then gated away. Her opponents scattered to the wind's twelve quarters, few finding the route she'd taken.

Gating drained endurance. Finally she could run no more. She must turn and fight, though the odds be one on two. Her foes avoided her plane; the easy rune-magics did not avail her. Surprise gave her a chance. She could choose the moment to launch her assault. Her memories of the combat were hazy. All three of them were gate-drained, too tired for subtle interplanar fencing. They had at, toe to toe. More than once, Adara's heavier armor saved her. Strikes which would have cleft

through unprotected flesh tore her clothing and grated across her mail, leaving only bruises behind. Her hand-and-a-half sword gave her an advantage in reach over the rapiers favored by the Guard, an advantage balanced by her need to wield it two-handed against her adult opponents. Once she was thrown off balance, driven into a one-handed parry. Her opponent was surprised that it worked at all, too surprised to consider how much she must have strained to hold off his greater weight.

Somehow she won. Her blows at brain and heart killed, though she was terribly hurt. Desperately, she managed a long-distance gate, enough to reach a haven of sorts, then fell unconscious. Her skin was a scarlet rash from ruptured capillaries---the Black Way's toll. Petechia, thought Pickering, vacuum induced ruptures of skin capillaries. Ugly, not seriously hurtful. Itrensaved her, though saber-scars on her arms and legs would last a human lifetime.

The brawl was notorious. The Patriarch of the East sermonized against the Guard for attacking an Assembly. He was later found in the nave of his own cathedral, murdered, hanged by the neck from a chandelier. His partisans, of whom there were many, variously resorted to assassinations of the Guard's friends, and to public attacks on Guardsmen in uniform. The Brethren, the Guard, and their supporters retaliated in kind.

Adara had an invitation to make another presentation, this at a formal meeting of the Provincial Estates-General, the rarely-convened Assembly of Regional Assemblies. She rested, recovered her wounds, repaired arms and armor, and calculated her escape. She would carry her drive for revenge as far as she dared, even unto great risk of death, but she was not yet ready for suicide. Her address to the Estates-General would in time be heard throughout the Net. Wherever the Timeless Ones met, her ideas would become known. Then time would be needed, time for her claims to be considered and digested. Through that time, the Brethren and the Guard---infiltrated by the Brethren? how had they been dragged into the affair?---would be searching for her. She had, however, found a place to hide, a remote section of known

space, related to the Net as the Siberian Aleutians are related to the heartland of Europe. Her choice of analogy, Adara promised Pickering, would momentarily become clear.

For once, she was able to finish her words, shed a tear for Dairen and Estelle, and thank her hosts without needing to go into battle. The Brethren's response was more subtle. Adara had presented her story; now there was opportunity for discussion and debate. The Brethren had summoned its most clever orators, its best thinkers, and prepared careful rejoinders.

Pickering found the arguments all too familiar, they being the rationales of every slave-holder and helot-suppressor of human history. 'If she be correct, we lose our servants.' 'The unmen will overwhelm us.' 'Keep what is ours.' 'Why rock the boat?' and on and on. The debate passed from Estates-General to the individual Assemblies. Adara, not yet an adult, certainly not a senior member of any Assembly, found she had been outmaneuvered. Her original story she was entitled to tell, because it involved criminal attacks on Timeless Ones. But in a general debate she had no significant role, no right to participate.

An increasing undercurrent of violence swept through the Net. The pattern of revenge and counter-revenge wove wider and deeper. When she found an invitation, Adara did manage to tell of Dairen and Estelle's fates. Sometimes her story was met with horror. More and more frequently she met the pragmatic counter-attack that she should hush, before she joined her housemates. The Brethren attacked her scientific work. They could not deny its value, but a combination of good writing and clever endorsements would gradually move the credit for her ideas from her original work to the Brethren's publicists. As Pickering had seen all too often in the sciences, Adara's first account of new results lost credit in favor of later, more-cited presentations by others.

Physical attacks by members of the Brethren, and by professional warriors she suspected of being Guards out-of-uniform, became less conspicuous. Instead of outraging an Assembly by assaulting her while she spoke, they tried ambushing her before or afterwards. Only her grasp of spellcraft,

her command of the tunes of the Void, and her willingness to use the Black Ways kept her alive. Between speeches, she hid in her distant refuge, seeing no one, speaking to no one, living alone as best she might.

The Illuminants of the East were preoccupied electing a new Patriarch, which might take them a century or three. Meanwhile the Brethren and their friends in high placed organized a serious counterattack, a trap into which Adara boldly marched.

She was summoned, not merely invited, to a Collegial Assembly, a meeting of one of the groups governing the Timeless Ones. She learned to her surprise that she would not be allowed to speak. Instead, the Assembly, citing its megallenia-old powers against barbarians, demanded that she cease forthwith to repeat her description of Estelle's fate. The issue was not whether it was true or false, but that it had disrupted social order, leading to assassinations, riots, and other disturbances. A lengthy list of those said to have perished at her hands---always, admittedly, in self-defense---was read. It took little subtlety for her to see that some of those assembled sat on their hands, disapproving of the course being taken, but a majority applauded the Assembly's fiat.

Later, she wished she had had time to think matters through more carefully, to recall precisely this Assembly's lawful powers. Instead, she demurred. She, after all, had not murdered, nor ambushed, nor burned homes, nor tortured. 'Irrelevant', came the Moderator's response, 'For it is you who are the first cause of the disorder.' Again she refused to bind herself to silence.

The answer was not expected. The Brethren had gained a key assent, that of the three surviving Patriarchs. The Moderator turned on her: 'As you deny our word, we have the unanimous assent of the Patriarchs to set you beyond the law. You are *urragh*, undead, to be rendered deceased, to be slain without salt.' With the Moderator's words came a great rush in the Void. Seeing death on every side, Adara gated away.

Her choice almost slew her. To her horror, the Void was disturbed not by battalions of Guards but by a hrordrin, a monster of the Void, flailing its

tentacles as it came into conjunction with the Assembly Hall. The Brethren had noted her unreasonable ability to avoid ambush, and had brought into play a weapon most commonly deployed against enemy worlds. She had stepped into its maw.

A dozen steely tentacles encircled her, their crushing strength pinioning her legs and torso. To gate away from the creature was impossible. Its gating field, far more powerful than her own, pinned her solidly. Even if she broke its grip, it would follow her as quickly as she might run. Her arms were free, but her sword bit only dully into its metallic flesh. As she swung, its tentacles exuded a flambent glow---a Void Force which struck through her own protections to burn rings in her armor.

Beyond its outer physical aspect, the Void Force struck at the mind itself. The hrordrin attacked by inflicting its victims with spells of ecstasy, so powerful that no man or woman would want to avoid their continuance, no matter that the hrordrin was chewing their vitals while they still lived. Adara recalled waves of warmth, of foggy disorientation, which slowed but did not incapacitate. She later concluded that the beast had been bred to attack adults. She was not yet grown up; in her the nerve centers which the beast attacked were incomplete. Perhaps, she consoled herself, perhaps also her years of study had immured her thoughts to merely secular temptations.

She knew full well that normal spells would not save her. Binding the hrordrin had been a task for teams of mages, carefully choreographed. Many such attempts failed, oft bringing ruin to those who attempted it. Hrordrin of the Guard were largely bred in captivity.

Seeing doom close upon her, she drew once again upon runecraft. Her choice was the Rune of the Unmaking, a thing of darkened circles, ever-turning, bending through angles whose existence confounded the normal senses. Her source asserted that the rune acted against the Void itself, so a necromancer wielding it might cause destruction across distance and metadistance. Her source also warned that the rune was all-consuming, so its wielder risked finding himself drawn pell-mell into

its zone of destruction.

The rune came as an unseen tornado roaring through the midnight sky, the silent rot which turns noble oak into gold-brown humus, a black-flaming spiral into which all matter fell in an ascending scream of violet light. She threw the rune over one shoulder, afraid to look too closely into its violet iridescence, unwilling to see more sharply than need be what lurked between the hrordrin's tentacles. The hrordrin screeched in agony. For an instant its tentacles spasmed, crushing her stomach and chest. Her sword arm was free; her left hand locked in a mantric pose, binding the Rune against the hrordrin.

The tentacles fell away. She set her will behind the Rune, thrust it into the beast's gut, and fled. The Guard behind her hesitated. Guards who stayed on one plane were safe, but he who set foot across the Void risked being heard and eaten by an enraged hrordrin.

The beast's tamers needed time to restore the creature to their control. They sent it shambling away, down a dark path in which it might hide until it was recovered of its hurts. Only then was the signal passed that the Guard might safely pursue the *urragh*---the undead.

Adara used every trick she had imagined, every scheme she had found in her reading. Against the masses of Guards chasing her, no maneuver was enough to win her to safety. Once and again, she lost her close pursuers by skipping along a Black Way, touching a land where the stars shone in daylight. Each time flankers and point men found her again. The rune and the hrordrin's assaults had left her giddy, wishing she could stop and hold her head between her legs until the feeling dissipated.

She gained a few minutes lead. She squandered them appearing in a town where she'd twice spoken, a town some of whose people had died in her defense, to announce her sentence and her rejection of it. She might die; her vengeance would outlive her. She changed tactics by fleeing---so-to-speak---Northeast, into the remote Siberian peninsula which had been her sanctuary. Her travelling gear and pack were hidden there. She needed but a few moments to escape.

One last time, she led her pursuers along a Black Way. Instead of leaping back at once, she skipped from one to the next, using gatepaths whose connections multiplied her every step. Her vision reddened. Finally, she had to dodge to a place with air, leaving the Guard stages behind her. A few tried to follow. They had needed a little longer on the way than she had; enough longer that they expired in the vacuum.

Adara reached the end of the Net, a place both figuratively and literally a seacoast. Dark cliffs fell to a beach strewn with bone-white gravel. Shroud-gray waves marched in funeral step from a fog-locked horizon, the boom and hiss as they broke across the strand tolling a dismal, mournful cadence. Ahead lay emptiness. Behind her came troop after troop of Guards.

Besides normal gating, she explained to Pickering, there was another form of travel, one which could be used to fling you from section to section of the Net without crossing the intervening space. Deep gating was difficult to direct, save in the most general way; those who tried it to an unknown destination often did not return. It was also not healthy for children, a description that included her in the ways which mattered.

Adara wore her travelling cloak; rucksack and pack were over one shoulder so she might discard them swiftly if need be. She calmed herself, summoned the patterns which opened the deep gates, and reached across the water. Searching out as far as she dared, she at last found a patch of rocks which reached above the waves. A single step took her there.

The air was chill, damp with bitter salt spray. She stood on a pillar of granite perhaps a hundred yards across. Her perception told her that a few more normal worlds lay to each side. There was a Black Way close to hand. She looked upon it, gating light back to her eyes. Here was a place of awesome cold, with neither sun nor stars in the sky above. She drew from it a pebble, which lay at her feet smoking and popping until she returned it to its native clime.

She peered out again, hunting by deep gate for a further destination. There were other islands, out at the extreme limit of her perception. Some were

above another. It wasn't like mountains. Pickering understood the feeling. An inhabitant of the complex plane, looking across a surface littered with branch points and cuts, would see similar infinities.

She took at least a dozen gating steps, each longer than the last, driving herself to complete bone-etched exhaustion. She dared not lie down. The plane on which she stood was not safe. One might stand there for a few hours, but its air and water tainted those who tarried overlong.

She came at last to a farther shore, one unknown to the People's geographers. In every portolan she had ever seen, plots of this ocean showed only lifeless rocks, extending perhaps two or three deep-steps from shore, followed by speculation. In terms of her analogy to Pickering, she had crossed the Bering Straits and worked down the coastal islands.

Adara resheathed her gnothdiar. The illusion which had entranced Pickering faded. "Actually," she said, "by this time I was gate-drunk, having driven myself so hard I'd lost all judgement of where I was or how tired I'd become. I knew I wanted shelter. Someplace shaded. Someplace warm. I ended up in northern California, not five hundred miles from here, totally and completely drained. I could gate no farther. I awoke to find myself face down in a pile of pine needles, my belongings a few steps behind me.

"That was as close as I came to dying. As you may know, northern inland California had areas with no Indian population, because of the arctic grizzly, a predator which stone-age savages could not fight. To this creature one man was a snack---a group of men was a food rally. The Spaniards noted that local Indians were terrified of the creature, with good reason. Facing a beast like this with non-repeating firearms was not a task for the faint-hearted. With stone age equipment, fighting the bear was suicidal.

"I awoke, physically sound but temporarily gate-blind. It's one of the minor side-effects of excessive deep gating. You lose gating talents for a time. Alas, a grizzly was sniffing at my pack, apparently having decided that I could wait.

"We are not describing a tiny brown bear.



The arctic grizzly is similar in size to a Kodiak, standing perhaps 15 to 20 feet tall. It viewed me as a snack.

“Mercifully, gate-blindness doesn't have other physical effects. I was on my feet in the instant the bear took to peer over my rucksack. My panic was quite real. While I knew formally what gate blindness was, I'd never actually had it happen to me. Think of waking up, and realizing that your eyes are open, the lights are on, and everything is black.

“Sword training goes to a deeper level than rational thought. I had my blade out while my feet were in midair. The higher functions of the gnothdiar---spells and runes---were closed to me, but its cardinal purpose is to be sharp.

“The bear had never seen a human being. It was not so cautious as it might have been. Driven two-handed, a gate-forged sword will cleave a substantial thickness of bone. To make a long tale short, I got bashed around rather badly---it used its claws like razors, not expecting steel armor---but it lost paw, snout, eyes and skull plate, and finally throat arteries. Focussing does make me faster and stronger, enough that it never grabbed me. That would have been the end. The creature would've crushed my spine and rib cage. I was very, very lucky, or it was still sleepy; I've seen how dangerous those bears are.

“I was convinced that I didn't want to wait for its mate. Ignoring a variety of bruises, not to mention several cracked ribs, I slipped under my pack and headed downhill.

“I spent days wandering southwards into the San Fernando valley. I knew that gate blindness almost always disappears if you are patient. I did have food with me---water was no problem, not back then. Just as well, because I wasn't prepared to forage on foot, not without gating. With gating, you look along the small paths, find the fruit tree, and bring the fruit back. Hunting, from a fast plane, is just as easy. You walk up to an animal, staying yourself in a the fast plane, and stab it in the heart. Without gating, life was hard. We don't use missile weapons to hunt. I did have fishing equipment---fly-fishing is a common hobby, here and there. Lighting the fire was harder than catch-

ing the fish. The easy firelighting technique is a simple, foolproof spell, which the gate blind can't cast.

“I limped southeast. Itrenis partly gate-based. I drove it to keep from bleeding much, but didn't dare use it a lot. I walked rather than sitting down because I wanted to see where I was. Besides, walking took out some of the bruises. I was decently cautious about running into people. Until I recovered, I was armed with my wits and a good sword.

“I spent weeks on foot. The first were very slow. I'd do a half-mile and lie back to rest. My best sleeping was by day, lying in the sun to absorb its heat. When you're that tired, you don't have the energy to stay warm against the night air. I'd been deep gating and runecasting and fighting a hrordrin. I have shields against spells and Void-Magics, which the hrordrin almost broke. I'd taken lots of long-term damage, slow to heal. For all that I talk about itren, we don't really heal very quickly. Itrenputs things back together on the right path, but not fast. It'll be a ten-year before my right arm has its strength back, from the bullet wound last Summer.

“I still remember, very vividly, climbing a range of hills to see San Francisco Bay. It was a lot bigger then, with no bridge across the headlands. I've got sketches to take home with me. We build ceremonial stairs, but bridges as decorations never came to us. After all, except for the benefit of unmen, we don't need bridges at all.

“One morning, I woke up, and everything was back. Not solidly, but spellcraft was there, and gate senses, and gating. At first I was very careful. I didn't have any place I wanted to go. I was reasonably sure I could dodge anything I couldn't fight. It did make a big difference in foraging. The main limit was learning what I could eat. There are a few poisons which paralyze gatesenses; itren usually wipes out lethal stuff. What it won't do is save you from being sick to your stomach.

“What to do? I didn't know. The planes around earth are worse places to live than here. At first I was scared to realize that the Purple Sea---the place I took Victoria---was here as well as at

my world. Then I realized I was seeing the Dai-ren's conjecture. The Purple Sea is literally infinite in extent, and connects everything. I think I'm right on that. Its connections are such that you can't easily travel along the Purple Sea faster than walking, so while someone could walk from the Net to here on the Sea, it would take a long time. I'd guess you'd have to walk several light-years, which is too far, even for us. Also, there'd be problems with food, since the regions I deep-gated through would contain the Purple Sea---to which you cannot deep-gate---and islands which don't support life.

``From looking at the sky, I think I can explain how gates and the Net relate to your ideas about space. From most of the Net, a main feature in the sky was 'the whirlpool' --- a very large, bright spiral galaxy, close enough to be seen on a dark night even without gate-amplification, covering a big part of the sky. There's no feature like that here. The Net---our world---spans a galaxy, or several close ones (I don't know which). What I'd done was to deep-gate across a fair piece of intergalactic space. The islands were stopping points, matching your astronomy's count of the few worlds and stars between the galaxies. The whirlpool had an odd number of arms, for a spiral; it's not close. I've gone through catalogs and checked. I didn't know then, but know now, I must have covered some billions of light-years, all by myself.

``It never occurred to me, until you people developed biology, to wonder why I wasn't poisoned by the local flora and fauna. I haven't tried it, not about to, not interested in thinking about it, but the spells show we are the same species, could intermarry if we wanted.

``I spent a year or two exploring your world. I found lots of hunter-gatherers, not in this hemisphere. I'm not saying man didn't reach the new world more than 15,000 years ago. If he did, though, he soon became extinct. The Chinese did, when they reached southern California 2000 years ago.

``Then I realized that I was completely alone, that anything I wanted I'd have to make for myself. Despite being careful, my clothes were wearing out. Gating helps some, but only so much. I can

cut stone blocks or boards with a spell, but to make a tunnel I eventually have to pick up the stone and carry it a distance. There's a way around that, but I don't know how to do it without another mage helping. My home---Victoria saw bits of it---took years of back-breaking labor.

``I wasn't about to go back. If I'd succeeded, set an avalanche in motion against Estelle's murderers, it might take tens of millenia to fall. Before I returned, I wanted clear evidence that my side had won, or that I had a considerably better set of weapons. The Gatestone would have been my weapon, if it had been completed. Meanwhile, I was safer staying here. My message hadn't met with overwhelming approval. If I wasn't going to be listened to, I'd rather not argue with people about it.

``One of your stranger ideas is viewing solitary confinement as a punishment. We can't readily be confined, but after the first few thousand years we don't put up as easily with other people's company. Besides, I had gone through the entire literature on sorcery thoroughly; there were no more surprises to be had. Now I had time to think about what my results meant.

``At first I built a cottage in the hills overlooking the Pacific. I didn't finish it in a single effort, though I much enjoyed the first night I could sleep and be absolutely positive I wouldn't be wakened by raindrops. The coast was drizzle-prone. One morning, I had\dots visitors. I was sitting on a porch---my house, with seven porches on three floors, was sort of like yours---when a half dozen people appeared around me. There'd been no disturbance in the Void; they were just there. Now I know how unmen feel about gating.

``I panicked. Even after a decade of safety, my gnothdiar was close at hand. Then I realized that they weren't Timeless Ones. They were a taller than me---and I'm tall for someone who isn't grown up yet---but not as heavy. I didn't want to run, not after the work I'd done. Besides, I wasn't sure I could outrun them. They didn't use the gating skills I knew; perhaps they were faster than me. I might do better to stand and fight, not that I like fighting one-on-six, not that my first thought was fighting just because they were strange. It's

just that I'd been running a very long time.

“After an embarrassed moment, their leader spoke. In the liturgical language of the European shamen. Fluently. I'd wondered about that tongue. It was totally different from other human languages. For a good reason. It wasn't human.

“Perhaps we startled you,” she said. As if she had to ask. My gnothdiar was half-drawn. When I had moved, they put hands to sword-hilts. “We'd not meant to. We wondered who you were. You don't appear to be Vrijn, no matter how far your sept wandered.”

“Vrijn?” asked Pickering.

“Dryad,” answered Adara. “Or close enough. Hey, they're native to your world, almost. After all, you've met two. There's the shy friend of Victoria's, the one who keeps saying she'd from Centervale and can't tell her phone number or last name because her parents are both alcoholics and would have a fit if anyone called her. And there was the one you've caught swimming---unclothed---in your brook.

“Vigdis whatever-her-name-is\ldots?” responded Pickering. “I thought she was a bit strange, but not more than her parents would explain. And the other---I was a bit displeased when I met her, but because she was swimming alone, not because of her state of, ummh, undress. Though I did find her behavior, when she saw me standing there, a bit odd. My limited impression of modern female children that they tend to be more, ummh, \ldots modest.”

“!Tril is older than I am. You'll meet more. The other planes are becoming less favorable at the moment. Ice ages and such-like. The Vrijn had been aware of me for some time, thought I was very odd to build a bungalow, instead of hollowing out a large redwood. They did that more with primeval redwoods, which they encouraged to grow big. Bigger than what's common now. In any event we traded tales. Dryads have been on earth a long time. Long enough to see dinosaurs. Long enough to meet Earth's first intelligent species. Alas, the therapsid in question was a stay-at-home. They were all at home, 70 megayears ago, when the asteroid landed on top of them, the one that left the iridium deposits around the world and formed

Iceland.

“Dryads live a very long time, even by my standards. But they aren't city-builders, nor heavily into ceramics and permanent stuff, so they're hard to notice. Though your people would ignore the evidence. They'd been around me, and I'd not seen them, though I easily found homo sapiens in the Old World. Vrijn don't exactly gate. From one place here they go to exactly one place on each other plane. They do it very smoothly, but they can't use gating to travel quickly point-to-point. That tipped them off that I'm not a Vrijn; they realized I'd moved between here and southern California instantaneously.

“They had serious worries about the Kreesha, til we showed each other a few tricks. We didn't realize that my teaching men agriculture would be dangerous to them. Not until mankind started taking out forests. Then it was a bit late. But there've never been many dryads, and they mostly prefer the Pacific Northwest. They have problems, now.

“I could trade with the Vrijn, a bit, but they were one-of-a-kind craftsmen; also, they found me unpleasantly single-minded in wanting the comforts of civilization. Running hot water, real furniture, that sort of thing. I can take mountain streams, even glacier-fed, for a while. I did to save that friend of Victoria's. But it's not pleasant. Vrijn like swimming in near-ice-water.

“I did a little manipulation, in the Old World, trading with stone-age men for furs and such not. I did teach some agriculture and metal-working. My request for bronze drinking beakers---something that wouldn't break if I dropped it---got more copies than I expected. But I never said I was the Goddess. They invented that all by themselves. I suppose my not aging over the centuries did hint I was special. But they tacked on the Mother and Crone by themselves---I'm always this old, and I've never been grossly fat, and I've never ever been pregnant.

“After a time, I was reasonably comfortable, spent some time watching your world, lots on preparing my return. I knew what I wanted---something to make me stronger, enough to let me take the hrordrin and the Guards. The gatestone---Table Rock---was that weapon. It had to be

grown, slowly. While it was growing, it was unstable. Violent release of qis energy near it was not good. So I didn't let the Indians hunt on the mountain---less for the killing than to prevent blood lust. They were a bit stubborn about that at first.

“I spent some time exploring the local cluster and ran into the Kreesha. They gate. Rather, they find and expand natural gates. The paths they take are very different from mine. For me, Earth is very far from home; there were Kreesha here. I stayed well away from them. They'd love to have me for a slave, someone who can make gates. As a threat, even a few thousand are a joke. But against a billion or two, my shielding spells might not be good enough. They're weak, but they can link powers.

“I watched your kind. After a time I stopped interfering. I didn't want a planet-full of slaves, and I'm too intimidating. When Alexander looted Persia, I borrowed a few items. I made a mad dash through the library at Alexandria each time it burned ---I got the better half. It's stashed on a plane where time is very slow. You'll have it, by and by. Though I'm carrying\ldots " Adara pulled a metal ring from her pack, tugged at it, and let it open into a pair of scrolls. Pickering was reminded of conjuring tricks, though surely there'd been no space in which to hide the scrolls. “That's a fair chunk of Menander---you'll see why the Greeks thought he was their greatest playwright--why the two plays you know are not his typical work---and a decent section of Sappho. The rest is in my home." Pickering stared greedily at the scrolls.

“Everything worked till I stopped the jerks from killing Victoria. I hadn't meant to be shot. Protecting other people from missile weapons is not part of our normal combat; we can all protect ourselves. I was gating the bullets away from Victoria, and miscued my timing.

“Shooting me unbalanced the stone, enough that the Kreesha and Vandemond---the little winged ones---pried open a natural gate and started coming through. They knew where I was, and roughly what I was. They knew what gatestones do, at least partly. With a gatestone they'd have

my gating powers. I had to lie on Table Rock, badly wounded, to keep them from the Stone. I'd been too clever with warding spells around my home, too clever by half. The iron in my shoulder made it hard to gate---the void dislikes metallic iron---and triggered my house-wards, keeping me out of my own home. Victoria came to the rescue. I'd still've taken out the Kreesha with the Stone, but the method I'd've used, besides taking out the Park and a fair piece of Eastern Oregon, would've killed me, almost for sure.

“As it was, I fought the Kreesha Mind Union--the linked power of the whole species, or damn close---by myself, barely recovered from Victoria's surgery. Victoria thought I returned in minutes. It was about 3 hours, my time, enough that I could stand up without fainting. I couldn't hold against the Kreesha, not in the shape I was, so I had to use the Gatestone somehow. I could have fled with Victoria, leaving your world to be enslaved. Instead, I did what I did. There aren't many Kreesha left, not in the local star cluster.

“That really hurt. I'd been working on the stone since before your recorded history, and I lost it. I didn't want to do anything violent against the bank robbers, not when they were so close to the rock, not so close to its time. I thought I could just scare them. Then I had to protect Victoria. I was trying to gate the bullets away from her, and blew my timing.

“Having wiped out fifteen millenia of work through minor carelessness, I had to start over. I did have a picnic with Victoria and her friends. Kelly Pierce had seen very clearly how I took out the thugs, and how I vanished afterwards. Kelly was sure I had a transporter, and a phaser pistol up one sleeve. But she didn't dare tell. Her mom would punish her for watching Star Trek. Her mother thinks it's not right for girls to like SF. Kelly was surprised at the Purple Sea. She wondered where the machinery was. I suppose Kelly would still be very upset to learn I fixed her mother, just a little bit, enough so Kelly has room to grow up.

“A week ago, I began my step from home to here, and found a hrordrin in my way. If I'd been daydreaming, I'd be dead. I managed to get back--

-they're not real swift---grab my crash kit, and flee on a path it wasn't watching. My home is rune-masked so long as it's empty. They'll never find it now. They'd find me if I stayed in it. So I played hide-and-seek with Guards and a hrordrin. They'd spotted the Gatestone dying, and come across space for me.

``This afternoon I faced four Guards on the slope over Lake St. Marie. They thought they had me. They assumed I couldn't gate around a hrordrin---close enough---and that they had the strength to take me out. Perhaps not right. I'm very reluctant to use rune-spells, lest there be witnesses. If the Guard gets rune-magic, I've lost. Rune-spells are my ace in the hole---they've saved me more than once. But four on one, sword to sword, is just impossible when I'm half their weight, even if focusing makes me stronger than they'd think.

We skirmished a trifle, using sorcery. They couldn't touch me. I'm still the Spellmistress. If they've followed our customs and history, I'm a heretic, so my books and ideas are proscribed. Without those books, they have random-scattered spells and I have the pattern which binds all spells together. In any event, I started an avalanche. Mechanical amplification of spell effects (a little snow sliced away, releasing a big block of ice) I learned from watching your people. The Guards were swept far into the lake. The smart ones drowned. The fools gated while a hrordrin held the paths.

``My mistake was standing too close. I got caught in the slide's fringe, was dumped into four feet of water. I climbed out, soaking wet, in this weather. I---fighting the blizzard was risky, but if I gated and dodged the hrordrin, other guards would be on my trail. I'd never have found the Gatestone. And I did make it here alive, so my judgement was right. Barely." She yawned deeply. She would finish the story, she told herself, no matter that she was bone-tired, wanting above all to sleep forever and a year.

``So I'm leaving again at dawn, when hrordrin's gaze is dimmest. I did bring two presents." She yawned, much more deeply, then tugged two boxes from her pack. ``The bees and flowers are for

Victoria, when she needs money for college or whatever. I trust you to handle Sotheby's. They're Greek, from Darius's Treasury, the gold-casting being so fine you can see veins in the wings. The ceramics were stored in real time for the past two millenia---EPR will confirm their true age.

``The rod is for you---a gate-key. When the stone turns pure white, the hrordrin will be gone, the key safe to use, my home then being yours. It's a gift, for hosting me this eve." (And, she added to herself, for steering Victoria and her parents this past decade, so Victoria had the courage to rescue me.) ``If you hold the key, you'll know how to use it, and all that it does. The dryads will help move things from there to here. They want secure space on this earth. My home holds treasures, enough to pay for what they want. My recorded history of mankind, 15,000 years of it. About half the library of Alexandria. Stacks of Mayan books. Roman oracular scrolls. Chant and dance magic---rune magic you'll have to learn for yourself. Albigenian theology. That one you should know. You keep pointing the Albigenian heresy out to Victoria, as an idea so thoroughly suppressed by the sword that it was wiped out. The dryads want use-rights, non-exclusive, on a couple National Wildernesses. After all, they did clean the dope growers out of Mendocino State Park.

She yawned, very deeply. For a moment her jaw drooped, her eyelids sagged shut. Pickering dimmed the lights. ``Sleep here," he invited, ``or use the guest bedroom. We could talk a thousand hours and not answer half my questions. You'd be welcome to stay. No one else lives here. I don't have so many visitors that you'd be noticed. But if you must leave on the morrow, you need your rest."

\* \* \* \*

The last hour before dawn: Pickering awoke to a gentle knock at his bedroom door. Fumbling for his glasses, he found Adara standing in the doorway, clad in a short-sleeved, tight-fitting white tunic. She had, he noted, something of the figure of a gymnast, but moved with a leopard's highly muscular grace. She was shoeless; her hair was now



brushed into tight falls. "I had thought to say good-bye," she said. "There are spells I set while donning my armor, spells which make it harder to talk afterwards. I, I do thank you for your hospitality. And for the Gatestone shards. But now I must bid adieu."

"Then good-bye it is. And a safe journey. You'll leave from here?"

"From your garden maze. There's a Void-node there. Your Japanese gardener felt its tone, set the maze around it. Good-by."

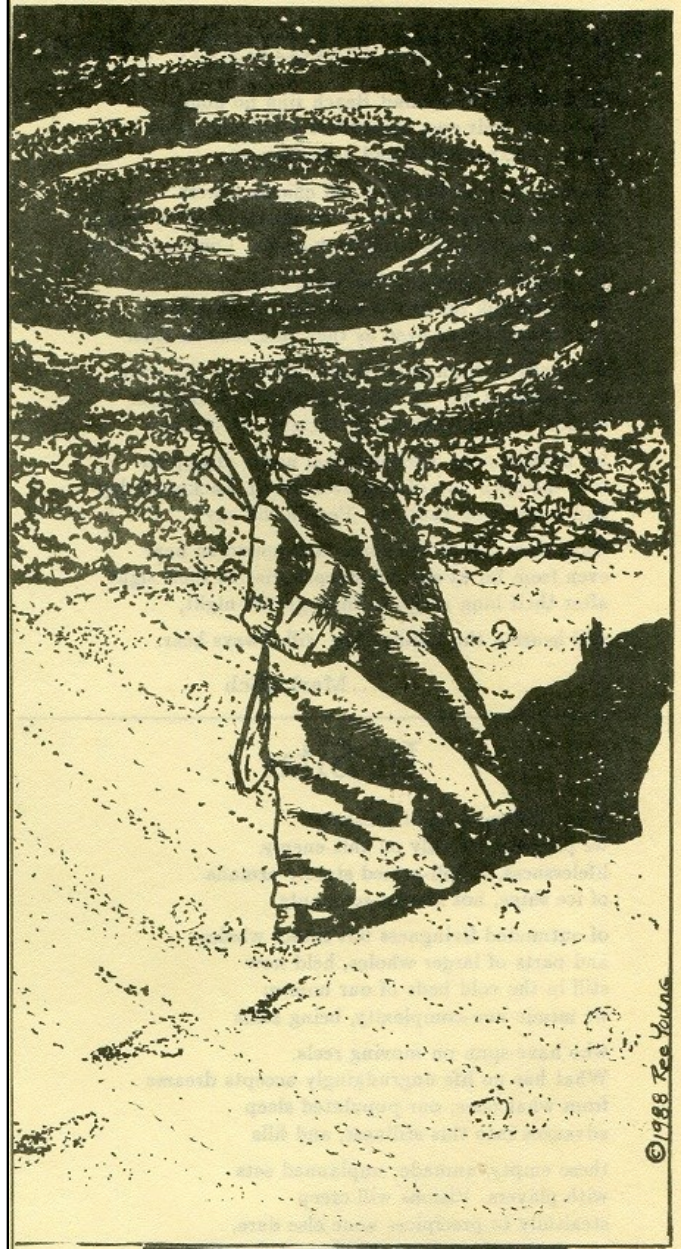
"I see. Then, good-by."

Adara faded from the doorway. For a time Pickering heard sounds in the living room below, soft clatterings and clankings of steel against steel. Finally, he arose and peered furtively over the balcony. Adara, now wearing her mail, stood in the center of the room, the air around her interwoven with the faintest tracers of pastel light. She gestured, a slow and intricate weave of her fingers, and turned in an intricate sarabande, her steps paced to the unheard notes of an unseen orchestra. The phosphorescent lacework drifted toward her and sank into the depths of her steel armor, slowly vanishing from sight.

Her winter boots and cloak, now dry, fell silently over the armour. With skis and poles and backpack over one shoulder, she tiptoed to the front door. Open, its bronze facings gleamed in Pickering's ever-burning porch lights. Adara stepped outside, faced about, and glimpsed Pickering watching mutely from the balcony. Her wave was a fan-like flutter of gloved fingers. She strode off to the maze.

Pickering, high-power binoculars in hand, watched her wade through the drifts. The maze, protected by low evergreens, was almost snow-free. The sky was still dark, no trace of dawn yet in the air, but his house floodlights lit the garden. He considered dimming them. No, he thought, if she had wanted pitch darkness, she would have asked.

Inside, Adara's grief had faded to a numbness, another layer of ice around her soul. She had fled her home, her friends, all she knew, with the hope she would return. She had lived alone, surrounded by unwashed barbarians and flighty-headed dry-



ads, possessing little beyond that which she made for herself. The errors of an afternoon had robbed her of millennia of effort. She had expected she would finally leave Earth. She planned for a return in triumph. Instead, she needed to flee once again, laden with no more than she could carry on her back, not knowing her final destination or even her chance of successful escape. Her long flight might be about to end, with the Guard victorious.

She'd passed the small paths before despite hrordrin's baleful watch. She told herself she could do it again. She'd fortified her armor ten-

fold; this time the beast would not take her by surprise. Besides, she had the Rune of Unmaking at hand. The hrordrin might find her, but against the Rune it could never stand.

Her arguments failed to reassure her. No matter the strength of her logic, the hrordrin was all her deepest nightmares---a beast which crushed cities, slaughtering its foes by the millions and the tens of millions---come to malevolent life. Now she must face it alone, without friends or help-mates at hand, with only her little-practiced skills and frail strength to support her. Her heart pounded in her chest. She saw no choice, but dreaded that her need to retrieve the Gatestone had trapped her like a moth at a candle-flame, obliged to soar closer and closer to the hrordrin until her wings might become her funeral pyre.

The words of the Collegial Assembly, answering her final plea for mercy and justice for the unmen, came again to her:

Spare us from your endless lying  
Despite all your base conniving,  
We will keep them in their proper place.  
Weeping, pleading, screaming, dying,  
Will be your fate for denying  
That we are the perfect master race.

A slow, controlled anger rose in her heart. Never, never, never would she allow that side to triumph.

Dawn swiftly approached. There could be no further delay. Chin high, a smile on her lips, Adara tucked the last of her bronze-red curls under her hood and took a half step forward. In that moment she was gone, vanished forever from Pickering's gaze, leaving behind only shallow footprints through which the wind howled as they filled with the ever-drifting snow.