

# ORPHILION DREAMS



JEANNE ALLEN

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"The earth is the cradle of humanity,  
but one cannot live in the cradle forever."

Konstantin Tsiolkovsky, 1899

## PROLOGUE--YEAR 2097

Terraforming processes had been converting Mars into a planet suitable for Earthian life forms for the last seven decades. Mars was just massive enough for its gravity field to contain an atmosphere, and the iron oxide abundant in its crust had been a major source of oxygen gas, a byproduct of commercial iron ore processing. Transplanted vegetation and resulting offshoots, which had been progressively enveloping the Martian surface, also released oxygen into the air. Nitrogen, another gas vital to living things, was generated by roving soil-converting units and during the decay of plant remains. Also manufactured by the soil converters were "super" greenhouse gases, which captured heat energy from the sun. With the help of orbiting mirrors, the atmosphere had warmed enough to cause carbon dioxide, another greenhouse gas, to evaporate from the surface of the planet's nonpolar regions. The combination of artificial and natural processes on Mars served to maintain air pressure and temperatures comfortable for human activity--conditions not unlike those found in a northern temperate forest on Earth during autumn.

On Earth's moon, which had less than half the gravity field of Mars, biosphere domes were required to entrap a life-supporting atmosphere. The ongoing construction of a network of interconnecting lunar domes had begun at the onset of terraforming processes on Mars.

Frozen water was abundant in the solar system beyond Earth. It not only existed within Earth's lunar crust, but also within the polar ice-caps of Mars and meters below its surface in the permafrost. Water in the liquid form existed at greater depths, closer to the planet's heated core.

Moons of Jupiter were well-known for being covered with ice. Europa, for instance, was about the size of Earth's moon. The versatile technetium ore was extracted from one of the small continents which lay beneath its solid water surface. After a refining process, technetium was combined with other metals such as titanium and vanadium to make lightweight, durable alloys. The silvery blended metal was woven into the fabric of spacesuits to protect those who performed space walks from the effects of cosmic radiation during the repair and assembly of orbiting constructions. Being highly resistant to impacts made by micrometeoroids, technetium alloy was also used in spacecraft fuselage.

A technetium-ceramic composite could withstand the intense heat and radiation from deuterium/helium-3 fusion reactions. It was thus used to encase the magnetic field confinement "bottles" which surround the reactor cores that powered modern space vehicles and extraterrestrial colonies. On Earth, the composite made possible the compact and efficient energy source for a city's businesses, factories, and private residences. Technetium had greatly reduced the risk of dangerous radiation exposure and had eliminated the need for the enormous nuclear plants of the twentieth century.

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The human population of the solar system had exceeded fifteen billion. Earth's former countries had become regions; their subdivisions had become districts. Numerous colonies were scattered throughout the solar system. Almost eighty years had passed since the time of the Guerrilla Class Wars, after

which the present system-wide government had come in to being.

The populace was divided into three general economic classes. The powerfully wealthy--shareholders in the major industries--were in control of the government. Those in the middle class were only barely above poverty distinction. And there were multitudes of the poorest of the poor, scavengers of the streets, where survival of the fittest was the law. They were called street scavengers.

The planet system's governing body was an oligarchy of twelve giant corporations which were represented in a self-serving delegation assembly located in Des Moines, of the Iowa district. The Delegation of the Twelve Megaconglomerates consisted of ten assembly members from each of the ruling corporations, that is, from those corporations which had proven to be among the DTM's twelve highest money-makers.

People of the middle class struggled to make ends meet while managing their small, independent businesses, as fair competition with the industrial giants was virtually impossible. And legislation was seldom, if ever, in their favor.

It was to a conglomerate's advantage to remain competitive and amass revenue in hopes of securing a seat in the Delegation. To keep production costs low, DTM corporations hired uneducated street scavengers for low skilled, high risk labor. For moderate to highly skilled positions, numerous orphilon workers were utilized.

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James John Ganymede, the CEO of one of the high-ranking industries in power, Universal Mining Operations, Diversified, lived in opulence while most of his workers survived at barely subsistence levels, as was typical of Delegation hierarchy.

Costly genes for intelligence, as well as for attractiveness and athletic ability, had been secretly requisitioned by his parents before his embryo was three weeks old. Genetic engineering for the purpose of class enhancement had been against the law for quite some time, but those who could afford the procedures always seemed to find the legal loopholes to be able to have them done.

As James had grown older, he'd become arrogantly aware of his mental capabilities and his own emerald-eyed handsomeness. He possessed a chameleon personality which he used to his advantage in the corporate world and in his private life. Compelled to succeed, he was able to select the interpersonal communication style most effective for arriving at an intended outcome. Seen as manipulative by some business leaders, many others used similar tactics, viewing them as part of healthy competition, as fair rules of the commerce game.

Universal Mining Operations had become exceedingly profitable two generations earlier after James' grandfather, Zircon Ganymede, a survivor of the Guerrilla Class Wars, had acquired a failing iron ore mine. With determination and grit, after marketing his vision and declaring promises, he'd found enough investors to begin modernizing. His rebuilding of the mine was the birth of an empire. Later on, as the majority stock-holder and self-appointed CEO, he had expanded the iron ore mining division to Mars where iron-rich ores were in abundance and easily accessible. On Earth, most of the remaining high-grade iron ore was found deep underground, too costly to remove. It was his exploration team that had later discovered the valuable technetium mineral on Europa. From UMO's headquarters, in the district of Colorado, he had diversified the company by engaging in mergers, acquisitions, and takeovers--hostile and otherwise.

With UMO as the parent company, mining remained the top money-maker. There were also subsidiary consulting and investment firms, R & D and manufacturing businesses, nanochemical engineering and biotech laboratories, and prestigious universities. Zircon had managed UMO's progress with an iron

fist and had not been the least bit intimidated by the brutal nature of the corporate world.

His only son, Zebulon, named after the mountainous backdrop of Colorado Springs, had become the next majority stockholder with controlling interest, though his turn at managing the business had been a bit insecure. His compassionate nature had jeopardized his chances of turning sizable profits from various business dealings. He had married an intelligent and ambitious woman named Claire, who had masterfully learned the trade. She had assumed control after Zebulon had died while their son, James, was still an infant.

Emulating her father-in-law, Claire became shrewd and ruthless. Under her direction, UMO had risen to within the twelve leading megaconglomerates and into an office of the Delegation, making it a significant power of the solar system.

James John Ganymede's goal was to make it number one.

## CHAPTER 1--LIFE IS A GARDEN

2097: On a course set for Jupiter

Silently catapulting toward Jupiter in the cold vastness of space at one-thousandth the speed of light, the small spacecraft was set on a purposeful course. It was headed for the planet's moon, Europa, where a space station had been established by Universal Mining Operations for the purpose of extracting valuable technetium ore. On Earth, the element technetium existed only in dangerously radioactive forms. The discovery of its stable isotope on Europa had provided UMO with a highly prosperous mining opportunity.

The mine's crew of one thousand had contracted the deadly Attila disease, caused by a mutant strain of an airborne virus. Its only cure was found in the fluid of the live orchid plants of the species *Cattleya hyperlimbia* that were on board the spacecraft. The pharmacy at the mining facility was becoming depleted of its supply of the life-saving orchids, and UMO's orphilion and street scavenger employees were dying. Because of the need to ration the *Cattleya* medicine, many were not receiving high enough dosages. Transporting them back to Earth was not an option as doing so would place the world's population at considerable risk. The Europa employees were not indispensable but were too numerous to replace without UMO suffering a loss in mining profits. And James John Ganymede, the chief executive officer of Universal Mining, was not about to sacrifice the company's profits!

He had immediately dispatched an emergency rescue team comprised of his trusted corporation soldier and space pilot, Captain Thor DV556hz, and Doctor Helena OM781eh, gifted pharmacognosist, also a paramedic. They were to deliver and dispense the life-saving cargo to the surviving workers in the mine's infirmary. Two days after their departure, they'd been followed by a larger craft carrying a crew of medical personnel who would administer further treatment to the patients.

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On the day Helena was to board the craft, a sense of wonder filled her. At thirty-two, not only would she be carrying out an assignment vital to UMO's workforce on Europa, but it would be her first venture away from the Earth-Moon system. Captain Thor would soon be directing her from the Nebraska ground, onto the spacecraft's first step, and her perception of the universe would be transformed forever.

The tall soldier-pilot as her guide, she absorbed with great interest every detail he brought to her attention during the required safety tour designed for civilian passengers who would be traveling beyond the Earth's ionosphere aboard government transport. Aboard the interplanetary ship that was to become their home for the next two months! she marveled. She'd only read about space science in the popular holojournals and was eager to experience some of their reported facts firsthand. While acquainting her with the external features of the craft, the captain spoke with the fluency of an expert in space flight, yet in terms a layman could understand.

Normally, Helena scorned Delegation government soldiers. She had witnessed their callous disregard for fellow orphilions whom they would arrest for, in her opinion, unjust reasons. But this one seemed different. He had the manners of a gentleman, ceding his physical strength and military ranking to her defenseless civilian status. She sensed from him the promise of a memorable adventure.

According to Thor, the spacecraft, issued for his sole use while carrying out official duties for UMO, was a smaller, more streamlined model compared to the bulky cargo and commuter transport ships he had often been asked to fly. At thirty-five meters long, Helena thought it was enormous! Its exterior design, sleek with aerodynamic moldings, was painted dark gray, the UMO logo in red. The bow was

tapered and held diamond-glass window panels impervious to micrometeoroids. At the stern Helena noticed four large exhaust exits, each flaring out to twice a man's height in diameter.

Embedded in the craft's flipped-open exterior door was the escalator that carried Helena up to the lower deck's transitional airlock chamber and, she thought, into a most fascinating new dimension of space-time. As Thor guided her through the ship's interior, a flush of warmth filled her. It was prompted by her anticipation to embark--or was it because of the tall man's nearness? She acknowledged it was probably due to a mixture of both.

The lower deck contained access to the vertical take-off and landing gear, a cargo hold area, and the ship's power and support bays. While Thor detailed the ship's infrastructure, Helena detected a sense of pride in his voice. There was kindness beneath its authoritativeness. But she also sensed something else: a weariness--or a trace of sadness. It matched the subtle darkening in his turquoise-colored eyes. Eyes which seemed to have seen too much in this old solar system. They had a cast which most would not have noticed, and she had the feeling that Thor didn't mean for her or anyone else to become aware of it, for it would serve no worthwhile purpose to dwell on past woes while there were official obligations to fulfill.

Helena wondered what had hurt him so.

Accustomed to laying aside his personal problems, Thor continued with his survey of the spacecraft, feeling appreciative of the beauty and efficiency of its form and function. His passenger was showing evidence of becoming more at ease when she began asking him to further explain certain technical aspects. Shown the access to the power plant which was fueled by a deuterium/helium-3 fusion reactor, she inquired, "And what mode of energy transfer initiates the fusion process?"

He answered, "A microwave laser, or maser, provides the activation energy needed for the reaction, ma'am." Thor remarked to himself that beside him was a woman with extraordinary concerns and that, unlike some orphilon employees who felt the need to gratingly recite Delegation tenets at every opportunity, conversations with her on the ensuing journey might actually hold his interest. He further explained, "The stream of hot ionized gas that is expelled from the reactor is capable of producing thousands of kilonewtons of impulse force--"

"Which is more than enough to escape a planet's gravity field and acquire the speeds needed for practical interplanetary travel," Helena volunteered with a hint of a smile, as though proud of herself for her addition to his technical explanation.

The lilt in her voice--Midwestern, yes, but he detected a hint of something exotic. And he noticed a playful glimmer in her eyes, blue as a summer lake. He was surprised at himself when he continued looking directly into them. "Er, why yes, exactly, Doctor." Already, she was infinitely more interesting than some of the government drones whom he had had to transport. He needed to remind himself of the task at hand and further elaborated that the nuclear plant also provided energy for the ship's internal functions as solar panels would provide decreasing power as they traveled further and further from the sun.

He caught Helena's uneasy glance at the OFF LIMITS and DANGER signs on the walls surrounding the reactor. Her somber expression indicated that their stern warning, along with his description of the gruesome death caused by intense radiation exposure--suffered by a flight mechanic he had known--was becoming firmly impressed upon her mind.

Her eyes darkened with concern and then brightened again as her curiosity moved on to another topic. She asked about the ship's method of producing a physiologically sound gravity field. He pointed out the graviton emitter, which lined the fuselage. It was usually set to one Earth gravitational force.

Soft, layered waves of brunette hair, just reaching chin length, tumbled attractively around her face. She moved some of it behind her ear, a mannerism of hers, he'd already noticed, when she was thinking hard about something. Or this time, was it possible that her subconscious was making a flirtatious gesture? The botanical pharmacologist asked, "Captain, and how are the gravitons are produced?"

His eyes sparkled at her profound question, and he explained the particle physics involved in the process. Something from deep within his consciousness, catching him completely off guard, became magnetically attracted to her vitality, her intellect. They had a common interest in scientific matters. His visceral self was already attracted to her sable-like hair and expressive, blue eyes. He couldn't deny the excitement her presence was kindling within him.

Extinguish it. Now. He warned himself to neutralize his endocrine rush and subdue his quickening heartbeat. This wasn't the time or the place. The nature of this assignment demanded his full attention. To be preoccupied by a woman now would not be advisable. The UMO employees on Europa were depending on them--for their lives. Fortunately, he was able to control his more basic urges and even ignore them if he had to, attributing this talent to his soldier training.

And he was not about to jeopardize the mission of the Subterra Rebel Force, an underground, anti-Delegation organization of which he was secretly a member. He needed to guard his words around Helena. Treason was not looked upon lightly by orphelions who were uninformed--or unwilling to believe the reports--about their government's corrupt activities.

Helena was contemplating his quantum mechanical explanation of the gravity simulator as they moved toward the bow of the vessel. She decided that his voice, mellifluously articulate with a soft, southern accent, was pleasing to her auditory sense. She couldn't escape the fact that his rugged handsomeness and long, auburn hair was most pleasing to her visual sense as well.

But an uneasiness from the back of her mind came forward with stern advice: He represents tyranny. Don't be fooled by his charm.

Helena regarded her government as oppressive as a searing, desert heat. During times when her mind would soar to the stars with ideas of freedom, her body had always been left on the ground to be subjected to Delegation control. The rescue mission to Europa had given her a symbolic leave from the usual constraints of her life at UMO--symbolic only, because the spacecraft they would be traveling in belonged to UMO and was managed under the jurisdiction of the Delegation Assembly.

She decided to rein in the natural will of her emotions. To them, Thor was luring her toward an unknown fulfillment almost too tempting to leave unexplored. On the other hand, she felt disdain for what his position exemplified. Conflicting emotions aside, her undivided energies were needed for the success of the rescue mission.

A spiral stairway brought them to the upper deck. Thor motioned his arm in a broad sweep across the bridge in introducing her to the nucleus of the astroship's activities. Helena noticed the forward-facing seating and control panels around the room's perimeter for three additional crew members. It pleased her to see the stacks of crates under her charge had been delivered safely into the environmentally-controlled bridge chamber.

While seated at the command station, Thor demonstrated some of its functions should his mission partner need to maneuver the craft in an emergency situation. "I will further instruct you in emergency piloting once we are on our way," he said. Helena felt the task would be a bit daunting, but she didn't mention it.

Thor brought her through a doorway, which led to a hallway behind the bridge. Helena saw that he had



to bend slightly to avoid bumping his head. To the starboard side she was shown the galley, two sleeping quarters, the shower and lavatory. She thought the rooms small but serviceable and observed that her luggage had been already set in the room that was to be hers. Further down the narrow hallway was the utility room which held dry-cleaning and other appliances that would be necessary for the extended trip. On the port side and separated from the preceding chambers by the corridor were the workout room, two more sleeping quarters, and a storage room.

Returning to the bridge, the pilot's voice became deadly serious. "This spacecraft is equipped with a defense system that includes warning detection devices, protective force shields, and gamma ray weaponry. There is a self-destruct feature and an escape pod should we need to suddenly terminate the mission."

Helena tried not to furrow her brow at the thought of why they might need to use the defense system. Both were well-informed of the potential dangers inherent in this assignment.

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On course for Jupiter, the daily routine of life inside the spacecraft was soon established. On the bridge of the ship, at the control panel, Thor's time was spent updating course settings, maintaining computer systems, and communicating with UMO headquarters on Earth.

Their distance from Earth rapidly increasing, he began to feel more removed from the restrictions of his soldier life. From his post, he felt more at liberty to furtively, so as not to seem disrespectful, behold his shipmate's slender figure within her gold and black regulation clothing. Her medium frame seemed taller as she moved with straight-shouldered elegance. His eyes followed the shimmery fabric along her seductive curves. This could become a very satisfying habit--watching her. At least for the moment, her presence was able to soothe his troubled conscience. Memories of the incident on Mars were still haunting him. Even though it had occurred while he'd been carrying out orders, he felt responsible. And because it had occurred while he'd been carrying out orders, it had been the deciding factor which had spurred him into becoming a Subterra rebel.

While Helena softly hummed an unfamiliar and not unpleasing melody, he watched with great interest as her graceful hands gently held and sponged with water some of the thick leaves of the myriad of epiphytes which were growing in deep trays upon the lighted shelves. The asymmetrical, palm-sized orchids had begun blooming from their pseudobulb spikes. Lavender in color, with dark pink centers, a delicately sweet fragrance wafted from them. They had converted the bridge deck into a makeshift greenhouse. Thor found the woman's touch around the place oddly comforting. As Helena made random chemical tests of the petals' fluids, he noticed how striking she appeared under the ultraviolet light, among the tropical flora.

He also noticed how content she seemed to be with her position at Universal Mining and, for some enigmatic reason, felt more let down than he would have had she been anyone else. How could she be happy to exist where one's life is predetermined to obey rules which allow no opportunity for democratic input and no possibility for leniency when errors are made? Even now they were being spied on by government recording devices hidden in the walls of the UMO astroship.

Thor's job as a rebel infiltrator was to seek out recruits from within the ranks of the workforce. But it was sometimes difficult to distinguish between those who would be supportive of the SRF cause and those who would sound the alarms if they knew a revolutionist was in their midst. Could he trust Helena with underground information? He thought, realistically, probably not. He knew others like her who believed their life was good and would readily turn in a traitor. After all, order must be maintained for the Delegation, for the good of the Solar System. Radical ideas signified disorder and needed to be dealt with accordingly. If she were to back Thor into a threatening situation, he would do whatever

necessary to protect himself and the cause of the Subterra Rebel Force, which he knew in his heart to be true and right.

Better to just enjoy her soft, feminine presence and trust her with nothing, he concluded to himself.

Appearing to concentrate, yet not one hundred percent into her task, Helena could not resist the urge to spy on Thor through the foliage while she made the viability measurements. He was wearing the black version of the UMO pilot's uniform, made of a supple, synthetic material called leatherine. His thick hair was tied back; his mustache and beard were neatly trimmed. Knowing her thoughts went well beyond what was appropriate and in spite of her ill feelings toward most authority figures, she couldn't help but muse over how appealing this one was while at the control panel, in expert command of their course. His mind into his work, it dawned on her how completely unaware he was of his own sexiness while masterly performing in his element.

The sight caused her to inhale deeply. She closed her eyes and concentrated on settling her pounding heart.

To be so distracted by a man's presence was a novel experience for Helena, and she knew that if she was to act on her desire to become familiar with him on a more personal level, the attempt would most likely result in an awkward embarrassment since Thor was obviously of a more official mind set. Furthermore, the very idea--and other ideas even more dangerous--went against the terms of her employment, and more significantly, against the premise of Delegation law.

More dangerous were her plans to interfere with the completion of a major project where she worked in the lab at UMO's Medicinal Chemistry. Achieving that objective, she was convinced, was necessary for the future welfare of UMO's orphilion workers. She was certain that Thor would phase her out without so much as a blink of an eye if he knew of her mutinous scheme.

Focus on the mission at hand, she reminded herself. Then she looked at Thor and sighed. At least the company could issue less form-enhancing uniforms for their pilots so she could better concentrate on her duties.

Thor decided that, as the ship's captain, it would be more befitting if he resisted looking in Helena's direction for no apparent reason. He tried to concentrate on their trajectory against the stellar navigational on-screen charts, but it was proving to be an exercise in futility. He was more drawn toward this beguiling and beautiful woman, the manner in which she cared for the delicate tropical flora, and trustworthy or not, he discovered that he simply enjoyed her company.

But, she was a faithful servant to a government which he, only recently, had recognized for what it was and had grown to detest.

## CHAPTER 2--THE GUERRILLA CLASS WARS

Shortly after their departure for Europa, Thor and Helena had settled into the daily pattern of fulfilling their responsibilities for the mission and studying the technical holomanuals that had been downloaded into the ship's data-storage computer. For emergency readiness, he had instructed her on the basics of spacecraft operational procedures.

Physical workouts were vital during the long weeks in close quarters. Helena was learning that each piece of exercise equipment was able to auto-calibrate to accommodate her target heart and respiration rates. Thor demonstrated how the weight-lifting apparatus automatically adjusted to the user's size and to the strength of one's muscles, bones, and joints.

Each had been intent on keeping their relationship on a professional level--silently opting to suppress their mounting desires for a more intimate association. Decorum needed to be maintained if they wanted to avoid a company conduct hearing which often resulted in dismal consequences for alleged offenders.

During meals or while relaxing before retiring for the day, they discussed topics in the areas of spacecraft technology, the latest developments in the pharmaceutical industry, and various scientific breakthroughs. They had attended preparatory schools run by the same organization and compared past educational experiences.

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"The Guerrilla Class Wars in the early part of the twenty-first century was a time of world-widespread upheaval. Historians attribute the population explosion, the reckless use of DNA technology, and the increasing disparity between the rich and the poor as the predominant factors that had fueled countless conflagrations.

"During the pre-war decade, the construction of space stations on the Moon and Mars had set the stage for scientific and industrial exploration across the solar system. Nanotechnology had been in the early stages of development. Sightseers had ridden to Mars in fission-powered rockets.

"Bioengineering breakthroughs had resulted in the production of various medications, organ clones, and agricultural products. Colonies of genetically altered bacteria filling room-sized vats could synthesize, for example, the cancer-fighting halichondrin B, thereby dispensing with the need to harvest a certain sea sponge; and durable, satiny threads were produced without having to unwind a silkworm's cocoon."

Alone in the workout room, Helena was walking a vigorous pace on the treadmill while learning about the historical development of their government from the images and audio narration that were being transmitted to her personal computer.

This particular type of computer, called a holoviewer, was contained in the framework of a set of wrap-around, photo-responsive eyeglasses. Moving--or kinetic--holographic images were projected from the crystal-laser cells in the lenses to a position about a hand's length in front of the wearer's eyes. To observe distant, real objects, one needed only to focus beyond and through the hologram. When partially folded, the holoviewer became a hand-held communicator. The device could be completely folded and stored in a small pocket.

"But the unrestrained use of biotechnology, which created new vaccines and hardy crops, had the effect of negating millions of years of evolution. The cloning of fast-growing, disease-resistant stock animals with leaner meat had contributed to smaller gene pools for these species, resulting in sickly animals in

the long run. The lack of genetic variety had reduced the chances of their populations surviving attacks from new pathogens. A monoculture of soybean crops had been nearly wiped out due to a fungus. Also, transgenic genes and harmful crop by-products had escaped into the wild, creating havoc with indigenous organisms--herbicide-resistant superweeds and toxic effects on beneficial insects having been two of the negative effects. New human diseases had occurred as well. And the overuse of rain forest species as a source of genes with medicinal and other value had resulted in numerous extinctions, causing the world's number of naturally available genes to dwindle even further."

Helena was disheartened on seeing the graphic images of emaciated cattle, fungus-deformed crop plants, and people weakened from lesions. Her gait slowed down, causing a soft beep to sound. A quick check of the readings across the bottom of the holo-image signified that she was not maintaining a heart rate for optimal aerobic respiration. She resumed her previous, faster pace as the documentary, a production of the Delegation, continued.

"Rampant genetic engineering turned out not to be the panacea for all of mankind's problems. Laws regulating living technology practices were thus enacted in attempts to protect what was left of Earth's genetic pool and to ensure that dangerous transgenic by-products were being properly disposed of. But the so-called DNA laws were too little too late. Corporate powers of the day were focused on financial growth and were usually able to circumvent the weakly-written laws."

Things haven't changed much in that respect, thought Helena, recalling department meetings where Mr. James Ganymede, Universal Mining's chief executive, had invariably stressed to them the importance of profit over all other considerations. Nevertheless, she was glad she lived in healthier times. Today, genetic engineering, with the assistance of programmable molecules, or procules, produced a host of transgenic organisms--that is, those containing DNA from more than one species and used for the manufacture of desirable products. It had been proven time and again to be safe and effective. The techniques were frequently applied in her own research laboratory.

"As the twenty-first century progressed, natural resources were becoming depleted. More and more scarce were clean air, potable water, and usable topsoil. Respiratory and intestinal ailments were pandemic. Global warming and soil erosion destroyed the grain belts. Competition for available space forced large families into small living units. There was no adequate method for disposing the mountains of accumulating solid refuse if a healthy environment was to be sustained. Further loss of species occurred from the human encroachment of wilderness habitat and from the over-harvesting of seafood.

"And, vital space-aged materials and hydroponic foods were not finding their way to the ever-increasing, destitute masses."

The timer's chime sounded, for she had "walked" ten kilometers. Helena paused the article. She used the towel draped over the treadmill's hand support bar to wipe the moisture from her forehead before heading to the galley to consume a cool tube of replenishing electrolyte juice. She returned to the workout room and sat at the apparatus designed for developing upper body strength. After replacing the holoviewer over her eyes, she began flexing and extending her arms slowly, strenuously within the butterfly machine.

"History File Three. Continue." No image appeared before her eyes. Only static. She repeated the command. "History File Three. Continue." The holoviewer didn't respond. She halted her arm movements and removed the holoviewer from her face. The minute antenna hadn't telescoped from the frame and was thus preventing her from receiving further information. Helena tapped the device in her hand hoping to jar it loose, but the action failed to do the trick. "Shooting stars!" she blurted out loud, annoyed at how imperfect technology could be in this day and age.

She searched for Thor and found him on the lower deck, sitting at the robotic controls in front of the window to the ship's power plant. His jacket off and in a white working T-shirt, he was manipulating the mechanical arm for the purpose of placing new fuel pellets onto the fusion reactor's intake conveyor.

Hearing her descend the steps, Thor looked up from his task. Her movements were light, graceful like a dancer. She had covered her workout leotard with a silk kimono, its color as vibrant as a blue jay's feathers. Her face was flushed from exercising, which he thought made her all the more attractive. Her interruption was a welcome diversion.

"Captain," she called as she reached the bottom step. On seeing his virile form without the cover of his uniform jacket, she drew in a profound breath. His T-shirt-clad, massive chest and bulging biceps emanated dynamic strength. His was not the body of a lean and strapping twenty-year-old but of one who had filled out quite fittingly over the years. He was not overweight by any means, but with maturity, his formerly hard angles had become somewhat...softer. A woman would find it difficult to resist desiring his arms around her. His embrace would be tender...and warm. But Helena did resist. Complete...and fulfilling. She had to. But then her eyes met his and she forgot her reason for being there. She had to think. "Ah...I'm really sorry to bother you, but I had paused in the middle of a lesson about events that had led to the Guerrilla Class Wars. The holoviewer is refusing to continue. It seems the antenna is stuck."

For an instant which lasted forever, Thor glimpsed into her eyes, their brilliance enhanced by the kimono, and witnessed the spectacular sight of a hundred thousand wild geese rising from glistening blue waters. With raucous honking echoing over the treetops and soft-feathered wings creating cool cushions of air strong enough to feel across the face, their rise up to begin a southward migration, a ritual as old as time, eclipsed the light of the sun.

At the moment of the wilderness vision, Thor's nostrils flared at the delicate scent of her perspiration. A heat, sudden as a brush fire, flowed outward from his groin. Mustering up his most effective technique for quelling such fires, he extended his hand for her holoviewer. He managed to make his voice sound only slightly unsteady. "Let me take a look at it."

They moved to his work bench where he needed to concentrate on the simple effort of spreading out a kit of tools designed for working on miniature components. The geese and his sudden desire to continue his lineage with her had flashed from out of nowhere. It startled him--until he reasoned that he had only fallen prey to his imagination, which, it seemed, had become more active since this trip began. While he selected the necessary tools from the array, he needed to talk about something--anything to get his mind off his physical urges. His self-control techniques seemed to be faltering. "The Guerrilla Class Wars, hmm? One of my heroes from that era was General Beryllius. He led some brilliantly executed battles for the Naturons, as street scavengers were called back then. Unfortunately, his genius wasn't enough for the losing side." There. Mind direction changed. Thor waited for her response to the fact that his hero was on the side opposing their early government.

"The program is an overview emphasizing the ecological and social aspects of the Delegation's development. Not much has been said about war strategies," explained Helena without further remark. She supposed that as a military man, he would consider successful campaigns from either side of a war with high regard.

Thor assumed her lack of commentary on the subject placed her on the side of the Delegation. He let the matter drop.

After securing her holoviewer under the photonic magnifier, while viewing the monitor, he used a forceps to jiggle the antenna on the front edge of the its bow. He tried a voice command, "Program

Menu." The computer was unable to respond.

Helena filled him in on what she'd been absorbing from her lesson. "It seems biotechnology was overused to the point where strict laws were necessary to safeguard the environment."

Thor popped open the holoviewer's panel to view tiny optical fibers and circuit boards. He added, "But the effort had been too late to prevent a global food shortage--and a chain reaction of civil wars." He used the forceps to remove some of the components so he could gain access to the cylinder which housed the jammed antenna. Thor saw that it was loose. Its misalignment had caused the antenna to push against the frame's edge instead of rise through the hole. He realigned the cylinder and fused its brace back into place.

While he manipulated the tiny pieces, she noticed his hands were steady. His hands. Proportionately sized for his body. From his healthy-sized forearms, the soft lines of reddish hair, glinting under the light, extended to the backs of his hands, becoming finer at the lower sections of his fingers. His fingers were not the rough, callused kind of one who makes a living doing manual labor, although, Helena imagined that Thor would look as natural erecting a steel-beam structure as he did while repairing delicate circuitry, or while flying a spaceship, for that matter. As he nimbly used the forceps to replace the components, she was reminded of a neurosurgeon.

"There, that should do it," he said and on impulse added, "While I'm at it, let me service it for you." He wanted her near him for a bit longer.

He reached for a blower which released a grease-cutting, fast-evaporating solvent. He spoke while directing its tiny nozzle toward the internal parts of the holoviewer and across the small slots along its bows into which nanodiscs could be inserted. "In the service I'd learned that the Wars brought death and destruction along with a technological slowdown. Our present government came into being soon afterwards. It put into practice more 'progressive' methods for managing the masses."

Helena thought she detected a hint of cynicism in his voice, but she couldn't be certain.

Since I'm pretending to be patriotic, Thor thought, I might as well put on a good show for the Vigilant Eye cameras. While he continued to clean parts, he expounded to Helena, "We can be thankful for nearly eighty years of peace time and modern-day innovations. We are not lacking for employment opportunities. We are able to travel to any planet with relative ease and can thus swiftly carry out life-saving assignments such as this one we're on. We can feel proud to do our part for the Delegation in its quest to maintain solar system order." Thor looked up from his work to gauge her reaction to his last statement. Had a blank stare replaced the usual glitter in her eyes at his mention of the basis for Delegation law: to maintain unquestioning orderliness?

She had always felt an unnatural restraint in the way she and others like her were forced to maintain such order. But she kept her opinion to herself. As intriguing as the captain of this ship was--that is, unless he was spouting the Delegation's attributes, narrow as they were--it would be unlikely that she could safely share with him her own independent thoughts on the subject.

Thor had been subtly attempting to find out how devoted she was to their government, to determine if he could safely tell her about his affiliation with the Subterra. Could he recruit her for their cause, or would she blare her discovery of his infidelity into the ship's Vigilant Eye? He decided on the more secure bet and changed the subject. "Have you seen the inner workings of one these before?"

In a way, she was relieved when he moved on to a new topic. The corner of her mouth lifted in a half-smile. She knew she would be indulging him by encouraging him to explain something technical. But she was also indulging herself; it was a good excuse to stay for awhile. "No, I haven't. But you'll show me?"

"Here, watch the magnifying screen."

Helena pushed some hair behind her ear as she moved in closer. His aura seemed to envelop her own. It was warm, entrancing, and seemed mysteriously capable of raising her body's temperature. She watched the monitor as he pointed out and described the function of each part while her peripheral vision kept its attention on his profile. His dark red hair was pulled back to reveal a straight, high forehead. His mustache and beard were the color of mahogany, a shade of red darker than his hair. She envied his curled eyelashes.

"The lightning fast processor takes advantage of the massive parallelism..." His voice sounded husky. He cleared his throat. "...provided by quantum bits, or qubits, obtained from phosphorus ions which interact within silicon crystals. It's what gives today's computers Q-predict capabilities." She answered with properly spaced "uh-hmms," indicating that she was paying attention.

Q-predict was invaluable to the DTM's planning of financial strategies and during the process of scientific and other research. It solved problems by analyzing all possible combinations of entered data until all but the best possible solution had been canceled out.

Thor used a needle to indicate the heart of the computer. "The massive parallel logic or MPL mechanism, here, and the ten-year battery are all housed within the framework of the glasses."

He paused to look at her, and Helena's gaze turned abruptly from him to the dissected holoviewer. Pretending not to notice the red-stain of embarrassment rising in her cheeks, he aimed the solvent at the pull-down voice transmitter on the lower edge of one of the bows and then at the stereo speakers in each of the ear pieces. "Its memory is in the quads. The signal is received by the antenna, goes through the amplifier here..."

Thor was acutely aware that the usually inquisitive Helena was uncharacteristically quiet while she observed him reconditioning her computer. He focused on the holoviewer to avoid thinking about what he'd rather be doing with her, for he had a primeval urge to take her hands in his...gaze steadily into the aquatic depths of those blue eyes...and move in slowly for a taste of her enticingly moist lips.

Instead, he pulled out the micro-camera from its telescoping tube to blow-clean it. The camera could be periscoped in any direction to transmit digital 3-D images of the immediate surroundings or of the person sending the communication. "Here is the rubidium clock." He pointed to the mechanism which ran the atomic timekeeper. After cleaning the remaining parts, he meter-tested all of the components, including the probes which detected atmospheric conditions and those which monitored its occupant's vital signs. His own holoviewer was equipped with enforcer surveillance capabilities.

Within the range of relay satellites, the personal supercomputer was a source of news, research information, and entertainment. But the preprogrammed holoviewers of UMO employees contained a filter which had been installed to prevent unauthorized transmissions from being received or transmitted. Thor could easily override this fact and, without her knowing exactly what he was up to, did just that and plucked out the tiny censorship chip. He snapped on the cover. "There. Good as new," he announced.

Helena found her voice. "Thank you, Captain." But all it took was one look into his eyes, and she became lost in the midst of an endless, pale blue sky. And she sensed it again: the shadowy trace of something he regretted.

She reached for the holoviewer he was offering. Where his fingers touched hers, the warmth she felt was intense. Suddenly feeling the need to flee from this scorching, dizzying room, she forced her eyes from his spell. She spoke quickly while turning to leave--before she would be required to look into his eyes again. "Now I can continue with my studies."

Thor could only watch as she spiraled up the stairway and then disappeared.

\* \* \* \* \*

Helena placed the holoviewer over her eyes and viewed the rest of the program while completing her regimen in the workout room. She took advantage of the physical exertion and having to concentrate on the documentary to shake off the reeling effect Thor's presence had had on her.

"Biotechnology had also re-created the social problem of eugenics, the belief by some that genetic manipulations would result in a superior class of people. Several multinational megaconglomerate business leaders belonging to a secret organization called the New Century Eugenic Society had the means of ensuring that their representatives were elected into high-level positions within their respective countries. The science of eugenics was promoted by these world leaders under the guise of improvements in the health care system. Wealthy citizens of the 'right' nationality and social status were approached to have certain germ-line genes replaced by more desirable DNA segments, resulting in their offspring being more intelligent, creative, robust, and physically attractive. This plan, which was to produce a select group of more genetically fit individuals, was known covertly as the Class Improvement Project.

"Classes became further divided when those who acquired their genes naturally were discriminated against in obtaining jobs and receiving equitable pay and were left to fend for themselves, usually in the overcrowded, impoverished cities. They were called the Naturons."

On receiving that information, Helena's arm movements stopped in mid-swing. It appalled her to think that her station in life was due to a premeditated class-cleansing. And she was amazed that this had occurred in the first place, because since the early part of this century, it had been deemed dangerous to indiscriminately alter a person's genome at the germ-line level. It was the actions of certain combinations of genes, rather than of single genes, that determined most of our traits. Without exhaustive research occurring first, eliminating or altering one or more of the genes in the combination had been known to cause adverse health effects. Q-predict was being utilized in such research today because of the sheer number of possible polygenic combinations made more complex by gene regulatory mechanisms. Altering germ-line genes was determined to be safe only in special cases, although gene replacement in body cells, as a way to treat certain diseases, occurred all the time.

Also, a population with a large variety of genes in its genetic pool was more apt to survive environmental changes. Eugenic procedures reduced the number of naturally available genes for a group. This fact alone should make the Naturons and today's street scavengers evolutionarily superior to a eugenic monoculture because they had more genes at their disposal for their future generations to be able to adapt to the raw, ruthless competitiveness inherent in their meager surroundings. Supporters of the Class Improvement Project, who had been out for selfish, material gains, had considered this only a theory, and wrongly so, but their practices had prevailed because they had access to resources for developing their dubious biotechnology.

"The Earth's population had surpassed its ecological carrying capacity. Famine, new diseases, and eugenic applications created escalating political unrest. Cyberspace was sabotaged by regions which regarded wealthier nations as a threat to their security. In concerted efforts, they tampered with ground communication networks. The halting of the flow of information would severely impair the economies of wealthier nations as well as cause setbacks in scientific progress.

"The events prompted the Guerrilla Class Wars in which thousands of class-driven battles were fought world-wide. Industrial powers had the advantage of having satellite-guided nuclear weapons, neutralizers which destroyed incoming enemy warheads, and bioengineered germ warfare. The Naturons fought fiercely with crude and outdated ground weapons. Though achieving minor victories,



their military drives were mostly ineffectual."

Images of cataclysmic altercations and bodies strewn about in the aftermath were not easy for Helena to watch. Almost harder to bear were scenes of hundreds of corralled prisoners of war, ragged, battle-weary, and gaunt with hunger.

"After the Guerrilla Wars, a delegation of world business leaders conceptualized an 'Emigration for Work' program which offered defeated war survivors transport to the Moon and Mars if they would accept jobs in their extraterrestrial, genesis industries. The brave adventurers who accepted the proposals realized that to improve their chances for a more secure existence, they would need to leave their homelands and thereby become the colonial pioneers of other worlds. They had opted to reside in unadorned settlements elsewhere in the system rather than end their time in trying to outlive famine conditions or further engage in ravaging class-driven fights they knew they could not win. The need for unpolluted, peaceful, and politically free space, even on a desolate world, outweighed the desire for the convenient warmth that Earth provided."

Helena perceived that they really had no other option. The idea was upsetting to her. She tried to imagine leaving her home, everything she knew, for a barren and uninhabited world, and then working for slave wages. Either that or fear for your life in war-torn, overpopulated conditions or endure iron-handed lock-up. Moreover, she strongly doubted that the new colonialists were politically free while under the rule of their corporate superiors.

"Eventually, tensions over class boundaries eased and a new world government, the Delegation of the Twelve Megaconglomerates assumed command. New laws demanded order. Technological progress resumed. There were new developments in harnessing energy, in communications, and in transportation. Nanotechnology was achieving limited success with programmable molecules. Quantum computing was solving simple mathematical problems. The terraforming of Mars and the extraction of precious ores from asteroids had begun. Space vehicles carried explorers further out to the moons of Jupiter and Saturn. Colonial and industrial communities were becoming common on the Moon and Mars, due in part to the construction of profitable enterprises by wealthy entrepreneurs in trades such as mining and tourism.

"The use of more prudent methods in biotechnology was resulting in a cleaner environment and a greater diversity among living things. The latter was accomplished by drawing from cell and seed banks which had preserved the chromosomal make-up of past endangered land and aquatic organisms.

"Gene altering for disease-prevention and some cosmetic purposes was sanctioned by the DTM, though the unchecked implementation of genetic engineering on humans was deemed to have adverse effects on their chances for long term survival. The New Century Eugenic Society disbanded, and the Class Improvement Project was thus suspended."

But Helena knew this wasn't altogether true. Eugenics was being practiced among the ruling class still today. Classified information which Jack, her friend and colleague at work, had divulged to her about James Ganymede and other Delegation officials came to mind.

"Our government's vanguard and the illustrious assembly members who presently hold office in the Delegation of the Twelve Megaconglomerates have, with their great wisdom, unfailingly given us proper and sound direction. They are to be commended for upholding the peaceful and prosperous order of our lives today."

The words END OF PROGRAM flashed on and off.

In spite of the obvious propaganda put forth by her government, Helena was left with a feeling of relief, as though she'd been watching a story where a satisfying ending had been against all odds. She agreed

with Thor and was thankful for the peacetime and technology which made their lives easier. But at what cost to the individual? Was living under the threat of harsh punishment the only way to maintain the order of the people? How could it be otherwise?

And there was the legal loophole where the corporate wealthy were having so-called "corrective genes" inserted into the embryos of their offspring. In reality, their ultimate purpose was to strengthen their class, their power, which would result in further discrimination of those like Helena who aspired to someday rise above political oppression. How could such obstacles be overcome?

These were the philosophical questions to which she had already begun formulating her own unorthodox solutions. Solutions she knew would never come to fruition, but hoped for, just the same.

\* \* \* \* \*

In the ship's shower room, Helena stepped into the turbulent mineral bath. Jets of warm water pulsed around her as she sat in its vertical chamber. Millions of tiny, invigorating bubbles rose from the skin of her torso, arms, legs. The hum of the water pumps droning, she leaned back on the headrest, and, as with the few other times she has such indulged herself, it was the nearest thing to a complete emancipation of mind and body she had ever had the pleasure of experiencing: it was exquisite, pure rapture.

In the soothing, physical luxury, her mind drifted from one topic to another. She made plans and problem-solved with ease, her creative energy more potent in this elevated state.

She sorted through the most effective procedures for bringing a major project to completion upon her return to UMO's Nebraska laboratory. She filed away ideas on how best to deal with her despotic boss, Mr. Ganymede. She reviewed her obligations and expectations for the current rescue mission. That she was flying through infinite space filled her with a sense of insignificant awe. Soon, in the watery paradise, she was having visions of colorful, fragrant orchids. And then Thor entered her mind.

Through the rising steam, she saw him again as he guided her through the ship. Tall, his obvious physical strength held in reserve, he made her feel...safe. She sensed that he did not need to prove his strength to others, unless the situation demanded it. He spoke gently, intelligently, without arrogance. He was helpful without expecting anything in return. She would be traveling over 600 million kilometers from home, and he had given her a sense of security as though they were taking a trip to the next town. On one hand, he gave her comfort. On the other, he threw her emotions into turmoil.

His voice sent tingles down her spine. His closeness caused her heart to fall out of rhythm, her thoughts to become a confused jumble. His influence on her scared her tremendously, for she could too easily drown in the tumultuous, white-water river of him. She counseled herself that it was all in her head, that Thor had none of these same feelings for her. He was here on a saving mission, nothing more, which should also be her focus. She was struggling for her life, yet her instincts were allowing her to drown, urging her, gently, to let the river take her.

There, in the mineral spa, she softly groaned at the memory of his eyes reaching into her and she becoming powerless against them. They had transmitted meaning too ancient for words. They had filled her with a yearning for...what? What desires were orphelions allowed? She only knew that Thor was the only one who had ever awakened in her such a passionate--and she knew dangerous--hunger.

She recalled his T-shirt-covered contours which had tantalized, enticed her to go to him. She recalled the dexterity of his hands while he repaired her holoviewer and the burning sensation she had felt from his contact when he had returned it to her. Just for a moment, she closed her eyes and dared herself to imagine his hands on her. His touch would be as stimulating as the hot gushes of water cascading around her now, only the same stirring heat would surge from deep inside of her, as well.

Hovering over the pinnacle between wake and sleep, she zoomed forward in time. It's morning. She has awakened and is basking in his embrace. Her back is spooned against him. His beard is snuggled against the side of her neck. His arms are holding her securely. His warmth surrounds her, until they have to rise for the day. She worries about him after he leaves for his job--as a corporation soldier-- a delegation enforcer--whose duties are to maintain order, arrest innocent orphelions, take prisoners of war.

Why was her mind replaying scenes from the history documentary? She tried returning to the heaven in his arms, but the dream's delicate crystalline sphere had already shattered into a million pieces of bitter reality.

Jarred from unalterable facts, she sat there in the churning water with eyes wide open. She tried to console herself. A life with Thor, DTM enforcer or not, was an impossible notion anyway. In an attempt to prevent the onset of an engulfing sorrow, she unraveled into nothingness the deep blue, velvety remnants of her unattainable dream.

It left her with contemplations about the history program in conjunction with the present condition of her planet. She acknowledged that Earth's ecology had improved since the time of the Guerrilla Class Wars, but there were facts of which she and others were highly aware: The rain forests had been nearly obliterated from misuse and climatic changes. Overpopulation would always present insurmountable problems. Greedy corporations were in charge of an interplanetary government which exploited workers. The belief in eugenics remained. And economically and socially, the rich prospered while the poor merely survived.

In Helena's opinion, the course of Delegation history needed a major overhaul.

## CHAPTER 3--LESSON IN SUPERIORITY

2070: Earth

It was a rare summer Sunday when Claire was not immersed in her work and seven-year old James was home from Chrysalis Regiment Academy, located on Earth's moon. James, who missed his mother terribly while away at school, would often stare through his dormitory room window at the distant blue and white Earth, wishing desperately to be on the North American jigsaw puzzle piece he knew held his home.

Claire, in her early thirties, was not a woman who smiled easily. She viewed her life as a serious business to make perfect. This included the upbringing of her child.

That morning at their home in Colorado, she announced to her son, "James, let's go for a hike on Pike's Peak."

He was elated to do anything with her, but he remembered his manners and contained his exuberance. "That sounds like fun, Mother."

Her long, auburn hair pinned back, Claire packed a knapsack with picnic supplies and her palm-held computer. They aircruised to the mountain's timberline in search of a beaten path.

The thin morning air was crisp and clear. From their path, beholding the view below their line of sight, the mountain valley was green with trembling aspen and ponderosa pine. Above the line was the barren tundra on which glaciers had randomly deposited boulders, now covered with pale green lichen. Higher still, the snowy, jagged, granite peaks impaled cottony clouds against the azure sky.

With provisions on her back and in sure-footed gear, Claire led the way in an uncompromising walk on the trail that guided them through thickets and gnarled pines, stunted in height at this elevation. Not acclimated to the thinner air, James was soon struggling to keep up with his mother's longer-legged stride. "Mother, I'm tired. May we stop?"

"We must keep going for a while longer." Claire was building stamina in her son, preparing him for life as they forged ahead.

A countless number of steps later, "Mother! Please may we rest? I can't go on!"

"James, stop complaining now. We'll go just a little further." And she kept walking for what seemed to James a duration longer than his time spent in the headmaster's office at school that past week. He had been reprimanded for chasing a girl during a game of pi-square where pursuing the opponent had been part of the game. She had slipped and fallen, skinning her knee. It wasn't his fault that she was clumsy, he thought. But he'd been blamed for her injury.

Walking, much less chasing, wasn't coming naturally to him at the moment. He had to concentrate and tell himself to move each foot forward. It was hard to breathe. This hike wasn't much fun at all. He pouted in silence.

Finally, at a bench among some pine trees, Claire decided that they would rest. A weary James was only too happy to sit.

They snacked on fruit juice and glycine nutriment bars while they relaxed. Claire asked James about school.

"My friend Pauly got a puppy for his birthday." James was excited to tell her this bit of news. "He told me all about how it follows him around and sleeps in the bed with him when he is at home. Mother, may I have a puppy?"

She admonished him. "I should say not! They need lots of attention, and you don't have time for that. We have to make you strong, mentally and physically, because one day you will replace me as the head of Universal Mining."

James was disappointed in his mother's answer. But he wasn't surprised. She had refused him many things, saying they would be a waste of time and that he needed to concentrate on his studies and do well at the academy.

He chewed on his sandwich bar in silence and watched his mother pull out her computer from the knapsack. She was soon communicating with one of UMO's platinum mines in Africa. A power outage a day ago had halted production. "What do you mean it hasn't been repaired yet? The electrical contractor had better damn well bring in the new transformer to the substation A-S-A-P or he will have hell to pay!"

The boy, feeling rested, left his mother to her business. He wandered to a nearby clearing where, among the glacial till, chartreuse moss, and fiery red paintbrushes, he heard the voices of other children. He spread apart the thicket on the forest's edge and observed about ten children in gray attire. They were using magnifying lenses and electronic tablets to study the nature around them. Some were observing the flaky lichen on a boulder. Others were looking closely at the flora among the moss. An adult off to the side seemed to be reprimanding a youngster.

Near James and to his left, studying the petals of a flower, was a girl with dark brown hair, a little younger than he. "Hello," he said.

The girl looked up and said, "Hi." Her attention then returned to the creamy white, purple-tipped flower.

"What are you doing?" He had noticed her blue eyes.

"I'm comparing this gentian flower to one that I saw at the bottom of the mountain," she answered matter-of-factly.

"Why?" asked James.

She had to think for a moment and then smiled. She said as if reciting, "Because our purpose is to make the Delegation happy with our productivity."

That sounded strange to him. He didn't know what it meant.

"James!" Claire startled both of them as she came up from behind them. She grabbed James' arm and dragged him from the clearing. "Don't ever go near those children again! They are inferior to us! They are orphillons!"

James didn't know what that meant either.

But as the years went on, and as he was enrolled in the finest preparatory academies, metallurgical colleges, and business universities, he had learned what it meant to be superior. How else would he have been able to handle the rigors of managing one of the industrial superpowers of the universe?

## CHAPTER 4--THE EVE OF SELF-DESTRUCTION

2097: On course for Jupiter

Before sleep time each day, the space travelers had fallen into the habit of playing games of chance with an old-fashioned deck of playing cards which Thor had brought along. While they sat at the table in the galley, he was almost apologetic at first for his low-tech offering. "I find they're easier on the eyes after peering at computer images all day," he had said.

Helena had a penchant for things antediluvian. She had smiled and asked, "I wonder for how many centuries these things have been around?"

Thor had chuckled. "Yes...some things never change."

They had reached a comfortable stride in their working relationship. Their conversation, more at ease now, more sociable, would broach subjects such as their musical tastes or entertainment preferences. Helena had loaned Thor some recordings she thought he might like. While playing the card game called ten-point smear, they listened to one of the music groups. "It's a very old style of music called rock," explained Helena. She was pleased to hear Thor express that he rather enjoyed its driving beat and creative lyrics.

She studied the cards which Thor had dealt to her, now fanned out in her hands. At the same time, she was wondering if he was the dedicated officer he appeared to be, or was he also feeling discontent over the too many restrictions imposed on them by the DTM. Granted, on the surface, his talk sounded proper and official, but the underlying cynicism she thought she'd detected in his voice earlier on matters of patriotic duty led her to believe otherwise.

When solving problems in the medicinal chemistry lab, it was necessary for her to apply logic and creativity. It was these same intuitive qualities which disinclined her from embracing their government's principles. At first, she wanted desperately to believe that the Delegation promoted good will for all, but its credibility began to deteriorate after she'd learned, from illegally acquired DTM-banned history texts, that there'd been a time in the past when people were free--actually encouraged--to pursue their aspirations and dreams. This information had only served to reinforce her intuition that the Delegation was overly stringent in exerting its authority as it strove to maintain the order invariably stressed in its tenets.

Jack, her colleague who worked at UMO's viral pathology lab next door to her department, had given her ideas--forbidden ideas--on how orphillions could acquire the independence described in the illegal texts. He had asked her to join the resistance movement. Then apprehensive, she had remained noncommittal, but lately, she'd been seriously reconsidering the offer.

She glanced at Thor over her cards. If he was to identify her as a sympathizer of the rebel movement, would his considerate demeanor turn glacial while he handcuffed her as though she were a common criminal? Would she be confined to her quarters during the weeks it would take to return to Earth for an interrogation that was certain to be biased against her? Or was he under orders to phase out insurgents directly, since the Delegation had recently enacted a zero tolerance law for treachery?

This evening, despite her misgivings, Helena's mood was daring. She set out to test Thor's level of loyalty to the Delegation before deciding whether to share with him her own insights about Delegation principles. Her gut instinct told her she could trust him, but she hadn't become the head of her department at UMO's Medicinal Chemistry without first determining if her instincts were of sound basis.

A lesson from the DTM history documentary was on her mind. Her heart pounded in anticipation. With eyes veiling her true intentions--and the cards she was holding--she cautiously ventured forth.

"Captain,...do you believe the Delegation is condoning those who are illegally taking advantage of the procedures outlined in what was once known as the Class Improvement Project? I'll bid." She was surprised at her own acting ability. The tone of her voice did not waver.

There was evidence that high numbers of the ruling class--their boss Ganymede included--had too many similarities in appearance and personality for it to have happened by random natural selection. Current laws which governed DNA technology officially prohibited eugenic practices. She reasoned that if Thor believed the Class Improvement Project was not currently being exercised, then the DTM, in its training of him as an orphilion, had been successful in completely brainwashing him, and it would be hazardous for her to say more. If he believed otherwise, as did most skeptics, a vague statement like "I believe it is in the Delegation's best interest to discourage such practices" would be safe to say while beneath the ship's surveillance cameras, yet it would give her a hint of his open-mindedness.

Thor eyed her suspiciously, peering over his own cards. What a charged topic she'd brought up. What was her motive for this? The words of the old man, Taedres, sprang to the forefront of his mind: "If caught as a subversive, you will be placing yourself and the whole Subterra Rebel Force in extreme danger...." Helena didn't seem to fit the profile of a Delegation informer: all-too-serious and proper, follows orders to the extreme, openly spouts Delegation tenets. But there were informers who were known to be skillfully deceptive. It would be just like Ganymede to send one along on this mission. But why would he suspect Thor? Thor was certain he had covered any tracks which could lead to his involvement with the SRF. And his imitation of a steadfast DTM soldier had been perfected to a tee.

All he could do, while gazing at Helena's pretty poker face, was hope that she wasn't an informer, yet act as though she was.

Grouping his cards into like suits, Thor answered her guardedly. "I had learned of the Class Improvement Project when I was in the Space Force. Early in this century, those who had risen into power believed they could artificially create a physiologically superior class of people. They felt this 'purifying' of their genes gave them justification to discriminate against the Naturons. We have been told the procedures were discontinued soon after the Class Wars, when our present government took charge. But I have reason to doubt that--"

He was about to divulge to her underground information until it flashed across his mind that telling her of their government's corruption would result in her thinking him as nothing but a barefaced liar. And she would probably be repulsed if she knew the degree to which he was a traitor to the Delegation and its tenets. Shortly after meeting her, he'd decided to wait until the Europa rescue was accomplished before taking such risks with her. He decided this was still the best option and quickly added, "I mean, the type of eugenics with the purpose of achieving DNA supremacy isn't sanctioned by the DTM anymore. We have all been allowed to take advantage of certain beneficial genes.... So, what do you bid, and in what suit?" Her expression revealed nothing to him about her perspective on the subject. Nor about the nature of the hand he had dealt her.

Helena's hopes had been raised for a moment, when Thor's answer had seemed open to interpretation, but then he spoke in Delegation-ease, telling of its infallible goodness. Beneath her impassive appearance, Helena was becoming incensed. She wanted to shout out to him: Do you really believe that? Do you think that you or I, as orphilions, could go and obtain genes for intelligence and creativity as do those in power? I think not--not that we would need to, or want to. We aren't even allowed to express our own ideas, inherently inferior as they are thought to be, if they fall outside of the realm of Delegation dogma, without suffering a prison sentence--or worse! Democratic nations of the past, about which you will not hear in any DTM documentary, used to solicit and reward innovative

thinking--and without the use of brains that have been genetically tampered with!

It was her sudden recollection of an exchange she once had with a conservative friend in which she had shared some of her feelings about their oppressive government that was presently causing her to hold her tongue. She remembered having had the distinct feeling that her friend would have reported her as a malcontent if she hadn't begun to express her thoughts more in accordance with Delegation tenets. She gave serious thought to that lesson while conversing with the career military man before her. Instead of vocalizing the heated discourse that had erupted in her mind, Helena calmly mulled over her cards and spoke in a way which would make the Delegation proud. "It is best to trust in the Delegation and UMO. They select the lifestyle that is best for us. Peaceful order is maintained. Imagine if anyone could requisition genes for enhanced cerebral ability." She released a short snort. "There would be nothing but chaos. 'Keep creativity in check for the peaceful order of the solar system,' I believe is how the line is worded. I bid five, in spades."

They discarded some cards, and Thor dealt enough for each to complete a hand. He was mentally commenting on the number of cards she requested. She seemed confident to have bid so high, but she had also discarded too many cards to have made such a gamble judiciously. It would set her back in points if she didn't make her five.

While Thor was trying to second guess her strategy at cards, one of his hands slowly followed the grain of his beard to his throat, an action he did instinctively when pondering problematic situations. He kept hidden his disappointment over her response about their government. Her answer, so automatic, unquestioning, and in support of the Delegation, convinced him that she would turn him in if he were to identify himself as a deserter. While determining the best ploy to make in the game--and in the conversation, he was imagining that if he revealed himself as an SRF infiltrator, after this card game, she would head to her quarters, nonchalantly, thinking that he wouldn't become suspicious. But he'd follow her and eavesdrop from the corridor where he'd listen to her speak into her holoviewer communicator. Her voice would be muffled. He wouldn't be able to make out the words. But naturally, he'd assume she was calling for an enforcer unit from the nearest space station to come and arrest him, which, of course, would result in his attempt to escape.

All conjectures aside, he decided that at this time, it was most important to complete the Europa rescue operation. Too many lives were at stake. He would investigate her willingness--or unwillingness--to join the rebels at a later time. Even in so deciding, it crossed his mind that her skill as a medicinal chemist would be a valuable asset for the rebel cause.

The part of him which considered her a cunning DTM informer barred him from saying what was really on his mind. Rather, he said, "I agree. Rampant genetic engineering for the purpose of increasing mental capabilities would be disastrous for our culture, which requires multiple levels of intelligence for its division of labor--for specialization in various jobs. Although, the Delegation has allowed us to benefit from modern gene therapy. For instance, we have all taken advantage of corrective gene insertions for the prevention of certain illnesses."

Helena laid down her first card, a jack of spades. A risky play, thought Thor, without her knowing the cards he held. This whole conversation was risky. And talk about a taboo subject! Eugenics, of all things. The wisest move he could make was to lay down his two. At least he would be guaranteed the low point.

That move told Helena a lot about the cards he was holding. Nothing higher than a jack, or he would have taken hers. And his last statement said a great deal about where his allegiance lay. "Yes," Helena said, suddenly growing weary of playing the Delegation's advocate, "The DTM and Universal Mining want us to be healthy."



"You are very perceptive to our government's wisdom," he said appropriately. But on his mind was: Why does she seem so willing to accept being a puppet to the Delegation and UMO? The only reason UMO is concerned about our health is so we can carry out their detestable orders while they earn their exorbitant profits.

On hearing his last comment, Helena was beginning to understand the extent to which Thor lived his oath of duty, and it would be perilous for her to carry on this conversation should she become vexed enough to say something which would give him reason to take her into custody. She decided to change the topic as she set down the three of spades. "So, how is it that you know so much about the insides of a holoviewer?"

Thor laid down his ten which gave him a point called game. He felt that slight pang from having to concede control of the game to the cards; Helena's three had automatically given her three more points. He said, "I had a roommate at school who would dissect any electronic device he could get his hands on, just for the sport of it. I learned a lot from helping him put the pieces back together, before the disciplinarians found out." Thor played his joker, hoping she was out of high trump cards. It occurred to him that it had been many years since he had spoken to anyone about his childhood friend Seyfert.

Helena had the king and took his point. "Did it work? To help him avoid punishment?" She played the ace of spades for her finale.

His eyes widened at her incredibly good luck: jack, king, and now the ace. He had never had a chance. "Sometimes. I could not always be there for him. But he was resourceful and could usually avoid the disciplinarians on his own." He reminisced to himself about good times, keeping repressed deeper, darker memories concerning Seyfert. He had a premonition they were too painful to deal with at the moment. "There were times when I had trouble keeping up with his escapades--as I seem to be having trouble keeping up with your prowess during this game of cards." And Thor had to surrender his last chance at acquiring a point called jick.

"Ha! I should have bid higher!" Helena's stoic, poker face exploded into shameless gloating.

All Thor could do was mark down the score. Two to seven. But seeing her dazzling grin was almost worth the loss of this round. "Perhaps I will be able to redeem myself with the next hand," he said. For the moment, his luck at cards might have taken a downturn, but he was thankful the conversation had steered onto less hazardous terrain.

Helena was contemplating that a serious debate with him over the merits of their government would be intellectually stimulating. But it would, in all probability, not be the wisest thing to do at this time. Successfully completing the rescue was first and foremost.

\* \* \* \* \*

Twenty-one days into the mission, alone on the bridge deck, Helena was examining the conditions surrounding the pale purple cattleyas. Resembling an insect with the holoviewer's antennas extended from the frame, she read the temperature on the projected image and became concerned that the ship's cabin was a bit cool for their optimal growth.

Focusing through the lenses, she observed that Thor was still away from the bridge. She removed the holoviewer from her eyes to more closely inspect the health of one of the potted orchids that she'd pulled from the shelf. A short while later, Helena decided to adjust the air temperature herself, not seeing a need to bother Thor for what seemed to be an easily solvable matter. Carrying the plant with her, she went to the spacecraft's command station.

The semi-circular panel before her held an endless array of touchpads and variously colored blinking lights. Beneath some of the switches on its middle section were words such as thrust power, attitude

adjustment, inertial guidance, celestial guidance, graviton field strength, and so many others that Thor had introduced her to during the emergency flight lessons. Alongside was the T-handle which regulated the rate of fusion reaction. To the panel's left was the holocomm unit which projected kinetic images.

Helena carefully set down the somewhat top-heavy orchid plant on the edge of the panel's right center area, where there was an inset desk surface and keyboard in front of a thin display screen. The screen was slightly curved to match the bend in the console.

She sat in the captain's chair, pretending for a moment that she was the commander of a starship's crew. "Take a left at the nearest wormhole, and chart a course for Arcturus, Lieutenant," she said in an authoritative voice to an imagined officer and then smiled to herself.

Returning to her task, she turned the chair and found the bridge's climate controls to the desk's right. The UMO botanist pressed her finger on the temperature button. Her left hand reached past the orchid and was about to adjust the thermostat's touch control which had appeared on the screen when a series of high beeps, sharp static, and then a voice announced a routine communication check from Earth. The sudden noise jarred her, causing her elbow to knock over the plant, strewing compost across a portion of the flight command panel.

"Of all the..." Helena began scolding herself for her clumsiness. She had not intended for Thor to know that she had been at the controls. She most certainly did not want to have to explain that this accident had occurred while she'd been performing a function for which she was not authorized. While quickly tidying up, she inadvertently pushed a touchpad beneath the spill.

A seemingly infinite number of colored lights--mostly red--began coruscating on the panel and around the bridge deck. She heard a pleasant, masculine voice from the speaker. "Please begin evacuation procedures and prepare to use the auxiliary vehicle at once. This Universal Mining spacecraft will self-disintegrate in one-hundred-and-twenty seconds. One-nineteen. One-eighteen. One-seventeen...."

Feeling incredulous for what she seemed to have started, the only words she could muster were, "Oh, my!" And then, "Captain! Captain Thor! ...HELP!"

"One-thirteen...", answered the voice.

Her heart beat in her throat. She tried to calm herself so she could think coherently about her next move. She studied the panel for a button to cancel the command and discovered one labeled DISENGAGE COMMAND. Relieved, she touched it and felt the ship suddenly decelerate.

"One-o-seven. One-o-six...", continued the disembodied voice.

"Uh, oh," she said, a panic beginning to rise.

She ran in search of Thor. While calling his name, she rapped frantically on the door of his sleeping quarters. No answer. Time was ticking away. "Ninety-nine. Ninety-eight. Ninety-seven...."

Maybe he went for a snack. She rushed to the galley, but he wasn't there either.

She hurried to the workout room and pressed the button to slide open the door. The speakers in the room blasted the familiar rock and roll of Steppenwolf's "Magic Carpet Ride." The ship's cabins were quite soundproof; she hadn't heard the music from the corridor. She found Thor lying on the weight-lifting apparatus and thanked the constellations that he hadn't gone to the lower deck. Her eyes were drawn to him as he lifted against a considerable number of force units. It was almost more of a distraction for her to see the tightness of his neck tendons, the spectacular size of his biceps, and the sweat-glistened skin of his well-muscled chest as he allowed the metal alloy resistance bands behind him to return to their unrestrained shape.

"Captain!" she called.

Thor hadn't noticed her at the room's doorway. He sat up and reached for a towel to wipe the dampness from his face.

"Captain Thor!" she screamed louder.

He turned to look at the frantic woman in the doorway and quickly reached to mute the music's volume. "What is it, Doctor?"

His eyes widened and his jaw dropped as he was acknowledging the red lights flashing and the voice of the ship's computer resounding from the hallway. "Eighty-two. Eighty-one. Eighty...."

"What is going on?" he asked, his sense of alarm rapidly springing to life.

Helena fidgeted. Hating to have to admit her foolish mistake, she stammered, "Er...it appears that I have accidentally activated the ship's self-destruct function. You must hurry!"

"Seventy-three. Seventy-two...."

"You did what?" Thor's face showed every sign of shocked disbelief. Then he darted up from the bench-press and tore out of the room, down the hall, to the dazzling lights of the command console.

"Sixty-four. Sixty-three. Sixty-two...."

While wondering how in blazes loose soil found its way across the console, Thor opened and reached into a hidden compartment from beside the desk and pulled out an egg-sized metallic object. He scanned for the ABORT FINAL OPTION button.

"Fifty-eight...."

He touched it and voice-entered a code requested by the monitor. "Heisenberg is certain of his principle." Thor was relying on his ingrained emergency preparedness and his voice was clear. He inserted the ovoid platinum key into a depression near the abort switch and then pressed a series of buttons. He waited a moment for the new command to take over. Thor expected the countdown to stop, but it didn't.

"Fifty. Forty-nine...."

Emergency preparedness notwithstanding, he gulped at this unexpected turn. He and Helena eyed each other nervously. There wasn't time to retry the procedure and to vacate the ship should the abort command fail again. He yelled, "Quick! The escape pod!" He grabbed Helena's hand and pulled her along as he ran down the spiral steps to the auxiliary vehicle's entrance. He knew they would probably not have enough time to eject safely from the exploding spaceship, but it was their one and only chance for survival.

Thor swiftly directed her into the pod and followed close behind. He swung into the driver's seat while at the same time turning on switches in readying the space capsule for flight. Time continued to elapse. "Thirty-two. Thirty-one...."

Only half a minute, yet neither were ready to abandon hope.

Thor secured the capsule's hatch and they belted in. He systematically punched touchpads on the pod's instrument panel in performing the emergency preflight checks. The internal oxygen and pressure levels were set. The inner door to the main ship's airlock area closed. The outer door was about to open. Their time on board the ship was about to end one way or another. The electronic voice, as heard from the speakers in the cramped chamber, gave the final countdown. "Ten. Nine. Eight...."

Thor gave Helena a so-long-it's-been-nice-to-know-you-but-I-tried-everything-I-could glance.

He pushed the throttle's T-handle. They heard the increasing whir of the pod's engine as it approached

escape power. Thor was about to press the button for blast off when they heard from the speakers, "...Three. The self-destruct mode has been deactivated. All systems are operating under previous authorization." The emergency lights stopped blinking. There was no cataclysmic explosion. Thor and Helena felt the surge of the larger craft's acceleration.

With great relief and joy, they turned to hug each other but ended up only pulling against their safety braces. Each fumbled to unlatch the restraints before completing their embrace. Their lips touched lightly...momentarily. Both resisted overwhelming urges for a more comprehensive kiss. They did allow their arms to wrap tightly around each other in celebration that they would survive this day after all.

After several seconds, they released each other, reluctantly returning to a manner more suitable to their assignment. "Yes, well, that was a close one," said the captain while mentally composing himself. Also recovering, Helena ran her hands over her top and pulled its hem downward to straighten it. Thor flipped switches which closed the astrospace's outer door, reset the air pressure, and opened the inner door of the airlock. He shut down the pod's engine and opened its hatch. After exiting the auxiliary vehicle, he offered Helena his hand to assist her.

Emerging from the pod, Helena considered it nothing short of a miracle to be alive--and to be holding Thor's hand. Being in his arms a minute earlier had definitely been metaphysical.

They returned to the bridge deck where the black dirt across the console reminded her of why they'd needed to nearly abort the mission--and most likely their lives in the process. After Thor's gaze turned from her to the console, she knew he was also being reminded of why they nearly had to abort the mission. She had the distinct feeling that the relief he'd been displaying only a moment ago was giving way to a slow-burning anger which was intensifying as it expanded outward from the smoldering core of his being. As though struggling to control himself, he said through gritted teeth, "What in the name of the Milky Way did you think you were doing?"

She didn't know what to say as he was glaring at her. In his eyes, she could see flames like the violently erupting flares on the solar surface. She knew his fury was justified, but she should have been more intimidated. Deliberating the best way to account for recent events, she said, "Well, Captain Thor, I didn't want to trouble you when I detected that the cabin temperature was below optimum for the orchids."

Hearing her unique pronunciation of his name softened Thor's glare. She'd held the vowel sound a bit longer than required, and the sudden rise in tone half way through reminded him of northern Europe. Sweden, maybe. He recalled for a moment the time when he had negotiated a pact between Universal Mining and Swedish townspeople who were being displaced by a new silver mining development. Now he found himself eyeing the curve of Helena's lips. Forgetting his anger for a moment, he thought how he would like to gently outline them with his finger before covering them with his own.

Did she detect less intensity in his eyes? Trying not to imagine her fingers weaving through the thick hair of his heaving chest, she continued, "So I thought I would increase the temperature myself by calling up the computer's thermostatic gauge, but noise from the comm unit startled me. A reflex action caused me to knock over the cattleya that I had carried with me to the console. While cleaning it up, I must have set off the..." Her voice trailed off when she sensed Thor's ire returning.

He turned to press the temperature button on the console--applying a bit more force than was necessary, she thought. It seemed he was making a great effort to speak civilly when he inquired, "Now what was the optimum range of degrees for which you were searching?"

"Um, two-hundred-ninety-seven kelvins, within a three degree tolerance, sir." She saw him tap the monitor to program in the setting for the ideal temperature range. Helena was beginning to feel

properly embarrassed. She could hardly bring her eyes to meet his when she said, "Thank you, sir. I'm very sorry for all this." She began cleaning up the compost and the overturned orchid. In spite of her feeling of chagrin, she decided to conclude this episode on an optimistic note. "Captain? About what just happened..."

"Yes?" He was curious as to what she had to say about the near termination of their existence.

"It was a good thing that I found you before it was too late."

He was amused at her understatement. "Yes, Doctor, it was a very good thing."

\* \* \* \* \*

Before the rescue mission, at the UMO hangar in Colorado Springs, Thor had been servicing the spacecraft. While up to his elbows in colored fiber-optical wiring and precision tools in the craft's astronics bay, he'd been summoned for the Europa emergency. Before picking up Helena, he had quickly rewired the photon circuitry and finished upgrading the remainder of the ship's processing systems--including the self-destruct function--with new MPL qubit components.

Immediately following today's crisis, Thor found himself back in the astronics bay on the lower deck, troubleshooting his most recent computeronics work for clues on what could have caused the malfunction. Normally, to initiate self-destruction, two encoded confirmations, known only to the pilot, along with the insertion of the platinum key, would have to be entered into the command station's computer after a particular button--the one on which the orchid had fallen--had been pressed. Only then would the countdown have commenced. How, then, Thor was now questioning, had Helena so easily set off the system? Why had she been able to bypass its safeguards? And what had caused the time delay when he had tried to abort the procedure?

Using an MPL meter, he tested each quantum bit component which he'd recently installed into the ship's defense line until he reached one which gave an unexpected reading. To his mortification, the UMO pilot discovered that he had inserted the wrong replacement part. How could that have happened?

After rereading the itemized electronic receipt, he could only bring himself to stare at the component in question: QB7-80E-437V. Edd, the parts distributor at the hangar, had handed him the wrong part. Although the shape was the same as the original, it had been designed for an older model self-destruct system. It even looked worn, like it had been reconditioned. Why hadn't he noticed that before?

His mind sifted through possibilities, which led him to remembering how rather odd his last exchange with Edd had been.

\* \* \* \* \*

Thor was at the hangar's service department to obtain some upgraded items for his spacecraft, including a new MPL mechanism for the circuit board which governed the spacecraft's defensive technology. "Whoa, Edd, you look like something a rat dragged into the drain system. Rough night?"

Edd was a street scavenger, hired by Universal Mining over a year earlier. The spacecraft parts department employee appeared too skinny, but one could sense the sinew in his lean muscles. His skin was whitish as though sun-deprived, and this morning his eyes were bloodshot. Around one eye was a good shiner which extended downward to a bruised and swollen cheek. He'd lost one of his crooked teeth in an earlier row. It had been replaced, thanks to the company's biotech health coverage. When Edd spoke, Thor noticed a toothless gap in his mouth; the replaced tooth and now another incisor were missing.

"Shhh! Don't talk too loud!" His voice was just above a whisper. He squinted in a way that suggested

the interior light was too bright for him. With an incomplete set of front teeth, he now spoke with a lisp. "Went out drinkin' with the guys lath night and got ourthelves in a bit of a thrape with a gang from the Back of Beyond about...umm...funny, I don't quite remember over what. But you ought to thee the thorrier thtate of the one who got at me!"

Thor shook his head. "You've got to be more careful, Edd, or your dental plan will run out, and soon you won't have a tooth left in your mouth."

"Don't worry about me, Cap'n." He winced suddenly. After a few moments, when whatever had overtaken him subsided, he said, "Got me a killer headache right now, but after my shift, after I thleep thome, I'll be ready for more action tonight." He gave Thor a wink in spite of his self-inflicted pain and suffering.

Thor wondered how Edd could maintain such a lifestyle and make it to work each day. He surmised that it would soon catch up with him, and he would regrettably be out of a job.

Into the microphone of the automated receipt maker, Thor listed the spacecraft parts he needed, concluding with the previously mentioned MPL qubit device, "...and number QB7-80E-437Y."

Thor had to wait while Edd took agonizingly slow steps behind the service counter in retrieving the upgraded components from the warehouse shelves. "Here you go, Cap'n," he said finally, pushing a box toward Thor.

"Thanks Edd. And try to stay out of trouble," said Thor as he reached for the container of parts.

"You too, Cap'n. Thteer clear of Venuth." The last sentence was an expression of care which meant: beware of anything comparable to a planet which disguises its corrosive acid clouds and blistering surface heat beneath alluring and shining beauty.

It wasn't long after that when Ganymede's call came in with the request that Thor make immediate preparations for departure to Omaha, then Europa. After hurrying to complete his astrionic work, Thor proceeded to gather provisions needed for the trip. Stepping from the bottom of the astroship's escalator, in his rush, he nearly collided with a custodian who appeared to be picking up discarded components for recycling. Thor had never seen him before. On his way toward supplies, he was trying to pinpoint what it was about the man that had spooked him. It wasn't because of the suddenness of his appearance; Thor had just been caught off guard. It wasn't because of the total lack of hair on the man's smooth, white head; that was common enough. No, it was because of his gray eyes, cold and inanimate, and the shiver Thor had received when he had looked into them.

\* \* \* \* \*

An hour later in his beige flight fatigues, Thor was alone on the bridge, manually driving the spacecraft, making tiny adjustments in attitude by firing the craft's smaller control thrusters. At the same time he was contemplating Helena.

He shook his head when he thought of the total destruction she'd nearly caused to them and the ship. And it would have been tragic indeed to the survivors on Europa. He had wanted to reprimand her severely for utilizing the ship's controls in a non-emergency situation without his consent, but when he saw her look down in remorse over her action, that was reprimand enough in his eyes.

She was easy to forgive. Too easy. He didn't understand how he could pardon someone for committing such an inexcusable and potentially catastrophic offense. Back in his military days, there would have been months of an investigation for making a mistake like that.

Then he groaned at his own lack of forethought. Even though he had been hurried, he should not have left Earth without running the more comprehensive series of tests to ensure that the craft was in fully

functioning order. At least he should have double-checked the serial numbers of the parts he had received from Edd.

His other worries must have been affecting him more than he cared to admit. The near-fatal error of this day was more his fault than hers, and he held himself fully responsible. That might have been another reason why he hadn't reprimanded Helena--and why he could so easily exonerate her. What he'd done instead was help her vacuum up the scattered orchid soil.

All he knew was that he felt good when she was near. When he'd first met her and had given her the tour of the ship. When they planned mission strategies together. When they played card games. Even when their discussions swerved toward forbidden topics.

In the escape pod when they'd nearly kissed, how he had wanted to more thoroughly experience her flavor. It had definitely been exciting to hold her. Exhilarating, in fact. Like watching a multitudinous flock rise to the heavens. He relived the wonder of that moment when her eyes had become windows to the cosmos. He wondered if she would consider... Then he snapped to his senses. His desire for a more intimate contact with her was simply due to the intensity of their recent emergency and nothing more.

During the weeks in which they'd been within the confines of the spacecraft, he had often imagined touching Helena's dark, satiny hair, feeling the softness of her skin, and experiencing the warmth of her body next to his. He also realized that it was only a lust which he would never act on, out of respect for his mission partner--and which he didn't need to act on because of his military conditioning which had taught him to ignore such urges if necessary. The thought of circumventing an unpleasant conduct hearing had also crossed his mind.

Thor had not been, however, without a satisfactory means of releasing his pent-up sexual tension while on these prolonged space flights. With a dose of a rec-procule designed to tune in to certain signals from the ship's computer and bring about an interactive virtual woman from within his brain--an experience as near to real as one could get without a flesh and blood woman--the desired release could be easily achieved.

But, unlike the superficial feel of his holographic cybermate, his urges now could only be satiated by a real woman and only one woman. For a moment, Thor allowed his innermost yearning to surface: in the absolute coldness of outer space, Helena's warm touch was what he truly desired--no, needed, he corrected. With her, it would be a need.

His illusion was violently interrupted by the obnoxious sound of the collision warning klaxon. During his fantasy, he had unintentionally steered into a meteoroid field and a large, rocky piece was about to impact the hull of the ship. He was able to finesse the vessel safely out of danger, narrowly averting yet another disaster that day. He scolded himself for his own momentary lapse in judgment. Again. His mind used to be sharper than this. Maybe this was what happened when one neared forty.

Thor put the ship on autopilot and went to his quarters, meeting Helena as she was walking through the narrow corridor toward the bridge deck. They could not avoid brushing each other as they passed. The moment they touched, catching them both off guard, something remarkable occurred.

## CHAPTER 5--GENSAPIENS

2024: Earth

After the end of the Guerrilla Class Wars, scientific progress resumed at an accelerated rate. Electrical power frequencies were soon transmitted through space, eliminating the need for wires. This was called Tesla power. The harnessing of fusion energy was becoming a reality. Silicon computer chips, having reached their maximum potential, were soon to be replaced by nanotech inventions.

Advancements were made in materials science, agriculture, and the health fields. New materials were surpassing earlier composites for strength and lightness. The major food for the masses was processed from a new genetically enhanced soybean called Glycine vigere. Procules were being designed for the purpose of destroying plaque in a patient's arteries.

New technologies greatly improved the quality of life--that is, of those who could afford them....

In a penthouse overlooking New York City, a mere portion of the sprawling megalopolis called Eastern Seaboard, Twyla Relliss was viewing the daily news on the wall-sized, high-resolution screen. As some graphic images were being broadcast, she spoke with dismay in her voice. "Look Bernard, eight more babies have been found discarded in dumpsters and alleyways." This growing trend was greatly disturbing to her.

Bernard was sitting beside her on their large-cushioned sofa. He was carving an African elephant out of wood. Using a photograph as a guide, he was transforming a two-dimensional image into a three-dimensional work of art. Looking up from his project, he said, "That is tragic news, dear." He sounded indifferent to the problem, but only because it was too overwhelming to do much about. The recent extinction of the magnificent pachyderm had given him the same feeling. It had gone the way of the great woolly mammoth before it, except its demise was due to selfish human activities rather than to a naturally cyclic ice age.

Twyla and Bernard Relliss were in their late forties and had no children. They'd met at New York's Institute of Genome Research while earning their doctorates in genetic engineering. Both from wealthy families, they married after obtaining their Ph.D.'s. They had borrowed the capital to begin a biotechnology company which they named GenSapiens Laboratories. It specialized in growing transplant organs from human cells.

There had been amazing progress in the medical field. They lived in a time when a cell could be induced to divide and develop into an organ of choice. All that was required was one DNA-containing cell from the person who needed the organ. In the proper nutrient and hormonal environment, the genes controlling the manifestation of a heart, for instance, could direct cell mitosis to differentiate into a new beating organ. And if there was a congenital defect in the original heart, then, by utilizing a splicing process, the defective DNA portion could be replaced with a healthy gene before the fresh organ was cultivated.

An eye afflicted with macular degeneration could now be supplanted with a fully functioning version.

Organ cloning possibilities were endless, the market was competitive, and business at GenSapiens was thriving.

\* \* \* \* \*



Twyla's concern for the forsaken infants caused her to lose sleep that night. Maybe it affected her so deeply because of her own unfulfilled desire to have a child, having put her career ahead of raising a family. She began formulating a plan, trying to view the lamentable problem in the city as a redeeming opportunity instead.

One evening shortly thereafter, before retiring to bed, Twyla was sitting at the optical reflector, brushing her hair. "Bernard, I need to use you as a sounding board. I've been mulling over the idea of starting an orphanage." Bernard, sitting up in the adjustable contour bed, looked above his reading screen and waited for Twyla to say more. She continued. "We'll advertise to the naturons that we will care for their babies, give them an education, and find a place for them in the job market after they come of age. We have enough capital to start a good-sized facility."

"But, my dear, an endeavor such as that would soon deplete our resources," offered Bernard, who had always been the more conservative of the two. A true scientific skeptic, he never began a new project until all angles were considered, and only then would he proceed with caution. But they made an effective team. Twyla had vision and ideas. Bernard had realistic expectations. These seemingly polar qualities had led to their many creative, yet sound, business decisions.

"It would be a money-making undertaking, eventually. Corporations would pay us for the service of providing them with highly competent employees."

"But how could a proposition like that make money? Do you realize the cost of raising and educating one child, much less a building full of them?"

"We would be doing this for humanitarian reasons first and foremost, Bernard. We would consider it our contribution to society. Later, our orphans would gain the reputation of being excellent workers. Word will spread and other corporations will want to buy in." Twyla pulled out her computer tablet. "I've done some calculations on running a cost-effective orphanage and school. In twenty years, if we have received the asking price for our services, we will come out well ahead of the game. The orphans will have broken away from the cycle of street scavenging, and corporations will have benefited greatly from hiring them. Here, Bernard, take a look at the figures."

He studied the numbers on the tablet's screen and they seemed to make sense. He saw that Twyla had not considered all aspects, however. For example, a contingency fund would be needed for unforeseen setbacks. After stating so, he added, "And with the population of Eastern Seaboard the size that it is, how will we be able to decide which of all those abandoned children to accept?"

"There will be a screening process to take only children of age five and under who exhibit future potential. It may seem cold-hearted that we will have to turn many away, but we will be giving others a chance to escape deplorable slum conditions--and a chance for them to lead productive lives."

Bernard soon gave in to her enthusiasm and benevolent need. He didn't believe for a minute that Twyla would be able to refuse any of them access to a better life. And he kept his opinion to himself on his expectations of the level of financial returns they would receive from this venture. The initial investment was only money compared to the greater good it could do. In this respect, his thoughts coincided with his wife's.

\* \* \* \* \*

Weeks later, Twyla was scheduled to meet with Eastern Seaboard's Planning and Resources Committee to acquire permission to implement this plan and to appeal to them for monetary assistance.

The room contained a long table at which a panel of twelve members were seated on one side. Twyla was in front of them, to the right of the room's large computer wall screen and hologram stage.

She was nervous but well-prepared to state her arguments. She began by asking the Delegation's subcommittee, "Envision, if you will, a megaconglomerate future with well-trained and cost-effective personnel in the labor force, business offices, and laboratories...." Using computer animated audio-visuals, she described her plan to rear and educate orphaned children, beginning when they were under five years of age. Her presentation contained a series of hologram stills of destitute street children dressed in filthy, tattered fabrics; then of neatly dressed, smiling children eating generous helpings of appetizing and nutritious food. This was followed by images of people performing high-tech skills in spacecraft manufacturing and medical surgery.

Twyla was pleased to see that the images of her report were holding the attention of the panel members.

Delegation Assembly Member Iovanna Johnson, representative of World-to-World Real Estate and chair of the P & R committee, asked her, "How will it be to a corporation's advantage to choose your product over independently acquired labor?"

Twyla wasn't considering her future graduated orphans as a product and thought it an inhumane term. But she had to admit to herself that she was marketing them as though they were commodities.

"Because they will have been groomed and disciplined to be successful in the job markets on Earth, Mars, the Moon, and wherever else they may be needed in the future."

"Why not begin educating older children also in order to receive an earlier financial return?" inquired another panel member.

"The younger the children are, the more easily trainable they will be, consequently ensuring their success in the DTM job market," answered Twyla.

Another portion of her presentation contained colorful, easily understandable graphs and charts citing predictions about cost-effectiveness to the corporations should they pay for her service and hire her orphan workers. "There have always been vociferous complaints by corporations about unprepared and unskilled employees for which valuable time and money is spent teaching them the basics. We know it has been a high cost expenditure that has greatly reduced profit margins. A corporation would find itself money ahead to hire my orphans." She paused to let them absorb the significance of what she was saying. "But I need a guarantee that in the next twelve to seventeen years, they will be hired, at least on an experimental basis, and that GenSapiens will be compensated at a fair rate: forty percent of the service fee when requisitioned and the remainder when the worker is hired."

The panel members broke into a buzz, expressing to each other how daring Twyla's proposal was, yet they couldn't deny it was innovative as well. They called for a caucus. Twyla stepped out of the chamber.

It was then that she realized how tense her muscles were from the stress of presenting her proposal. She leaned against the wall and breathed deeply to try to relax. She freshened up in the restroom and returned to the waiting area outside of the meeting room.

After over half an hour, Twyla was invited back into the chambers. Member Johnson said they would take her ideas into consideration pending further discussion with Assembly-level committees. Twyla was to meet with them again in one month for their recommendation.

During the ensuing weeks, Twyla searched for a facility in which to house and school the orphans. It was to be large enough for one thousand students initially and efficient in design and energy use. It would eventually contain all of the modern technology and equipment needed to effectively teach the basic subjects as well as advanced level courses. The care-givers and teachers employed would be dedicated and top-notch.

When the P & R committee reconvened, Member Johnson addressed an anxious Twyla. "Dr. Relliss, we have studied your proposal and see great future benefit in hiring your orphans. But we, as representatives of the Twelve Megaconglomerates, also have a vision of the future. The bottom line is that we exist to bring in revenue, and our profit margins would greatly increase if we could utilize cost-effective workers, as you have indicated. We envision them to be productive to the companies which employ them, but we also need assurances that they will be obedient not only to their employer, but to the Delegation as well.

"We have some suggestions for your plan. They are controversial, but we feel that only under these circumstances will we enable you to proceed with your bold endeavor."

Twyla sensed that her journey was about to be brought to a sudden halt by the looming, impassable mountain of her government.

The list of items spelling out their counterproposal was displayed on the room's screen and read to Twyla. It included a modification of her asking price and a reduction of the initial investment made by the corporations to twenty-five percent. But it was what followed that caused Twyla to gasp. To ensure allegiance to the DTM, it would be necessary to censor the orphans' education in the areas of history, literature, and art. Strict indoctrination practices on them would also be required.

And if that wasn't upsetting enough, the worst part of their proposition was that the companies would literally own the orphan workers, having complete control of their lives. Radio identification tags would be implanted into their bodies so their locations and activities could be monitored at all times.

Twyla went home sickened that night. If she didn't agree to their offer, they would organize a boycott to prevent the hiring of any of her orphans, who would then end up where they had started, scratching for a living in the sweltering urban streets, many not surviving. And without the service fee, GenSapiens Laboratories would be swallowed up by the cost of raising them on its own.

The next day, her heart ached over what she was about to do, having decided that the alternative would be worse for the children's future. Twyla agreed to the Delegation's counteroffer. She tried to rationalize that at least there would be fewer abandoned babies found in toilets and dumpsters.

After purchasing a suitable building, Twyla sent an advertisement blitz through the airwaves informing the naturons to bring children for which they could not provide to any of the twenty-five collection centers set up around the giant city of Eastern Seaboard. The ad said that parents of children who passed the screening tests would be offered a fee (a large sum of credits from a naturon point of view) and could live in peace knowing that their children would be well taken care of. Many people, seeing this as their only hope to better the lives of their children, brought them to be taken by GenSapiens officials. It was an unfortunate circumstance that unscrupulous women would have babies for the sole reason of selling them for credits.

Within a few months, by the time the building was remodeled and nurseries and caretakers were in place, Twyla's quota of one thousand babies had been filled. She immediately saw a need for expansion and was realizing the true expense of her philanthropy. She wondered how they were going to make ends meet without having to sell their organ-cloning firm.

While Bernard single-handedly managed their biotech laboratories, Twyla directed her energies into planning for the future of the orphanage.

As they became older and as a cost-saving measure, the children earned nominal wages by doing custodial and domestic tasks and by working as office help, food service workers, and teacher aides. This was considered part of the school's work-study curriculum.

Within twenty years, GenSapiens began to see a healthy payback in the orphan training center division.

Evaluations from businesses were favorable. The orphans proved to be what the conglomerates desired in a workforce, having the necessary skills to be easily trained in the specialty areas that their employment required.

But was selling them into slave labor worth the cost? That was Twyla's last thought, years later, on her death bed.

Twyla and Bernard, before retiring, sold GenSapiens Laboratories to a nuclear energy mogul, Rikard Salvorich. His company, Deuterium Fusion, which manufactured nuclear reactors, was located in the Romanian region. During the selling interview, he'd led the Rellisses to believe that he cared deeply for the welfare of the orphans.

Salvorich maintained the genetics research and organ transplant divisions of GenSapiens while expanding the number of orphanage centers around the world.

He modified the screening policy to collect only infants that were no older than one year. They would be without preconceptions and more easily molded to the DTM's needs in a labor force. Salvorich also fine-tuned the mind-control technique applied to the orphans and coined the name "orphilion workers" in advertising them to corporations.

It turned out that he lacked compassion when it came to caring for orphillions, regarding them as merchandise to be bought and sold.

Companies made enormous net gains after only ten years of utilizing orphillions. The demand for them spread like a nuclear chain reaction while the number of traditional, more expensive employees diminished because they were dismissed or because of attrition. But the supply of orphillions was short. Rikard Salvorich was able to solve this problem with more intensive infant searches.

The hard-hearted Salvorich also steered GenSapiens toward applying the latest in nanotech biology to the possibility of cloning human workers ideally suited for the labor force.

Before Rikard Salvorich died, GenSapiens ran like a well-ordered machine, although far from the humanitarian purpose that Twyla and Bernard Relliss had intended. It ran true to the Delegation's philosophy that money is power and a complying workforce is good for business.

Bree Stevens, a young, exceedingly successful cosmetic entrepreneur of Los Angeles, became the chairperson of the board of directors at Deuterium Fusion and its subsidiary, GenSapiens, after those given charge of the Salvorich estate sold the conglomerate to shareholders. With the controlling stock interest, Stevens adhered to a philosophy closer to Twyla and Bernard Relliss, insisting on the humane treatment of the orphillions by GenSapiens and by the companies that would later own them.

She directed the genetic research lab to branch out and apply the organ replication process to make orphillions more functional for their companies and to apply the procedures in cosmetic and recreational fields for the wealthy.

Raking in profits, Stevens brought Cosmic Cosmetics and its subsidiaries, Deuterium Fusion and GenSapiens, to within the top twelve megaconglomerates and a member of the Delegation Assembly until Universal Mining Operations, Diversified, headed by Claire Ganymede, bumped her out.

## CHAPTER 6--DREAM KISS INTERRUPTED

2097: On course for Jupiter

Much like during the suspended moment when they had held each other in the escape pod, Thor's closeness, his inadvertent touch now, in the narrow hallway, caused Helena to forget all about the tenets of the DTM--what was supposed to be her belief system--and about her disdain for what the Delegation soldier stood for. Their eyes locked and time slowed to dream state as his arms encircled her while hers moved up and around his neck. Their bodies in electrified contact, her insides turned to warm jelly. Thor was literally holding her up as his lips slowly approached hers.

Helena's conscience had been wrestling between being faithful to her beliefs and being true to her desires. What she was just beginning to realize was that her beliefs and desires were leading her to the same providence. In a sudden spark of self-realization, she knew that being in Thor's arms was what she had been wanting for days. For a lifetime. A heart-pounding warmth like she could never have imagined coursed through her as they embraced and were about to seal their cosmic destiny with an irresistible kiss. It was sure to be all warm and wet, a complete kiss this time--not like the one in the escape pod.

Then the communicator on the bridge signaled an emergency, abruptly forcing them to return to a different reality. With simultaneous sighs, they reluctantly released each other before hurrying to the holocomm unit. There they observed the snowy, flickering kinetic image of a man in a white lab coat. His voice was faint among the static. He identified himself as Dr. Wolfe, the chief medical officer on Europa. Fading in and out they heard him say, "...huge magnetic storm on Jupi--...aggravates disease...progresses faster...are few surviv--"

Thor responded to the call. He advised Dr. Wolfe that they would boost the main fusion thrusters and arrive in two days instead of three. He began reprogramming the power and flight path settings when he caught a glimpse of Helena preparing her plants for the oncoming acceleration. He paused to study her gentleness as she staked each orchid flower, securing them as if they were young children.

\* \* \* \* \*

The spacecraft on its amended course, Thor was at the captain's chair, immersed in thought. He stroked his beard slowly, absentmindedly, while again reflecting on children. About pregnant women. Like he'd seen in the Martian Subterra. He thought about Helena and his immediate--albeit improper--physical urges that their unanticipated contact had triggered. The fragrance of the orchids intermingled with her natural scent had been delightfully inebriating to his senses. It felt wonderful to hold her--and to feel her clinging to him. Her eyes had spoken to him with more profound meaning than words could ever express. "You're the one," they had proclaimed. At the time, this had surprised him--but only because it was identical to his own burning need that was quenched, he'd discovered, when Helena was by his side. He wondered how far they would have gone if there hadn't been the interruption from Europa....

Returning from his daydream, he looked up to find her staring at him.

## CHAPTER 7—SEYFERT

2070: Earth

Along with the orphilion training centers and the organ-cloning division, GenSapiens retained a research branch with the sole purpose of cultivating ideal workforce humans.

Genetic engineering, although it had come far, had not been without its obstacles, even with the aid of procules. Gene combinations responsible for the instincts of procreation and socialization as well as for the tendencies of independent reasoning and self-expression were considered undesirable in orphilion workers. GenSapiens scientists had been working to replace the errant genes with more preferable DNA snippets. Thus far, nature had been rejecting the attempts of such tampering. GenSapiens geneticists were working diligently to solve the problem in hopes of utilizing exceptionally dutiful and competent workforce clones in the near future. After all, GenSapiens' desire was to produce what the customer wanted.

Until then, mind-conditioning methods had been effective in perpetuating the profitable orphilion business.

Immediately upon arriving at the orphanage, the infants were subliminally exposed to pleasantly spoken loyalty messages that surrounded them during wake and sleep. At age three, formal lessons began along with indoctrination procedures which more deeply instilled allegiance to the Delegation. The subliminal stimuli continued, to reinforce the indoctrination routine. A child was rewarded with warmth and gentleness when behavior was satisfactory. If a child's actions deviated from the acceptable, his punishment was unpleasant and certain to result in correct behavior in the future.

The Delegation Tenets orphiliions were forced to learn and live, with the aim of repressing natural inclinations toward individualism, were repeated like a ritualistic chant three times a day by each child.

"We do not question authority; we trust in the Wisdom of the Delegation. There is peaceful order in our lives because our beliefs are with the Delegation of the Twelve Megaconglomerates. All outside information is corrupt and is the source of disorder; we will not tolerate it. Obedient we are; asexual we must be, for our purpose is to be productive for the Delegation. In upholding these Tenets, the Delegation rewards us generously."

Sitting down to the meal before them, blonde-haired Seyfert nudged his best friend Thor. With a mock cheerful expression on his freckled face, he said, "Looks like something new today. Drab green mush instead of boring tan glop. Makes us strong like ox." His voice had taken on a low tone while he held his skinny, twelve-year-old boy's arm up to display through the gray uniform sleeve, his flexed, though not yet fully-developed, biceps.

Thor couldn't help but chuckle at his roommate's dramatics, but Seyfert's insinuation on the unremarkable nature of the food was true. Thor also knew he would have to contain his laughter to avoid being reprimanded by the ubiquitous GenSapiens disciplinarians--or Misery Officers, as the orphiliions unaffectionately referred to them. Seyfert had been scolded by them often and had been sent to the isolation chamber several times for his repeated violations of behavior rules.

Two years ago was the first time Seyfert had experienced isolation. He had been caught in a prankish performance during mathematics class when he'd thought the instructor's back was turned.

Mr. Portland was facing the symbols that he'd written on the room's optical screen board while expounding in monotone on the importance of imaginary numbers in comparison to real numbers. Seyfert stood up to imitate Mr. Portland's movements of using the laser pencil and running his hand

over his hair in an accurate reflection of his teacher's idiosyncrasies. Seyfert mouthed his words, giving a very good comical impersonation. Of course, those in the class were beside themselves with muffled laughter.

Mr. Portland turned unexpectedly before Seyfert could sit down and feign innocence, catching him red-handedly committing the farcical impression. The teacher was not pleased with his student's parody at his expense. The three behavior infractions Seyfert had now accumulated required that he be sent into isolation.

Later that week, when Seyfert returned to the sleeping module he shared with Thor, the towheaded boy looked sallow, thinner, like he'd gone through a distressing time. After he sat down on the edge of the bunk, Thor asked him with worried concern, "Where've you been for the last three days?"

They'd once seen a broadcast in which old-world entertainment had been discounted as time-wasting nonsense. Thor recognized Boris Karloff in Seyfert's voice when he said, "They called it a 'cleansing of the mind.'" He was trying to disguise the suffering he had endured from his recent ordeal with humor.

"What in the world does that mean?" Thor noticed a loss of sparkle from Seyfert's usually animated, hazel eyes.

"From what I could tell," answered Seyfert in his normal voice, "they think that putting me in a dark, sound-proof room alone for two days would make me loony enough to cry uncle."

"And did you?" Thor's eyes grew large.

"Naw." He spoke with false courage. "So they strapped me in a chair and touched their 'magic wand' to the back of my neck a couple of times.... Then I cried uncle." He paused. "Well I had to so they would quit zapping me!" He turned to show his roommate the red electrical burns. Thor counted five of them.

"And yesterday, I had to recite the Delegation Tenets over and over and promise to live by them. I left them with the impression that I would concentrate on my lessons and stop causing trouble." The level of his voice dropped. "What I didn't tell them was that I was planning to work harder to avoid getting caught!"

Thor saw through Seyfert's brave facade and hoped he wouldn't instigate any more mischief. He didn't want to see his friend harmed at the hands of the Misery Officers.

There were times in their room when Seyfert, weary of the bland food, gray uniforms, and rigid rules, as a form of benign rebellion, would wear his uniform shirt and pants inside out. He wore them that way once on his way to breakfast and had been severely reprimanded, which only added another infraction to his accumulating list.

Thor and Seyfert shared common dreams of flying in space and of making scientific breakthroughs. They were thrilled over the current headline news about a probe which had been sent to the binary star system in the constellation Cygnus. It had transmitted close-up images of the system's black hole, which was siphoning glowing gas from the nearby supergiant star, shaping it into a whirlpool-resembling accretion disk.

Seyfert would begin a typical fantasy. "Like, what if we flew an astroship into the black hole, into a new dimension, only to discover Earth on the other side?" He'd think for a moment. "But that Earth's evolutionary path had taken a different turn, with humans being far from the dominant species. They've evolved into elf-sized creatures with the intelligence of squirrels--not unlike the intelligence of the stony-faced Misery Officers!"

Thor would laugh and then fantasize along with his friend. "The planet hadn't been hit by an ancient

asteroid, and it is the reptiles that rule the world!"

Seyfert would add, "And roaming upon the land would be meat-eating dinosaurs--even more ferocious than T. Rex--which swallow the elfin humanoids like soybean nuts!"

And Thor would continue. "Its hide would be resistant to our energy blasters. There would be no way we could tranquilize one of them, but it would be our duty to bring one back to our Earth in the name of science, along with one of the humanoids." He loved getting caught up in Seyfert's wild imagination. They bantered ideas around until they would solve the problem of bringing home the monster.

Thor had missed his friend. "Well, I'm glad you're back from isolation."

"Ya, sure you are!" exclaimed Seyfert as his arm playfully curled around Thor's neck while his other hand messed up his thick crop of short, dark red hair. And the boys proceeded to wrestle as boys will do.

The amusement-seeking Seyfert, who was possibly too indomitable for his own good, had been mind-cleansed a few times since then.

Before the drab green lunch that day, while in industrial technology class, during the time when he should have been finishing the construction of a Zener diode circuit board, Seyfert had bent a thick metal wire into a keyhole shape, leaving it open at the ends. He'd then soldered a thin, flat prong to the wide end of the structure. From there the prong spanned to the narrowed, open end. Seyfert had thus fashioned a crude Jew's harp. The idea to build such an object had materialized from having observed a diagram he had happened upon in the conceptual dictionary. By holding the instrument against his open mouth and plucking the extended tine, Seyfert could create a low frequency twang.

Now after noon, in multi-lingual class, most of the twenty-four orphelions were quietly studying at their computer desks while their teacher, Madame Lacnier, at her desk at the front of the room, was assisting two students in the previous Cantonese diction lesson.

Mme. Lacnier was slender, neat, and modestly-dressed. She wore sensible, brown shoes. Her button earrings were the exact color of her beige suit. Her light brown hair was cut in a short, carefree style. An effective instructor, she did not tolerate silliness and thus, in the eyes of her students, appeared to have no sense of humor. She adhered to the GenSapiens philosophy that administering strict discipline was necessary for teaching with efficacy.

Thor was silently reading a passage about China's geography when a message box popped up on his screen. "Direct your attention toward Mme. Lacnier at 13:55." Thor immediately knew Seyfert was up to something. Lately, Seyfert had managed to elude being detected by his teachers and the Misery Officers during most of his escapades and was acquiring infractions at a much slower rate. Even so, Thor hoped he would be careful in order to avoid another isolation treatment.

Thor glanced across two rows to where Seyfert seemed absorbed in the lesson, an observation which only increased his anticipation of the unknown event that was about to occur in ten minutes.

Having deciphered the most recent code which enabled him to access the classroom computer's main system, Seyfert had also sent the message to others at their desks. For comic relief or as an indication of an impending caper, he sent messages often. They were regarded by the others as welcome breaks from the monotony. There were, however, a few in class whom he couldn't trust and share his antics. For example, pretty blonde Nina, who sat three desks behind Seyfert, was nothing but a goody-two-shoes tattletale, so he usually blocked her computer from receiving his entertaining messages.

Mme. Lacnier looked up periodically from her desk at the front of the room, pleased to observe her



students quietly studying.

Then the moment arrived.

Thor turned to see Seyfert duck behind the boy in front of him so he would be eclipsed from the teacher's view. Then Seyfert lifted a metal object to his mouth. Before looking at her himself, Thor quickly scanned the room to see all eyes furtively glued on Madame.

Twang twang twang twang...

She glanced at the boy and girl whom she was assisting. They appeared not to have heard anything. They were facing away from the class. Placing her forefinger to her ear, she shook it as though the soft, low vibrations she had heard were coming from within her head.

Upon seeing this, Thor and the others had to work hard to stifle their giggles, although a few snickers escaped from some.

Thor made eye contact with Seyfert who was smiling bright as day. Twang twang twang..., he played again.

Mme. Lacnier scanned the room, saw nothing out of place, and again wiggled her finger in her ear.

She became aware of a few titters from around the room. Turning suspicious, she rose to stroll around the room and down the aisles. Everyone appeared to be reading their assignments or writing answers to the lesson's question list on their electronic palettes.

As she walked past Seyfert and further down his row, she heard the odd vibration again. Twang twang twang... Maybe she should have that ringing in her ears checked by the school's medical officer, she thought. She shook her finger in her ear once more in trying to clear it. Her action caused most in the class to burst out in laughter.

Madame was not amused and sternly scolded the class for their outburst. "Quiet! All of you!" She turned towards her best student, "Nina, will you please enlighten me as to what is so funny?"

Nina stood up from her desk at the back of the room. She hadn't been laughing. She hadn't heard the tone. She had been concentrating on her assignment. "I don't know, Madame." She was disappointed that she could be of no further assistance. She sat down.

Mme. Lacnier turned to Thor, whose desk was in the middle of the class, and asked the same thing. He rose and gave a similar answer but could not look into her eyes. He was desperately trying to prevent the release of a fit of nervous giggles.

"If I don't get to the bottom of this, all of you will be sent to the isolation chamber." She stated this quite matter-of-factly, and they believed her, knowing that the recommendation of an instructor would override the requirement of each student to acquire three infractions first. Suddenly the smiles were wiped from all of their faces.

Then all heard the sound of a metal object falling to the floor near Seyfert. Madame marched over to his desk, bent down, and picked up the mouth harp. "Seyfert, what is this?" she asked as she studied the odd structure.

He stood and pinned his eyes to a spot on the floor, "Nothing, Madame."

She plucked the prong and recognized the frequency. "Is this yours?"

Even if it hadn't slipped from his grasp, he knew he would have had to confess or the whole class would have been made to endure the unpleasantness of the deprivation booths. "Yes, Madame."

"To the chamber with you, young man!" She had known of his previous violations. She paged for a

disciplinarian who came and escorted him out of the classroom.

And that was the last time Thor saw his best friend.

It hadn't been the first time an orphilion had never returned. The class was later told that Seyfert had become ill with cerebral contamination and mind-cleansing methods had proven unsuccessful with him. It was best to simply phase out their classmate because he wasn't capable of good behavior and loyalty--virtues which made GenSapiens and the Delegation happy. They were also virtues which were required to maintain solar system order. The surviving orphilions had been firmly convinced of not wanting to be responsible for solar system disorder.

After days of hoping for his best friend to jauntily saunter into their module again, Thor sadly came to the realization that it wasn't going to happen. He cried himself to sleep only once, not that he didn't feel like crying for many days to come. He felt a horrible loss, but he was not to express his feelings nor question the wisdom of those with authority.

Thor knew in his heart that Seyfert had never meant any harm. He was going to greatly miss the free spirit of the one who had taught him to view life with a sense of adventure and humor.

During the following years at GenSapiens, Thor was fortunate to be able to work toward his dream of becoming a space pilot. But he didn't find much to laugh about anymore.

## CHAPTER 8--PASSION FORBIDDEN

2097: On course for Jupiter

Less than five percent of the DNA found in human chromosomes contained the genetic codes for making the proteins which gave people their traits. These coding regions were called exons. For almost a quarter of a century, in DTM government laboratories, a person's unique exon data was recorded and entered into a carbon-based nanocomputer which was then implanted into the individual and used for identification purposes. This had replaced the silicon-based exon implants used during previous decades. A carbon computer was versatile. It also amplified the radio signals intended for injected procules designed to have certain health or recreational effects.

Though DTM citizens might opt to have these chips implanted for the health or rec benefit, the exon-encoded computer of each orphilon and street scavenger worker was required to be inserted into the neck, against the carotid artery. They functioned as radio tags which enabled Delegation establishments to scan and identify incoming workers during shift changes and at other times. Via satellite, the locations of the workers, genetic information, and other personal data could be radio-monitored at any time and place in the solar system.

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After receiving the broken radio transmission from Europa, Helena felt a renewed sense of urgency to deliver the life-saving medicine that would be obtained from the orchids she was tending. Time was of utmost importance as communications were not clear as to how many had survived the debilitating illness made worse by the influx of electromagnetic energy from Jupiter's magnetosphere.

Helena felt solace in seeing Thor take charge of the critical situation. A delayed reaction, she shivered at the thought of how close she'd come to blowing the both of them into nothingness. The ship's self-destruct function was an option intended to be used only if the ship was hopelessly under siege--as a last resort! And then there had been only three seconds to spare! If she had been trying to impress Thor with her resourcefulness, she feared she had accomplished the complete opposite. She wouldn't have blamed him if he, as an officer of the DTM, had placed her under arrest for having initiated one of the ship's emergency functions in an unauthorized capacity, unintentionally or not. His anger had been warranted. Then he had mellowed, relieved that they had survived the close call, she supposed. She had witnessed him merely shake his head at her near-fatal impulsiveness.

Her attention was on Thor as he adjusted course settings so they would arrive on Europa ahead of the original time schedule. He communicated with Universal Mining Operations on Earth to keep them apprised of the latest news from Europa, which hadn't been much, due to the static.

Just watching him aroused a fundamental response from deep inside her. She had a compelling desire to walk up to him, put her arms around him and bring her soft lips near his to complete what they had begun in the corridor.

She remembered how his strong arms around her had made it easy to forget about everything else in her life; in the escape capsule and again in the hallway, nothing but being with Thor mattered. She felt disappointment and sudden emptiness when he had released her to answer the radio call. His embrace had simply thrilled her to the core. Or, on reconsidering: Maybe this was the beginning of madness.

Helena decided right then that it was essential she take control of her emotions before they led them both to their dooms. Delegation doctrine was against employees having sexual relations in the belief that such distractions would jeopardize the performance of precision tasks. Or so the DTM would like them to believe. But her conditioning and the expense to UMO in training their highly specialized

employees, and the competition for the workers to remain in such esteemed and rewarding positions placed the company in control.

There were also the more pragmatic guarantees for ensuring proper orphilion conduct. The exon locator tag, for one. And, there were hidden recording devices in all work areas, homes, and spacecraft used by the workers. This was the Vigilant Eye of the Delegation.

If one was discovered violating any of the Delegation Tenets or company mandates, it was viewed as an act of rebellion, and the punishment was severe. Hard prison labor on a bitterly cold, lifeless moon of an outer planet or simple phaseout by the gamma ray gun were the usual sentences. Needless to say, the number of orphilions committing conduct or other violations were few and far between.

After reevaluating her options, Helena had no desire to become intimately involved with the solidly resolute DTM officer named Thor. Whatsoever.

She had finished reinforcing the fragile cattleyas for the anticipated acceleration. With firm resolve to maintain only a professional relationship with the pilot, she walked over to him at the command chair and asked in her most businesslike voice, "Captain Thor, what conditions can we expect to encounter on Europa?"

Not having immediately noticed Helena's approach because he'd been deep in thought, he lowered his hand from his beard. He cleared his throat and answered, "Ah...Europa is a world that is totally covered with a thick layer of ice under which is a vast and frigid ocean. On the frozen surface, over one of the few small land masses, a dome construction shelters UMO's technetium mining operation."

The hue of Thor's eyes had shifted to a more brilliant facet of heavenly blue. At first becoming captivated by their color enhancement, Helena promptly dismissed it as being caused by the room's lighting. Nevertheless, she needed to refrain from being drawn into his gaze. Appearing to be businesslike was proving to be a more difficult task than she had anticipated. "And what air temperature and pressure can we anticipate?"

Thor answered, "Outside of the biodome, there is no atmosphere to speak of, and the temperature will be around 120 Kelvin degrees, not much warmer than the dark side of Earth's moon. But within the dome, the temperature and pressure maintained will be similar to a spring day on Earth."

Observing her matter-of-fact demeanor, Thor thought: So, she would rather forget about our impassioned encounter in the hallway. But in her eyes I see a meteoric flame that belies her facade. He decided to test the extent of her apparent indifference to her own passionate nature. About other aspects of the moon, he said, "As you know, within its ice is the system's primary source of Epsom salt." She nodded. "And away from the continents, several exploratory outposts have been stationed to analyze the life in the slushy waters beneath the ice. Scientists have reported the seas teeming with bioluminescent microbes, which give the waters an eerie glow." Casually, he began to press buttons on the command console in a routine exercise, pretending to downplay the following account.

"Unfortunately, some of the expeditions have fallen through the frozen surface, never to be heard from again. The ice beneath them had mysteriously worn thin. It is rumored that the ice-thawing breath of a hungry, serpent-like beast was the cause of their demise." He paused to calibrate her reaction.

"However, this speculation has never been proven...nor disproven."

Helena gulped at the horrible image of a team of scientists being devoured by an illusive sea creature. Then she noticed the twinkle in Thor's eyes, which told her he was most likely lying about the serpent. She mustn't be so gullible, she thought while sighing to herself. Directing her next question to more realistic circumstances, she inquired, "And when are we due to arrive at the technetium mining facility?"

He had noticed her expression change from dismay and then back to proper interest in the mission at hand. Ah, she has seen through my embellishment, but I had her going for a moment. He tried to contain his smile. "We will arrive within forty-five hours, Doctor."

She noticed his grin and thought that teasing her or not, his voice sent a liquid warmth down her spine. It gave her an extraordinary urge to move her palm, gently, across his beard to sense its texture--but she could not, for UMO was recording their every move.

Instead she said, "Thank you, Captain. It is imperative that I begin preparing the cattleya medicine within thirty-six hours of its administration or it loses its effectiveness against the Attila virus."

There was more static from the receiver. There was no image from the holocomm unit when they heard a barely perceptible voice. "...ionizing radiation...plasma shields ineff--...too late for--..." and then silence. Thor tried in desperation to contact the Jovian moon again, tuning in to different frequency bands, but to no avail.

The spacecraft's monitors were registering a flare-up of solar wind activity occurring simultaneously with volcanic eruptions on the moon named Io, and both were passing through the plasma sheets of Jupiter's magnetic field. The combination of events was resulting in the production of ionizing radiation a million times more concentrated than that found within the Van Allen radiation belts which surrounded Earth. As Europa orbited through the plasma sheets, interference with radio communication was the least of worries for the people at the UMO mine. Thor conjectured that if ionizing radiation was penetrating the dome, the mine's workers could be suffering from radiation sickness. After sharing his concerns with Helena, she vocalized her despair over another possibility: "The cosmic-ray-type energy could be altering the genetic make-up of the Attila virus, possibly enhancing its malignancy."

Both concurred that there was only one possible, subsequent action: continue on course to Europa under the assumption there were survivors left to rescue--for Thor and Helena would be their only hope.

## CHAPTER 9—HELENA

2087: Earth

GenSapiens had regularly lobbied for laws which would incorporate incentives, fines, and threat of prison to corporate officials who had been guilty of orphilion maltreatment. But the efforts had been ineffective because it was the unspoken belief by most of the corporations' boards of directors, and their DTM representatives, that even though orphilion employees were a life-long investment in training and education, they were owned by the company, and were, well, frankly, expendable. If a worker violated policy, there were quick and clean methods for phasing them out with nary a trace of evidence.

Be that as it may, failures from GenSapiens had been few, as rebellious personalities were usually weeded out during various developmental stages before the orphilions were procured by the corporations. The venture had thus remained profitable for the corporations and for GenSapiens Laboratories.

After being taken by GenSapiens officials, Thor, Helena, and millions of other young orphilions had undergone gene therapy and had been immunized against disease. They had been fed optimal nutrients and had been raised in warm, caring, albeit clinical, surroundings. Research had determined that a nurturing and stimulating environment would increase a child's brain capacity and mental stability. They would then be better able to withstand the rigors of their future occupational assignments.

The time of the orphilions' formative years was also when mind-control and mass hypnosis began, prescribing obedience to the Delegation.

As the child developed, he or she was tracked into an area of his or her strength, ranging from the manual labor of factory and mine work to skills requiring high intelligence quotients such as those found in finance management or in the medical and technical fields. Genotypes were matched to the workplace, and intensive training methods ensured that each orphilion attained performance mastery in the required discipline. Additional, specific training was done at each work site by the company that requisitioned the individual, along with continued obedience conditioning.

Children deemed trainable only for simpler manufacturing tasks began work by age ten. A child orphilion might, for example, start a twelve hour day at a spacesuit manufacturer, setting up the materials for the excision and seam robots. The child would quickly learn how not to amputate a finger.

It was a substantial investment for corporations to buy orphilions, but the cost was recovered with their high productivity combined with low salaries. There was a sliding scale of credit compensation for the personnel, depending on the risk involved and the level of skill. A few exceptionally skilled workers, like Helena and Thor, were compensated at the top of the credit scale as long as they remained dutiful and worthwhile to the corporation.

Credits earned by employees were recorded in the exon tags, leaving employees no other choice but to make purchases from Delegation stores or to spend their few accumulated days off at Delegation resorts.

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Helena had developed an aptitude for biology and chemistry at GenSapiens and had been educated further by Universal Mining in pharmacognosy. She had mastered the subject, becoming proficient in the laboratory and out in the field. Her discipline's protocol called for the collection and cultivation of

plant varieties that exhibited medicinal possibilities. After isolating active compounds from plant extracts, she generated computer images of the promising molecules and applied visualization techniques to predict their reactions in infected cells. This was followed by inserting the hypothetically beneficial chemical into cloned tissues infected with the harmful microbes. Helena had a sixth sense when it came to creatively solving problems involving viral and bacterial pathologies. She was known for outwitting the Q-predict program on occasion. This had secured for her a supervisory position in UMO's botano-pharmaceutical lab soon after she had turned twenty-five.

Dr. Helena OM781eh had recognized that the powerful effects of medicines, healing herbs, and tender care during the treatment of ailing patients, however scientifically proven, could seem purely magical at times. She had volunteered without hesitation for the rescue mission to Europa.

Her laboratory accomplishments had not occurred without the occasional need to relieve job stress, however. After work hours, she had escaped from the demands of research at a Delegation-regulated library store a few blocks from her home in Olde Earth Customs, a location within Omaha.

\* \* \* \* \*

The elderly couple who managed the information store, Wallace and Gelana Neering, were of the middle class, struggling to survive in a greenhouse hot city. Wallace's health was failing and it was an exertion for him to breathe the heavy, stagnant air. The old air conditioning system in a constant state of disrepair, the store's basement offered him a cool respite.

One day, during an attempt to answer a botanical question that had surfaced at the lab, Helena was in need of information on the taxonomy of orchids found in the Venezuelan Rain Forest. Neither the company's data library nor the computer banks she'd accessed via the airwaves had been able to answer her question about the epiphytic plants. This resulted in her visiting the library store after work, but the search for information there had come to the same end. Frustrated, she appealed to the gray-haired woman behind the circulation desk for advice.

Helena regarded Gelana as kindly and knowledgeable, willing to offer assistance whenever it was requested. Today there was a larger importance to what she was seeking, and it seemed Gelana sensed it. Gelana peered above her old-fashioned bifocals, as though deciding if she could confide in the twenty-three-year-old woman before her. Then, after looking left and right, apparently to make sure no one else was about, she invited Helena behind the counter. From there, she led her to the back side of a wide storage cabinet which reached to the ceiling. Hidden from the view of the library store was a concealed door made to look like a wall panel. After pulling on a nearly invisible wire to open it, Gelana directed Helena down a stairway to a moderately lit and quite sizable room. Helena immediately appreciated its soothing climate.

She was amazed at the sight ahead of her. Sprawled out on tables and shelves was a storehouse of obsolete plastic-coated aluminum information discs and an unending assortment of even more ancient paper-leafed volumes.

Wallace was sorting through stacks of books when Gelana asked him to assist Helena. He brought her to the South American flora section.

In discovering later that she shared the Neerings' passion for the paper-bound tomes, a bond formed between Helena and the old couple that would have a lasting hold, like comfortable family ties.

Well aware that it went against Delegation doctrine, but more powerfully drawn to her need to gain unedited knowledge, in secret and decadently enraptured, Helena studied the twentieth century, predominantly American artifacts. Each week, the elderly couple kindly allowed her into the cobweb-filled cellar. She looked forward to thumbing through the musty, worn pages while uncovering facts

about history-in-the-making, the personalities, and the primitive technologies of the time. She read literary works which revealed a most vibrant and texture-filled century.

The library store, modernized and censored by the DTM on the main level, held hidden in its basement the illegal histories of long ago. Helena, Wallace, and Gelana knew of the perils involved if the Delegation were to discover them with the unauthorized books. It would most definitely lead to their immediate phaseout.



## CHAPTER 10--TO SLEEP, PERCHANCE...

2097: On course for Jupiter

He gazed into her eyes and softly said, "Darlin' ...let me take you to places you've never been. Lie back on the bed. Our journey begins...with the taste of you...." Mesmerized by his lovecommand, she allowed him to have his way with her as he tenderly guided her to new, sensational heights.

He sat on the bed's edge, beside her reclined body, and leaned over her. His hands molded to and moved along the contours of her arms while he kissed her neck. She felt his lips, soft as rose petals, against the rapid fire of her pulse. His kisses on her throat left a cooling wet path that quickly evaporated from her scorching skin. This, along with the brush of his whiskers, caused her nerve endings to fire in cascading tingles. Moistening her lips with her tongue, finding their nerve endings even more sensitive, she was in great anticipation of his lips pressing against hers in what was sure to be a wonderfully unforgettable encounter.

Gently massaging her shoulders, he leisurely delivered steady kisses along her neck...to the lower edge of her jaw...to her chin...finally arriving at her parted lips. He held his mouth suspended just above hers. She felt his warm, moist breath; her own breath, hot and erratic. One of his hands moved to her breast, and her body arched involuntarily against his grasping palm. His other hand moved to her back, lifting her from the pillow, pulling her against him. Her arms encircled him; her hands pressed into the broad latissimus muscles of his back. A soft moan escaped from deep in her throat as his mouth covered hers, after what seemed like a century of heavenly want, in a kiss more satisfying than anything she could possibly have anticipated. It was intoxicating...mind-altering...ethereal.

With knowledgeable flair, he proceeded to inflame her more intimate parts. Every enlivening touch of his hands, every sizzling contact of his lips fanned in her a sensual frenzy. She became astonished at the needy response of her body--as though it didn't belong to her, but to a feral forest woman. Soon his sweet caresses cast her onto the rolling sea of high-reaching crest after crest of trembling ecstasy.

The incredible feeling caused Helena to awaken. Her heart was beating like a pulsar star; she had to catch her breath. It took moments before she realized that it had only been a dream, but she had a disturbing feeling that it was more than that. The intensity and the loving warmth she felt indicated that Thor was actually there.

She turned on the light to make certain that he wasn't.

## CHAPTER 11--SUBTERRA REBEL FORCE

2046: Earth

Delegation corporations had not taken into account that orphilion workers would be capable of experiencing discontent. They had assumed that that particular problem was being resolved at the GenSapiens training centers.

Shortly after GenSapiens had become firmly established with orphilion centers around the world, a resistance movement was originated by two daring pioneers. Bral NV903ag and Steffie MS062bg, who were orphilions working for Tennessee's Parsec Corporation, managed to elude the Vigilant Eye during the early stages of the rebellion.

Bral was a cost accountant in Parsec's Tesla electrical products department. Lately, his curiosity about the level of his company's total financial returns was getting the better of him. Bral was proficient at his job and was able to complete assignments ahead of schedule. During his extra time, from his office data terminal, he began to focus his energy on breaking Parsec's secure access codes. One afternoon, he surprised himself when his efforts were finally successful. His mounting curiosity blended with excitement--though he kept it wisely contained--he furtively delved into the sea of information now available to him at the touch of his fingertips. He soon discovered classified databases which revealed the firm's entire earnings, department by department. As suspected, the exorbitant amounts did not justify the meager number of credits he and the other orphilions were earning, even when considering operational and overhead expenses. The realization of this major discrepancy between Parsec's income and orphilion salary initiated the crumbling of Bral's Delegation indoctrination.

He began to regularly direct minute amounts of Parsec's incoming revenue into a Swiss bank account under a pseudo-corporation which he'd named Horsehead Nebular Funds. He later used the money to invest in non-megaconglomerate businesses such as rare art and collectibles and the entertainment industry.

The amount of his returns snowballed well beyond his expectations, but he didn't dare spend the cash for fear of being discovered. Aware of the dire punishments unruly orphilions received for involvement in illegal activities, he knew it was dangerous to even share his scheme with anyone. Nevertheless, he eventually confided in a friend named Steffie while they walked to work one morning.

"Steffie," began Bral, "does it bother you that we are the driving force behind Parsec's immense wealth, yet we can barely sustain a comfortable living?"

A Tesla-electrical systems engineer, Steffie eyed her friend as though wary of his intentions. Bral understood her hesitancy to answer; she did not want to give the DTM a reason to haul her away.

"Well, I try to live by the tenets of the Delegation." Then her eyes flickered as though she was remembering that she had nothing to fear from her friend. "But since you mention it, I have thought of what it might be like to be able to patent some of my own inventions and reap some of the rewards myself."

"Do you feel it's fair of the Delegation to deny us that freedom? We don't even have the means to earn enough to branch out on our own at a later time. Except, now Steff, I'm going to tell you something that may get me whisked off to an isolation holding pen somewhere. What I'm about to tell you must be kept in the strictest of confidence."

Steffie stopped walking to hear what Bral had to say.

The level of his voice dropped considerably. "We must keep moving to avoid suspicion." Barely audible, he revealed his crime. "I have embezzled a large sum of money from Parsec Investments division and funneled it into a Swiss bank account under a false name."

Her mouth fell open upon hearing this revelation. Words were not forthcoming.

He had almost anticipated this reaction from her and continued. "Having been making investments for the last five years, I have enough money to begin any type of business I so desire!"

Steffie found her voice, "But you cannot outwardly do so because getting caught with this money would be to your detriment."

"Shhh!" Her volume was a bit high for Bral's comfort. "I think the word detriment is inadequate for describing weeks of cruel sensory deprivation in a darkened and soundproof room. Or for a crime such as this, it would most likely be a ghastly prison without a fair trial. But yes, you are correct. I am not sure how to put this increasing investment to work for the benefit of orphilions without getting myself arrested. I welcome any ideas you may have."

Bral and Steffie ruminated on this for the remainder of their walk to work.

The next day, Steffie spoke while they headed toward the Parsec building. "Bral, if the two of us are feeling dissatisfaction, and if we can see the major inequities between the earnings of the Parsec corporation compared to our paltry salaries, don't you think there are others around the world who have made similar discoveries and share our same feelings?"

"Before falling to sleep last night, this was my thought: to escape. Not only us, but with people who feel the way we do--unhappy with the unfairness of their positions, frustrated by the inability to change them, and weary from always having to guard their actions."

Bral said, "You mean like a resistance movement? Hide out in a cave somewhere? Retaliate against injustice and tyranny?"

They became excited at the prospect that their lives were taking on a new direction. Their enthusiasm grew each day as their plan of desertion began to materialize.

In the weeks that followed, Bral and Steffie systematically visited with others after work hours and away from the Vigilant Eye. They began to plant the idea of a rebellion in people whom they could trust, proceeding with extreme caution, however, because most orphilions were unquestioningly accepting of their subservient positions and would report those involved in subversive activities. Even some trustworthy friends would begin reciting Delegation doctrine to ward off their colleagues' heretic talk, but further into the conversation, they would find the tenets easy to forget. Some had even offered suggestions which were helpful in implementing the plan of defection.

For instance, a compound situated in the mountains would be well-concealed. The granite slopes would also deflect radio waves, making it difficult for the DTM to detect their exon identification chips.

The founders named their underground organization the Subterra Rebel Force. They sent out airwave communications to workers of the United States region informing them of their government's financial corruption. Astounded by the number of replies, they were able to recruit orphilions who supported the cause from within various industries across the continent. A committee was established to draft the constitution and by-laws for the SRF.

There were times when Bral would secretly voice his doubts to Steffie about the sheer magnitude of their undertaking. She would reassure him of the correctness, the rightness of their goal, and that what they were trying to accomplish was now beyond them; there was no turning back. It was for a better future for humankind. She reminded him of his original motives, and Bral would soon be back on track.

Bral did the same for Steffie when she would feel overwhelmed.

They used the investment dividends to pay for goods and services needed from outside the industries. In this capacity, street scavengers, formerly known as naturons, who normally scorned the megacorporate policies which provided scant opportunity for them to rise above their underprivileged class, played significant roles in the early stages of the rebellion. They acquired air vehicles and transported goods and equipment smuggled from megacorporate factories to the SRF site in the Rockies. With the help from workers on the inside, little by little, items used for the cause were secretly obtained. Street scavengers also provided the manpower during the construction of the facility.

Bral and Steffie solicited volunteers who bravely left manufacturing positions to apply their technological know-how to the design and construction of the Rocky Mountain compound and to all of the modern equipment within. A cavern was carved into the mountain by orphilion blasting experts. Surveyors, architects, and engineers applied their craftsmanship to the facility that would house over one thousand rebels. Bral spent his time coordinating the effort while Steffie utilized her engineering skills.

After the heating and electrical systems were set into place, the entrance hangar and living quarters were assembled, as well as the infirmary. Technical experts drafted the computer, communications, and defense control centers.

Other recruits, assigned to solve the problem of the exon tag, crafted radio wave scramblers that, when worn around the neck, would help to avoid detection when escape from a Delegation employer was imminent. They were only temporarily useful because the DTM was later able to descramble the jumbled signals. Surgery to remove the DNA tag from the neck proved to be the best option.

Over the years, word of the underground movement filtered to numerous locations within the solar system as United States orphillions were transferred to jobs elsewhere on Earth and on other worlds. The number of Delegation industries on Mars was increasing, and prospecting for mineral deposits on Jupiter's moons had begun. Along with crews sent to build industrial facilities, there was always extra cargo, undetected by the megacorporations, which found its way to a Subterra camp under construction.

The DTM registered a slight increase in the number of missing orphillions, Bral and Steffie among them, but believed they were simply returning to the megalopolises from which they came. The number unaccounted for was relatively few and ranged over a broad area and thus did not warrant significant reaction by the Delegation.

Eventually, though, through the testimony of dutiful orphilion and street scavenger workers, or from those subjected to deceptive interrogation, the DTM became aware of the resistance movement and had filed the reports about its extensive capabilities.

GenSapiens was ordered to intensify the brainwashing and isolation techniques of its orphans. The Delegation adopted a policy of no tolerance to orphillions suspected of disloyalty. To deter others from following suit or as an attempt to reverse their errant ways, punishments far beyond the mind-cleansing deprivations used previously were put into practice. Alleged offenders received severe and irreversible sentences, as did hardened criminals, to prison labor camps.

The framers of the Subterra Rebel Force were proficient in their skills, stealthy in their revolt, and courageous in their leadership. But in the name of freedom and justice, not all were able to escape the Delegation's most recent and unmerciful enactments with their lives.

## CHAPTER 12--TEA FOR TWO

2097: On course for Jupiter

In the middle of sleep time, Helena sat at the counter in the softly-lit galley, trying to read the leaves in her tea. She wasn't able to decipher anything. She was still feeling aroused and warm from the erotic dream and was hoping for some insight from the brew as to what was in store for her future.

Thor, in regulation sleepwear of tank top and briefs made of a gold-colored, quantum-aged textile, his dark red hair flowing free, entered the galley and upon seeing Helena, for a moment, thought he was having a hallucination. It wasn't because of her unearthly beauty, though on reconsidering, he could just as easily believe that he had walked into a heavenly dream. But no, the vision before him was of a more peculiar nature because of her attire. She was wearing nightwear of a strange fabric, styled with blue and green intersecting stripes and lines on a white background. He could see crossed under the counter, her long legs which ended in huge, pink, furry footwear. The nightshirt was too big for her and fell, exposing a soft, creamy shoulder. God, how she aroused him, even in this ridiculous outfit.

Sensing Thor's presence, Helena looked up from her tea. Hmm, she thought, maybe the tea leaves had conjured him up. "You couldn't sleep, either?" she asked.

"No," he answered softly, thinking of the other vision of a half hour ago. They'd fallen into the habit of sleeping with their doors ajar. He had been awakened to soft moans wafting from her room. Having been concerned that there might have been a problem, he'd peeked through her door just long enough to see that she was all right. He had deduced that her moans were not cries of distress, but of pleasure caused by a dream. The alluring sight had prevented his subsequent return to slumber. "Maybe sleep is being elusive because we are due to arrive on Europa tomorrow. I am feeling a little anxious about what we will find once we get there."

"I know what you mean." She gestured toward her cup. "Would you like some chamomile tea? It's supposed to be soothing."

Having never heard of chamomile tea before, he smiled and said, "Sure, darlin'." To call Helena the tender name was spontaneous. It was a word from his early childhood which had been used by a GenSapiens worker named Kat. Kat hadn't been like the others; her loving care had been treasured by Thor and the other children. Before sleep, when they would be reciting indoctrination verses, Kat would slip in rhymes which had carried Thor's imagination far from anything in his world.

"Sleep, little darling, close your eyes,  
And fly with birds through clear blue skies.  
Dance with bears around the moon.  
You'll be on your own too soon.  
I can take you just so far.  
Let dreams guide you past the stars.  
Sleep, little darling, close your eyes..."

He noticed it was Helena who had brought forth the pleasant memory, unthought of for years.

As she turned to give the voice command to the automatic food dispenser for the tea, she was thinking that his voice was calming. Soft--a gentle accent from the southern area of the former United States. She felt an agreeable twinge inside of her when he called her darlin'.

Thor sat down across from her, accepting the odd flavored tea. "What kind of tea is this?" he asked.

"I got it from an Olde Earth Customs shop. It's called chamomile. Earthians of the twentieth century used to drink it to help them sleep. Do you like it?"

"It's wonderful," he said of the golden brew as he brought the cup down from his lips.

It doesn't taste that good, she thought, half-grinning at his compliment.

"Thor," Helena said, as though trying it on for size. Seeing the warmer glow of his gaze made her breath catch. "That is the name of a brave Viking god from ancient Earth." And a very fitting name for this broad-shouldered and copper-haired man in front of her, who could easily be the inspiration for legends. "He was the personification of thunder--which says a little something about his manner of battle, yet he was generous to humankind."

The patch of a dark red birthmark near the top of his shoulder was unveiled from under his hair as he reached for his cup. She also noticed a small vertical scar on the side of his neck. "May I ask how you came to be assigned to this mission?"

He answered, "In the Louisiana district, I trained as a fighter pilot for the Delegation Space Force. Mostly I had disaster relief and peacekeeping assignments. No wartime battles, but there was plenty of order to maintain."

She smiled. He'd said Looziana.

He went on. "I've found that there is nothing I enjoy more than to break free from a planet's gravity field and maneuver a craft at tremendous speeds through space. And to approach a shining planet while viewing it against the black sky...well, they are thrills that I live for."

Helena heard the élan in Thor's voice. She was profoundly affected that he was sharing one of his life's passions with her. "After the service," he continued, "I flew cargo and became a liaison officer for UMO to negotiate with colonies, on Earth and Mars mostly, that become displaced by our mining operations, until...well," he hesitated, "until I was reassigned. And a mercy flight to the planet Jupiter, how could I refuse?"

She studied him intently and was enchanted by his smile, by the sparkle in his cerulean blue eyes. She wanted to run her hands through his unbridled hair.

"Shall we look at the planet, Doctor?" he asked.

"Why, I'd love to see it!" she answered enthusiastically. They carried their tea onto the bridge deck where, from the console, he prompted the diamond window panes to change from opaque to transparent to reveal the planet Jupiter.

Glowing gases in a rainbow of colors--red, orange, yellow, purple, and white--roiled within horizontal bands and cyclonic eddies across the Jovian surface. It was like watching a thousand Hawaiian sunsets at once. So spectacular was the sight, it took Helena's breath away.

Lightning flashed at irregular intervals. Hovering just above the northern polar region was a labyrinth of vertical, gently undulating sheets of a phosphorescent green aurora. A small moon had left a gently spiraling trail of glittering dust which had become a delicate, planetary ring.

Tears welled up in her eyes and a lump formed in her throat.

Thor pointed out the stormy Earth-sized Great Red Spot to the right. He looked at her face, which was softly illuminated by the planet's light. Her tear-filled eyes communicated that she was as deeply moved by the sight as he was. They could say nothing for a long while but only stand there and share in the radiant beauty of Jupiter.

## CHAPTER 13—GRYS

2090: Earth

Old Earth Customs bordered the street scavenger Cajun community. The Cajun population had been one of the victims of the Guerrilla Class Wars. Surviving groups had been forced to scatter and wander in search of relatively safe, if not prosperous, havens, some of them ending up on the outskirts of Omaha.

One particularly warm evening while walking home from the library store, Helena came upon a street scavenger woman who was lying on the walkway, in obvious distress. Her moans, the pained expression on her face, and her arms around her distended belly indicated that she was in excruciating agony. Helena was horrified to see that the woman had been hemorrhaging from her lower abdomen. Her long dress of once colorful patchwork, now faded and worn thin, was saturated with blood.

Helena was level one paramedic, certified to administer inoculations, basic first aid, and cardiopulmonary resuscitation. She was not prepared to deal with the major medical emergency before her. She quickly scanned the area for anyone who could call for help. Seeing no one, she crouched by the woman in an attempt to offer what assistance she could. After making sure that her bleeding had indeed stopped, Helena communicated to the woman that she would go for help. About to do so, she was relieved when she spotted an old man hurriedly approaching them. He was of short stature with a slightly hunched back, his clothes also old and worn. She was about to ask him to seek help so she could stay with the woman when she sensed his own determination to offer aid.

He poured some liquid from a small, amber-colored vial into her mouth and massaged her swollen belly. He said some words that were unintelligible to Helena as he moved one hand from his forehead to his chest and then touched each of his shoulders. The woman's cries diminished and her face relaxed somewhat.

He spoke quickly to Helena. "Vite! Aidez-moi à porter la femme chez moi!"

Helena said that she did not understand.

The man said, "Help me to...carry her." He gestured to a nearby, run-down building. He was quite strong in spite of his misshapen back.

In his apartment, they laid the woman on one of the three beds in the living room that had been converted into a simple health clinic. The air was heavy and warm. Helena noted that the room did not have adequate lighting even though the frayed, orange curtains had been drawn. A small electric fan was blowing out through an open window. Its vanes were out of alignment and buzzed rhythmically, softly. There were shelves with bottles of various shapes containing liquids and powders of various densities and colors.

To one side of the room, there was a disordered desk which held piles of papers and books. A row of jars containing dried herbs seemed ready to fall off the edge. A lamp was directed at a little clearing at the desk's center--a place most likely intended for serious study.

Helena sensed that the disorder of the room was only external and that everything was meticulously arranged in the old man's mind.

The ailing woman began to moan. He further rubbed her stomach, dribbled more liquid into her mouth, and said some more of the strange words to soothe her. She winced hard and groaned at a sudden contraction.

Helena watched in wonderment as he spread the woman's knees. He told her in a steady, calming



voice, "Pousse quand je te dirai. Push when I tell you to, and not a moment earlier." His accent was thick. He waited for a contraction from her womb and said, "Pousse! Tout de suite! Push! Now!" He held his hands to where the smooth, bloodied head of a baby began to emerge. Helena's eyes were riveted to the scene while the woman pushed and gasped as the tiny boy was born into the man's hands.

Grys looked down at his catch and grew emotional. "C'est un beau garçon! A beautiful boy!"

The mother was drenched in sweat from exertion and humidity. He laid the baby down beside her, tied the umbilical cord twice with string, and with scissors, he cut in between. He then placed the infant on the mother's belly and massaged her lower abdomen. Helena saw a joyful look on the mother's face as she touched and studied her little one.

Helena was speechless at all she'd witnessed within the last few minutes, for this might have been how she herself began in the world, her mother a poor, ragged street scavenger. And she'd only read about births in the library store basement.

When both mother and child were resting peacefully, the man looked at Helena. "Merci for your help. Je m'appelle--er...I am Grys, guérisseur--a healing man of the street scavengers."

Helena found her voice. "I am Helena, a pharmacognosist for Universal Mining. You have done a wonderful thing here. I am humbled by your skill."

He looked down, accepting her compliment with modesty. "I learned from mon père, my father. He was also guérisseur. I believe our ability to heal is a gift from above; I am only an...instrument...for it."

Helena did not grasp his full meaning. Weren't one's talents the result of hard work? But she asked, "What will happen to the mother and her baby?"

"C'est pas une vie facile. It is not an easy life, being street scavengers. Maybe they will survive." Grys nodded his head with concern.

"I am curious about the medications you gave to the woman."

"Une autre fois...maybe we can meet sometime to discuss shop, oui? Right now I have a patient to tend. It was très bien of you to help."

Helena took that as her cue to leave.

The next evening, Helena brought blankets and food for the new mother, but she'd already left. Grys did not know to where.

On subsequent visits to the healing man's clinic, Helena brought samples of the latest pain relievers, coagulants to stop bleeding, and other medical compounds that had been synthesized in her clinical research setting—many of which had been modeled after exotic plant chemicals.

Grys listened to her scientific jargon. Words like proteomics and programmable molecules. To compensate for the limited movement in his neck, his eyes would look up to her when he'd say, "Je ne comprends pas." And he would say it often while shaking his head, as though wishing she could explain the modern cures in ways more comprehensible to him.

He shared his herbal remedies with her and named the botanical sources. For example, he used crushed leaves of the white wild flower, yarrow, as a coagulant on wounds. A tea brewed from the plant was used as an analgesic and sedative. In yarrow was the chemical achilleine which helped control bleeding, salicylic acid for pain, and thujone--a mild tranquilizer. To Helena's amazement, many of her laboratory medications were derivatives of his natural treatments. She conceded to the fact that Grys' primitive drugs were worth further scrutiny because they could lead to answers for which she was searching in the pharmacology lab.

She had a host of other questions for the healing man. What did he use for mutant viral infections? For certain cancers? To retard aging?

Grys was kind enough to share what he knew about the beneficial effects of echinacea, orchid nectar, ginkgo, and many other herbs and natural medicines.

\* \* \* \* \*

A few weeks had passed since the street scavenger woman had given birth. Helena was listening to music softly emanating from speakers in Grys' apartment. A male voice singing in French was accompanied by an accordion and a violin. Major keys would change to minor, bringing out the ballad's passion.

"The music is beautiful. What is it about?" she asked.

"C'est une musique qui reflète la vie. It is music that mirrors life," was Grys' only answer.

Before she left for home, there was something she'd been meaning to ask him. "Grys, what were the words you said above the pregnant woman that seemed to put her at peace?"

He recalled for a moment. "Just some long-forgotten prayers to le Bon Dieu...to a higher power," he said.

## CHAPTER 14--GONE FISHING

2090: Earth

Billowy, white clouds were stark against the bluest of nitrogen skies. From across a large lake, one could see a line separating the deeper blue of the water from the varying greens and shadowy areas of the shoreline vegetation. The air was warm. A light breeze gently lapped water against the sides of an extravagant cabin cruiser anchored in a bay promising fishing success.

From the vessel's fore rail, the brawny, red-haired man dropped a baited line into the water in hopes of hooking a rather large northern pike. Beside him, with the same goal in mind but applying a different strategy, a dark-haired man of a slimmer build had already cast his line away from the boat and was reeling it in, in trying to entice an equally large, if not larger northern to bite at the moving lure.

Captain Thor DV556hz and UMO's chief executive, James Ganymede, were momentarily away from the demands of their duties, participating in the age-old pastime of fishing.

In warm-weather recreational clothing, Thor stood tall at the bow of the vessel. Strands of long hair, loose from their tie, were undulating in the wind. His dark red beard hugged the angles of his jaw line. He had the rather savage, seductive silhouette of a northern European conqueror of long ago.

Usually seen in the physique-enhancing lines of a business suit, those who knew him would say that Ganymede looked rather odd in the casual summer attire of a sleeveless tunic and shortened leggings. Those who didn't know him would find him menacingly attractive. His athletic build, trim black hair, and clean-shaven, dark complexion made him an equally impressive-looking counterpart to Thor.

Thor, Ganymede, and dozens of others were on a working vacation at a resort on a large Minnesota lake. They were attending a four day seminar to improve their skills in courting the public. They were there to learn how to enhance their business prowess while at the same time making the customer feel satisfied. Reading between the lines, some would say it was a lesson on how to exploit the public with the use of veiled manipulations.

Ganymede had asked Thor to attend the conference because he was in need of an intermediary to persuade and temper hostile colonial groups that were hindering Universal Mining expansion opportunities on Mars. The Delegation's chief of military staff had recommended Thor to Ganymede, avouching that he was a trustworthy and dependable officer. Not only were his piloting and spacecraft maintenance skills excellent, but some years ago, he had been an important cog in government order-maintaining activities when factions on Earth and Mars had retaliated against the DTM over control of land use. Of course, the Delegation's military threat was too large for the smaller groups to conquer, but they were appeased somewhat during a negotiation process to which Thor most notably contributed. Settlements involving borderline disputes, mineral rights, and ecological concerns had been reached. Thor was then assigned to head an overhead reconnaissance mission to ensure that the agreements were upheld by the inconvenienced factions.

After the service, Thor became a corporation soldier for Universal Mining Operations, flying orphillions and equipment across the solar system to its various mines. Now Ganymede needed Thor's skills in a different capacity--as a public relations liaison.

On the fishing boat, Ganymede explained further. "When UMO's exploration division discovers pockets of valuable minerals in inhabited places, we need a person skilled in public relations to smooth over the trauma for the groups that become uprooted."

I'd be like a transformer smoothing over an impedance mismatch, joked Thor to himself.

Computeronics humor. "I believe I can be of service to you in that capacity, Mr. Ganymede."

"You will still be needed as a commuter pilot, but when I need a liaison officer, I would like to rely on you to work for the best interests of UMO."

"You can count on me, sir."

Thor only knew life as a soldier for Delegation causes. He believed they were peaceful for the most part, and with the human population growth curve increasing beyond the plateau, he couldn't fathom a better way to maintain the order of the masses.

Yet, at the age of thirty-two, he felt his life had been lacking something. An as-yet unknown, more meaningful purpose was nagging at him. Maybe the change in his position at UMO, to be useful to the company as a keeper of the peace, would settle his mind.

"Your first assignment will be on Mars. Core samples have uncovered veins of gold among the iron deposits. This discovery was made near our Mariner Valley Mine, which borders the Deimos colony. Your art of persuasion will be needed to convince the settlement to allow our mining expansion, at minimal expenditure to us, of course."

And things like that annoyed Thor. Ganymede could share the wealth once in awhile. What could a person possibly do with all those trillions? But Thor calmed himself by thinking about his number one enjoyment. Piloting his spacecraft. As long as he would still be able to do that, then he would consider his a good life.

"I will do my best, sir--hey! I got a bite!" Thor had felt the quiver on his rod. He allowed the fish to nibble at the bait and waited for its big gulp before he jerked the line to set the hook. He struggled to reel it in. The rod arched with the weight of the fish and its resistance against the water as it was being pulled in.

Ganymede was genuinely enthused as he extended the net under the monstrous-sized, amber-colored pike as it rose fiercely flailing from the water. "That one's a definite keeper, Captain!"

Thor had the impression that Ganymede wasn't often caught in such unguarded, warmhearted moments. And he grinned from ear to ear when he saw that he had hooked what turned out to be a ninety-centimeter, seven-kilogram trophy.

Well, he thought afterwards, while gazing across the lake which was reflecting the rich hues of the setting sun, it would be a good life as long as he could fly in space, and fish.

## CHAPTER 15--TRITON: ZETA DECADE

2059: Io

In the processing building at a sulfur mine on Jupiter's volcanic moon, Io, Mura, experienced to the degree of wearing her hard hat and protective clothing like a second skin, made sure that irregularly shaped blocks of sulfur ore did not jam the rotating bits in the crushing machine. From the incoming conveyor belt, she pushed aside an oversized sulfur chunk that was about to fall into the crusher. The previous stage in processing did not make it a small enough piece for the rotating bits.

She understood the importance to the DTM of processing the sulfur ore into its pure, bright yellow element. Sulfur was used in the preparation of a multitude of industrial chemicals. For instance, more metric tons of sulfuric acid were utilized annually than any other compound in the making of products such as explosives, plastics, pigments, and textiles.

The churning geologic activity for which Io had been famous had diminished enough to make sulfur mining possible. Though the mine was located in a region of relatively low activity, there was still the very real risk of gravitational tides triggering violent moonquakes and explosive volcanic eruptions in the area.

Into her fourth decade, Mura was physically fit due to the demands of her labor. She was conditioned to withstand the machinery noise and the monotony of her dusty job. The odor of sulfide compounds fatigued nerve endings in her nose so she didn't smell it much during the day. But afterwards, in her compartment, the pungent odor was nauseatingly inescapable as it diffused from within her body all night long.

She was looking into the funnel of the machine and didn't hear two armed guards approach her from behind. One grabbed her arm, startling her. She removed her ear plugs.

"Come with us," he commanded.

She was brought through the connecting walkway to the mine's administration building and into the UMO Personnel Inquisition room. She was told to sit on a chair at its center. The chamber was dark except for a spotlight on the chair.

Completely at a loss as to why she was there, Mura heard a woman's alto voice from a speaker in the darkness. "Mura OS603jg, the Vigilant Eye has recorded you committing violations of DTM law with fellow employee, Taedres ES045ed."

"No! That is not true!" Not knowing which laws she was being accused of breaking, Mura began to describe her relationship with Taedres. "We only talk--"

An audiovisual recording hovered in the blackness ahead of her. She viewed an image of herself talking to her friend. Rebel undercurrents had given them something to hope for. "Taedres, we must remain optimistic that our plans will materialize, and we will soon be free from working in this putrid place." It was an excerpt from a typical conversation she would have with him as they imagined a different life. "What gets me through each day is the thought of being with you, far away from here."

The voice from the dark said, "Do you deny that you said this?"

Tears streamed down Mura's face as she realized that whatever answer she gave in her own defense would be in vain. "Yes, I said it!" She said through her tears. "But it was only about a dream!"

From beyond the light, the woman's unwavering voice gave the judgment and sentence. "You, Mura OS603jg, are found guilty of disloyal conduct and of conspiring to defect from the Delegation of the

Twelve Megaconglomerates." With a feeling of growing dread, Mura listened as the reference numbers for the said charges were being read, and then she heard, "You are thus sentenced to a life of hard physical labor on one of Triton's radioactive heavy metal mines." Her feeling of dread became one of absolute doom.

The recent changes in DTM law, aimed to discourage such crimes, were being put into practice with the expectation that it would take only a few examples to deter others from making similar plans of defection.

Mura sobbed uncontrollably as this grave injustice was being handed down. The guards grasped her by the arms. Her efforts to break free from their unyielding grip were wasted. Her hard hat removed, she was hauled into a holding cell where she was to wait for a DTM transport pod that would be carrying prisoners to Neptune's moon Triton.

How can I warn Taedres? she thought. He had added similar words to their conversation of wanting to leave Io's sulfur mines. He would certainly be next to receive this dismal sentence from the uncompromising judge.

She was directed through the connecting passageway and into the vehicle which was filled with dozens of sleeping, gray-uniformed orphilions. Those in ragged clothes must have been hard-core street scavenger criminals. She was strapped into a seat where a mask which released a gaseous sleep inducer was placed on her face. An intravenous feeding unit was then pressed onto her arm, a requirement for the long ride ahead...

Once on Triton, the convicted on board the transport vehicle were given a dose narcotic neutralizer. A guard technician removed the IV unit from each passenger's arm. At first, Mura was aware only of her physical self as she slowly returned to wakefulness. Then a piercing remembrance tore through her mind. Through the window nearest her, she viewed the moon's frost-covered landscape. It appeared dusky and unsympathetic to her circumstance.

A DTM soldier handed out disposable pressurized suits, oxygen tanks, and ore-carrying racks for each prisoner to put on. That the spacesuit was stamped "disposable" said it all, effectively snuffing out any flicker of hope Mura may have had for being rescued.

Once outside of the spacecraft, the prisoners were immediately besieged by the shocking chill of outer space. They were led to a lighted area. There sat a mountain of iridium ore boulders that had been hauled there from the adjacent open pit mine, dug deep into the moon's rocky crust. Mura could almost detect the glow of radioactive energy from the pile. The handling of the hazardous ore was saved for the condemned. Its refined product was used in gamma ray weaponry.

The prisoners were prodded into one of the dozens of moving lines which, to Mura's estimation, was comprised of over a hundred workers walking in single file to the immense rock pile. Each would heft an ore chunk onto the rack that hung to the suit's front and carry it for about five-hundred paces to a conveyor belt which brought the rocks into the processing plant. Each laborer would then circle back to repeat the path. On a row of high platforms, DTM enforcers, in radiation-protective gear, were on watch and under orders to phase out those in the ore transfer lines who became physically exhausted or otherwise unproductive.

After a few hours, Mura wondered when a break would come. Or water. And her mind wandered. Well, I got away from the putrid sulfur mine. She guffawed at the irony. She wondered if Taedres was still on Io. Was there any chance that he would escape this horrible fate? Run Taedres!

Thoughts of being rescued ebbed and flowed in her mind until, with grim realization, she abandoned any anticipation of that miracle transpiring. It wasn't long before she felt like she was among the living

dead. The slight warmth emitted from each boulder did not prevent her from becoming numb from the moon's extreme cold. She plodded on endlessly while carrying the dense metallic rocks, each up to one-hundred-forty kilograms in mass. In that gravity field, it was equivalent to nearly one-half her body weight on Earth, much heavier than what her muscles had become accustomed to on Io.

Mura observed a new shuttle descend onto the landing pad, and the people from within it were directed to the rock-transferring lines. They seem to have an unlimited supply of human conveyor belt, she thought, and then hoped against hope that Taedres wasn't in one of the spacesuits of the new arrivals.

She was becoming exhausted and lost track of how many hours she had been there. Her footing slipped on the worn gravel path. She hurried to right herself. She dropped another radioactive boulder onto the moving belt. Trudged back. Picked up another. Heavier this time. They always got heavier.

The spacesuit she'd been given was woefully inadequate for the frigid temperatures found at thirty times Earth's distance from the sun. Frostbite prevented her from sensing the bruises on her shoulders caused by the straps of the carrying rack, nor did she register the ache of the bloody blisters on her feet. She did feel the shooting pains through her back as she lifted yet another stone.

Witnessing another worker collapse ahead of her, she saw the momentary x-ray of his skeleton before he disappeared after a sentry's accurate aim. She wearily concluded that, given a choice, it would be better to die that way than from the agonizing radiation sickness which would inevitably ensue from grappling this dangerous form of iridium.

Mura looked across at the moon's lifeless surface and then up at the pitch-black sky. Neither offered her any salvation. Or hope.

Into the next day, the straps of the carriage rack were gashing painfully into her shoulders. Ah, sleep would feel wonderful right now. She was so tired. And numb. Her knees buckled from under her. She fell to the ground, asleep before the gamma ray phasor disintegrated her form.

## CHAPTER 16--FLANNEL, MY LOVE

2097: On course for Jupiter

They were watching Jupiter in all its glory when Thor turned away from the planet and found Helena a sight even more beautiful. She ignited his passion and he desired no other woman. As he set down his tea, his sky-colored irises met hers of deep oceanic blue--the connection like paints bleeding together on a watercolor. Taking her hand in his, he brought it to his mouth and tenderly kissed it.

Her full attention was now on the man beside her, on his warm hand surrounding hers. The contact of his warm lips and the brush of his soft mustache on the top of her hand sent a torrent of heat through her. It was a feeling as extraordinary now as it had been when they'd nearly kissed in the hallway while he had held her in his arms.

Her gaze was locked on his as he lowered her hand from his lips. His arm moved to her back. When he gently pulled her closer to him, Helena found herself gravitating towards the one who was beckoning her through the gates of paradise. Yet she felt ambivalence between her logical, dutiful side which was screaming inside her Stop! and her foolish heart which was telling her to maintain course.

As though sensing her internal struggle, Thor did the noble thing: he met her half way.

The sensation of her lips on his was more spectacular than any supernova or even Jupiter shining through the window. He gently held her face in his hands as his mouth covered hers in the sensuously intoxicating encounter. He heard her softly gasp when his tongue penetrated her parted lips.

One of his hands went up to clutch the back of her head, his fingers finally able to lace through her silky hair. It was more exquisite than he had imagined.

He moved his arms around her, wanting to envelop her, to absorb her into him. He felt her tremble. It crossed his mind that he probably should stop. He responded by strengthening his resolve: he tightened his hold and kissed her harder. Tasting her this way was beyond anything he had ever previously experienced. And when she kissed him back, he found himself entering a provocative and extremely satisfying yet uncharted space sector from which he could not return. Nor did he want to.

Helena found herself wanting nothing but to continue savoring this heightened pleasure that Thor was generating in all of her senses. Then her rational side panicked. You can't do this! it said. She pushed against his shoulders and tried to back away, but Thor's arms were unrelenting, holding her against him, possessing her. Abandoning all sense of reason, she allowed his mouth to crush over hers again, an action which effectively stifled any desire to retreat on her part. Her arms went up around his neck as she succumbed fully to his plundering kiss.

Their bodies melded together as she met his searing, demanding kisses with equal intensity. With equal desperation. Thor's voice rasped with emotion. "Helena, I want you."

Helena repeated the words back to him. "I want you, too." And I love you with all that I am, she added in her mind.

Locked in each other's embrace, they kissed deeply against the backdrop of glowing colors from the Jovian surface. Then, oblivious to all the reasons why she shouldn't, she allowed Thor to take her hand and lead her away from the bridge.

\* \* \* \* \*

Nothing she had read, nothing she had imagined could have prepared her for the pure rapture this closeness with Thor was causing in her. It was dizzying; her mind swirled like the turning of a spiral



galaxy, scintillously floating in deep space. She had come alive with his kiss and had simply surrendered to his lustful demands, for she realized they had been her desires also.

During that kiss which had sealed their cosmic destiny, her hands ran over his coarsely soft beard. With only the fabric of their sleepwear between them, she was starkly aware of the hard contours of his magnificent body. Her fingers found their way over his broad shoulders and through his long, fiery-colored hair as he pulled her closer to him, her breasts pressing against his chest. Their hearts beat as one and nothing else in her life had ever felt more right. She knew the heated rush of desire within her would be satisfied completely by Thor.

The thought of the two of them being banished to a dismal, frosty world for violating company dogma never entered her mind as Thor's warm hand held hers as he led her, then carried her to his bed where he gently laid her down and covered her body with his.

They kissed urgently, hungrily, hands searching each other. A thrill charged through him when her long, smooth, pink-slippered legs instinctively rose up to his waist. He reached inside her nightshirt to caress the silky fullness of her breasts.

"Darlin'?" he asked in between kisses, "what is this fabric of your nightwear? It is warm and soft to the touch."

She murmured, "Flannel, my love."

He growled in response and kissed her more thoroughly, knowing he would be forever aroused by the cloth, and by pink furry slippers.

Helena's heart had searched for Thor for so long--an eternity--even before she knew it. In her arms was the man who transcended her every dream. She was finally able to hold him...sense him...love him. The tenderness of his hands and mouth's touch on her lips, on her breasts, created a scorching excitement which surged throughout her body that would be caused by no other.

She pulled off his nightclothes so that her fingertips could dance freely on his taut skin...over his shoulders and broad back...through the soft hair of his chest...over rippling muscles...to the torrid regions of his lower latitudes.

She was not timid in satisfying her need to explore his body. While discovering his nuances...her hands, lips, and tongue moving over his hot skin...she heard him release groans of pleasure, each one giving her encouragement her to explore further. She tasted, savored, committed all to memory.

And Thor lay back, as though she was a seductress plying her charms, thoroughly enjoying the tactile pleasures she was bestowing upon him. He allowed her to continue in this way. He couldn't have stopped her if the ship was about to self-destruct. Her contact stoked him to levels of pure physical need the likes of which he had never encountered before. Does she know what her touch is doing to me? I shall surely perish from this fire blazing inside of me--hot as the sun's core.

Something of a deep-rooted, primal nature surfaced in Thor. He rose to savagely tear the flannel from her body, and he became further aroused by this naked, writhing, feminine thing in his arms. He had never before seen such a beautiful woman. He tried to tell her this, but in his present state of arousal, he could only whisper, "...beautiful..."

And Helena had never believed it possible to be so uninhibited with a man. To be naked with this one felt so right as she sensed his lustful gaze upon her bare skin--and so natural as he laid his hot kisses on her supple curves, their sensitivity intensified by each touch of his ruddy lips. She arched her body for more.

Thor acted on his overwhelming need to claim her. To make her his own. For all time. He rose to enter

her, and it nearly melted him to see her eyes brimming with love for him. Her arms extended to welcome him, to embrace him.

She said, "Thor, my love...you are mine...and I am yours. We are now and forever will be...one." With that, he felt Helena take gentle hold of his erection and direct it into her.

From there Thor took charge. His long hair softly brushing on her breasts, he was intent on watching her face as his powerful size was going in. Her eyes closed as she took in a deep, shuddering breath. She moaned a breathy 'ohh' as heavenly anticipation was becoming an even more euphoric and sensational reality. When her eyes opened again, they glistened with a look of wonder. They met his eyes, and he had never felt more pleased.

Until now, she hadn't fully realized that this was the moment she had been living for: to express her undying love to Thor in this most intimate way possible--on this purely magical space ride of a lifetime.

He fought to control the rate of his entry, forcing himself to go slowly, to savor her sultry tightness around him, until his body's need overpowered his mind to move with an oh-so-gratifyingly increasing rhythm to which, he was aware, she was also synchronized.

They called out each others' names between devouring kisses and thundering thrusts, reaching a vocal crescendo at the moment of the blinding starburst. Explosive energy from their union charged through each and every one of their trillions of cells, radiating to as far out as the quasars on the edge of the universe.

\* \* \* \* \*

Waking up in Thor's arms had been most sublime. Helena hadn't expected it to feel so wonderful to be surrounded by his strength...his warmth...his scent. She lay there savoring his embrace, trying to determine exactly why it felt so good. She turned to face him and her insides melted when she saw that he was awake--his eyes unmistakably full of desire for her. Their color was more intense, like the blue halo of Earth's sky as seen from orbit. She moaned softly when her own desire for him began to overwhelm her. He answered her throaty moan with roaming hands and a ravishing kiss. Their bodies then communed in an encore of their previous night's passion.

Wonderfully spent, again luxuriating in his arms, she groaned a mild protest when he got up to dress before leaving to carry out his pilot duties for UMO. That left Helena no choice but to arise and dress also so she could finish preparing the orchid medicine. But first, she would go to the galley and make a breakfast for the both of them. The last thought caused her to stop abruptly and wonder: Where had this desire to prepare food come from?

Thor's room was orderly--except for the bed. Helena guessed it was probably the first morning the Delegation/UMO officer hadn't made it in military fashion. Her brow puckered as she was reminded that he was a dedicated Delegation enforcer. But how dedicated to DTM tenets was he really? After what had just occurred between them, she couldn't be certain anymore.

She went to the auto-cleansing basin and directed its gentle spray and then drying air across her face. Studying her image in the optical reflector above it, she noticed that her face had a different cast now than before the mission began. It still had the same flaws in the skin: some blotchiness and a few crinkles starting at the outer corners of her eyes--especially when she smiled, but she also noticed a relaxing around them. That and the easy smile on her lips hinted at a new-found contentedness. Whether Thor was fully devoted to the Delegation or not, his lovemaking had proven that he desired her--that he cared for her. Of that she was certain. She had already admitted to herself that she was hopelessly in love with him. But she could never admit it to him. To anyone. At this juncture, to know

that he cared for her would have to be enough.

She pulled open a drawer in search of a comb to manage her unruly morning hair. Among Thor's few items of hygiene, she saw three other objects: his winged captain's pin, an odd piece of thick, bent wiring with a prong across the middle, and a timeworn, paper book.

Seeing the book surprised her because she was familiar with it, having read through many of its passages in the library store's basement. Even though it was an ancient text which brought to mind pretechnological images, she had found the words applicable to her life today and deeply comforting.

Helena really didn't mean to pry into Thor's personal belongings. But while combing her dark brown hair into some semblance of order, she couldn't help but ponder the significance of the items that Thor would bring with him on an extended space journey.

## CHAPTER 17--THE MARTIAN INCIDENT

2096: Mars

Having no choice but to abide by Delegation doctrine from an early age, each orphilion knew that the exon locator tag had been placed precariously close to the smooth muscle wall of the carotid artery, carrying with it the risk of death should an attempt be made to remove it. And most orphilions employed in the various industries had witnessed fellow workers being nabbed by government enforcers for alleged violations of Delegation Tenets, never to be seen or heard from again.

After the business seminar in Minnesota, Thor had been called upon by James Ganymede on numerous occasions to serve as a liaison to negotiate pacts with colonies on Earth and other worlds. He had proven to be a valuable asset as a pilot and mediator for Universal Mining's expansion interests...until that one day he would wish time and again had never dawned.

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The project of terraforming Mars was nearing completion and Captain Thor had been assigned to transport a crew of orphilion iron workers to UMO's Mariner Mine on the edge of Valles Marineris, an immense canyon that was as long as the former United States was in width. The Deimos colony was to the east, green with aspen. Though much of the planet was still desert-like, it had been years since people required oxygen masks while living on Mars.

The space shuttle had been teeming with new workers. Word was out that among them were dissidents who regarded this area of the Red Planet as a place to escape the tyranny of UMO and other megacorporations. It was rumored that the Subterra Rebel Force was gaining members in significant numbers. As a measure to deter the renegades, the Delegation assembly had recently ordered guards to shoot any orphilion attempting to flee during the labor relocation process.

Thor was wearing the beige uniform and cap of an enforcer for UMO. His holoviewer unit was in surveillance mode. He noticed his phasor's power pack was running low and set its gamma ray laser to devitalize target--rather than to vaporizing phaseout. While on watch, he and the other guards were prepared to follow the orders from their superiors to terminate the life of any absconding worker.

As the queue of gray-uniformed orphilions was entering the building, there was one young woman who, erroneously thinking--or desperately hoping--that she would go unnoticed, slipped away from the line, hiding behind the rust-colored boulders scattered here and there as she moved toward the great canyon that lay beyond. The uneven terrain was helping her stay out of the sentries' lines of sight. What the defector didn't realize was that the shuttle's pilot, who was standing on the steps of the spacecraft, was at an angle to be in full view of her attempt to escape.

He allowed her to move in her stealthy manner for awhile in hopes that she would lead him to the notorious Subterra underground. For a moment, he gazed through the hazy, salmon-colored air, across the great chasm to the horizon where the inactive caldera of Olympus Mons, the largest volcano in the solar system, gradually rose to a height well above the three smaller volcanic mountains in front of it. Aware that she would be soon out of firing range, he lowered his gaze back to the woman. He aimed and discharged his phasor; she dropped dead to the red ground.

Other workers who had witnessed the tragedy continued walking steadfastly into the mine building. They knew better than to display their emotion over the woman or express their contempt for the authorities.

Thor had been struggling with his own conscience for some time now. In the back of his mind, there was a feeling of wanting to escape the tyranny himself, yet some stronger force held him in check. "Loyal to the Delegation, Loyal to our Cause, We are the Power of the Universe." The verse he'd learned in childhood would recur in his mind and he really knew of no better way.

He was an orphan. A pilot. A corporation soldier. A liaison for promoting peace. And he had never had to fulfill his obligation in this capacity before.

The reverberation of what he had just done was beginning to penetrate into his very soul.

Thor radioed the others of his intention to inspect the area where the woman had been heading--and no, he didn't require assistance. He used a voice command to switch off his holoviewer. He removed it from his face, folded it, and tucked it into a uniform pocket. He stepped down from the shuttle and found his way to her lifeless form.

On reaching her, for some unexplainable reason, he crouched down and moved her hair from over her eyes. Gazing at her face, now at peace, he felt an overwhelming compassion. He paused to consider this. Why did he care about this woman whom he knew nothing of except that she wanted to break away?

He saw a flash of white in the opening of a cave which was beyond a wind-sculpted rock formation. That must have been where she was headed. He gathered her body in his arms and walked to the cave where a large hill obstructed its view from the other DTM enforcers. Thor was hoping they were thinking he was only disposing her remains into the abyssal Valles Marineris.

He dropped his weapon before the cave opening. Trying to make his voice sound as non-threatening as possible, he said, "I am unarmed. Please, come and take your dead." While he waited, he noticed sweeping marks on the ground where someone had hastily tried to brush away footprints.

It was nearly half a minute before an old man, at least a head shorter than Thor, with a time-weathered face and understanding gray eyes, came forward. Balding with short white hair around the sides and back of his head, he wore a long, ivory-colored robe that draped over his tenuous frame. He was brave to face the soldier, knowing that he could be shot dead by him or by another at any moment.

Thor walked closer and handed him the woman's body. The elder man stared intently into Thor's remorseful eyes and knew their underground would be safe from tyranny for a while longer. He took the body from Thor's arms and said, "You will be forgiven, my son." Then he turned to go inside the cave.

Thor returned to his post before being discovered at the cave by the other enforcers, who had already begun a search for him. The woman he had killed and the gentle, courageous old man would be indelible on his memory. The word forgiven, an impossible notion for the indefensible crime he had just committed, weighed heavily on his mind.

## CHAPTER 18—JENISSE

### 2091: Earth

In Olde Earth Customs, Helena resided on the sixth floor of a company-owned, efficiency compartment building. The module contained a living area where a divan had been placed in front of the kinetic image stage. On the opposite side of the room was a kitchenette and counter. Across the room from the entry was a large window which, when the glass was made clear, exposed an unexciting view of the neighborhood's similar buildings. Behind the hologram stage, a partition wall separated the living room from a small bed chamber which adjoined a smaller shower room. On the floor of the compartment and on most other horizontal surfaces was the greenery of over two dozen plant varieties.

Helena and her friend, Jenisse, were sitting at the counter, playing a round of Spacetime Continuum. As Helena moved a muon to the sixth orbital, a crucial move that would turn the tide of the game, she watched the tension in the face of her friend. "Sorry, Jenisse, but it was something I had to do." They both laughed at Helena's sincerity, or rather, at the lack of sincerity in her voice.

"Well, the game is not over yet, my pet!" Jenisse used her top right hand to move her neutrino into excitation. A gamble, but what did she have to lose?

Helena furrowed her brow, but only slightly, at this development. She smiled as she soon realized that if her muon became a matterwave, it could make a quantum leap beyond Jenisse's neutrino. It would take control of the space-time continuum and she would win the game. Helena leisurely made the next play.

Jenisse gulped in defeat. "I'm not much of a match for you at this game, my dear friend. Next time let us compete in a contest of my expertise: Superstring Chess."

Both laughed because they knew Jenisse would beat the space tunic off Helena at that game.

Jenisse CS368ah was a graft orphilion who worked in the manufacturing of MPL qubit processors. As her fine motor dexterity became apparent at GenSapiens, she was given injections below her arms which had created there a certain desired chemical environment. The subsequent genetic response resulted in sublimbal somatic cells to fission and sprout another set of arms. Jenisse's mind had naturally become enhanced to coordinate the intricate motor skills needed for the delicate, quantum-level manipulations required of four arms instead of two. Employing grafts has saved Delegation establishments much time and money.

Some grafts had been induced to grow two more legs for jobs requiring heavy lifting or a long day on the feet. The legs worked in relays, increasing the stamina of the worker. Resembling the movements of a horse when walking, the four-legged grafts were called centaurs.

Some security orphilion grafts literally had eyes in the back of their heads.

In more recent years, GenSapiens had begun cosmetic grafting. For example, a bioluminescent gene from a deep sea organism could be procule-inserted into the lower epidermis' columnar cells. Enhancing the biochemical environment of these precursor epidermal cells caused the introduced gene to express itself as enzymes which governed the production of light-emitting skin. These grafts were called glowbugs.

Using the same technique, a person's hair could be made to look like brightly glowing optical fibers.

Whatever extra body part or enhanced feature a person--or government--desired, the biotechnology was available.

Helena had gone to the kitchenette's food dispenser and brought back two goblets of tangy hydroxyl tea, one of which Jenisse accepted. They began disassembling the game. Becoming thoughtful, Helena moved her hair, fashioned in Marilyn Monroe-esque waves, to behind one ear. She had once read a biography on Monroe in the library store basement and had identified with her. Helena, too, longed for something more that life wasn't providing. To her friend she inquired, "Jenisse, have you ever wondered if there is more intended for us?"

"More? Like what?" Jenisse was helping to lay pieces of the game in its box.

"Like, don't you dream about things? When you look up at a moonless sky, away from the city lights, and it's filled with a billion stars, haven't you ever wished to be in a place far away from here? Where your activities are not constantly being monitored? Where you can be free to take part in the spectrum of possible human experiences?"

Jenisse only answered, "What else is there to experience, Helena? 'Trust in the Wisdom of the Delegation.'"

"I do, my friend, because I know it wants what is best for us. But sometimes I think about living in another time and place--where I can take off in a starship and go to the Andromeda Galaxy if I so desire! Where I can make choices of where to live and what to do--to work for anything my heart desires! Like maybe I could own a pharmaceutical laboratory, instead of just being a worker in one."

Jenisse scratched her frizzy, dishwater blonde hair with her upper left hand, obviously not comprehending such talk. Using her lower hand, she brought the mild alcoholic beverage to her lips.

Helena continued. "And you could use your talents to make, umm, music or something. Imagine the rhapsodies you could create with all of your hands on a symphonic harmonium. Each hand could play a separate yet vital piece, and all would blend together beautifully!"

Jenisse shook her head and looked distrustfully at her game partner. "Helena, from where are you getting all these ideas? Outside information is not to be tolerated."

Helena hadn't told her friend about the library store basement. And she wasn't about to tell her about the stash of fliers she had hidden in a drawer which Jack had given her at work. Secret pages with ideas for a new solar system order. Simple rhymes which formulated tantalizing concepts in her mind.

"Imagine it! And realize!  
No exon chip. No Vigilant Eye.  
Phaseout weapons say good-bye.  
Question the authority,  
Equal opportunity,  
Time to raise a family."  
and  
"Orphilions are people, too.  
Wisdom is a part of you.  
Discover information  
And sense the liberation!"

Jenisse would think them frivolous or even report Helena to security for having material which clearly went against Delegation doctrine. "Oh, they're just ideas that pop into my head. I guess they are a bit imaginative." Helena was disappointed that Jenisse wasn't about to be persuaded to her way of thinking.

The women carried their beverages from the kitchen counter and settled into the holo-stage area. They chatted about the theme of the upcoming story that was about to be broadcast by the Delegation Instructional Network.

The programs usually bored Helena to distraction because of their plots which lacked even a microgram of creativity, the amateurish acting, and the uncontroversial nature of the storylines. But Jenisse always seemed to be enthralled by them. The morals were devised to impress upon the viewers the way the Delegation's tenets fostered the minds of orphilion workers, resulting in interplanetary order and a good life.

Her friend's company and hydroxyl tea helped a little on the schlock Helena was made to endure: the daily propaganda from the DTM.



Thor and Helena were in close proximity to Europa, having had no further radio contact from any survivors. At the ship's helm, Thor observed the radiation monitor and found the levels of ionizing energy around the planet to be hazardingly high, though he was assured by gauges on the control panel that the superconductive shield around the spacecraft was providing them with adequate protection.

As he guided the craft nearer their destination, their intimacies through the night pervaded his mind. He thought of how her body had responded completely to him, matching his own desperate need. "We are one..." she had said while her blue-eyed gaze had touched his soul. At that moment on the bridge of the ship, he realized that to live without Helena would be tantamount to not living at all.

Thor had been contemplating how, after this mission, they could avoid returning to Earth where a UMO inquisition would most likely result in their deportment to the place of comet origin--the Oort Cloud--or somewhere equally cold and miserable for their crime of passion. They could travel incognito, keep a low profile, and go into hiding in the Martian underground where he had friends who would protect them. That is, if Helena would agree to it. If she had any reservations about going with him to Mars, to him, that would be a hell worse than Oort.

On Mars he would ask her to marry him. Then his thoughts turned to dread: how could he ask her to be with him forever after having committed such a terrible crime at UMO's Mariner Mine? No, it would be better not to let her know how he felt--how he loved her with every bit of protoplasm in his body--and so certain that she could never love a murderer. But he vowed to do what he could to prevent her banishment.

\* \* \* \* \*

Helena had begun preparing the orchid medicine on the previous day. This morning, after his pilot duties had been carried out, Thor had helped her extract serum from the remaining blossoms.

When she had taught him how to use a rudimentary mortar and pestle, her hand had covered his to gently direct him in the proper technique of grinding the redolent flowers. Her contact had flooded his memory with the sensual pleasures of their previous night together. He had learned to move the pestle in a circular motion while pressing the mauve petals against the thick-walled bowl. Thor had thought it a shame that such delicate beauty needed to be pulverized.

It had been a painstaking method for the number of flowers, but an automated shearing grinder would have destroyed some of the medication's potency. The mash then had to be transferred to a weak alcohol solution to dissolve its nectar and oils.

Now Thor was working alone, grinding the remaining petals while Helena was purifying the medication in one of the ship's sleeping chambers, which had been made into a temporary chemical laboratory. It had been completely stocked with a gas chromatograph and other chemical analyzers, coiled glass distillers and hot plates with automatic stirrers, separatory funnels and volumetric flasks, a weighing scale and other laboratory paraphernalia.

Helena filtered the tincture from the mash. After performing a cold separation technique to isolate the antiviral agent from the orchid fluid, she standardized its concentration and then added a measured amount of it to a sterile, buffered isotonic saline solution. The life-saving concoction was then funneled into syringe cartridges which were subsequently placed, along with the injection gun, into a security medical box.

Knowing that one thousand people were employed on Europa, Helena was being optimistic that one-half of them had survived the Attila virus invasion. She prepared enough medication for five hundred doses.

As she turned to secure the filled medical box to a shelf, she felt a slight soreness in the region where her legs met. She closed her eyes, savoring the memory of how that soreness came to be, of how Thor's initial gentleness had changed into an uncontrollable, yet pleasurable marauding of her body that had made her feel so deliciously female.

Helena had found his body exciting to touch. She thought of them awakening together in his sleeping quarters, of being surrounded by his strong arms--and feeling protected. It occurred to her that she had never experienced feeling protected in this way before, and she had discovered that she rather enjoyed the warm security of his embrace.

And she cherished that he had shared some of his passions with her. She had simply found the one who filled her heart and soul. She loved Thor completely and knew she would forever.

But with her love came the guilt. The consuming guilt of having branded them to be sent to a remote planet to conclude their lives in submission to a pitiless prison guard. How could she have done that to Thor? How could she have allowed herself to succumb to her lustful desires for his body well knowing the dire circumstances it would place them in? Not that she could have helped herself in the least to prevent what had occurred. How can the path toward one's event horizon be altered?

They were well aware that all of UMO's astroships had recording devices to monitor the activities of the employees. Helena thought, With the lack of privacy, the inquisitions, and banishment to hard labor, what kind of government was this which would allow such barbaric treatment of its subjects?

In the basement of the old library store, she had read about the history of labor unions in the former United States. How workers had joined together to fight for fairness with the management. How private lives had been kept separate from the job--the way it should be. She imagined the orphilion employees of the megaconglomerates organizing to form a powerful, system-wide union.

\* \* \* \* \*

While passing through Jupiter's colossal version of a Van Allen radiation belt, the lights of the spacecraft flickered a few times, each blink followed by the soft clicks and whirs of the astrionic systems resetting themselves. In calm acceptance of her choice to come to the aid of those in distress, no matter what lay ahead, Helena silently observed their approach of Europa through the main window.

She noticed its surface was not smooth but had the appearance of shattered safety glass chaotically crisscrossed with red yarn. As the ship moved closer and resolution increased, she observed that the ice had formed into large plateaus, their leading edges outlined by sharpened shadows. A reddish compound seemed to have bled and then hardened into the canyons between the blocks. The spacecraft was nearing a white, low-lying plain on which was a human-made dome structure.

In the meantime, while firing retrorockets, Thor was closely watching monitors on the console. Even though the distance was short, through the magnetic storm, he needed to amplify the encoded radio signal in order to open the entry vestibule and then the interior doors of the geodesic dome that housed the mining operation. The visitor's docking bay was high above the ground, adjacent to and level with the top floor of the main building. As though the craft had become an extension of him, he flew it smoothly through each opening and docked it gracefully onto the illuminated landing pad.

Though relieved that the level of magnetic radiation inside the dome was considerably less, Thor needed to conceal his worry from Helena about what they might find when they entered the mining compound ahead of them. He reserved for later his worry about the grim possibility of her rejecting his

Mars offer.

Before leaving the spacecraft, they held each other in a tight embrace. He did not verbalize his worst fears: Now that they had finally found each other, they could conceivably lose each other because of company mandates or because of their more pressing situation: they could contract the illness on Europa.

They were on a dangerous mission together, and should they survive it, no matter what happened afterwards, he knew the memory of it would always bind them together.

In the craft's airlock chamber, they helped each other put on their silvery, pressurized spacesuits. Thor was wishing that circumstances were less critical and that they were taking them off each other instead, along with the rest of their clothes.

"Mmm, honey, you sure do look sexy in aluminum foil." Helena put on a brave smile.

He smiled back, and his eyes gleamed at the sight of her. "And you, darlin', look lovely with that bubble over your head." They laughed in spite of the somber task ahead of them. They checked each other's oxygen pressure levels and the security of the hose connections. Their space gear was to be worn at all times to avoid becoming exposed to the virus as well as to protect them from the high radiation emanating from Jupiter's plasma sheet.

Having landed on the side of the moon facing away from the planet, the sky was void of light except for the stars which appeared as sharp pinpoints through the transparent dome. Near the horizon, the distant sun was small and yellow, radiating fuzzy spokes like a dandelion gone to seed.

With the medical box in Helena's hand, they exited the exterior door of the craft and walked buoyantly, due to the low gravity, across the lighted platform to the entrance of the office building of Universal Mining Operations. There was an eeriness, because no one was around to receive them except for a voice recording which halted them at the door. "Please wait for a dosimeter reading." They were sprayed with a radiation neutralizer and their exon tags were scanned for identity. A green OK light flashed and the door slid open.

In the office, computer monitors were glowing, but again, not a soul was present. They searched until Thor found a holomap on a screen that indicated the location of the building's hospital ward. They rode the elevator down to the eighth floor. Thor imagined that in another time, they would have made uncivilized use of being alone in an elevator... Before its door opened, a sense of foreboding washed over him.

Looking up from his work at the registration desk in the reception area, a small-framed, middle-aged man saw the two in spacesuits approach. He had salt-and-pepper hair and was wearing a white lab coat. Rising to meet them, he scanned the upper left front of the taller person's suit, where the UMO logo was. "Captain Thor? I have been expecting you."

"Yes," Thor answered. "And this is Doctor Helena, medicinal chemist and paramedic. We have brought the medicine."

The tension in the man's face eased somewhat. The name tag on his lab coat identified him as Dr. Synphor Wolfe CL247ie. He brought them through a set of automated sliding doors to a sizable room filled with beds, most of which had people on them. Thor saw Helena's shoulders relax, and she exhaled as though relieved. The lights on the monitors were registering signs of life.

Thor noticed Dr. Wolfe's complexion was greenish, and his skin was moist with perspiration. He asked, "Are you feeling all right?"

"As well as can be expected," he answered. "I was the one who lost radio contact with you two days

ago. The deadly infection has spread throughout our workforce. I would like you to see what I have discovered about the disease in the pathology lab."

He spoke as he led them to the surgical laboratory down the hall. "Some days ago, the high particle flux from the planet's magnetic field had disrupted our computer instrumentation. Technicians had been unable to increase the strength of the dome's force shield to impenetrable levels until it was too late. Utilizing back-up power sources, the shield was repaired in time to prevent the onset of radiation sickness, but the surge in plasma energy had already done its damage: it had mutated the virus, hastening its replication process and very much complicating the symptoms of the disease."

It was what Helena had suspected could happen.

Entering the chamber, Dr. Wolfe said, "I have performed a post-mortem examination on one of the UMO security officers. He was the first here to fall victim to the mutated virus." Thor, trying not to become repulsed by the sight ahead of them, stared at the corpse lying on the table in the glass-enclosed, refrigerated section of the room. The body appeared bluish under the lighting. The head had been dissected, exposing the brain. Opened incisions down the abdominal wall revealed what were once healthy organs.

"As you can see," said the doctor, "the Attila virus settles in the viscera--the liver, kidneys, spleen--causing internal bleeding..."

Thor had to work to suppress a wave of nausea, not wanting to vomit in his spacesuit. He had a moment of feeling faint and reached for Helena's shoulder.

She turned her eyes toward him and was concerned at his peaked look. She whispered, "Are you okay?"

He nodded. "It's nothing...", he whispered back, sounding unsteady. "It'll pass."

It took a few seconds for him to recover his composure, and he removed his hand from her shoulder. She noticed that his body was now turned toward the doctor and away from the cadaver. Her immediate alarm subsided when she realized that Thor's behavior was due to an aversion to viewing dissected organs and not to the onset of radiation sickness or the Attila disease.

"After an onslaught of disgorging," Doctor Wolfe continued, "the patient enters into violent convulsions. The body's organs eventually shut down if the medication is not received soon enough."

On a table beside the refrigerated chamber were surgical instruments. The medical officer directed the attention of the mission's first responders to a small, cylindrical, transparent container which supported the soldier's tiny exon tag in a solution. "We will be analyzing his molecular chip in search of clues that may give us insight about early detection of the virus."

"I would be interested in knowing the results of that analysis, Doctor. At the pharmacological lab where I work, it could help us in developing a more effective drug with which to treat the disease," said Helena.

They began walking back to the patient ward. Dr. Wolfe said, "The *Cattleya* plants that we had been sustaining in our medicinal herbary had withered before we could save most of the patients. With the accelerated rate of the disease's progression, we have lost too many." Helena thought his voice sounded weak, as though the enormity of the situation had become suddenly overwhelming to him.

As they walked through the infirmary's doors, she asked, "How many have died, Doctor?" She feared the answer.

"What you see in this room are our only survivors, barely hanging on to life. I seemed to have escaped the illness. After the first case came to see me, I took an injection of the serum. I managed to extract

enough medication for twenty-seven patients before the orchids became desiccated. Everyone else has died. Their bodies lie preserved in the temperatures outside of the dome. The survivors need more medicine, but I am not sure the mutated virus will respond to it."

With that, the doctor slumped to the floor, obviously more ill than he was letting on. Thor lifted him effortlessly to the nearest empty bed while Helena readied the medication for the patients. From the medical box, she removed a syringe of the pale pink liquid and placed it into the injection gun. She pushed up the doctor's sleeve, and by pressing the injector's secondary trigger, she sent a germ-killing pulse of ultraviolet light to his arm. Then she pressed the gun's primary trigger to give him the inoculation. With Thor's help in preparing the arms of the other patients, she administered shots to them in a matter of minutes.

"Now all we can do is monitor their vital signs and wait for the follow-up medical team," said Helena.

They found the drug dispensary in an adjacent room and observed the dehydrated remains of the orchids in the greenhouse section. Helena noted that the gauges monitoring temperature and humidity levels seemed right. The rate of water dripping to them was correct. The ultraviolet light was of the optimal frequency. Why were these plants dead?

She decided to examine water and soil samples. She went to the pharmacy's chemical analyzer and ran a baseline test as a control. She tested the water dripping to the plants. After a few seconds, on the monitor, a matching pattern for mineralized water was displayed.

She next inspected the aerated compost in which the orchids had been growing. The lines on the analyzer's screen revealing the presence of organic components as well as compounds of potassium, phosphorus, and nitrogen were as expected, but there seemed to be an anomaly. Helena ran the test again. The irregularity was still there. She changed the mode of the analyzer's computer which matched the shape of the errant line to calcium chloride, a well-known dehydrating agent in concentrated amounts.

She turned to Thor and exclaimed into her helmet's microphone, "As sure as a star's red shift, someone sprinkled a fine powder of calcium chloride into the soil, well knowing it would kill these life-saving plants!"

## CHAPTER 20--THE FIRST FRACTURE

2097: Earth

James Ganymede was a man driven to perfection, demanding it not only from himself, but from his subordinates as well. As a result, he was short-tempered. Too often he displaced his anger on those who didn't deserve it. He did not have a tolerance for things over which he had no control. Sometimes, he could not tell what was controllable and what wasn't, which only added to his irascible temperament. He was not compelled to give compliments or apologies unless there was something to be gained from doing so.

What James didn't understand was that most of the time he was responding to his own inadequacies--not that he ever admitted those to anyone, or even knew of their existence. He wouldn't have the first clue of how to accept the fact that he was only human, sometimes inadequate, and not able to control most things. It wasn't part of his nurturing or in the genetic package he had received as an embryo--a package containing bioengineered portions, but mostly it was of natural origin, from his parents. His behavior patterns had been instilled in him long before he had attended Chrysalis Regiment Academy during his childhood.

Beneath his impenetrable and domineering exterior, one wondered what kind of man James really was. Sometimes a glimmer of his father's congeniality would surface, although it was rare for anyone to witness it. Thor had been privy to it once on the fishing boat; James had been relaxed and having fun. People at social events saw his more jovial nature. He was always pleasant to his mother, Claire. But James never let his guard down for very long unless, of course, it was to his advantage--financial or otherwise.

Discovering that physical exertion was one way to vent frustrations, he worked out hard at the gym. Unfortunately, another way was to release his wrath on his four executive secretaries who, in his opinion, were incompetent. No one could ever attain his perceived level of competence. After repeatedly demanding new secretaries over the years, he had finally settled on the four presently employed.

At UMO headquarters in Denver, they worked from offices adjacent to the receptionist's anteroom, on the side opposite to James' main office. It was unusual for them to work a day without being reprimanded by James. Time was most productive when he was away from the office.

Typically, when he was there, in language peppered with expletives, he would blare that they could never do anything right. This would invariably cause them to scurry to fix something that often times wasn't fixable.

As efficient as James usually was, there were times when he himself had been caught unprepared. Once he had had to scramble at the appearance of an unexpected client. As a reaction to his own embarrassment, he had blamed and humiliated one of his office assistants in front of the client, having sneered that it was she who had forgotten to remind him of the crucial appointment, when it had been James who had neglected to tell her to program it into the calendar.

There was the time when Claire had visited him at the office. He had blatantly accused and berated another of his secretaries for stealing his mother's purse. It had later been found intact in his mother's airglide cruiser. No apology had been offered.

All of his office workers should be phased out, they heard him bellow often. He wasn't able to admit to himself that he really couldn't survive without their faithful service.

And orphilion workers were not allowed to quit their jobs.

James had the equivalent of one-twelfth the power of the solar system. Not only was it not enough, but he resented the fact that he had to make compromises with the other eleven conglomerates--compromises which had subtracted from his own profits and went against his own philosophies about land use, pollution control, and the level of mining technology he was allowed to use. He would definitely welcome fewer government regulations.

And as inadequate as they were to the middle and lower classes, many laws went contrary to his own beliefs about the treatment of orphilion workers and street scavengers. The minimum credits paid to workers seemed high to him, as well as the assistance tax--a mere token, really--for the poverty-stricken masses. He wouldn't be as generous as the laws mandated.

The statutes as they were written were slowing down his progress. To amend them, he needed more power. Gaining complete dominance was an all-engrossing goal of his--and the sooner the better. After all, the universe was a big place. A man's life was only about 110 years. To achieve his lofty ambitions, there were places to go, deals to make, acquisitions to accomplish.

This was why he was not a proponent of the Class Improvement Project, a notion that was being resurrected by a small group of Delegation members whose ambition was to acquire mental and physical superiority. It wasn't that James was concerned about the negative effects that arriving at this ambition would have on the human population. That, he never really thought much about. No, his concern was solely for the welfare and earnings of UMO. He regarded the Class Improvement Project as a hindrance because it would mean he must vie with others in the corporate world who would be more characteristically enhanced than he was already. From his perspective, if the Class Improvement Project was confined to the annals of history, his business conquests would be much easier to accomplish.

In his love life, James was relentless. He vainly recognized that women were attracted to him, and if one wasn't, he could easily win her over with his charm. But the hunt was the thing; commitment wasn't. His relationships were usually short-lived.

Although, there had been one woman for whom he had had an attraction in the manner of a schoolboy with an all-consuming crush. But he could not act on his yearning for two reasons. First, she was not of his class. And second, she was not attracted to him. It was the one thing in his life about which he was obsessively indecisive: should he pursue her because of his burning desire to be with her, or should he forget about her because of her lowly status? It was enough to drive a man insane.

It was the first fracture in his ironclad shell of total control.

\* \* \* \* \*

On the outskirts of the mile-high city, it was a quiet moment in the office of the UMO chief executive officer. Looking off through the window at the rows of snow-capped mountain peaks, James was thinking of how one of the company's female employees had captured his imagination, even if she was only an orphilion worker. She had an unassumed beauty and a quiet, determined intelligence. With efficiency, she managed her department at UMO's Medicinal Chemistry Laboratories in Omaha. She had seemed to welcome a break from the intensive research project in her charge when he had asked her to go to Europa.

He recalled their first encounter six years ago.

James had been on a routine inspection of UMO's Metallurgical Chemistry lab next door to where she worked. He had stopped for lunch in the commons which was in the building central to the two chemistry branches and to UMO's pathology research facility. This was a necessary habit, he felt,

because it helped to maintain the image that he cared about his workers and this, he believed, would make them more productive.

In the cafeteria filled with employees having lunch, James found a place to sit which was across a table from an appealing woman wearing the laboratory garb of a department head--a transparent coat over a gold top and black leggings. This was in contrast to the usual gray uniforms of UMO employees. Through the lab coat of a material as sheer as gossamer yet ultra repellent of chemical spills and flame, he read her name tag. It said Dr. Helena OM781eh, Pharmaceuticals.

"Excuse me, is this seat taken?" he asked her as a worker who was accompanying him fetched his lunch.

Helena turned from the colleague with whom she was conversing. It was the first time she had seen her boss so closely and she noticed that his dark hair was beginning to turn gray at the temples. Becoming caught in the spell of his green eyes, she experienced déjà vu. She had seen those eyes somewhere long ago. She said, "No, please sit down."

"I'm James Ganymede."

She was amused that he had introduced himself. "I know. I'm Dr. Helena. I work in the medicinal chemistry lab."

He inquired, "So, tell me of your current project, and how will it profit the company?"

Helena answered professionally and to the point. "We are searching for a specific drug that will block the action of an easily mutable and deadly virus that has been surfacing around the solar system." She almost forgot his other inquiry. "Oh, and demand for the medication would boost the company's profits considerably."

Her forthright manner intrigued Ganymede. He found himself enchanted by the movement of her lips, by her animated blue eyes—the way there was something in them that wasn't in other orphilion workers'. A sparkle. A bit of humor? There was something distantly familiar about them. And he was sure her body under that lab coat would be an adventure worth exploring.

Their conversation was cut short by a signal for the workers to return to their stations. "It was nice meeting you, Doctor," said Ganymede.

"Likewise," said Helena. He held out his hand to shake hers. Ah, such nicely tapered fingers and skin so smooth and warm, he thought as he held her hand for longer than necessary. But after she left, he chided himself for thinking these things about an insignificant orphilion worker.

Even so, he made it a point to tour the medicinal chemistry building often--to inspect the progress in the labs, he told himself. He knew his mother would not have approved of his interest in seeing an orphilion socially, and he should be of the same opinion. He was rich and powerful and could have any woman he desired. And besides, orphilion workers were creatures brought up in institutions. He had grown up imagining that they were trained like rats, going through mazes!

Yet, in the moments he let his thoughts run free, they would always run to Helena, replaying scenes of their meetings. Sensing a sensuality under her businesslike demeanor, he relished the idea of her body yielding to his. It was disgraceful, he knew, and he had to force his thoughts to turn in other directions.

\* \* \* \* \*

In the chemical analysis room next to the main lab, Helena was startled at seeing James suddenly in the doorway. "Oh, Mr. Ganymede, you gave me a start. What can I do for you?"

She felt an uneasiness in the way he was staring at her, lecherously...threateningly, as though he was



stalking her. It was a side of him she hadn't seen before. "I'm on my latest round of inspections," he said. Without taking his eyes off her, he moved deliberately towards her, closing in slowly...steadily. Helena backed up, but could go no further when she met the counter, causing the beakers and test tubes on it to clink together. When he reached her, she noticed the smell of alcohol on his breath. James grabbed at her breast, brought his face close to hers, and whispered in a ragged voice, "Helena,...my orphilion, you belong to me, and I desire you--your body...so beautiful..." His other hand reached to stroke her hair.

Helena was repulsed by his improper and unwanted closeness, his hands on her, and his unfounded consideration of them having a sexual encounter. She tried to sidestep away from him but his arm went around her, pulling her against him. She said the first thing that came into her mind. "Asexual we must be, sir."

His mouth covered hers with a clammy kiss. She nearly retched when he forced his tongue between her lips. With all of her strength, she pushed at his chest. "No! Don't!"

They heard the door open as a lab technician entered the room. James released her--his green, monster eyes boring into her, still undressing her. "Yes...well, Dr. Helena, I find the results here to be, ah, most...interesting, and full of dynamic possibilities. Keep up the excellent work. Until next time, good day, Doctor." He turned to leave.

The next time could come in Hades! she wanted to scream. Helena wiped her mouth with the back of her hand and glared in sickened loathing as he exited the room.

## CHAPTER 21—LIRA

2091: Earth

The DTM annual gala was in Des Moines, in the chandeliered ballroom of the government building. Lira Jones, elegant beauty, was the daughter of Delegation Member Gentry Jones from Computational Chemical and Investments. While politely conversing with a male acquaintance, Lira was surreptitiously watching the darkly handsome James Ganymede, dressed in black evening attire, sashay his way around the room. She was transfixed by his smooth, self-assured movements, the way he laughed as he clapped a colleague on the back while sharing a good joke, and the way his emerald eyes seemed to penetrate into the eyes of each of his dance partners as if she was the only person in his world.

Lira was polite to her own admirers as they lined up to dance with her, but she had designs on one man's attentions. Deciding to overcome her shyness right then and there, she politely excused herself and walked over to the bar where James was currently in the middle of a discussion with a business associate. Lira caught his eye as she requested a Spiral Helix cocktail from the bartender.

James suddenly forgot what he was about to say to the woman with whom he was conversing. Captivated by Lira, as were most of the other gentlemen in the room, he had been meaning to approach her later that evening, when the time was right. He wondered why he hadn't already. She was so beautiful. Was his confidence slipping? Perish the thought! His hesitation, he rationalized, was due more to her father, Gentry, who'd been good friends with James' father, Zebulon. Now that Jones was in the assembly, James was resentful that the man didn't honor him with any favors where legislation was concerned. Regardless, he turned from his associate, deciding to focus on the statuesque woman to his other side.

Lira was wearing a form-fitting, one-shoulder, column dress. It's fabric was iridescent, the color of carnival glass. James' eyes were drawn to her exposed skin at the asymmetric, angled cut-outs at her waist. Her white-blonde hair was pinned off her slim neck with intentional tendrils of silky ringlets hanging down. Dangling from her ears were glittering diamonds embedded in silver filigrees. She was simply stunning.

James said to the bartender while looking at her, "And I'll have the same." To her he said, "I can't believe it's little Lira Jones. Your appearance is a bit different than I remember from a few years ago when your father had asked me to teach you to drive the airglide cruiser." He found the somewhat unsymmetrical lines of her eyebrows appealing. One traced a rounded curve while the other followed the shape of an upside down check mark. Her beauty was enhanced by the slight flaw.

Her presence played havoc with his vocabulary. "Heck, you look a lot different. I mean, you were so, how shall I say it, gawky and scrawny with your tangled hair and spindly legs." James was appalled at the words that spilled out of his mouth.

Lira giggled, suddenly feeling at ease. "I believe the time you taught me to be a reckless driver occurred about ten years ago. I'm still a terrible driver, thanks to you. It's best if oncoming traffic stays clear, if they know what's good for them. And," she added, "some of us do grow out of our gawky stages, you know."

James laughed as a slow love-you-forever song began playing. "Ms. Jones, I would be honored if you would dance with me."

"I'd love to," answered Lira with a resplendent smile. The crush she had had on him during her tomboy days had resurfaced, but it was now embodying more womanly substance. They set their drinks down

and he led her in the dance. With one arm around her back and the other firmly holding her hand, his skill in the dance moved them smoothly and effortlessly in gentle rhythm to the music. They resembled a rotating double-star system; she was the bright star circling its dark twin.

His eyes were as she had imagined. They were the only two people in the ballroom. In his arms, she thought how fulfilling life was at this moment in time.

He pulled her closer and smelled the heady aroma of her slender neck and smooth, white shoulder. She put her head against his broad shoulder; he felt her soft hair on his cheek. Unable to resist, he gently pulled a ringlet through his fingers. James thought that perhaps this would be the woman who would take his mind off of Helena.

\* \* \* \* \*

During their courtship in the months that followed, James found it easy to utilize the charming facet of his personality. He treated Lira wonderfully. He bought her extravagant jewelry. They traveled to exotic planet resorts.

It was their last day at an exclusive island resort on Earth. James was needed on Mars and would be away for a month to tend to a financial complication at UMO's iron oxide mine on the Ares Vallis floodplain. The assembly of ten, three-hundred-metric-ton production trucks was running well over estimated costs. James was to assess the situation and determine if the firm they had contracted for the job was operating within reasonable parameters.

They were walking barefoot in the sand under a bright, round moon. Its beams painted silver crests on the ocean waves and illuminated the edges of drifting, broken clouds. Most stars were obscured by the moon's brightness but Jupiter was shining like a beacon just beneath it.

They wore timeless, island clothes. James was in a light-colored, cotton shirt and shorts; Lira was wearing a strapless, knee-length floral dress. They were serenaded by the rhythmic splashing of the surf. The salty breeze was gently lifting wisps of hair across her face.

James had been receiving pressure from his mother to settle down. An heir would be needed to carry on the family business, she had said. He was now in his late twenties and hadn't been planning to take that step yet, even though he was finding Lira to be very desirable.

At the same time, he was still attracted to another woman. He believed that if he had been less forceful with Helena in the lab that day, she would be feeling the same way toward him, wanting him. Helena was a woman who needed to be gently persuaded, he had decided. He filed that thought away for a later time.

He couldn't put into words what pulled him toward both Lira and Helena: that they were women who were capable of giving warm, tender love--something he hadn't ever remembered receiving from his mother, though she had always claimed that she wanted the finest for her son. His subliminal mind was aware of all this, however, and was the director of his performance in the following scene.

On the sandy beach, James stopped to face Lira. "My beautiful Lira, I have never experienced a more wonderful time than during this past week with you."

Lira smiled softly, her eyes glistening. "Nor I, James, in my whole life." She had never said anything more truthful. "It is sad to see this time end. It is so beautiful here." She did not want their days of sightseeing and making love in tropical paradise to end. At least to Lira, the latter had been more than simply satisfying sexual urges.

James moved a delicate blonde tress from her face and said, "We can make this night a new beginning instead of a sad ending."

"Every hour is a new beginning with you, James. And it doesn't have to be in tropical beauty to be heavenly. I know you have urgent business to take care of and when--"

"What I mean is, will you marry me? And when I return, we can be together every day."

She did not need to deliberate before answering his question. "Yes, James, oh yes!" And they embraced, joyous in their declarations of commitment to each other. She was so sure of her feelings for him, Lira didn't notice that he hadn't mentioned love. She assumed his proposal had the same significance.

James, who prided himself on always being in complete and rational control, seemed to be losing his grip. His emotions were making the decisions this night. And Zeus knows, that was never the profitable thing to do.

\* \* \* \* \*

Lira could not have imagined being happier with anyone else--even after meeting his mother, who lived at the Ganymede estate with James in Colorado Springs.

Upon meeting Lira, Claire Ganymede--a thin, tight-lipped woman with angled features, her silver hair in a perfect braided knot at her nape--had eyed her up and down. Lira thought she had seen Claire nod approval to James but then had passed it off as her imagination.

Claire had once run Universal Mining Operations, and Lira was in awe of someone who could drive a major corporation to the top as Claire had done. She admired Claire's intelligence and talent at being successful in the vicious corporate environment. Claire presently contributed to the company in semi-retirement from their home.

While James was away at Mars, Lira was in too much of a prenuptial whirlwind to notice Claire's guileful actions, as she would later come to regard them. After Lira had invited her future mother-in-law to assist with the wedding arrangements, Claire, in a smoothly covert manner, began taking control of the younger woman's life. Under the guise of a caring mother figure, Claire was able to persuade Lira that what she had in mind for the marriage ceremony was for the best. Lira had found herself welcoming Claire's ideas instead of heeding the warning signals of her conscience which was telling her to run for her life. The warnings were absurd, she had reasoned to herself. Claire was being nothing but kind and considerate.

According to Claire, to make Lira more presentable for this upcoming public affair, she needed corrective surgery to straighten the slight asymmetry of her eyebrows. Lira's hair must be styled short and wavy. Claire even picked out her wedding gown--traditionally modest rather than modern. The nuptials would take place at the mansion, leaving Lira no other choice but to agree.

But Lira was too in love to care much. These were not big issues to her at the time. She was hoping that Claire might be like the mother she had never had--someone to confide in. Lira's mother had died of cancer when she was four years old.

The wedding in the Ganymede ballroom was large and conventional with tasteful floral arrangements and the proper dignitaries present. It was officiated by Colorado District Judge Galaxinia. Afterwards, there was a formal dinner and ball. As though having just experienced one of her past business conquests, Claire was in her glory.

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After the wedding, Claire infiltrated their lives over and above what was healthy for a marriage. Claire disapproved of Lira's friends, saying that in her new social position, they simply weren't suitable. Not wanting to have a confrontation with her, Lira appealed to her husband. "James, your mother has

disapproved of my friends and has strongly suggested that I don't see them anymore. Will you speak with her?"

Claire had been able to convince James that this would be to their advantage. "Think of the power you will gain with the glamorous Lira among influential people. She can't be seen fraternizing with riffraff," Lira heard her say as if she wasn't in the room.

He turned to Lira and explained, "Sweetheart, Mother is only looking after our best interests."

After overcoming the hurt, Lira let herself acquiesce to this fallacy. She severed ties with her college chums because she wanted to please her husband and her mother-in-law. She did not wish to make waves.

It startled Lira at first when James would become irrationally angry at some things she thought were trivial.

After a long, tiring day at work, James was just now noticing that as pretty as his wife was, her appearance seemed more ordinary--something he couldn't put his finger on. Not able to discern exactly what it was that was different, it bothered him and he lashed out. "You know I don't like your hair that way! Why did you cut it short?"

She didn't have the heart to tell him it had been his mother's idea. The cosmetic surgery on her eyebrows had been Claire's idea also, which was what James' subconscious had become alarmed about. Lira tried to be understanding and rationalized that his behavior was due to job stress.

But her ability to rationalize problems away wore thin when a simple dinner evening with her father and younger sister Kia had turned into a disaster.

## CHAPTER 22--ORPHILION COURAGE

2097: Europa

They were in the medicinal greenhouse of the hospital's pharmacy. Through the glass of her space helmet, Helena saw that Thor was as astounded as she was at her discovery that someone had deliberately destroyed the orchids, intending for a thousand workers to die. That meant someone had also released the Attila virus into the ventilation ducts of the living compartments and the ore processing areas, knowing employees would inhale the virus and become mortally ill.

"Whoever did this probably didn't realize that the ionizing plasma from the magnetosphere would aggravate the disease and speed up its progress," added Helena.

They returned to the infirmary and Helena observed the monitors of the patients. They were stable, but it would take at least twenty-four hours until they knew if there would be satisfactory improvement. At least no one had died in the past hour. Helena noted that the intravenous feeding units were dripping properly. She turned to Thor. "We have to notify UMO of the apparent sabotage that has been done in this facility and to obtain orders on how to proceed."

He told her he'd been thinking the same thing and left to find the communications station of the base. He came back after about twenty minutes. "Helena, the magnetic storm is still fierce. All I get on the radio is static. We need to sit down and plan our next move."

They went to the receiving area just beyond the doors of the patient ward and sat on a bench along a wall. She said, "We could wait until the storm clears and transmit a communication then."

Thor smiled at her quick fix to the problem. "But that is unpredictable. It could go on for days yet." He suggested an alternative approach. "While you attend to the patients, I will fly above the planet's magnetic field and contact UMO to get further orders."

Helena had another thought. "Or, tomorrow, if there is improvement, we can load the patients into the mine's shuttle and transport them to Earth where they can be properly taken care of." But then she thought about the risk of possible contamination to Earthian populations.

In the end, both agreed that Thor would fly high above Jupiter to radio a signal. It would be accomplished during the critical twenty-four hour period while waiting for signs of patient improvement. If worse came to worst, they would then transport the workers in the UMO shuttle and advise Earth to prepare an orbiting quarantine station for them.

Thor directed the signals from the hospital's monitors to the receiver of their spacecraft's communicator. After one more examination of the patients, he and Helena left the infirmary for their ship's airlock chamber. After their spacesuits were doused with decontamination spray, they removed them and went inside.

With good reason to be overly cautious, Helena loaded a syringe cartridge of the orchid medicine into the injection gun. "We had better immune ourselves in case we've contracted the virus." She took Thor's warm hand--an action which filled her mind with sensuous memories--and extended his arm. She pushed up his sleeve, irradiated the side of his prominent biceps with UV light, and skillfully gave him the injection. "See, Sweetie? No pain. Now you have to do me."

She noticed Thor's brow furrow and his expression became suddenly dark. "Well, you're going to have to give me lessons."

Helena hid her smile at his uneasiness and directed the UV pulse to sterilize her upper arm. She removed the cartridge from the gun and demonstrated. "Now, hold it in your hand like this. Squeeze up

some of the muscle of my arm with your other hand, aim, and shoot."

Thor did just as she instructed, but when the time came to press the trigger of the loaded injection gun, knowing he would be piercing Helena with a needle, he thought he could more bravely travel through the treacherous Asteroid Belt than do what he was about to do. He had a moment of feeling faint, but overcame it for Helena's sake. With trepidation, he watched the light pink fluid disappear from the syringe window as it flowed into Helena.

She winced only a little bit but Thor didn't see that. She smiled and told him, "Now that wasn't so bad, was it?" Thor could only take her in his arms and hold her.

They decided to eat something before Helena returned to the hospital ward and before Thor left the moon to transmit a message to Earth. While lunching on reconstituted glycine nutriment and electrolyte juice, Thor was wondering if she was thinking the same thought: Why did space transport vehicle food always taste so bland?

Soybeans were a natural plant source of complete dietary protein. The variety called Glycine vigere had been genetically altered, converting the legume into a multivitamin bio-factory. The enhanced soybeans were then fortified with minerals and processed into various forms for consumption. Three daily servings easily met an individual's nutritional needs. Other varieties of glycine had been bioengineered to become medicine producers. For those suffering from minor ailments, a curative dose was contained in every bite of specially prescribed glycine nutriment bars.

Thor asked Helena about her employment with Universal Mining and about where she lived. She described her life. "My compartment in Omaha is within walking distance from my job. I began working for UMO in the botanical laboratory, cultivating plants such as the cattleyas. Great care must be taken to grow the orchid from its microscopic seed. Did you know that twenty-five thousand seeds have the mass of only one gram?"

"Fascinating," Thor remarked.

She went on about orchids. "From flasks containing a sterile, nutrient medium, the sprouted seeds are eventually transplanted into aerated compost. It takes five years for a plant to develop its first flower. From the hardest plants, meristem clones are grown from cells within their bulbs. Such clones are aboard this ship."

While chewing a bit of his glycine wafer, he imagined Helena doing the meticulous work in the botany lab.

"Now I head the botano-pharmaceuticals research department in UMO's Medicinal Chemistry division, where we determine the chemical compositions of potential medications from herbaceous sources. It seems that plant cells, through the process of natural selection, have been amazingly creative at designing molecules. They contain compounds we could never have imagined! But we are concerned because there are fewer and fewer natural resources from which to glean medicinal prospects." She ate some of the soybean bar and swallowed a gulp from the flute of colorless, fruit-flavored juice.

"We extract plant fluids and evaluate them to see if they are able to block the actions of certain disease-causing enzymes. After running a series of assays to isolate a promising compound, a chemical engineer figures out how to program procules to synthetically produce it. The resulting product is tested on cloned human organ systems which have been infected with virulent microbes, and we decide if it is as effective as the original plant compound. We also determine the best method of bioavailability, meaning: Will the medication be best utilized if taken orally, dermally, as an inhalant, or by injection?"

Thor asked about the effectiveness of the drug obtained from the orchid plant.

"The overuse of an antiviral drug previously used on the Attila virus has unfortunately made the germ more resistant and virulent. The cattleya serum is effective on the new strain we're dealing with here--even in its mutant forms so far. But it has an active component that we haven't been able to manufacture successfully. Nanotech disassembly, nuclear magnetic resonance spectroscopy, crystallographic ultramicroscopy, and other methods of molecular identification have not been able to disclose its complete structure.

"For a life-saving effect, the component needs to be freshly extracted from the cytoplasm of the orchid flower cells. It disrupts a stage in the virion's life cycle, but it decomposes rapidly. We have not been able to tweak it into a more stable and reproducible formulation. Quite possibly, the plant fluid contains a combination of antimicrobial agents which work in conjunction to destroy the virus." She paused. "Oy...the limitations of us humans, huh?"

Thor smiled. He simply liked hearing her voice. And he found her use of technical, scientific terminology to be mildly erotic. As he brought the glycine to his lips for another bite, he said, "Tell me about Omaha."

Helena told him about the borough she lived in called Olde Earth Customs. "It is where I can buy flannel to keep warm during winter. Where I can listen to old-world music played on instruments called guitars and pianos and violins. And singers sing quaint melodies about hopes and dreams and love. Always love."

"And where you can buy chamomile tea," added Thor, remembering how a sip of the tea the preceding night had transformed his life.

Helena thought of the transformation that she had undergone when she had fallen in love with this dear man before her. Though he must never know it, a mental warning flashed from out of nowhere. He cannot know it, for he is a government enforcer. Remember what his uniform stands for. She had to keep reminding herself of this.

"It was a good thing that you brought your flannel nightshirt." He grinned as though vividly recalling the forces that had driven him to tear the cloth from her body.

Then, seeing his expression, teasing yet full of passion, her doubts about him instantly evaporated. "Yes Captain, it was a very good thing." She added, "I'd heard that it's near absolute zero in outer space. I wanted to be warm enough."

Not missing a beat, Thor replied, "You needn't have worried, darlin'. Last night in here, it was as though we'd flown through a supergiant's torrid zone. When we return to Earth, I'll be sure to have the ship's climate control system serviced."

"Ok honey, you be sure to do that," she said with a smirk and then asked, changing the subject, "Who do you suppose would want to undermine the company?"

Thor thought of possible motives for wanting to halt UMO production, and for good reason, except for the fact that people were dying. "Maybe it was a disgruntled orphilon worker who was dissatisfied with the salary and working conditions." He waited for her grin at his joke of the sadly obvious. "Or maybe it was a former corporation head whose company had been ruthlessly taken over by Ganymede and who had vowed to get even. Or possibly," his voice began to take on a melodramatic tone, "there's an assembly member of the present Delegation who would like to see the tyrant Ganymede ousted out of corporate power!"

"Ya," added Helena, "or maybe it was his wife--or a scorned mistress that he left for his wife!" Both laughed at how absurd that sounded.



Thor expounded. "And she became a poor street scavenger who worked her way into the ranks of the UMO labor force, hefting chunks of technetium ore onto her shoulders. In her spare time, when she wasn't exhausted from working, she mail-ordered a vial of a deadly virus from a radical militia group, released it into the air vents, and added a dehydrator to the soil of the only plant that could possibly cure the disease. All of this toiling and plotting, to get even with the lover who jilted her, would cause a huge dent in his corporation's profits and result in his forced withdrawal from the DTM!"

Helena added, "That'll sure show him!" And they laughed again at the improbability of their speculations. Ganymede had the reputation for being heartless; they could not feel much pity for him. Helena thought that her friend, Jenisse, would never converse imaginatively like this. Thor was adding a new dimension to her life.

She went over to where he was seated and plopped herself on his lap. Her hands glided over his unshaven face, took winding paths, and met under his pony tail while one of his hands found its way to her inner thigh.

Their ensuing kiss lingered.

Helena murmured between caresses, "Captain, I really should be getting back to the patients."

"And I need to jet into space for awhile. But first, Doctor, talk to me again in scientific terms... It turns me on."

As her hands moved over his shoulders, she looked into his eyes and softly said, "You mean, like the euphoria that I am presently experiencing," she intermittently touched her lips to his as she spoke, "is due to the gentle oscillations heard from your vocal cords and the irresistible pheromones...emitted from your skin... Both stimulate a release of phenylethylamines...that blissfully flood my neural matter." She paused as her hands reached inside his uniform jacket to move over his warm, muscularly contoured skin. "That, my love, and the oral and digital sensory input of your lips and hands...along with the brush of your whiskers...on my very susceptible erogenous parts...send wondrous transmissions along nerve axons to my hypothal--Cap-tain...mmmm...that feels good..." She paused to fully enjoy what his hands were doing to her.

"Now, where was I?" Her voice was breathy. "Oh, yes...your touch...is causing preclimactic oxytocin to rush into my bloodstream." Her tongue delved between his lips, savoring the taste of him.

"And...impulses from within my medulla oblongata...are moving through my autonomic nervous system in such a way as to elevate phenomenally... my body's temperature...respiration...and cardiac rates."

"Mmmm...yes, just like that, darlin'. I love your intellectual...sexual language." And they kissed some more.

Unable to resist culmination, they made love right there on the chair.

\* \* \* \* \*

Before Helena headed back to the mine's hospital, Thor was assisting with her spacesuit. She was contemplating their most recent dalliance and admitted to herself that she had immensely enjoyed the diversion, one of several reasons why she relished being with Thor.

They had fabricated stories about someone seeking revenge on Ganymede, but in stark reality, almost one thousand guiltless orphilion workers had been made to suffer before dying. For a short while, Thor had taken her mind off their more sobering circumstances, though images of the mining facility lying motionless, the patients in critical condition, and the scene in the autopsy room had never been far from her consciousness.

While fastening the airtight seal down her suit's front, Helena shared her thoughts. "Thor, it is horrible that most of the workers here have died because of someone's greed, or vengeance. Think of the severe pain each must have endured before succumbing to the disease. There can be no defense for this massacre of innocent people."

Thor was at her back checking the pressure in the air tank. He had been deep in thought also. He'd heard the heartbreak in her voice. Words came hard, for none could fully describe the extent of the atrocity on Europa. "Yes...it is a senseless waste of so many lives." Then he turned her so he could see into her eyes. Reading the anguished compassion in them, he said, as much for his sake as hers. "At this point, all we can hope to accomplish is to carry out our assignment to the best of our ability. We must make every effort to save the lives of those we can out of solemn respect for the great majority of those for whom saving was beyond our grasp. Helena, there are not many who have selfless courage as great as yours. Many would not have even considered volunteering for a mission as risky as this."

Thor's words, gently spoken, gave her comfort. She was just doing her job. If she was displaying courage, it had been inspired by Thor's own valor. She was extremely grateful for her time with him--and for their more fortunate existence in comparison to other orphans.

## CHAPTER 23—DISILLUSIONMENT

2092: Earth

Gentry and Kia Jones were being given a guided tour of the Ganymede manor before dinner. Earlier, Lira had asked James if he would please set aside his political differences with her father for one evening. He had agreed to be cordial--"Aren't I always?" he had jested--yet around Gentry, he would hold his reserve.

"What a beautiful place you have, James," complimented Lira's sister, Kia. Marveling at the wide, ornate moldings which bordered the ceiling, she said, "It is rare to see woodworking in home decor--and so elegantly crafted." Two years younger than Lira, Kia was equally attractive with honey blonde hair and wholesome, lightly freckled skin. She wore a casual, one piece suit of starlight yellow. An interior decorator, she usually dealt in more attainable twenty-first century materials. The extravagant mahogany and oak that trimmed the Ganymede household was a feast for a decorator's eyes.

"I fell in love with the place immediately," said Lira. She was in a metallic, berry-colored, sheath dress. "I've discovered that wood gives this home a special warmth. It adds a coziness to its spacious rooms."

"Your home also displays sound carpentry. May I ask who was the architect?" asked Gentry. A stately, white-haired fellow, he was wearing an after-hours leisure suit of dark slacks and an olive green, Nehru-styled jacket.

"The residence was designed by my grandfather, Zircon, about seventy years ago," answered James with a bit of pride in his voice. "He had applied retro-styles of architecture--mostly the Le Corbusier International Style blended with post-modernism--yet he planned the living space to facilitate future remodeling. Except for some technological improvements, I have not found a reason to alter a thing." He was dressed simply in a knee-length, silvery gray vest which draped over a black turtleneck and pants. James always enjoyed describing his grandfather's architectural genius. "The free-flowing floor plan surrounded by the sleek lines and geometric shapes is early Le Corbusier. The vaulted ceiling and columns in the foyer are borrowed from post-modernism."

Kia added her professional review of the home's design. "The whole effect exudes a cool beauty which is warmed by the classic shapes and natural materials."

"He definitely had vision." Gentry sounded impressed. "The piedmont hills of Pikes Peak was an excellent choice of location. The belvedere on the top story is an intriguing novelty. From it one gets the full impact of the breathtaking view of Colorado Springs." Roofed and enclosed on three sides, its railed east side was open to the air. "James, years ago your father would take me up there. It was a place where we could discuss matters in private.... Zeb was a good man."

Lira remembered Gentry sharing stories with her about when he had been starting out on his own and problems had arisen at Computational Chemistry. Zebulon was able to ease his worries with words like 'Trust your instincts' and 'Don't worry, everything will be all right'--words her father had passed on to her when she had been troubled.

Beneath the belvedere terrace was the ballroom where James and Lira's wedding had taken place. It had a glass wall through which to enjoy the city vista without being exposed to the often chilly night air.

The mansion contained all of the modern conveniences. The guests were shown the fully equipped offices and the high-tech food processing center. There were voice-controlled elevators, security force shields, and heated walks that melted ice and snow.

For recreation, there was the virtual game room. It was a place to play out the fantasies of dangerously exciting adventures in the safety of one's home or to relax and view the cinematography of bygone eras.

There was a state-of-the-art gymnasium. And of course, no home could be without the sensory oxygen chamber. Breathing in the pure gas and experiencing the pleasurable surround sensations was an elixir to the spirit.

A soft chime sounded. "I believe that dinner is ready," said Lira as she took her father's arm and led them into the luxurious dining room. Claire was already there, overseeing last minute preparations.

Covering one wall was a large mural of Europa's icy surface with the contrast of Jupiter's hues filling the sky. Its colored bands were almost vertical. "I recognize that as one of Zebulon's creations. He always did have a flare for blending colors splendidly. I feel like I'm actually there," said Gentry.

Two orphilion domestics served the meal of coq au vin to the diners, who had taken seats around the antique oaken table. Whole chicken was a delicacy in this day and age, and in burgundy sauce, it emitted a mouth-watering aroma.

The dinner conversation was lively beneath the soft glow of the Art Nouveau fiber optic light. What were the latest discoveries at Jones' Computational Chemistry division? What was Kia's latest decorating project? James and Lira had a lovely wedding. What were their plans? Gentry was secretly anxious to be a grandfather.

All seemed to be enjoying the evening until Claire said, "Gentry, do share with us the latest news from the assembly."

Dinner wasn't the place to discuss politics, he thought, and Claire should know better. Perturbed, he answered, "Our last session ended late this afternoon." He knew it was a sensitive issue for James. "We voted down the bill to elect a Delegation premier." Nevertheless, the Delegation member wanted to emphasize to his son-in-law and to Claire that the majority of the electors had felt the way he did. "Over two-thirds in the assembly believe in the equal power of each of the twelve megaconglomerates. One of them should not be given a stronger voice."

Being reminded that his father-in-law opposed his view on this matter, James began to brood. He had had lobbyists work long hours in trying to persuade Delegation members to vote for the premier bill. Another setback to his progress, he thought bitterly. This wasn't the first time his chances for becoming the supreme ruler of the solar system had been stymied.

Gentry received a glacial stare from James. Why did this hard-hearted man have to so strongly resemble his late friend Zebulon? And why did his daughter have to fall in love with the man?

Gentry changed the subject and inquired about business matters. "Does UMO have any new mining exploration plans?"

James answered curtly about accessing the precious metals from the geologic hot smokers on the mid-Atlantic sea floor. "And I imagine you will be voting down the bill to expand ocean floor mining." He huffed like a little boy who wasn't getting his way.

Trying to soften James' mood, Gentry broached another subject, but his references to sporting events resulted in James' continued sulking.

A glance at her mother-in-law startled Lira. Claire was exhibiting a Mona Lisa smile at seeing Gentry's discomfort, seeming to revel in the tension she had instigated.

Lira had to force her smile. In trying to cover up her husband's shift in disposition, she spoke about benign issues while pretending that everything was fine. Lord knew, Claire wasn't going to help diffuse

the situation. "Kia, have you seen the latest play at the Penumbra Theater? I thought they did a wonderful job with Life on Mars. The ancients who wrote the story were so imaginative, especially when we know what a barren wasteland much of Mars really is." She released a nervous laugh. "What did you think?"

Kia answered politely, "I have read the rave reviews and have been meaning to see it, sister." Her mood had changed as well after witnessing the strife between their father and James.

The conversation lagged. Lira tried to get James involved. "James, didn't you think that even though the set was scant, the superb acting pulled your imagination into their lavish world?"

He turned his glower on her, still seething from Gentry's vote against instituting a Delegation premier. "Yes, dear." And he ceased to contribute to the discussion.

Lira's eyes implored him to act civil.

"Who has time for such nonsense?" scoffed Claire.

Gentry peered at her. "Now Claire, you know what they say: All work and no play..."

Gentry was about ten years older than Claire. They had met on numerous occasions years ago during business affairs when Zebulon, and then Claire, had headed Universal Mining. She had conversed with him before about frivolities.

"Well, one does not profit from taking part in such activities." She spoke directly to Gentry.

Gentry did not miss the underlying message in her voice which referred to her opinion about the cause of Zebulon's weakness in the trade world. After he had died, Claire had told Gentry that Zebulon had been too lenient and kind-hearted. He had time-wasting hobbies--like painting landscape scenes of other worlds. As a result, he hadn't had the ambition or business acumen to rise to a position of extreme influence as she had done.

Gentry's opinion was that Zebulon had found other things, like fostering relationships, more important than business dealings. If only he had lived to be more of an influence on James.

After Zebulon's death, Gentry had intended to maintain a connection between their families. But with Claire's personality such as it was, he had found it easier to allow their relationship to drift naturally apart. As time passed, social visits occurred with diminishing frequency.

Forced conversation loaded with tension filled the remainder of their visit.

The time after the guests left was no sea of tranquillity either.

Lira criticized James, "Why couldn't you have been more hospitable?"

"He was only here to acquire company secrets. And," more to the core of what was bothering him, "he knew how important the premiere vote was to Universal Mining. His voting it down was an affront to my father's good name--as if his heir wouldn't make an effective governor for the prosperity of the Delegation."

"I agree. It was a blatant insult to my dear husband. And I caught Kia nosing around in the bathroom closets," offered Claire with insolence.

Lira defended her family. "Kia is welcome in my home as if it were her own. And she was not snooping around where she didn't belong. Give her credit for having learned common courtesies!" Her voice was beginning to rise.

She turned toward James. "And my father was not being disrespectful to your father's name! It seemed to me that he cherished their friendship." Lira could not stop herself from blurting out the next

statement. "It seems that the way you two are living only for business gains is the affront to Zebulon's memory!"

It was as if she had been slapped James in the face. The silence was thick during the moments it took for him to recover from the blow. Then he spoke deliberately, with ominous warning. "You are treading on grounds of which you know not. Be very careful, dear wife, how you refer to the way in which we honor my father. And about your father and sister, they are not to set foot in this house again!"

"But they're my family! How can I not welcome my family?" Lira asked. Tears were beginning to stream down her face; the tension-filled evening was taking its toll. The only response she received was James storming out of the house.

Late in the night he returned to their bed, craving her unconditional acceptance of him. Before marrying Lira, it was something no one else had ever given him. And she needed his love just as much. Their tempers had cooled, and though neither apologized for their heated words, they made love urgently, desperately, seeking from each other a secure refuge amid life's bitter confusion.

\* \* \* \* \*

He left for work the next morning without saying a word. Lira longed for the happier, more relaxed James from the time before their marriage. To smooth things over from the disastrous dinner of the night before, she had a candle-lit dinner for two ready for when he returned that evening, but he was late in coming home. Eventually she retired to bed alone, sensing a rift forming between them that was beyond her power to prevent.

Subsequently, there were many nights when he didn't come home at all. When he would transmit a communication, his reason to Lira would be simply that something came up at the office or at one of the mines.

Lira began to wonder what was wrong with her that her husband would rather find reasons to stay away. Was he having an affair? She assumed the worst. The rift was becoming a chasm.

She once voiced her concern to Claire about James working too hard. Claire answered with reproach, "You have nothing to complain about. Look at all of the nice things you have."

Lira found her way to the belvedere terrace where she could be alone without the chance of being caught under Claire's disapproving glare. There was a light mist settling on the city in the distance. The cool dampness on the mountainside caused her to pull her wrap more tightly around her.

She was heartbroken, to say the least, about what life with James had become, not to mention her feelings toward his mother. The honeymoon had occurred before their wedding and it had been downhill ever since. They hadn't even been married a year. Something in that piece of paper called a marriage license had caused a transformation in James--or maybe the change had occurred in her. If she would just try a little harder, things would get better, she thought.

Lira had always felt compassion for those less fortunate. It was perhaps the reason why she had been drawn to James, even in her adolescence, she thought in retrospect. No, he hadn't been lacking in material things, but try as he did to conceal it, Lira had sensed his emotional insecurity--brought on by his mother's persistent fault-finding, she now realized--and she had wanted to help him overcome his wounded pride.

And she did love him, for better or for worse, so she would tolerate his temperamental behavior to the best of her ability. Their life would improve, she imagined, if only he was home more often. If only his mother-- It was pointless to wish for something that would never happen.

To take her mind off her increasingly empty marriage, Lira returned to her position in the marketing department at Computational Chemical. There she calculated the expenditure of fabricating designer molecules desired by their clients in materials manufacturing. Her specialty required her involvement in the planning stages of growing crystals to precise molecular arrangements in microgravity on the company's orbiting space station. The crystals would be used, for example, in the production of superstrong and superconducting carbon-based threads or in virus-sustaining substrates.

But Claire soon put a stop to her employment. "Your position as Mrs. Ganymede is to be loyal to our corporation. At business gatherings among legislators and potential clients, you are to help us gain political leverage so we can progress with our expansion plans. You give us the greatest benefit when you assume the role of charming hostess."

"You mean parade around as James' trophy wife?" That this was what her mother-in-law was implying didn't even surprise her.

"You are to act appropriately as the wife of a megaconglomerate executive." Claire's penetrating stare laced her statement with an unmistakable, deeper meaning: it was a warning to comply or life would become very difficult for Lira.

Lira was intimidated. She knew better than to protest against Claire's threat. It worried Lira that harm could come not only to her, but to her father and Kia as well. She imagined it wouldn't be beneath Claire to maintain control over her by threatening members of her family. She knew that Claire Ganymede had the resources to pull off such unscrupulous ploys.

Lira reluctantly assumed the position so explicitly spelled out by the older woman until a time would come when she would be able to convince James that they move out on their own.

To occupy the time between Lira's obligations at their social engagements, Claire had given her a choice of working part time in one of UMO's divisions or doing volunteer work at the hospital. Claire deemed either activity an acceptable pastime. Lira chose the volunteer work.

There was an interval during which James was able to work from his local offices and was home more often. Lira was more than pleasantly surprised at James' attentiveness to her again.

At breakfast one morning, in words as delicate as she could gather, she suggested that they find a place of their own.

"And leave Mother alone in this house? How insensitive can you be?" He stared at her in disbelief.

Lira sighed. His mother always came first. She held in her resentment, rationalizing that at least her husband was home again.

Lira became pregnant. She and James were thrilled with the prospect.

And so was Claire.

Taking advantage of a loophole in the DNA technology law, Claire had insisted on a genetics package that would impart aggressiveness, mathematical brilliance, and good looks onto the child. When Lira was alone with the technician, she had the genetics package altered to include less aggressiveness and more compassion. Also against Claire's wishes, Lira chose natural childbirth over in vitro fetal development.

The baby Jonathan was a delight. It was a dream come true for Lira to have this little one who loved her unconditionally and whom she loved with all her heart.

James conducted himself like a proud father, but his duties as a CEO soon took him away from home again for weeks at a time. He watched his son develop, mostly via the holocomm unit.

Claire insisted that she be the one to preside over how Jonathan was to be brought up. To Lira, Claire's choices were unacceptable. The nursemaid was too strict; his clothes were too prim; the preschooling was too restrictive.

Lira had always received warm love from her father and sister. She had hoped for the same warmth in her marriage to James. She had always searched for the positive side of things even when her marriage wasn't turning out ideally--even when it came to Claire.

But Claire's intrusion on how Jon was to be raised was the final straw.

Lira smoldered until James came home from his latest trip. She was going to get to the bottom of who was to be in control of Jon's nurturing. Almost before James had a chance to enter the door, she was to the point. "Listen Mister, I've put up with a lot around here. From your mother choosing my friends to your usual absence. And frankly, when you are home, you can be a bear to live with. Now she's raising our son! I will not tolerate it any longer!"

James listened to her tirade and responded in a calm but patronizing tone. "Now dear, Mother is preparing Jonathan for a megacorporate manager's life. She is thinking about the future of our business empire."

Lira fumed, "But I'm thinking about the future of our son and our family!"

Again, cool-headed and in control, James answered, "UMO is a part of our family. Jon is in a more unique position than most children. Mother has had experience in such matters; trust her instinct. Wait and see, Lira. Everything will be all right."

He remained unruffled, which made her feel as though she'd been overreacting. James had made it all sound so sensible. Of course. Jonathan was being prepared for running a megacorporation, and what did she know about it? In the household in which she grew up, she and Kia hadn't been pressured to follow in their father's footsteps.

Lira wanted what was best for her son. But Claire's incessant interference and James' support of it made her feel incapable of making sound decisions and inadequate as a mother.

James' presence was required elsewhere in the solar system again, this time to inspect the technetium mining operation on a moon of Jupiter. Jonathan, who was barely a toddler, was away at the academy. Lira hadn't contacted her father or sister in months. It was easier that way, easier than seeing them shake their heads with disappointment--or pity--over how miserable her life had become.

She became lonely and depressed, staying in bed for days at a time. Tears came easily when she thought of how her husband was gone too often, and when he was home, he would side with his conniving mother on all issues of significance to her. She felt unloved by him; he rarely said he loved her. Had he ever? Worst of all, she felt that her son was not being raised with loving care.

To the distraught woman, Claire once barked, "Quit feeling sorry for yourself," which made Lira more despondent because she thought that no one understood her. Or even worse, maybe Claire was right, and she was being selfish and wallowing in self-pity. This made her feel completely worthless. Lira was becoming hard-pressed to find a reason for her existence.

In a moment of lucidity, she decided that to save herself from falling into an abyss of no return, she had to leave. She'd had enough despair and loneliness. Why, she told herself, she was a very intelligent and capable woman, deserving better than this treatment.

She couldn't believe how blind she had been not to have seen it earlier. James and his mother were two of a kind. Their many accomplishments were acquired without compassion and in manipulative ways. She mustered the strength to meet with a lawyer and file for divorce.



Once the filing had been made public, Claire interfered with the legal proceeding, claiming Lira as an unfit mother, citing her depressed state of mind. Lira withdrew the file out of fear that she would lose her precious son--the one and only thing that mattered in her life.

Disillusioned and defeated, she felt hopelessly trapped. Her depression recurred and she turned to intoxicants to try to numb the hurt. But they only made her feel more.

She wondered what love was and concluded that it was something based only on hormones and brain chemicals--nothing of a forever nature. It was a clever evolutionary trick to get a couple to procreate, to perpetuate the species. Love was nothing really...except when it came to Jonathan. He was her sole reason for choosing to live.

To take the path of least resistance and to avoid the harsh disapproval of James and Claire, Lira rejected her father's attempts to contact her, except for one time. At his insistence, she agreed to sneak away to have a brief lunch with him.

Gentry observed her listlessness, her deep sadness, her unwillingness to get help. Her makeup did not quite mask the darkness under her eyes. "Everything is fine, Father," she said. It was an alarming conversion since before her marriage, when she was a vivacious woman. He was worried that if he tried to interfere, a worse fate might come to Lira at the hands of her husband--or Claire. Gentry felt powerless while watching his daughter wither before his eyes. He resented James for breaking the spirit of his once effervescent girl. With uncompromising commitment, he vowed to himself that he would rescue her from this dreadful mess. He would somehow pull her from the Ganymede quagmire and destroy the unconscionable James in the process!

\* \* \* \* \*

One day an orphilion worker befriended Lira, and she allowed it. Delta CS537bq was utilized as a domestic at the Ganymede household. She was a kind woman to whom Lira had never given the time of day because she had been accustomed to viewing orphilion workers as inconsequential, invisible.

The once soft-spoken, happy, pretty Lira had become quite a different person in just a few years. She became resentful, cynical, hard--with an edginess like a steel blade marred with nicks, unpredictable and dangerous to manipulate. She did not believe in dreams anymore. She did not care much about what she did nor the consequences of her actions. In fact, vengefulness was becoming a part of her belief system. An eye for an eye...

A plan began to evolve in her mind. She became a good actress, seeming normal and happy to James and Claire, smiling sweetly while playing hostess at their business soirees. At the same time she was developing a relationship with Delta CS537bq, who had some rather questionable connections....

\* \* \* \* \*

James was traveling parallel to the mountain range in his late-model airglide cruiser while on his way from the Springs to his Denver office. He glimpsed at the majesty of the mountains and wondered why they always reminded him of Helena. There she was, infusing into his mind again. He was trying to be decent. He would still visit her lab periodically, but he restrained himself from giving in to his physical desire for her. It thrilled him just to see her, knowing that some day he would act on that desire, and she would yield to him willingly.

His mother, however, knew what was best for broadening his solar system dominance. She calculatingly endorsed his choice of Lira as his wife, saying that Lira was of good stock for producing a respectable heir. He had agreed, but for a reason his mother was completely unaware of. He had agreed in hopes that he would forget about his shameful infatuation for his underling, Helena, of whom his mother would never approve. So why couldn't he erase the orphilion from his mind? He thought of the

obvious reasons: because of her loveliness and intellectual charm. But a deeper calling told him that she answered to his more basic needs. She was forbidden fruit. And she...didn't...want...him. Something primordial inside of him had to have her.

Then he thought of his beautiful wife. Lira was the envy of his male counterparts in the corporate world. He thought of how she glamorized a dull party or an evening dinner with a client whom he was trying to influence. The room would glow with her presence. He was truly proud that she was his wife.

James wished he could spend less time away from home, but running an interplanetary conglomerate was grueling work. He wondered why Lira seemed distant when he was at their estate. He allowed her to do anything her heart desired--unless his mother advised otherwise. Mother knew best. And hadn't he provided Lira with a lovely home? A fine son?

Ah yes! he thought. I have a handsome, intelligent boy who will some day fill my shoes and rule the universe! Becoming drunk with the thought, James was completely unaware that the force he was applying to the accelerator was causing the aircruiser to fly dangerously faster and faster.

## CHAPTER 24--THE AMPULE

2097: Europa

In the hospital wing, Helena observed a slight improvement in the vital signs of eleven of the patients. This gave her some consolation and hope that they would all recover.

Dr. Wolfe stirred and awakened.

"How are you feeling?" Helena's voice was transmitted through her helmet's speakers.

"Quite groggy," answered the doctor. His voice was weak. "But I see I am still alive."

"Yes," she said softly, "I gave you an injection of fresh cattleya medicine. You are recovering faster than the other patients." Her words appeared to give him some comfort. "Rest now, Doctor, and gain your strength."

He closed his eyes and was fast asleep.

To fill the time until Thor returned from above the planet, Helena began to search for clues which might lead to the person or group responsible for the demise of the Europa employees. She returned to the dispensary's herbary to look for signs of someone having tampered with the humus in which the orchids grew. She scanned the floor for footprints or broken vials and the waste receptacles for something out of the ordinary. She entered the chemical stock room and studied the shelves of containers which held fertilizers, soils, and the calcium chloride. It was impossible to discern if the chloride compound had been used recently, even though the jar was at the front of the shelf--out of alphabetical order--and the lid was askew. It could have been replaced by someone in a hurry.

Acting on a hunch, she found a holomap of the building on the computer in the infirmary's reception area. It revealed to her that custodial headquarters was down on the second floor.

She started to leave in search of it but realized that she would need access privileges. With an idea, she turned toward the pathology lab. It would be a long shot, but it was worth a try. From the table near the cadaver, she grasped the small, clear cylinder which held the dead enforcer's exon chip. Respectful of his suffering, she whispered, "Thank you, sir, but I don't think you'll be needing this anymore," and added as an afterthought, "Nevertheless, I shall return it soon."

Once out of the room, she breathed a sigh and said to herself as she looked at the cylinder, "Ah, my key to success."

Six floors below the hospital ward, the soldier's identification chip allowed her past the scanner and into the custodial control room. Helena searched for a schematic of the facility's air conditioning system. She sat at the main computer and called up the menu. She spoke the words AIR CONDITIONING. Nothing happened. Then she tried VENTILATION and a schematic came up. Now to interpret the diagram. Talking to herself, Helena said, "Hmm, it says 'Main Ventilator,' and here are the ducts leading to the living quarters of the workers." She was surprised that it was clear enough for anyone to understand. "It's a good thing they didn't feel the need to use encoded language."

A very good thing, she thought as she pictured Thor grinning at her.

She needed only to solve the problem of how to get to the main ventilator. Fortunately, on the bottom of the schematic were the words ACCESS 12, SUBLEVEL 3.

Helena never gave a thought to the danger in which she might be placing herself until the elevator door opened to the desolate corridor of Sublevel Three. All of a sudden, this place feels really creepy, she thought. But she had come this far, and she was on a mission to hunt for clues. She scanned the hallway

for a door that said ACCESS 12. Once found, she held the cylinder containing the soldier's tag up to the scanner and the door slid open.

The enclosed space was dimly lit. While looking for a light switch, Helena discovered a portable lamp on a shelf. She directed its beam ahead of her. Nearly filling the good-sized room and at its center was an enormous metal-encased, oxygen/nitrogen distributor. Large conduits radiated from it like the legs of a giant spider. She needed to duck under each conduit as she walked slowly around the ventilator, in search of an opening into which someone could have released a deadly germ.

At the back of the distributor, at one meter high, the lamp illuminated an iris-type window, now closed. The word HATCH was stenciled across it. Helena turned the wheel until the iris panels parted to form a circular opening through which her upper body would fit. Shining the light through the opening, she peered inside. Looking down through her helmet's visor, she saw a black and seemingly bottomless pit. She turned the light to the side where a glint caught her eye. "There it is!" she exclaimed to herself, assuming that she had discovered something of significance. Reaching inside the ventilator, Helena stretched toward a cross-brace made of angle iron, just barely within arm's length, to pick up the broken pieces of a delicate, tiny ampule. It was as if someone had forcefully thrown it inside the air distributor and had failed to anticipate that some pieces of glass would get caught in the crease of the angle iron.

BOOM! The frightening sound caused her heart to jump. She dropped the flashlight into the ventilator housing. She stepped backwards out of the window and turned to look for someone, something. Seconds elapsed before she heard the distant crash of the lamp. She soon realized that all that had happened was the five-meter blades of the fan within the distributor above the iris opening had begun to rotate. The noise had been the compressor turning on. She opened her closed fist to see that the glass fragments were safe in her gloved hand. After taking a moment to catch her breath, she placed the shards into a pocket of her spacesuit, closed the hatch, and speedily returned to the infirmary.

In the receiving room, she emptied the contents of her pocket onto the desk. Helena studied and pieced together each little glass bit until she was able to make out the tiny letters VPL-UMO. Her eyes widened in recognition. "This is incredible!" she exclaimed out loud. "Those are the initials of the viral pathology lab next door to where I work!" Knowing these vials were kept under tight security, she then questioned in her mind: Why would someone at UMO want to sabotage their own company?

## CHAPTER 25--THOR SEEKS PEACE

2096: Mars

Thor slept fitfully during the two weeks following the shooting of the orphilion woman. In his UMO compartment bed, he tossed and turned over what he had done until, this night, in the cool air under the oblong Martian moon, Phobos, he found his way back to the cave opening where the old man had carried in her body. Guilt was gnawing at him. He was determined to somehow make amends. He called into the opening, "I am Captain Thor DV556hz, the soldier from a fortnight ago who killed a young woman deserter. I am carrying no weapon. I am peacefully requesting entry." Thor now wore the black version of his leatherine soldier uniform as a personal symbol of remorse for the crime he had committed. Having been following orders made it no less a criminal act in his eyes.

After a few minutes, holding an oil-fueled lantern, the old man in the ivory-colored vestment appeared at the opening and beckoned him to enter. Thor needed to stoop his tall frame as he stepped downward into the cave.

Entering what he assumed was a Subterra hideout, he was met with an enormous cavern. There was a sound unusual to him: the squealing laughter of children's voices. In the dim light, he noted the primitive conditions. The temperature was not much warmer than outside. A few dark openings along the perimeter seemed to lead to passageways. There were campfires around which were gathered people in need of grooming and a good hot bath. He found it difficult to turn his eyes away from one woman with long, snarled, blonde hair who was wearing a long and loose-fitting, blue tunic. He stared at her enlarged, rounded abdomen, never having seen a pregnant woman from so near before. Upon closer scrutiny, he noticed her expression of contentedness while her hands cradled her belly.

There were children at free play. It was something else he'd never witnessed before, even in his youth: boys and girls laughing and chasing each other in an unorganized game. Seeing this gave Thor's heart a warm feeling.

He was led to a small, carved-out room which was the elder man's sparsely furnished quarters and was invited to sit down on a stone ledge. Thor began. "You are wondering why I have returned."

The old man sitting across from him smiled gently. His weary eyes seemed able to read the anguish in Thor's. "I know why you are here, my son." Thor didn't believe he really knew and waited for the man to explain. "You are a devoted orphilion worker who believes in the verses you have recited since childhood and who is bound by the oaths of duty you have taken as a soldier. Your loyalty lies with the DTM and the company that owns you. As a good corporation soldier, you have never questioned your orders, which has earned you some privileges and freedoms during your time away from duty, as long as they are within the parameters allowed by the Delegation.

"But doubt is stirring within you. Maybe for years, you have struggled with your conscience because on one hand, you would like to believe the Delegation is true and right in its orders. On the other hand, your inner self is beginning to wonder about the wisdom of those orders. You are treading on new ground here--this acquisition of your own wisdom. Ah, their mind control doesn't reach into us as deeply as they would like to believe, does it? Heh, heh..." He paused and smiled as though pleased at his own insightful observation.

The words of the old man described exactly what Thor was feeling. How was he so perceptive? Memories of the untimely death of his GenSapiens roommate Seyfert resurfaced. Thor's doubt of the Wisdom of the Delegation had begun many years before he had become fully mindful of it.

The man resumed. "And that is what brought you here this night. These feelings have been growing in

you and have come to a head because of the grievous thing you were ordered to do--to stop Aurora from running to her dream of freedom. You put an end to someone who was just like you, yearning for freedom. And you are bearing the burden of responsibility for this action, and not just passing it off as simply your duty to the megacorporation, as so many others do, and as you used to be able to do."

Thor could not find any words to add except, "And I have a burning guilt in me that has grown each hour since I saw the woman fall lifeless. I cannot live in peace knowing that I am the cause of her death. But your words of forgiveness keep recurring in my mind. Please tell me how one can be forgiven for a crime that is so...final."

"First, let me tell you how I came to be here."

## CHAPTER 26—TAEDRES

The old man began his story in an unfluctuating voice, as if keeping his voice steady would shield him from the despair he was about to reveal. "I am Taedres ES045ed. I was born among the street scavengers in Eastern Seaboard sixty-one years ago during the gamma decade. I was taken to the GenSapiens training institution after witnessing the murder of my mother.

"I was five years old when that outrage occurred. A hooded GenSapiens official abducted me from our home. He wrested me away while aiming his weapon at my mother. I will never forget the desperation in her eyes when she started running for me, reaching for me, before she was shot dead. While being carried away from our apartment, how I wailed for my mother--at this most devastating loss a child could have." He paused as though experiencing the pain once more.

Thor was appalled. His belief had been that orphilions were children who had been abandoned or given willingly by their parents. A life of productivity for a company was a small price to pay as long as the basic needs of life were met, in addition to a secure future. He had never imagined that some had been kidnapped from loving homes.

Taedres continued with his account. "Even though I was very young, I can still hear her voice, gentle and musical, telling me about the happy times of her own childhood. These and the lullabies she sang brought me great comfort. I will always remember the love I felt for her....

"GenSapiens applied their mind-control techniques on me, but I was beyond the infant stage and wasn't as easy to manipulate. The punishment for non-compliance was painful electric shock, so I did what was necessary to survive: recite loyalty oaths to the Delegation and excel at my lessons in the orphanage."

Thor reminisced. If only Seyfert had done the same.

"The owner of GenSapiens at the time, Rikard Salvorich, a gruff, ruddy-complexioned man who didn't seem to like children much, would make the rounds inspecting the orphanages. He seemed to take perverse pleasure in giving the shock treatment to unruly children. I suffered at his hands once. I believe that the cruel indoctrination methods and the kidnapping of orphans were ideas from his demented mind--ideas that had been sanctioned by the Delegation."

Thor was stunned to learn about this bit of GenSapiens history. He wondered what other information beyond his censored life would stun him.

Taedres resumed. "During the time of Zircon Ganymede's management, I was purchased by Universal Mining at the age of eighteen. I became a robot hydraulics mechanic, assigned to work at various mines on Earth. A few years later, I was transferred to a sulfur mine on Jupiter's moon Io, a high-risk job because of the active volcanoes nearby. The dome hadn't yet been constructed. I worked my fourteen hour shift in a pressurized suit and went to my modest compartment every evening to recharge for the next day.

"I became friends with an orphilion who worked in the processing plant--a woman named Mura who was older than I and for whom I developed a deep affection. I would invite her to my compartment where we would play Superstring Chess, talk, laugh, and even dare to imagine a life away from the foul-smelling sulfur mines. We had heard the rebel rumblings.

"Belonging to UMO, we were well aware of the hazards of a sexual relationship, so we kept it strictly platonic. Just Mura's presence was enough to soften a hard life.

"One day, a few years after we'd known each other, she vanished. She wasn't at her job nor was she at

her compartment.

"That evening, I received information about Mura from an office worker, Sajon BJ098dg, who came to my compartment. He had arrived wearing a spacesuit. His face below his eyes was masked with a cloth. We communicated on paper; speaking was risky because of the Vigilant Eye. He wrote that Mura had been taken to the personnel inquisition room, was charged with disloyalty and conspiring to desert, and was sent to the prisoner's section of Neptune's moon, Triton.

"I knew it meant that she would be physically moving radioactive stone without automation in temperatures of liquid nitrogen until her death. It distressed me to know that she wouldn't survive long under those conditions. Nobody could. And it was only a matter of time before they came for me.

"Sajon told me that he was a member of the Subterra Rebel Force, an underground organization of insurgent orphilions. He wrote down directions to the SRF compound nearest our mine, about a two day's hike. I saw a chance to stay alive and possibly rescue Mura--if only she could survive the labor camp until I could arrange for a rescue.

"Sajon also knew how to remove the exon locator tag implanted in my neck--they were silicon microchips back then, but still damnably efficient tracking devices--but it would be a dangerous operation because of its nearness to a major artery and because of the possibility of infection, since these weren't exactly sterile conditions. I told him I would take the risk.

"The rebel shed his spacesuit. To conceal the operation, we made a makeshift tent by stringing a cord and hanging a blanket over the bed. A lamp was directed to shine within. He removed a tube of antiseptic from a kit he carried on his belt and proceeded to sterilize his hands, a blade, and my throat. He also dabbed a cauterizing anesthetic on my skin which would reduce bleeding and discomfort.

"Lying on the bed, it flashed across my mind that he could be a UMO enforcer out to simply cut my throat. Or he could be who he said he was and I would bleed to death from an exon tag removal gone awry. Either way, death seemed better than unjust incarceration.

"I gritted my teeth as he sliced into my neck while performing the crude surgery. It required a steady hand to remove the tiny piece without piercing through the blood vessel wall. I worried that my pounding heart would make the operation more difficult for Sajon. Soon afterwards, the chip was successfully dislodged from my throat. He spread the tissue repair glue over the incision.

"In a voice inaudible to the Vigilant Eye, he said that his own exon chip had been removed in the Subterra before he had become an infiltrator of the workforce. It had been adhered onto the surface of his neck. He was able to remove it and leave it in his compartment before coming to talk with me. This way, he had avoided being detected by the scanners.

"I left my exon tag on the bed. When I wouldn't be at work in the morning, UMO detection devices would lead enforcers to my compartment. By then, I would have had an eight hour head start to the underground camp.

"I quickly packed food and water within an inner pocket of my pressurized suit. With our spacesuits on, Sajon and I left the building. We went to a secluded area of the security fence. He helped me climb over it. Before we parted, I said, 'Thank you, Sajon, for taking such risks to help me. You have been most...humane.'

"'Godspeed, Taedres,' he answered.

"I headed toward the rebel camp, not daring to stop for rest. I followed lava ridges which provided cover from UMO Security for when it would begin its search for me.

"In the morning under the yellow sky, the nearby volcano spewed a thin dust, making visibility poor. I



had a difficult time maintaining my course, always needing to wipe my helmet's visor. But I also regarded it as good luck because it reduced the chances of my being spotted. The next day, I considered it a miracle that I made it to the landmark Sajon had mentioned--where the sulfur surface changed from orange to red and then to white. A wind had cleared away the dust. Following the white boundary toward Jupiter, I reached a lava overhang to a cave.

"I called out the name and code word that Sajon had given me. 'I am Taedres, searching for Shandreen LG147ib, leader of the Ionian Subterra. Sajon BJ098dg sent me with the password, Copernicus. I am seeking protection and escape from the megacorporations.'

"I waited a few minutes until a uniformed teen-aged boy appeared. He searched me for weapons and scanned for my neck identification tag or any other detection devices he thought I might be wearing. He found I was clean and brought me to Shandreen, a man of African descent.

"Shandreen was in his forties and wore the black Subterra uniform. He perceived my exhausted state. With sympathy, he said, 'Rest, Taedres. A beverage and a hot meal will be brought to you.'"

\* \* \* \* \*

Shandreen spoke to Taedres about the extent of the underground rebel forces. Disillusioned orphilon and street scavenger workers were escaping to SRF camps on Earth, Mars, and the various moons. More camps were being organized around the solar system to accommodate the increasing number of defectors. They were hoping to gain enough members to someday have the power to rise above Delegation authority.

Shandreen described new communications and weapons technologies that were being developed for the cause. With a wry smile, he related that the megaconglomerates had excellently trained most of the rebels in their skills, and this fact was slowly backfiring on them.

He described to Taedres their plan to overthrow the government so they could be free from Delegation oppression and its Vigilant Eye. They wanted due process without the immediate threat of execution or banishment to physically hostile conditions. They wanted the rights and liberties to which all members of the human race were entitled.

Shandreen added wistfully, "Maybe we are dreamers, and we will not influence enough of our fellow orphillions, but we believe strongly that our principles are just and would bring great benefit to all within the planetary system."

\* \* \* \* \*

Taedres remained in the camp for six months. He learned rebel survival skills and about the history of the Subterra.

After only six weeks as a revolutionist-in-training, Taedres received word that the SRF had failed in its attempts to rescue Mura and others and that at the prison camp, she had collapsed and had been phased out. He became literally heartbroken and couldn't help but blame himself for her death. To allay his feeling of guilt, Taedres focused on the Subterra's mission which was to bring an end to the Delegation's tyranny and its brutal acts. He remained with the resistance and quickly learned the strategies necessary for acquiring independence. He was soon able to utilize the Subterra's weaponry and communications systems, and he learned how best to recruit others by infiltrating the DTM workforce without being detected as a rebel, as Sajon had done. His identity altered, he had been assigned to infiltrate mining operations on Earth.

\* \* \* \* \*

"When I was but a young boy, two brave soldiers named Bral and Steffie founded the resistance

movement in the name of freedom and justice." He told Thor of its beginnings.

The SRF had been able to obtain some unedited history discs. Taedres told Thor of past wars on Earth, about the horrendous torture and suffering endured by people who believed in liberty, and about how the atrocities were overcome. Authoritarian forms of government were gradually replaced by democracies.

"And there was something that emerged from my lessons which has affected me the most." Taedres shared with Thor his profoundly meaningful discovery about life's purpose. "There are words written about a man who lived so very long ago that reach deep into my soul today. He had spoken of hypocrisy, of turning the other cheek, and of caring for your fellow human. He had taught about the freedom your soul receives when you are forgiven and when you forgive those who have wronged you."

He waited for Thor to assimilate the essence of those words.

"After my training and moving up in rank on Io, I was assigned to head the Subterra here on Mars. When I reached my fifty-eighth year, I was given the title Sage, which makes me the chief advisor to the Rebel Force Commander. It is a position appointed by the SRF Council and one of high honor. We will soon commence with the final planning stages of our rebellion. An SRF revolution is imminent."

To Thor, the overthrow of the Delegation government seemed a daunting, if not impossible task. Taedres explained that the key to its accomplishment was to have strategies with clear focus and an efficient, cohesive organization. He made a complex mission sound so simple. The man was a visionary, a true leader and diplomat. Thor knew now, without question, where his allegiance lay. "Sage Taedres, how may I assist in this mission?"

He answered, "Continue with what you are doing. Follow the orders of the Delegation and UMO. A newly invented, superluminal communication device will be issued to you. Infiltrate the workforce with information, but approach only those whom you can trust for now. As you increase in rank, more responsibilities will be assigned to you.

"If you are captured for subversion, you will have a better chance of escaping if the exon tag is removed from your throat. The operation can be done here, before you leave. While you are still a Delegation employee, a flesh-colored, plasticine patch will hold it against your neck. It will be small and barely noticeable, even without the cover of clothing. It sounds crude, but their scanners won't be able to detect any difference.

"We can use you later as an interplanetary pilot for transporting equipment and as a skilled soldier for carrying out rescue missions. But Captain," his voice took on a more solemn tone, "be aware of the extreme danger in which you are placing yourself--and the future of the Subterra Rebel Force--should you be captured and taken prisoner."

Thor assured Taedres that his military training had prepared him for the perils of war.

Taedres was accurate in sensing that Thor would be a valuable and trusted soldier for their cause.

## CHAPTER 27--THE MARTIAN COMPOUND

Taedres requested his wife's presence and introduced her to Thor as Lylian. A distinguished-looking woman, her gray hair upswept in a French roll, she wore a garment similar to her husband's. Her manner was composed and gracious. Lylian gave Taedres a tender smile and an affectionate peck on the cheek. He asked her to give Thor a tour of the camp.

Lylian led the tall, red-haired man from the room and guided him around the Martian resistance compound. "This cave and what you are about to see is one of the main training divisions of the SRF. Headquarters is on Earth in the Rocky Mountains. There are over sixty camps like this across the solar system along with thousands of smaller chapters whose members infiltrate the megacorporations or serve in other capacities. Over the years, millions have joined the cause. The SRF is a highly coordinated network." Having seen only this primitive cave, Thor wondered how all of this could be so. She directed him to an elevator and they rode to a lower level.

As the elevator door opened, Thor was expecting to see more dimly-lit caverns. He was extremely surprised to encounter the sleek facility that lay ahead of him. It was clean, well-lighted, and computerized. A small group of uniformed personnel were walking by determinedly, no doubt carrying out an important assignment. Lylian noticed Thor's expression and explained, "The unassuming group of people you saw in the entryway to the cave are there as lookouts in case we are discovered. We have a defensive plan to protect ourselves should the need arise."

Thor wondered what devastation would have ensued if he and the other enforcers had instead stormed the cave that day, after he had discovered it--after he had killed the orphilion woman.

One hallway led to a surgical room where exon chips were removed and destroyed. It was also where women gave natural birth to children. Thor was curious about this but filed the thought away for later.

There was an extensive section of rooms that served as the sleeping quarters for over one thousand rebels.

In one of the conference rooms, there were about fifteen people, none older than twenty-five, gathered around a table on which, at its center, was a qubit computer, with Q-predict capabilities. It was the latest in military technology for monitoring strategic sites and forecasting campaign outcomes. There was an intense planning session going on. As Lylian and Thor entered, the rebels moved to stand at attention.

Thor observed the utmost respect with which one of them greeted her. "You honor us with your presence, Madam Lylian."

"And you are most honorable, Corporal Duncan." She asked him to demonstrate some of the capabilities of the MPL processor for their guest.

Thor was shown a kinetic hologram of the rotating Earth, which hovered above the table. On it were lines of latitude and longitude. Lighted cursors denoted the locations from around the world of the top twelve megaconglomerates, their branch offices, and the homes of the corporate executives. The three-dimensional projection also marked DTM military bases, the government assembly building in Iowa and the residences of its members. With a voice command, the kinetic image changed to Mars and displayed the locations of its megacorporate operations and government buildings.

Production costs, sales revenues, and investment dividends of any division of the DTM could also be holo-projected. The Subterra was able to track when a corporation fell out of the top twelve, caused by a new one replacing it, and it registered the subsequent turnover of representatives to the Delegation.

For Thor's benefit, one site on Earth, chosen at random, was magnified until the elderly face of Assembly Member Hyland Nisson, representative of an agricultural firm, could be readily recognized while he went about his business.

And the computer could locate, from anywhere in the solar system, the exon tags of any orphilion or street scavenger worker.

As Thor and Lylian were leaving, the fifteen around the table resumed their planning session on how best to accomplish the coup d'etat of the Delegation government before entering possible strategies into the Q-predict program. "We must plant explosives at each of the megacorporation headquarters and detonate them all at once if they do not give us what we want," said one.

Another disagreed. "No, we must kidnap all of the DTM's assembly members and corporate heads and make our demands for independence known to them. When they refuse to carry out our commands, we execute one, then another, and another until they have been persuaded to our way of thinking."

"Or we can declare biological warfare with our new tech-viruses...."

Lylian eyed Thor's uneasiness over the talk he had just overheard. "They are young and in training. Their passion blinds them from the consideration of using nonviolent methods for achieving our goals. Give them time. They are well-meaning. Our leaders and most others here envision more peaceful measures."

Lylian led Thor to the publication room where information sheets were printed on paperite (a synthetic paper) for distribution to the workers. "It seems a waste," Lylian explained, "but what is printed on paperite is not detected by the Vigilant Eye. It is actually an excellent way for us to disperse information while maintaining secrecy."

"But what of the workers that are loyal to the Delegation? What happens if they turn in the seditious pages to the authorities?" Thor had once seen a page spouting rebel propaganda. The words were simple, yet eye-catching and memorable:

"Join our forces! Join today!  
Emancipation, the only way!"

Thor remembered passing it off as absurd rather than as important enough to turn in to his superior officer.

"The DTM is not yet threatened by the messages, reckoning that they are the musings of a few escaped radicals," answered Lylian. "We have infiltrators in the workforce disseminating pages about our plan, and the number of orphilions becoming aware of a better way is increasing every day. They are beginning to question, at least to themselves, the Wisdom of the Delegation. They are becoming informed on human rights, which leave no room for slave labor and company ownership of orphilions."

They entered a room where Thor was filled in on a breakthrough in quantum physics. Post-quantum engineers, so called because they had discovered a process which appeared to break the current laws of quantum mechanics, had developed a faster-than-light communication system which they coined Quantum-Entangled Superluminal Teleportation, or QuEST\*.com.

Thor listened intently as a Subterra engineer explained to him the basis of the new technology. "Twin polarized light beams, collected from a titanium-sapphire laser source, are made to continue vibrating in the same plane--for instance, up and down--within transmitting and target communication devices.

These planes of vibration, or polarization states, are described as being linked, though they are not in contact, being in separate devices. This is called 'entanglement.' It is this entanglement that allows us to send data instantaneously."

Thor had previously known that non-localized events were impossible to control. That is, one cannot use, for practical purposes, the phenomenon which results when a subatomic particle event, such as a photon vibration, occurs in one locality and has, through a "spooky" connection across space, a correlated effect on a faraway photon. And there was the problem of the random behavior of these particles. Thor was curious to learn how SRF physicists were able to harness such information transfer.

The engineer explained further. "Our team's research has led to the invention of the entanglement correlator. A spoken word is converted by a photonic translator in the transmitting communicator into a series of photon disturbances--or polarization changes. The entanglement correlator reads this resulting array of polarization plane changes and accordingly alters the original laser beam within the transmitting communicator to vibrate in the same manner. This causes the planes of the corresponding beam within a target communicator located across space to become aligned to match the original message from the correlator. The signal has thus been transmitted synchronously, and therefore superluminally, as though the photons were connected by invisible, trans-space wires." He went on to describe the construction of the entanglement correlator.

In conclusion he said, "Then, a converter in the receiving communicator transposes the series of plane changes into a holographic and/or audio message. QuEST\*com entanglement enables our forces to send information to each other without the need for above ground antennas or satellites and without the time delay that is characteristic of electromagnetic radiation traveling through vast planetary distances."

Thor reasoned out loud, "Theoretically, QuEST\* communication signals could be transmitted instantaneously from anywhere to anywhere in the universe!"

"You are absolutely correct." The scientist grinned at the new recruit, as though recalling the time when he had also first deduced this staggering implication. Thor felt privileged to be witnessing the dawn of practical information teleportation.

Lylian next brought Thor to a large storage room on a lower level of the facility where there was located an expansive warehouse containing the latest in nuclear warhead technology equipped with ultra-precision homing devices. The weaponry was designed by SRF engineers who had capitalized on the concentrated fission energy of element 146.

Thor's eyes widened as he surmised that when the Subterra forces became ready to mobilize, the DTM would be as unprepared as an unwary insect that foolishly descended onto the unpretentious leaves of a Venus flytrap which, without warning, would close shut to digest its prey. The lowly plant had become a cunning predator.

Before Thor was to return to his station as a UMO officer, his DNA exon tag was removed and plasticized onto the surface of his neck where it could easily be peeled off if he needed to escape. Then Lylian and he returned to Taedres' room.

Thor spoke. "Please Taedres, tell me more of the man who spoke of forgiveness."

Taedres handed him a worn paper-bound writing, its title, The New Testament. He simply said, "Take this."

Thor sensed that in his hands was the key to the meaning of life. His voice broke with emotion as he said, "Thank you." He saluted the sage, turned, and left.

## CHAPTER 28--BAT OUT OF HELL

2097, May: Europa

Two hours had passed before Thor returned from high above Jupiter to the UMO hospital ward, but to him, it seemed as if they'd been apart for days. He met Helena in the reception area and longed to hold her, but because of their space gear, he instead quipped, "I'd give you a kiss, darlin', but I'm afraid that we'd only bump heads."

He asked her about the progress of the patients. She told him about the improvements and about Dr. Wolfe awakening.

He told her of his trip. "I couldn't resist and did a flyby of Io just in time to see its largest volcano erupting. It spewed great curtains of sulfur ash high above its yellow ochre deposits. Silhouetted against the light of Jupiter, it was spectacular!" He couldn't contain his enthusiasm.

"And, my dear captain, did you remember to radio Earth to find out what to do about our predicament here?" asked Helena through a grin caused by his excitement. She had also missed him during their hours apart.

"Why, my adored doctor, I did manage to find time to relay a communication. We are under orders to wait here until the arrival of the medical team that was sent shortly after we had left Earth. That should be in three and a half days, and they will assume responsibility for the care of the patients. UMO had also dispatched an investigative team from Mars that will try to determine the cause of this tragedy. They should be arriving shortly after the medical crew."

Helena, also bubbling with excitement, told him her news of finding the broken ampule in the ventilator and that it was from her own place of employment.

Thor's smile disappeared when he thought of the vulnerable position in which she had placed herself. He admonished her. "What a foolish thing to do! You didn't even have a weapon with which to protect yourself. The murderer could still be around, and you could have been his next victim!"

Helena was taken aback at his scolding tone. She retorted. "Hey Bub, whoever did this could have just as well murdered me here in the infirmary while you were up there taking in the scenery!" She had motioned her hand brusquely toward the sky.

Now he was surprised at her flippant remark. "You could have unwittingly altered evidence, making an investigation difficult for the detectives."

His sound reasoning made her self-defensive. "In case you haven't heard, I am schooled in methodically searching for clues. And I found key evidence to this case, so I would very much appreciate it if you could restrain yourself from assuming that I don't have a cerebral cortex in my head!"

He had been concerned about her lack of any precautionary forethought. Now the impudent tone of her voice infuriated him. He tried to control his temper. "By Great Orders of Magnitude, Helena, analyzing compounds in a chemical laboratory is no comparison to investigating a mass murder! You couldn't have waited two hours for me to return before you decided to play your little game of Sherlock Holmes?"

She couldn't believe his condescending attitude. "My little game? And are you insinuating that I needed your permission? For what reason should I have waited for your permission?"

"First of all, I wouldn't have allowed it. Secondly, if you had stubbornly insisted--which I know you

would have--you could have taken advantage of my expertise as a trained enforcer. You should have waited for my protection before you went traipsing off into the building's off-limits areas. Besides meeting the deadly culprit, you could have found your way to the power plant and inadvertently nuclear radiated yourself or something." He knew he had gone too far with that one and was about to regret it until her reply rekindled his ire.

Her eyes flaring with sapphire brilliance, Helena's reaction was fierce as a lightning bolt jagged across a thundering sky. "Your protection? I'll have you know that I have managed to live quite nicely for many years before you came along! I can protect myself without requiring the services of an egotistical, hotshot, space trooper who rockets about from planet to planet and then takes pleasure in wielding his armed superiority around!"

"Your...your..." He was about to say, Your self-preservation skills of late have been more detrimental than protective as far as I have observed--impertinently thinking of when she had nearly obliterated the ship with them on board. But he held his tongue, thinking it best that he leave the room before he said something more lamentable than what was already said.

Helena watched him bluster down the hall. She sat down forcefully on the bench along the wall, crossing her arms in front of her as she landed. She was deeply hurt by his remarks, which implied that she didn't know what she was doing, like she was a little girl playing a game, and not a problem-solving chemist by trade. Sherlock Holmes indeed! How presumptuous of him to imply that she made foolhardy decisions completely oblivious to common sense! And what made him think that his military training made him infallible? What unmitigated arrogance!

Then her conscience spoke. "He would be more infallible in potentially risky situations than you with your experience in controlled laboratory settings." She thought about that and failed to formulate a counter-argument. In fact, it was his self-assured savvy as a pilot and his ability to make cool-headed decisions in the face of danger that had intrigued her about him in the first place.

After cooling down a bit, Helena was not proud of the tone her own voice had taken. In deciding to search for clues, she had acted on rash impulse. From deep within, she knew he was right. A disaster could have occurred. And she should not have left the patients. That was irresponsible. Her actions did not merit Thor's earlier mention of her unselfish courage. After further contemplation, she really did appreciate his concern for her safety.

Down the corridor, Thor was mentally reiterating Helena's stinging words. She called me an egotistical hotshot! he ranted to himself. Like all of my training as a Space Force officer has been used in a cavalier manner. She presumes that I became a pilot only to fly around and 'wield my weapons' as she so straightforwardly put it. Here I was only thinking of her welfare and look at the thanks I get. I suspect that she'll blunder into some disastrous situation without the good fortune of having me near-at-hand, like when she nearly detonated the ship. She will then wish that I was there to protect her.

Blindsided by a sudden insight, he thought, What am I thinking? I've made some pretty big blunders in my day, even with my background as a soldier. He closed his eyes--stabbed by the reminder that once the decision to use armed superiority was carried out, it was irrevocable.

His rage subsiding, Thor was able to admit to himself that he would be in anguish if anything dire had happened to Helena. It was this worry that had caused him to reprimand her, which had been uncalled for, he now realized. She was right. The saboteur could have just as well killed her and the surviving patients in the infirmary while he'd been gone--or even while he was there.

He knew she hadn't needed him in her life, and she had become a successful scientist. Her independent intelligence was one reason he had become attracted to her. Yet why did he feel this overwhelming need to protect her?

A twinge of guilt struck him for having left her alone in the facility while he had flown above Jupiter. He never would have forgiven himself if Helena had been fatally wounded. That loss would have given him cause to consider the option of initiating the ship's self-destruct function himself--and without utilizing the escape pod. He should have insisted that she come with him while he had radioed Earth. It would not have been in the best interests of the patients, however, and not the appropriate course of action to take according to UMO protocol. But Helena's safety was exceedingly more important to him. Ah, hindsight is always in clear focus, he thought.

He turned back to offer her an apology.

After a few minutes, Helena was relieved to see Thor reenter the room. She rose to meet him. They both said "I'm sorry" at the same time and then laughed at their simultaneity.

"Helena," he said as his eyes searched hers. "I'm sorry if I hurt you. It was an asinine way to say that I was worried about you. Will you forgive me?"

Helena was not accustomed to someone apologizing to her. Her life had been so regimented. Mistakes had not been tolerated at the GenSapiens school, and especially not in the lab at Universal Mining, so there were few of them for her and others to be sorry for. But to cause Thor to needlessly worry about her was something she truly regretted doing. And here Thor was apologizing when it was she who was at fault.

"Of course I forgive you. But only if you'll forgive me for the insensitive things I said. I didn't mean them. And yes, I could have adversely affected the evidence, or something drastic could have happened to the unguarded patients. Even if a murderer hadn't been lurking about, I could have fallen into the ventilator or have accidentally locked myself in the custodial room with no way of getting out. And how would you have found me? It is I who should apologize."

"Helena, no apology is needed. Let us be thankful that nothing tragic occurred. I should have trusted your judgment. And besides," he reasoned, "the criminal is certainly long gone by now, covering up his or her tracks. Let us forgive and forget, oui?"

Thor wondered if the solace he felt had to do with the forgiveness he'd read about in the worn scripture that Taedres had given him, or if it had to do with simply being with Helena, knowing that she was safe, and seeing her pretty face smiling at him. Still, there was one forgiveness he needed to ask of her, but he couldn't bring himself to do it. Not yet.

"We have both seen the error of our ways. But next time, let the professionals perform the detective work. That is what they are trained to do. Promise?"

She was about to protest but then thought better of it. "Ok, I promise." Then she asked, "What do you think we should do with the evidence now that we have it?"

"Leave it for the investigative team to consider. But Helena, there is a more pressing matter we must deal with." Thor's voice took on a more serious tone. He spoke softly. "Let us go outside, away from the Vigilant Eye."

Outside on an artificial-grass-covered area near the building, they sat at a picnic table. There were some realistic-looking elms nearby. From one angle, and except for the unnatural lighting which cast dark shadows, one could almost imagine being in a city park on Earth.

Seeing that he had her full attention, he began. "On this rescue mission, in the days we have been together, you, Helena, have permeated my every thought. You are in my mind...and my heart...to stay. I have a desire to be with you like I have never had with anyone before. And what we did last night was the most wonderful thing I have ever experienced. With you I have discovered the true purpose of my



life, the reason for my existence--as a human being and not as an orphilion soldier or UMO pilot.

"All the oaths and pledges I have made to the Delegation have evaporated because I have discovered that to celebrate life, the mind must be set free from their indoctrination and control--from their supposed wisdom. And to really experience living occurs when there is someone like you to share life with."

Helena looked at Thor as though looking at him for the first time, amazed that he was describing what she had also felt. Exactly. "Oh Thor, you don't know how liberating it is to hear you say those words. You see, I have not been content with my lot in life--always feeling stifled by having to comply with Delegation and UMO policies--despising being owned by them. I, of course, have never dared to express this to anyone until now, to you. Only you really know me.

"In Olde Earth Customs, I had discovered a long-forgotten library and have been secretly reading old books left from twentieth-century America. It was a time when all humans were thought of as equal. No one owned anyone else. It was a time when you were free to express yourself and follow your dreams in the pursuit of happiness. Education was uncensored, laws were just, and the needs of the poor were met. Everyone had an equal chance of becoming a president! Oh, it wasn't a perfect time either, but those were the ideals and goals.

"And being with you, my most wonderful Thor, has made me complete. You, whom I have loved even before I met you. You have released me, at least in my mind, from the bonds of Delegation control--from being subdued like a tethered, over-disciplined circus animal that rightfully belongs in the wild. You have allowed me to express my love in the deepest possible way a woman can to a man, and it has catapulted me into a new level of awareness. I, too, am suddenly clear about our purpose here as people. And that is to love each other. I really wish I could kiss you through this helmet, sweetie."

Thor was gladdened to hear Helena say these words, but they didn't surprise him. He knew he had found his soul mate. Even so, not knowing her answer to what he was about to ask made him anxious. "Helena, our love-making has most probably been detected and reported by Vigilant Eye trackers, as we knew it could be. If we were to return to Earth, there would most likely be a hearing which would have the predetermined result of our being exiled--to fend for ourselves in one of the unbearable labor camps. Not many survive even a few days in the harshly frigid conditions, and when one collapses from exhaustion, they are phased out.

"On Mars, I have friends in an underground organization called the Subterra Rebel Force which has encampments that have gone undetected by the Delegation so far. There are other compounds across the solar system. One is in the Rocky Mountains near Colorado Springs. They are planning a military overthrow of the Delegation and its megaconglomerates in a fight for the freedoms we have just described to each other. My part so far has been as an infiltrator of the workforce, to deliver the SRF message to other orphillions."

Thor hesitated before he asked Helena the question foremost on his mind. His heart was hinging on her answer. "Helena, I am asking you to accompany me to Mars and to consider joining the Subterra forces. Together we can escape the UMO inquisition and become soldiers for independence."

Helena couldn't believe her ears on hearing what Thor had just revealed to her. That, like her friend Jack at work, Thor was a member of the resistance and that there were many others who held the same principles and who were willing to fight for them. The attempt at an overthrow could fail, but the idea was staggering and full of possibilities. And it would be better than freezing to death in exhaustion on a moon far from the sun's warmth.

Then she thought of other colleagues at Medicinal Chemistry, of her friends in Olde Earth Customs, of dear Wallace and Gelana, who owned the library store. Maybe they also dreamed of being liberated but

had been afraid to express it. She imagined herself cautiously presenting the idea to them, and after gauging their reactions, she would recruit those who held her same convictions into the rebel underground. Her graft friend Jenisse hadn't been receptive to the idea but perhaps the others would be.

But that would require her returning to Omaha. Where she would be subjected to a hearing. Was that something worth risking? Of course she would be found guilty. Or possibly, she would only be given a warning because of past exemplary behavior, and her skills in the lab were vital for UMO's pharmaceutical interests. There was also the evidence of the crime on Europa which she had uncovered. It could be used as a bargaining chip for leniency.

And there was her relationship to James Ganymede who had put her in charge of a special, classified project.

"My love," she said, "you have given me an exhilarating taste of freedom from our oppressive government, but it is to that which I must return. No Thor, I will not go to Mars with you at this time. I will take my chances on Earth."

His heart sank as his worst fears were realized. "But there will not be another time! They will be unreasonable and you will be sent to one of their torturous prisons!" Actually, there could not have been a worse torture for Thor once he had heard her answer.

Helena tried to explain her reasoning, except for the details about Ganymede's special project. "I believe that with my training, knowledge, and responsibilities in the lab where I work, they will think twice before deciding to eradicate me."

Thor tried to further persuade her to escape to Mars with him, and when he could not, he threw his hands up in exasperation and stamped away from her and toward the spacecraft.

Alone on the grassy knoll, she watched as he tore out of the dome with the escape velocity of a bat out of hell.

## CHAPTER 29--SLIM CHANCES

2097, Five weeks later, in June: Mars

Thor trained well as a member of the resistance. His skills as a soldier were already proficient; he was asked to train others in space flight. He gained certification in first aid and emergency field surgery. He mastered the encoded language and utilization of the QuEST\* communications system. He learned more about element 146 nuclear weaponry.

A long-sought-after method of preparing a usable isotope of element 146, an easily controllable source of concentrated radioactive energy, had been perfected by scientists in the Subterra's transmutation laboratory. The nuclear reaction between two particular isotopes of uranium and xenon produced the desired fissionable product. Only a few kilograms of element 146 in a warhead were needed to generate a nuclear reaction that could exceed a megaton of destructive force.

After joining the SRF, new recruits took part in mind decontrol therapy. This was necessary to help each rebel defector make the transition from living under the constraints of Delegation authority to being allowed the privileges granted by SRF principles. Most respond rapidly and favorably to the therapy. In others, even though each had chosen a renegade's life, going against ingrained doctrines had created internal struggles which had led to depression and other mental illnesses.

Thor's deprogramming sessions proceeded smoothly, easily erasing the years of Delegation influence.

At the Martian compound, UMO's logo and identification numbers were removed from the spacecraft Thor had been issued. The craft's surface was fitted with radar-absorbing tiles before being painted a jet black so shiny and dark that it seemed to ripple like a pool of crude oil. Thor combed through its framework to locate the cobweb of wiring leading to the Vigilant Eye's tracking devices, which he promptly destroyed, thus severing all ties to UMO and the DTM. Shortly after the ship's remodeling and while blasting away from the planet during tactical flight maneuvers, Thor had become awakened to the liberating thrill of being completely unleashed from the Delegation Tenets and the ubiquitous Vigilant Eye.

Becoming known for his verbal fluency, Thor was asked to be on the team which was to revise the SRF's mission statement. The team described a society which would aspire to attain true wisdom while regarding all with dignity and equal worth, and while encouraging the success of its citizens.

"Mission Statement of the Subterra Rebel Force

Kappa decade, year I

Our vision of a new solar system order is one of great opportunity for all. No one is lacking in basic needs. There is due process to protect one's rights, and no one is owned by another. In our ideal, each is free to pursue his or her dreams--their scopes limited only by the imagination and the farthest reaches of outer space.

Achieving our objective will undoubtedly involve a most challenging, though rewarding, process. We acknowledge that the government also has needs in sustaining an orderly populace while managing profitable enterprises. We aim to assist in these endeavors but while exercising safe and dignified methods conducive to our humanitarian quest."

\* \* \* \* \*

During afternoon drills, Thor was engaged in hand-to-hand combat practice with a fellow rebel named Brydak SY419ch. Brydak's dark golden, blonde-tipped hair was shorn close to his scalp but left a little longer on top where it curled. He wasn't as tall as Thor and was of a slighter, more sinewy frame.

The men were eyeing and circling each other on a wrestling mat. Each was bent forward with arms in ready position, searching for an opportune moment in which to strike and pin down his opponent.

Thor had noticed an obvious accent from Brydak who said, "You seem rather sullen, mate. But it seems to increase your prowess in this exercise. I see I'll have to rely on my famous 'Down Under' agility to come out of this row in one piece."

It was Thor who made a lunge and with his foot, stepped behind one of Brydak's legs in an attempt to topple him to the ground. Brydak moved aside swiftly, escaping the fall.

Back to circling each other, Thor glared at him. "I am concentrating. If you take that for sullenness, then that is your prerogative."

Thor executed a move to capture Brydak's arm behind his back and bring him to the ground, but Brydak used this to his advantage and positioned himself to catch the larger man off balance. Thor landed on his front side with a thud. Brydak immediately splayed his body over Thor to pin him down. He grabbed Thor's arm and firmly clenched it to his back, wrenching it, causing Thor to wince. Brydak moved his forearm against the larger man's neck to more tightly press him to the ground.

Brydak strained to hold Thor thus and whispered hoarsely into his ear, "Well, sport, I'm going to hold you like this until you admit that you are a sullen bastard."

Thor used all of his strength to break free, but the hold was solid and he had to surrender. His cheek was scrunched into the mat's surface. "Ok! I am what you say!" he exclaimed in a muffled voice.

Brydak released his grip. "You are a worthy opponent, my friend." He rose and offered Thor his hand.

Thor grasped it and allowed himself to be assisted to his feet. "You have given me a run for my credits, Brydak." He began to massage the arm which Brydak had twisted with the hand of his other arm.

"There are not many in this camp who can pin me down on the mat. In our next match, I will have to concentrate harder in order to become victorious."

"Or you will have to become a less sullen bloke. I think I'll call you Bluey on account of it suits your disposition." Brydak released a jovial laugh and clapped Thor on the back. "How about we share a cool ale in the sauna, eh Bluey?"

Thor couldn't help but smile at Brydak's genial nature. They went to the steambath with a couple of tall, dark schooners of bock. Each shared his story of how he had become an insurgent.

Brydak said, "I'm from Tasmania, originally--the Land of Apples. It was in Sydney where I manufactured biomolecular circuit boards at a DNA computing firm called Nano Circuitry. I photoholographed the double helix molecules into silicon substrates.

"It was there where I was given a Subterra paperite yabber, and my mind has never been the same."

Brydak had become acquainted with a silicate delivery pilot named Alia CB822jz, who was also a Subterra infiltrator. She had told him that there were regular deliveries made to Alice Springs, near the SRF compound in the Macdonnell Ranges at the heart of the Australian Outback. Brydak had assisted with the defection plan of himself and eight other orphilion workers.

It was near sunrise when the group had stowed away on Alia's airtruck before it left for Alice Springs on a delivery. Special neck coverings had been worn in an attempt to create interference with the radio signals that would be scanning for the exon chips in their throats. Regardless, they had been detected on Nano Circuitry's security radar which had been amplified and able to penetrate the neck coverings.

Two police crafts were soon in hot pursuit, closing in on and firing lasers at the lumbering delivery vehicle. Alia had managed to dodge the Nano patrol, constantly changing direction in her flight path over the one thousand kilometers of desert. Seeing the oncoming Ayers Rock monolith, the morning sun making it glow a deep rust-red, she'd flown low to the ground, disappeared behind a bluff, and had risen quickly just before she would have flown into the 350-meter high sandstone formation. Her out-maneuvering and a bit of luck had caused both Nano patrol cruisers, which had followed her behind the bluff, to crash and burn into the rock wall.

"Ooo-wee! What a corker of a light show they put on for us when they crashed!" Brydak appeared to be reliving the moment. "It seems the mugs had forgotten about the effects of Newton's laws of motion!" Thor grinned at his wry observation. "That gave us time to reach our destination in the Macdonnell Ranges near the Alice billabong before they dispatched another Nano enforcer. And here I am today, mate, fightin' for the freedoms we all deserve."

"It is inspiring to hear of your narrow escape, Brydak," said Thor after hearing the suspenseful narration.

Thor told Brydak of his growing unrest with his position at Universal Mining. He told Brydak of when he had started doubting the Delegation's wisdom, of Seyfert, and how murdering the woman Aurora on Mars was the last time he had willingly submitted to the government's lunacy.

In the sultry bathing chamber, Brydak savored a long draft of the ale after hearing Thor's story. "But there is something you aren't telling me."

Am I as transparent as a comet's tail? asked Thor to himself. At first he was going to deny it but Brydak was perceptive. "Well, there is a woman."

Brydak surmised, "Ah...an indiscretion of passion, eh? Is she still alive?"

"Well, yes...or, she may be dead by now. I am beside myself with worry about what may have happened to her." Thor went on to tell Brydak about the Europa mission and about his love affair with Helena which he could not have prevented with all of his might. He spoke about how Helena had refused to come with him to Mars because of some ambiguous urgency which required her presence at her place of work. He told Brydak how, since the moment she had opted not to go with him, his insides felt like they had been mangled by a pack of ravenous hyenas. There was no way in his lifetime that he would be able to remove her from his mind or untangle her from his soul. Nor would he want to. He just wanted her with him--safe in his arms.

Brydak became reflective. "It is another reason why we must accomplish our mission and crush the

DTM and its megaconglomerate fascists--so that we may be free to follow our hearts."

\* \* \* \* \*

Deep into a sleepless night is when your subconscious drives the thought process, bringing to surface your most desirous hopes and daring dreams, shared only, perhaps, with a soul mate, if you are lucky enough to have found one.

The stark reality of morning has a way of rudely informing you that it is not your choice whether these imaginings come true or not. You have no control. Never had. In your efforts to forget about them, daylight mercifully fills the mind with sights and sounds that diminish the intensity of the night's hopes and dreams--ideas of the way things ought to be--unless you find yourself alone. Then the day becomes as poignant as the night.

That night in his bed--a night no different than any other of late--Thor's mind replayed scenes of her dark-haired beauty. Helena had opened her arms to him in a welcoming embrace. In their passionate union, her womanhood had willingly answered to his potent need. He remembered in detail every sight, scent, and sweet emotion that he had experienced while with her. He was experiencing them now. His desire to be with her couldn't have been more intense. How he ached to hold her.

He thought of how they had laughed together at their own silly jokes. It reminded him of his friend, Seyfert, who had always made him laugh in their dormitory module. After his passing, Thor hadn't felt the same zest for life until he'd been with Helena. With her, he had been able to view things in a more humorous and uplifting light.

And with her, he felt a fundamental sense of fulfillment as a man--a cosmological purpose to live out his time with her. It was exquisite fate that had brought her into his life.

They were able to read each others' deepest thoughts as if by mental telepathy, their brainwaves entangled. As though they were bio-versions of the SRF's quantum communication devices and could send thought patterns to each other instantly through space. While they had been on the rescue mission, he couldn't have misread her; he was sure she had felt as he had. Even now, across the distance between Mars and Earth, he was certain she was thinking of him. They had a communion across space and time that was simply beyond their control--or so he would like to believe.

Then his thoughts turned to the blatant fact that she chose not to be with him.

This knowing--yet not knowing--if they had a future together made him feel as though he was dangling from a thin, frayed, spider's silk over a pit of voracious beasts.

Alone now in his training for a cause that was strong in him, without Helena, it was not as important. The only thing that kept him functioning each day was the assurance from her that she would join him in the Subterra when her duty at the lab was completed. That is, if she survived the ordeal at her hearing. And what were the chances of that? Well, a slim chance was what he was betting on.

## CHAPTER 30--THE ZODIACAL LIGHT

2097, July: Earth

It had been eight weeks since Thor had last seen Helena. He took a sip from his glass of Quasar Spirit, an intoxicating mixture strong enough to make the most troubled mind forget its problems. He was in Olde Earth Customs at an old-fashioned tavern called the Zodiacal Light. There were a couple of human glowbugs and a graft sitting at a table away from the bar. He recognized a song playing in the background as one from Helena's music collection. It was a thought-provoking ballad performed by a once famous folk singer named Bob Dylan. Thor was on glass number three and all he could think about was how his life was going so wrong. And here he was, drinking alone at a bar, in a town from which he should be parsecs away--if he knew what was good for him.

Having fumed at her stubbornness and then becoming angered when he had not been able to make her understand, he'd left her on Europa and flew off toward Mars. After one day, he had turned around with a plan to literally kidnap her and bring her forcibly to the Subterra. To do so, he would have resorted to rendering her unconscious if she hadn't pleaded so earnestly--if it hadn't been with some great urgency that she needed to return to Earth. But she would not disclose exactly why. She thought she would be spared a hearing because of the importance of her position at the lab, she had said. Helena had cried and begged for him to take her back. To the ensuing inquisition, he had thought. After the back-up medical crew had arrived on Europa, Thor and Helena had departed for Earth. On the trip back, all he could do was hold her, and cry with her, and love her in the face of an uncertain future.

After dropping her off at the outskirts of Olde Earth Customs, he had made a hasty getaway. As he left, he peeled the exon chip from his neck and crushed it under his heel--an action symbolizing that he had now and forever separated from his duties as an officer for the Delegation and UMO. He had, at that moment, become a rebel soldier, a deserter of his former life, a subversive, and a target for Delegation soldiers.

But to leave Helena had been like pulling himself away from the gravity field of a most massive neutron star. He had never before felt so alone.

At the Martian camp, Brydak had suggested that Thor enter Helena's code on the exon tag locator of the compound's qubit computer. On the Earthian hologram and to his great relief, Thor saw that she was alive at her home! His heart pounded as he stared at the dot of light that was Helena. He even tried to touch the elusive point, poignantly remembering how she had felt under his hands.

Even though there was no way for her to know that he was monitoring her location, he felt as though he was invading her privacy. Even so, it was a long while before he could bring himself to turn the locator off.

The next day, a young soldier found him at the hologram monitor. He demonstrated to Thor how it was possible to connect to the Vigilant Eye. The young man keyed in Helena OM781eh. It took Thor's breath away to see her kinetic image as she sat working at her desk in her compartment, a look of concentration on her face.

Another time, in spite of the slight pang of guilt brought on by spying on her, he had detected her walking down a street. The sunlight was gleaming on her hair. She was dressed in her lab clothes. She was walking beside a man with long, dark hair, also in lab apparel. This created an uneasiness in Thor which suddenly flared into a raging jealousy. Helena was with another man! He painfully watched as she held the man's arm while he leaned his head closer to her so she could whisper into his ear. As though experiencing an earthquake beyond the Richter scale, Thor's world came crashing down around

him.

It took him days to recover from the devastation. He forced himself to remain calm by rationalizing that there must have been a logical and official reason why she'd been so near to the dark-haired man and that Thor hadn't simply evaporated from her mind.

Afterwards, he regularly located her by way of his reprogrammed holoviewer processor. He settled for the point of light--as seen from a smaller Earth that was projected in front of him from the crystal-laser cells of the lenses--deciding not to magnify her image and take the chance of viewing another upsetting scene. He needed to know that she was alive, and he wasn't going to pass up this only contact with her, even if it was as feeble as the dim light of a white dwarf star.

Presently, Thor was in Omaha to ask her again to go away with him, but his nerve was escaping him, and doubt was seeping into its place. She hadn't arrived at the rendezvous at the SRF Rocky Mountain site at their predesignated time. At first he worried that she'd been captured while trying to escape--and that was another reason why he was here now, to remove her exon chip--if she still wanted to leave; he'd recently had training on how to do this. But his holoviewer had told him she was alive and well. And he was beginning to feel that he didn't have any right to be there. People changed. Maybe she didn't want anything to do with him. Yet he was hoping to see her, just the same. He needed to come face to face with his worst fears while praying that the obvious wasn't true--that she had found somebody else!

Except for the bartender, there was no one to whom he could tell his troubles, of which he never had any of significance before. "I've done the most hideous of things." Thor's words were slightly slurred. His elbows rested on the bar. "On Mars, when I was a peace keeper, under orders, I violently destroyed a woman's life.... The result of my action nearly tore my insides in half. It has given me a conscience--which I never asked for." Thor peered above his glass at the bartender, "Do you have a conscience?"

The short, gray-haired man, while wiping out a glass with a white towel, nodded yes.

"Then you know what I'm talking about." Thor's discourse went on. "It's hell having something in you telling you right from wrong and stopping you from doing the things you used to do without a single hesitation because you were led to believe that what you were doing was right--without question." The bartender looked at Thor kindly, having heard it all before.

"I'll have another." Thor pushed his glass toward the other man as he continued. "And even worse than that, I knowingly, and I'll admit stupidly, placed the love of my life, my Helena, in a life-threatening situation which could have caused her deportment to an infinitely dense black hole or some God-forsaken place. She is the woman who fills my every thought and for whom my heart beats--my sole reason for living. And she could have been killed because of my selfish needs. I was acting like a space cowboy. It turns out I'm more like the rodeo clown. I've caused the one person that matters most in my life to despise me." With that, Thor put his head on his arms and began to sob.

The bartender handed him a towel, patted him on the shoulder, and said the obligatory, yet caring, "There, there."

Approaching the bar from behind Thor was a brunette woman, dressed in galactic bar-hopping wear. Tears were welling up in her eyes. Her girlfriends had gathered at a table after they had entered the bar.

The woman reached the weeping red-haired hulk in front of the bartender to whom she said, "He's with me." She grasped Thor's broad shoulders to turn him. "Thor, my love, I'm right here. I have never stopped loving you."

He stopped his crying long enough to look at her. He thought for a moment that he was seeing an apparition conjured up by his despair; his conscience was trying to further torment him. He reached for



her anyway and found that his apparition hugged back and kissed him on his forehead, his cheeks, his lips.

While Helena used the bartender's towel to wipe the tears from his face, she said, "I've missed you so much. Let me take you home, honey. My compartment is within walking distance of here."

He got off the barstool--not quite to the can't-walk stage yet--and Helena allowed him to lean on her as they walked arm in arm through the door of the tavern.

In a drunken state or stone cold sober, Thor couldn't have felt more perfect. "Helena, I never want to lose you again. You are the best thing that has ever happened in my life. Darlin', will you have my babies?"

Helena burst out laughing at the spectacle they must have made as his big physique was supported by her smaller size, at the fact that Thor was drunk and uninhibited in expressing his feelings in public, and at the romantically shocking question he had just asked. "Of course I'll have your babies. I can think of nothing I want more!" she answered in an equally preposterous fashion, although they were words that couldn't have rung more true.

They arrived at her sixth-floor, four-chambered compartment where Helena led him to the divan. Thor swayed a little as he stood and glanced around, not at all surprised to see that the room contained an abundance of potted foliage arranged on tables and on the floor.

From his waist pack, he removed the recently invented Vigilant Eye interference mechanism. He switched it on and placed it by a fern on the table near the divan. Then he wrapped his arms around her and gave her all the kisses he hadn't been able to give her in the two months they'd been apart.

This act alone was highly arousing to Helena, but it was necessary to pull herself away so she could call up a strong anti-hangover brew for Thor from the kitchenette. It was not from a recipe she had picked up in pharmacy school, but one she had learned from Grys, the street scavenger healing man. It neutralized the effect of the acetaldehydes acquired from a long night of drinking.

Thor held on tighter and implored, "Don't leave me!" Helena assured him that she would be back in a minute.

When she returned, he was sprawled out on the cushions, softly snoring, his bearded face relaxed with a slight smile on it. She loved him so dearly, this wonderful, brave, handsome Norse god in front of her. Even when he was drunk. Even when he had murdered someone. She paused on that one. She'd overheard part of his talk with the bartender. She was sure it wasn't his fault.

Helena set the glass of the anti-intoxicant down, pulled off his boots, and removed his communicator, phasor gun, and waist pack. Then she laid on the cushions beside him. With her arm around him and her head on his chest, listening to the steady thudding of his heartbeat, she fell into a joyful sleep.

The next morning, Helena awoke to find herself alone. "Thor!" she cried out.

"I'm here, darlin'," he called from her small kitchen. "What would you like for breakfast?" Still wearing his black, rebel uniform, the jacket's fasteners now loosened, he had prepared, in the old-fashioned way, two fluffy, yellow omelets and toast.

Raw animal products were uncommon. The more energy efficient way to feed the masses was from plant sources. But on rare occasions, Helena was able to purchase nanoengineered meat fibers, egg fluid, and milk from the Olde Earth Customs Gourmet Shop.

She joined Thor at the kitchen counter to eat the simple, yet delicious-looking, meal placed in front of her. "I didn't know you could cook." She tasted a bite. "Hmm, is there anything you can't do? I think you are quite a catch."

He studied her as she ate. He watched how her fingers gently curved around her utensil, how her blue eyes sparkled with mischief, and how her succulent lips had a bit of egg on them. "Here, let me help you," he said. He leaned across the counter and slowly licked the egg from the corner of her mouth.

"Mmmm, Thor honey," she murmured, "what was that, desert? I like it...very much." And she left the table, announcing that she needed to take a shower. After clearing away the dishes, he followed her.

She was naked and about to turn on the spray when Thor entered the shower stall. He, still fully clothed, had only one thing on his mind. His eyes interlocked with hers as he menacingly approached her, backing her against the cool metal wall. His barbaric behavior would have intimidated anyone else as he pressed his firm, leather-clad body hard against her nude, supple form as his hand grasped her breast and his mouth ravenously covered hers. He unfastened his pants and took her right there against the wall.

Helena moaned in surprise at the urgency of his love-making. She responded to his lustful ravaging with an equal, blinding force of passion.

Their true, primal natures had been stifled for so long. How quickly both climaxed in a most vocal and astonishing rush of meteoric ecstasy.

As they drifted back to the third planet, Helena wondered how Thor could still be standing, because if he was to back away from pressing her against the wall, she would surely tumble onto the floor. Just as he did so, he scooped her up and carried her to the bed.

## CHAPTER 31--PROJECT WISDOM

2097, Later that morning

They were lying beneath the thermal coverlet, warm in the afterglow of their morning of becoming reacquainted. With his arms around her, her head on his shoulder, and in total relaxation, Helena touched the scar on his throat and asked him about it. He told her how he had become unburdened of his exon chip in the Martian Subterra. Cherishing everything about him, she ran her finger lightly down the healed wound. She could sense, as she had before, the pain he had suffered in acquiring not only this visible scar but other, deep emotional scars, as well.

Thor relished holding Helena in his arms. He felt protective of her; it was instinctive. Whenever he could, he would shield her from sadness or harm. He smiled when he recalled her feelings about not needing protection when she'd been uncovering clues on Europa. He decided not to let her know of his plans. He would protect her while allowing her the freedom to follow her heart's desires. He wouldn't want it any other way.

He had the reputation for being articulate, yet in expressing his feelings to himself, all he could say was that he simply loved Helena. He loved her with all that he was--with all that he would be.

He tenderly kissed her temple as his fingers ran through her hair. Something else was also on his mind. "Helena, my darlin', if I may ask,...how in the hell did you manage to escape the fate of being sent to Pluto?"

Because Helena had resolved never to take a chance on losing Thor again if she could help it, she needed to come forward and tell him her darkest secret. If he could not bear to be with her after that, then she would blame no one but herself.

Still lying in his arms, she was quiet for a moment, carefully choosing her words. "A little over a year ago, while working in the lab at Medicinal Chemistry, I was summoned to meet with the visiting James John Ganymede--"

"The King of Oppression himself," interjected Thor.

"Exactly," she replied. "We were the only two people in the room. I sat down at a table across from him. My guess is the Vigilant Eye had been turned off. Ganymede said, 'Dr. Helena, I understand you have an unprecedented talent in the research department, an uncanny ability when it comes to finding cures for disease--that you excel in pinpointing compounds that effectively destroy microbial problems.'

"'Yes, that is what I am trained to do, Mr. Ganymede,' I responded.

"'I have a classified project in mind that I would like you to consider directing for me. If you are successful in solving this problem, you will be rewarded with--how shall I put it?--special compensations.'

"I wondered what he meant by that. Once he tried to force himself on me."

"He what?" The hairs on Thor's neck stood up.

Helena sat up and described Ganymede's uncalled for advances on her in the chemical analysis lab. She assured Thor that it had happened only once and that he hadn't gotten very far.

About the project, she continued. "As to his request, his eyes peered into me so that I could only answer, 'Loyal to the Company, I am, sir. I will do my utmost to help you with your problem. What would you like me to do?'

"He answered, 'I would like you to synthesize a colorless, tasteless, and odorless compound that would cause a person to become forever hypnotizable with a one time dose. The person would succumb readily to the power of suggestion. You see, I have a domestic problem with an orphilion worker who seems insincere about her belief in the Wisdom of the Delegation. I caught her switching channels when she should have been watching the daily image instruction. She's a good worker otherwise, and I would really hate to dispose of her if she were to commit a more serious disobedience in the future. We can't have her not subscribing to what is right, can we?'"

"I was hoping he wasn't seeing my own developing cynicism about the Wisdom of the Delegation, but instead regarded me as faithful and subservient to its cause. 'Of course not, Mr. Ganymede,' I replied.

"'Good,' he said. 'And I need this medication to be undetectable after it has served its purpose. We shall entitle this assignment: Project Wisdom.'

"I didn't quite know the significance of his request until I began the research and discovered that should we be able to develop this compound, it could be used to cause the downfall of anyone he chose."

"So what did you do?" asked Thor.

"I chose to believe him--that it was to protect workers from being eliminated rather than believe what was nagging heavily on my mind. Notorious for his ruthlessness, Ganymede could potentially use the drug on his competitors and become the self-appointed premier of the Delegation of the Twelve Megaconglomerates. His opinion about the premier bill is well-known. The drug could provide him with the means of becoming the sole ruler of the solar system!"

"And his unquestionable implications about the dreadful consequences facing disobedient orphilions left me with no choice but to comply. My premonition was that if I refused, I would be phased out. I interpreted his 'special compensations' to mean simply that I would live.

"I gathered together a team of analytical botanists, nanochemists, pharmacologists, and neurobiologists. Ganymede supplied the psychodynamic engineers--to ensure the team was unbiased, I presume. I presented to them the problem of Project Wisdom in a clinical manner, telling them that knowing the reasons for designing such a potentially dangerous medication would not be revealed to them, just that it was a noble request by our esteemed leader--and the project was to be kept top secret.

"We needed to discover or synthesize a biochemical that would block a specific synaptic neurotransmitter in the behavioral response center of the brain. We knew the composition of the transmitter, but we were having a difficult time developing a blocker for it at the post-synaptic dendrite."

Her technical language was music to Thor's ears. He smiled softly. He was becoming aroused.

"The blocker would have to actually destroy the receptors at the dendrite in order for a one time dosage to work for the life of the person. Months into the research, we finally encountered a molecular structure with definite possibilities. Scanning through computer files for a similarly shaped molecule, we found one in the plasmodium--that is, in the living mass--of a giant slime mold that had been discovered growing under the polar icecaps of Mars.

"We isolated the compound and designed a derivative of it that would possibly work. The nanochemists synthesized enough of it for testing.

"We were pleased when our primate tests proved successful. The orangutans became docile and easily trainable. Any stubbornness of nature they might have had had disappeared.

"For human testing, Ganymede arranged for some soon-to-be-deported orphilion workers to be used in

our experiments. Most in the control group, given a placebo, remained closed to the power of suggestion. After administering the drug, the psych-engineer determined that the test group became very easily hypnotizable and obedient. Their personalities remained intact, but more complying and accepting of subservience. The effect did not wear off, even after weeks. They were actually sent back to their original jobs.

"Wow, the implications of that! Take the drug and avoid a miserable dying in a remote penal colony! I wanted to believe that Ganymede really was looking after our welfare."

"But he could sell the drug to GenSapiens," said Thor. "It would be valuable for reinforcing their indoctrination procedures."

"I'd thought of that also," answered Helena, "but then came to the conclusion that Ganymede had his own agenda. He wanted this kept confidential."

"Something inside of me prompted me to order the team to put in a time delay factor and to design an antidote which would neutralize the drug before it actually destroyed the synaptic receptors. Those facts I kept from Ganymede and the psych-engineers."

"The usually composed Mr. Ganymede was giddy with excitement when we were nearing Project Wisdom's objective. All that needed to be done was a few weeks of wrap-up experimentation and for the drug to be manufactured and quality-tested."

"Then the emergency on Europa occurred. Ganymede was willing to delay the project's completion for the sake of technetium production when he designated me to deliver the orchid medicine. Needing a break from the intensity of the lab work, I was more than happy to comply. I instructed the research team to do other work in their own departments until I returned. We all needed a change of pace."

"And that, my love, was why I needed to return to Earth. And why I thought Ganymede would grant me clemency on the one indiscretion that I have ever committed as an orphilion worker." She took his hand and tenderly touched her lips to his palm. Looking into his eyes, she said, "And that was loving you."

As though suddenly realizing why Thor was in Olde Earth Customs, she explained, "I imagine you were concerned when I didn't show up at the SRF camp. Achieving my goal here took a bit longer than planned. My ride to meet you had been set to leave tomorrow morning."

The word concern was an understatement for worried sick, thought Thor. He should have left her his QuEST\* communicator.

"Ganymede needed me to complete his special project. But because I had discovered your love and a chance for freedom through the Subterra, I tampered with the formula to make it totally ineffective. Ganymede should discover this little fact any day now. And if my attempt at escape fails, I will surely be phased out."

Thor looked at Helena with wonder. How courageous she was to defy Ganymede. How could he not love her even more for risking her life to do the moral thing? He said with new insight, "On the return flight from Jupiter, you must have agonized over whether or not to tell me of this insidious project that was in your charge."

"Yes," she said, "especially after admitting to each other our desire to be together and our discontent with the Delegation government. I thought if I told you the complete and sordid truth, then you would have despised me."

He wouldn't have, of course. And she'd been correct in insisting that she return so she could destroy the formula for the hypnosis drug. It was the defining moment in which she, too, had become a rebel.

If she had simply stated the whole truth about her predicament, he could have overseen her safety and avoided eight weeks of his own torment. Ah, he sighed, it never served to speculate over what should have been.

"I could never despise you," he said in a half whisper as his voice broke with sudden emotion. He held onto her more tightly.

After a few minutes and with sudden urgency, Thor got up to dress. "We have to leave, Helena. But first the exon chip in your neck will have to be disabled. The SRF has recently designed a procule drug that will disassemble it. I have a few applications of it here, with me, but there's a risk." Helena had risen to dress also. She stopped in her tracks and waited for him to explain. "It hasn't been perfected yet. There's a seven point two percent chance that it will affect an enzyme important to neuron function and cause irreparable brain damage." Seeing her look of dismay, he quickly added another option--though he was unsure that it was a better option. "Otherwise I can perform an operation here to remove it directly. During the time I have been on Mars, I have had training in emergency field surgery.

"The procule action will take about an hour before we can leave without the chance of it being detected. The surgery will take about the same amount of time. Either choice, Helena, it's up to you."

"What are the risks of the surgery?"

"There's the danger of infection. You'll feel physical discomfort during the procedure and afterwards, until the incision heals." He could be nothing but honest with her. "And I could botch up the procedure and you could die from excessive bleeding."

He gave her a few moments to deliberate. "Your choice, Madame?"

"Your recommendation?"

If he were to operate, a disastrous mistake could easily be made. But he didn't consider a more than seven percent chance of Helena suffering from brain damage because of a genetic predisposition to having a certain enzyme structure the best of odds, either. He would simply have to perform the surgery with zero percent error.

"The surgery," he said.

She gazed steadily, bravely into his eyes. "No, I know how you feel about--" She paused and then said with certitude, "The procule."

"Feel about what?"

"I've decided on the procule."

"You know how I feel about what?"

She hesitated. "About the sight of blood."

She must have been thinking about his moment of weakness at viewing the corpse and the trouble he'd had in giving her the inoculation on Europa. That she was choosing to take the risk of brain injury in order to spare him anxiety made him more determined. "No, I will do the surgery."

"Are you certain you can do this?"

Besides knowing that his life would be a living hell without her, he had never been more certain about anything in his life. He nodded his head.

"I have confidence in you, Thor. What would you like me to do?"

"I need you to take your top back off and lie still on the bed." He was wishing his request could be for a

more pleasurable purpose.

She carried out his request and lay motionless on the sheet. Thor turned on the lamp and directed it toward the bed. He then removed surgical tools from his waist pack and unwrapped a sterile cloth.

After sterilizing his hands, a blade, a forceps, and a surgical spreader with a solution, he placed the tools on the cloth. He gently wiped Helena's throat with a cooling antiseptic/anesthetic-soaked pad. Directing his laser scalpel against her skin, he froze. He had felt apprehension when he'd injected orchid medicine into her, but this was going to be an exponentially worse act. He knew of the pain she would feel afterward from the crude surgery--if he didn't kill her first.

"I trust you, Thor. Everything will be all right."

Her words gave him courage and he made the incision. "Please lie very still. And don't talk." The ruby laser line sizzled on her tender, white skin and cauterized as it cut. It took intensive concentration to steady his hand in order to avoid mutilating his beloved more than necessary. He tried to ignore the rank odor of burning flesh.

Suppressing a wave of fear, he reminded himself that he had received high marks when he'd become certified to perform this procedure. And he had conquered his irrational reaction to the sight of internal organs. Or so he had hoped. After applying the spreader to hold open Helena's skin, he had a moment of feeling dizzy, but then consciously pushed his phobia to the back of his mind. He had no other choice. He laser-sliced a fine line between adjacent fibers of the platysma muscle. His finger reached through and pushed aside the strap of the underlying sternocleidomastoid while feeling the pulse of her carotid artery and the bump of the exon chip. He moved the spreader to hold the muscles apart.

Helena felt the sting of the laser scalpel against her. A queasiness set in when she smelled her sizzling flesh and felt him reach into her neck. To ignore the uncomfortable sensations, she closed her eyes and concentrated on Thor, of their time together, of their future, of how wonderful he made her feel. He would be an essential part of her forever.

He was surprised at how well he was doing until he thought that the artery he was about to bring a precision surgical scalpel near supplied blood to her brain. Tiny millimeters in the wrong direction would kill her. All his experience doing precision work on computer components and his surgical training at the Martian Subterra could not prepare him for what he was about to do to his living, breathing Helena. He moved his arm and used his sleeve to wipe the sweat beading up on his forehead.

Pausing to gather his courage, he carefully used the shiny blade to cut the whitish connective tissue along the vessel's surface to expose the pinhead-sized molecular computer. He used a pair of sure-grip, tapered forceps to remove it. Now don't drop it and lose it inside of her, he told himself. He steadily raised the forceps and placed the chip on the end table. Filled with both joy and relief, he felt he was in the clear and started to administer the protein-polymer suture adhesive when the door chime rang.

"Don't move," he told her. He quickly and skillfully squeezed a line of the goo along the muscle incision and then a bead along the outer incision on her neck. "Are you expecting company?"

The chime sounded again. "No," she answered.

"Quick, get dressed. I'll see who is at the door." Thor left the room and turned on the monitor. He saw that two Delegation enforcers were on the other side.

Helena, wearing a red turtleneck sweater, entered the room. He would let her know at a later time how much he thought she was drop-dead gorgeous in red. He motioned for her to ask the visitors what they wanted. She went to the monitor and clicked on the speaker. Her voice sounded nonchalant when she asked, "May I help you?"

One of the military officers answered, "Chief Ganymede would like to thank you personally for your outstanding accomplishments on Project Wisdom. He has asked us to escort you to his home for a celebration dinner in your honor."

She looked at Thor while saying, "Well, ah, it will take a few moments for me to prepare my appearance for an occasion such as this." Thor wondered where she had learned to act like that, a smooth talker when her life was in grave danger.

Thor readied his gamma ray phasor. He gestured for her to let them in. "Would you like to wait in here?" She unlocked and opened the door. The first UMO officer entered and was met by a knock-out ray from Thor's weapon.

The second soldier aimed his phasor at Thor, but Helena lunged at the man's arm, knocking the gun to the floor before the trigger was pressed. The burly soldier swept Helena out of the way with a mere brush of his arm. She was flung against the wall, which forced the air from her lungs, and she crumpled to the ground.

Thor aimed his weapon, and the enforcer dropped to the floor just inside the doorway. He quickly pulled him further into the room and closed the door.

He hurried over to Helena and a sense of helplessness washed over him. There was nothing he could do but rub her back and hold her hand while she struggled to regain her breath. Noticing a wet mark developing on the fabric against her neck, he pulled her collar down and saw that blood was oozing from around the suture. He quickly readministered the suture adhesive to the wound.

Her regular breathing returned. After she assured him she would be all right, he headed toward one of the soldiers. "We'll have to put on their uniforms so we can make our way to the spacecraft and then head for the Rocky Mountain Subterra camp."

After a quick stop at the library store, they walked unnoticed to the edge of town to a parking area for space transport ships. They entered Thor's vehicle and flew off to a new beginning.



## CHAPTER 32--JUSTUS WELLES

2096: Earth

In discovering that Delta CS537bq had compassion for Lira Ganymede in her sorry state, Lira found comfort in talking with her.

Delta was of medium height, average build, and middle age. Her light brown hair was cut in a short style with bangs. She wore the domestic uniform of a gray jumper with white blouse.

In the more private, food preparation room behind the kitchen, Lira and Delta were sharing a carafe of a mild, stimulant beverage. "Now, Mrs. Ganymede, I know what it's like to be under someone else's thumb."

Lira was in her usual black, making-a-statement attire. "But isn't it different for an orphilion, because that is how you are brought up--because you are trained to serve?"

Sipping from her goblet, Delta said, "They would like us to believe that we are happily subservient. But we are fully human as you are. We have a reasoning brain. We have desires and fantasies. But most of us find that our lives are made easier when we are obedient to authority. Ha!" she guffawed, "They don't give us much choice with our implanted homing devices and the Vigilant Eye everywhere we go."

Lira thoughtfully observed the woman across the counter from her. "Yes, you are opening my eyes to the ways of the orphilion. My life is not much different," she said while thinking of her overbearing mother-in-law. She paused to taste the dark, aromatic brew. "So tell me, Delta, what do you fantasize?"

Delta didn't have to think for long. "I dream of writing. I have many story ideas in my head. Some are good and of a moral nature. And some are quite scandalous!"

Lira's curiosity was roused. "Tell me a scandalous tale."

Pausing to select her words, Delta began a yarn about a beautiful and powerful woman entrepreneur who fell in love with an orphilion construction worker.

"What type of business was she in?" asked Lira.

"The resort management industry. She managed vacation spots across the solar system which were patronized by the rich and famous.

"The woman was having a new wing added onto her office building, here in the Springs. Each hot summer day, as she walked past the building site, she would catch sight of a handsome, blonde-haired laborer. He would give her a sexy grin, exposing his bright white teeth--a stark contrast against his tanned, sweat-glistened skin. She couldn't help but notice that he, in his scant tank top and tight work trousers, was muscularly well-endowed. He began to make it a habit to be near her path and engage in small talk as she walked by each day.

"She became attracted to him to the point of obsession. Her work suffered. She couldn't concentrate at meetings. Her tabulations took much longer than they used to. She daydreamed of his warm, taut body doing scrumptious things to hers. But he was an orphilion, and she was a well-respected business woman. She prided herself on her intelligence and position while reminding herself that he was only a skilled orphilion laborer. Yet her desire was out of control for the forbidden fruit of his loins."

Lira released a laugh. "So then what happened?" she asked. She found this quite humorous, yet her attention was held firmly to the unfolding storyline.

While looking at Lira, Delta appeared to be considering something besides the story. "What do you think happened?"

Lira was somewhat surprised at this turnabout but it excited her to be asked to continue the plot. She thought for a moment. "Hmm, how about this: The woman was called upon to oversee the remodeling of a resort building on Saturn's moon Titan. She employed the orphilion as part of the construction crew.

"Unknown to her, he was really a government spy searching for information on the illegal activities of her boss, the proprietor of the resort system she managed, who happened to be her husband.

"With Saturn's rings as a backdrop, and a jungle theme under the resort dome, the woman finds a way to get the orphilion man alone with her in one of the newly built and lushly decorated rooms...."

And thus began the creative and collaborative relationship between Lira and Delta. They knitted intriguing tales and recorded them on photonic data discs. Delta concentrated on the lustful parts. Lira blended in the corruption segments, drawing from her background as a Delegation member's daughter and a DTM chief executive's wife who was often called upon to entertain associates and clients. But of course, no one could ever know that it was Lira and Delta who co-authored stories about the taboo relationships between affluent DTM family members and orphilions or street scavengers. Nor could it ever be known that it was they who penned the illuminating stories about the all-too-plausible corrupt activities which had made the wealthy even wealthier. The books on disc were recorded under the pseudonym Justus Welles.

It was prearranged that on shopping day, Delta would clandestinely meet her street scavenger friend Darr at the nutriment store and hand him the latest story disk.

Darr was a delivery person for Zanue Forzt, who owned a small, independent publishing firm. Forzt wasn't above taking the juicy yarns which Darr would bring to him. He secretly published them photonically and on paperite. They were distributed by Darr and other elusive-to-the-DTM street scavengers.

The racy stories became extremely popular among the street people, the orphilions, and the middle class. They were notorious among the wealthy.

Some inside information of the DTM was being made public, and Delegation officials were not pleased that their investigators had not been able to uncover the author or the publisher of the exposés.

In the meantime, Zanue Forzt and Darr profited greatly from the venture. Delta was building up quite a nest egg, and Lira donated her royalties to environmental causes.

## CHAPTER 33--HELENA'S TREASON

2097, May: On a course set for Earth

Heading home from Europa and guided by her spiritual awakening toward the man of her dreams and away from UMO's tyrannical control, Helena felt a pressing responsibility to undo Ganymede's potentially disastrous order. She could not confess to Thor the true reason why proceeding directly to the Martian underground with him was an impossibility at this time. He would be appalled if he knew the integral part she had played in the development of Project Wisdom.

In the spacecraft, the tone of their love-making ranged from unhurried tenderness when they had weeks yet to be together to fervid urgency when the days had turned into hours. It was then that tears streamed down her face as she tried desperately to make Thor understand that she would escape with him in a nanosecond if she only could.

She also knew that Thor was trying with equal desperation to understand why she would rather gamble with her life than travel with him to safety.

There had been no question in her mind that she needed to return to the lab. She was fully aware that the attempt to halt the production of the hypnosis drug would be in vain if, upon her arrival, a tribunal was poised to sentence her into frozen exile for having had intimate relations with Thor. But if she did not make the attempt, she could never face herself or Thor with a clear conscience, and she would accept the cruel banishment as the more deserved fate.

If the higher powers spared her the inquisition and yet her plan still failed, woe to the solar system if Ganymede gained absolute domination. She would never be able to live with herself, much less subject Thor to live with the one who was the cause of interplanetary shutdown. For if Ganymede were in charge, the system would be unmercifully subjected to his avaricious mandates.

As they neared Earth, they clung to each other for dear life while they watched the planet looming ever closer through the astroship's window. Ahead they saw chantilly clouds swirling over jewel-like oceans and land masses of intermingling tans and greens. The normally awe-inspiring scene was, for them, bittersweet. While Jupiter's beauty signified their joyous surrender to each other, Earth's splendor symbolized their untimely parting.

Duty before love, someone had once said.

After Thor dropped her off, the utter devastation of possibly never seeing him again nearly crushed the breath from her.

She returned to her compartment and cried, each thought of him causing the tears to gush again and again; ineffective was her courage now at holding them back. After the deluge, she was able to reason that if she was ever going to see him again, she needed to survive tomorrow. She concentrated on that fact and then cried herself to sleep.

The next morning, fully expecting to be directed into the inquisition chamber, her fears were allayed when she arrived at the Medicinal Chemistry lab without incident. After being greeted warmly by the people in her department, she set the wheels in motion to save the universe.

There were two items on her agenda. The first was to begin the final stages of Project Wisdom's hypnotic drug testing that had been suspended in her absence.

Secondly, Helena went to the viral pathology research lab to ascertain if any of the ampules containing the Attila virus strain were missing.

Having donned a microbe-proof biohazard suit, she entered the negatively pressurized room where the pathogens were being stored. The reason for the negative air pressure was in case there was an escaped microbe; it would most likely be contained in the room surrounded by the higher pressure on the outside. Upon opening the sealed cabinet which held the crystallized viruses in liquid nitrogen, through the cold, white vapor, Helena noted that, compared to the inventory of the last four months, there was one vial unaccounted for.

In the personnel department, she asked to see a list of orphilion workers who had been recently called into service in the viral pathology lab. There'd been four new hires but only one whose employment fit the time frame of the Europa crime. Five months ago, Dornai SS312hd, had been utilized. Helena noted that she was born during the delta decade.

Helena went to see the VPL department head, Jack ES179bh, her friend and colleague with whom she had worked on various projects and with whom she secretly shared the dream of freedom and a new life. He was the Subterra infiltrator who had given her the rebel propaganda pages. She asked about Dornai.

Jack was about Helena's age, had kinky, black hair down to his shoulders and was wearing the standard issue gold and black uniform and transparent lab coat. After welcoming her back, he said, "Dornai was here for only a few weeks before she disappeared. She was an older woman and a quiet worker. She learned the routine fast around here. In no time, she was inoculating nutrient substrates, incubating and classifying pathogens, and properly filing the colonies into the deep freeze. We also had her cataloging some of the medicinal plants next door. We were sorry to lose her. Just figured she got transferred or sent to Neptune or something."

Helena was thrilled at the prospect of being on the right track of determining who had schemed to undermine Universal Mining's operation on Europa. "Well, thanks Jack. I needed a capable technician over in pharmaceuticals and I'd heard of her reputation. Guess I'll have to keep searching." Helena wanted to share with her friend the precarious situation in which she found herself. But the less he knew, the less chance there was of placing him in peril.

As she knew would occur sooner or later, Helena was summoned by Mr. Ganymede. She recalled her first meeting with him in the commons during lunch when she'd been quietly discussing the radical concepts of the Subterra movement with Jack. If Ganymede had heard their dialogue, she wondered how long she would have survived hauling iridium boulders on Triton. How shrewd the executive had seemed when he had asked of her most recent project in the lab and of its benefit to the company.

She vividly recalled the repugnance she'd felt when Ganymede had violated her in the analytical lab. The feeling had recurred time and again when he had periodically stopped at her department to learn of their current progress in medicinal chemistry. She had made certain that she wouldn't be alone when he'd been due to arrive. During each visit, Ganymede's penetrating stare would eye her up and down, making her uneasy: he had been like a wolf circling a fawn, licking his lips. It chilled her to the marrow to think of it. She gave an involuntary shudder.

And he had asked her to head Project Wisdom in a way that she couldn't refuse.

She dreaded the ensuing encounter. In her mind, she started to say good-bye to the life she knew at the lab, to Jack and the others. Good-bye to her home in Olde Earth Customs, Jenisse, Grys the healer, and Wallace and Gelana. And Thor. Always Thor was on her mind.

Keep your head about you. If a situation has ever required you to act before, it is imperative that you give an award-winning performance now. Feign deep remorse for your illicit actions with Thor, she told herself. She knew it would be of no use.

As she entered the meeting room, the steady gaze from Ganymede's icy jade eyes was more than a little unnerving, but she withstood the chilling frost that was inching down her spine.

She might be untrustworthy, but she was still beautiful, Ganymede allowed himself as her vivid blue eyes calmly met his gaze. He said, "Ah, Doctor Helena, back from the Europa mission. I trust everything went well." And he allowed his manner to reveal nothing about his knowledge of her transgression with Thor, while keeping concealed his thoughts about her being a traitor to him personally.

Beneath his calm exterior, he was seethingly jealous of Thor.

"Well, not as well as we had hoped, Mr. Ganymede. There were only twenty-eight survivors, including Dr. Wolfe, but the cattleya medicine we administered saved their lives. And Captain Thor and I made some startling discoveries about the probable cause of the tragedy."

How composed she acts within her aura of guilt. He decided to postpone further mention of his formerly faithful pilot and liaison. Ganymede said, "Yes, I know the virus had been deliberately planted and that a dehydrating ingredient had been added to the orchid soil." But that was the extent of his knowledge. He'd been waiting for the full report from the investigators.

"But I've discovered something else." Her voice rose a little with excitement. "I was the one who had found, in the main ventilator of the facility, the broken vial which had held the deadly Attila virus. I left the glass fragments for the investigative team that was headed for Europa. But someone had been definitely out to destroy the mining operation." She paused as though deliberating if she should utter her next sentence. "Mr. Ganymede, can you think of anyone who would have had reason to bring technetium ore processing to a halt?"

His eyes narrowed at her presumptuousness. But of course, the question had already occurred to him. He could think of some unhappy executives who had lost their livelihoods during his takeovers. And there were always political enemies, and those who were indebted to him. As far as technetium ore, the Europa mine was the system's primary source, and its use in alloys was extremely important for maintaining the quality of life to which most were accustomed. A lengthy interruption in technetium production would be like turning back the clock to the antiquated time of the twentieth century, long before the Guerrilla Class Wars, when they traveled in automobiles! It had to be someone who was out for retribution. But who?

"No one whom I could make a solid case against, Doctor. But that does not preclude the possibility of someone trying to do me in." He released a sardonic laugh.

"There was some lettering on the viral ampule indicating where it was from," she disclosed.

Now his curiosity was piqued. "And what were the letters?"

"VPL-UMO, from our own viral pathology laboratory!" Then her voice softened, like she was consciously reminding herself to calm down. "Earlier today, I followed up on this in the virology lab. Yes, a vial is missing, and an orphilion worker was hired five months ago, but then after a few weeks, she vanished without a trace. Her name was Dornai SS312hd."

Helena watched the usually collected Mr. Ganymede turn a whiter shade of pale. Bringing the meeting to an abrupt end, he cleared his throat and told her, "Thank you, Doctor. You have been most...informative." And he left.

Helena was fully expecting some Delegation soldiers to come in next and haul her away, but it never happened. She returned to her post at the lab, gratified that her gamble was working so far.

She wondered what exactly had made Ganymede lose his composure in the end and what, if anything,

the name Dornai meant to him. Maybe she was the scorned mistress whom she and Thor had thought they were only imagining when they were in the spacecraft on Europa.

"Oh, Thor," she sighed, "I miss you so." It hadn't even been a day yet, but it felt like a hundred years. She yearned for him to hold her and to hear his gentle accent whispering sweet words of love into her ear.

When her duty here was completed--to bring Project Wisdom to a premature end--she would meet him at the nearest SRF camp. Would he even be there? There was still over a month's worth of drug testing to do. What if he found someone else in the meantime? Someone who wouldn't have conspired with a corrupt boss? Someone who would have gone with him to Mars? If she lost him, she would live forever in regret, becoming only a shell of a woman--empty of feeling, drifting without purpose--until her dying days.

Tears filled her eyes. "Think of something else!" she exclaimed out loud.

Because they couldn't speak freely on the spacecraft, Thor had written the directions to the Subterra compound, located on the continental divide west of Colorado Springs, for when she was ready to join him. Omaha was a little over eight hundred kilometers from the mountains. By air, it would take less than an hour to get to the camp.

Use of public transit wouldn't be prudent because her exon tag would be scanned as she boarded, and it would subsequently result in her leading the DTM to the camp.

She needed to borrow a private airglide cruiser. By the time they discovered she was missing, she'd be within the mountain range which would hopefully interfere with the signals scanning for her exon chip.

It was the contemplation of escape Helena kept foremost in her mind. The chance to see Thor again would mean that she'd have to find her way to the Rocky Mountain compound. She fretted, imagining that finding the hidden camp would be like trying to find a small wormhole in a galaxy of supernovas. And what if surveillance detected her exon chip before her arrival?

During the following weeks, it was essential that she proceed in normal fashion with the final testing of the hypnosis drug. Ganymede and the others in her group must not become suspicious of her plan to prevent its production.

She administered the final chemical analysis tests and found them to be successful. Then she altered the formula and sent it on to manufacturing. Helena personally conducted the preliminary, quality control testing of the newly synthesized hypnosis drug. Superb results, she wrote in her report.

She visited Jack to tell him of her plan of defection. They talked as they walked down the street near her compartment. They had walked that route together many times in the past, plotting and scheming, debating the merits of rebel movement. She finally told him of Thor and of her findings on Europa. She informed him of Ganymede's hypnosis drug order, how she was foiling it, and that she must leave shortly. Helena said, "I shall miss the stimulating discussions we used to have during lunch and on our walks, Jack."

"Maybe we will see each other again during our quest for freedom," he had replied, adding that he was glad she was about to join the forces and wished her well in her journey.

She went to see Wallace and Gelana. They sensed that something was troubling her. Trusting them, she told them of her plans and that she needed an airglide cruiser. She asked if they knew of someone whom they could trust and who would be willing to take the risk of transporting a defector to the Subterra camp a week from that day.

Wallace told her he thought he knew of a library patron on whom they could rely. Helena was relieved

when after a few days, she returned to the library and found that Wallace had made arrangements for her ride.

Gelana presented Helena with a twentieth century edition on art history. "Please, dear, take this as a reminder of our common passion for the old books." Helena was deeply moved as she stared at the wonderful volume. "We will miss you so much," Gelana said as she hugged Helena. Helena was already beginning to feel an emptiness. She imagined that this must be what it was like when a daughter and mother must part.

Helena turned to hug Wallace, as well. She worried that his respiratory condition was worsening. His body had become even more frail. "Let us hope for a reunion soon, during better days. I will miss you both!"

She brought another clinical remedy to Grys, on dementia this time. His figure slightly hunched over, he studied it's formula, huffing at its complexity. His gruff manner was endearing to Helena. She had seen the amusement in his eyes as she tried in vain to cross the language barrier between them and explain how the medication worked.

He looked reflective as though suspecting that it would be a long time before she would again bring light into his dark apartment. "Adieu, mon amie," he said as they parted for the last time.

The next day, the manufacturing process and quality testing of the altered formula was completed and was met with her personal approval as the project's coordinator. She sent a gross of vials containing the sham drug to Ganymede before deleting the Project Wisdom file from the computer banks.

Helena hadn't divulged to the rest of the research team the precise combination of components in the drug. The team could probably reestablish the correct formula, but it would take months of more experimentation to do so.

The following day, in the evening, she invited Jenisse and a few friends to celebrate the end of a grueling project at the lab with her, or so she had said. Helena thought she would patronize the local hangouts once more with her cohorts as a final farewell, unbeknown to them that they would never see her again. She would be gone the next day.

She entered the door of the Zodiacal Light, and telling his woes to the bartender, was her dearest, most wonderful Thor.

## CHAPTER 34--THOR'S CONFESSION

2097, July: Earth

As they were leaving Olde Earth Customs, Thor sent a QuEST\* communication from the ship's reconditioned control panel to the rebel camp in the Rocky Mountains. Within thirty minutes they arrived at a mountainside where a concealed door slid open to allow Thor to maneuver the craft inside.

Helena was registered as an active member of the resistance. She was designated to be one of the science officers and deemed an expert in Twentieth Century America.

The numbers joining the force were rapidly increasing as more and more orphilion workers were deserting their posts. The fastest growing show of support, however, was being received covertly by workers from within the megacorporations. Thor commented to Helena, "Brainwashing, oppression, and threats to life have not been able to repress inherent human needs, including the desire to be rightfully free."

He filled her in on the military overthrow that Subterra leaders were contriving with the aim of destroying the power of the Delegation of the Twelve Megaconglomerates. "We cannot deny that lives must be sacrificed when the Delegation retaliates. However, our members will not have died in vain, but for the future of mankind. We feel confident that we will be triumphant." In reiterating the rebel plan, Thor was also trying to convince himself that this was the best course of action for the SRF to take.

Helena processed all that Thor had shared with her. She wholeheartedly agreed with the ultimate goals of the Subterra--freedom and equality for mankind--but their means of getting there wasn't acceptable in her mind. To commit acts of violence against their oppressors and to risk losing many innocent orphilion workers would make them as despicable as those whom they were trying to rise above. Even worse.

Helena held these thoughts in her mind for the moment, however. She needed time to formulate her own ideas of how to more peacefully arrive at the same outcome.

They remained at the Rocky Mountain compound for nearly a month. Thor was in a more advanced stage of training while Helena was learning the rudiments of rebel life. Her handling of a phaseout weapon soon went beyond the initial, timid stage. She responded swiftly to the mind decontrol sessions. Even before she had joined the force, Delegation Tenets had ceased to be the basis of her belief system.

They gained many friendships and became close with a couple, Tyle and Hanna, who were soon expecting a child. The young woman, Hanna, allowed Helena to place her hand on her abdomen to feel the movements of the baby. It was a wondrous experience for Helena. She touched her own belly, desiring a baby she knew would hold half of Thor's essence.

After a morning of heavy training, they found themselves looking for something soft and horizontal upon which to lie, like the bunk in their sleeping quarters, "perhaps on which to partake in a nap," Thor had said.

"But it's the middle of the day!" Helena teased him, well knowing it wasn't a nap in which he was wanting to partake.

They meandered in heavenly exploration of each other, discovering sensual pleasure in each and every square centimeter of skin, reaching wondrous peaks of incredible ecstasy, and then falling asleep amid tangled covers.



Thor stirred first and watched Helena sleep. Dark, curled eyelashes rested against her cheek. With his finger, he gently followed the edge of her cheek and made a path to the borderline of her lower lip. Her breath was soft and warm on his hand. He surmised that most people in their lifetimes never found their perfect counterparts. How truly fortunate he was.

Helena awakened. Her eyes, sleepy and full of love, gazed up at his. She cuddled closer to him. Her fingers moved slowly through the thick patch of his chest hair.

Thor cleared his throat. It was time to tell her of his crime. "Helena, there is something I must tell you." She stopped breathing for a moment. "What is on your mind, my love?"

He reached for her hand and held it firmly--their fingers intertwined. "There is something that happened in my past, when I was a corporation soldier for UMO." His voice sounded distraught. "It is something I deeply regret having done, and I take full responsibility for it. Even on the likelihood that you will be repulsed by me when I tell you of the atrocious act that I have committed, I must confess so I will know now if I am to exist with your love or without it. It agonizes me to think that I may lose you because of this."

Helena felt his anguish and wanted to comfort his troubled heart. "My dear Thor, there is nothing in your nature that will ever repulse me." She remembered overhearing his confession to the bartender at the Zodiacal Light. "If a crime has been committed, then it wasn't your fault. It isn't in you to willfully wrong another. I know you. And nothing could ever turn me away from you. I will love you and stand by you until the end of time. Now unburden yourself of this grave error so that you can make atonements and go on with living."

Helena eased his mind somewhat. He told her of the woman he had killed on Martian soil while she'd been running toward freedom. He told her how it had nearly drove him to madness knowing that he had been the one responsible for her death. He told her about carrying her body to Taedres who had said that he'd be forgiven. Up to that time, though he had been trained to be an enforcer, his duties for the DTM had been as a pilot and negotiator, not as an executioner. The word 'sorry' was woefully inadequate to describe his remorse. She was dead, and nothing would ever bring her back.

She knelt beside him in the bed and tenderly kissed his forehead. Her hands were on his beard as she softly kissed his cheek. She touched her lips to his. "Thor, what were we trained to be?" She looked into his eyes.

"Orphilion workers," he answered.

"And what were we forced to believe?"

"The Tenets of the Delegation."

"Isn't it true that young minds, as ours were, are impressionable and easily molded to the authoritative way of thinking? And when we'd later discovered that we really hadn't been swayed, we had to pretend, or else what would have happened?"

"Isolation. Electric shock. Or phaseout."

"You did what was necessary to survive. What made it more difficult was that the tragedy on Mars occurred at a time when your own conscience was starting to take control of your actions. Their mind-control techniques were strong and able to coerce us into doing what went against our natural tendencies--or into doing what we eventually knew in our hearts wasn't right. A time came when we recognized this, rose above their corruptness, and made the choice to rebel against it."

"Thor, it wasn't your fault. It is the fault of UMO and the Delegation that the woman is dead. That is why we are in the midst of this movement--to try to correct nearly a century of wrongdoing. Always

remember Taedres' words: you will be forgiven. For I also believe that with all of my heart. But it must begin with forgiving yourself."

Helena's words had the effect of lifting a two ton technetium ore boulder from Thor's chest. He pulled her to him and held her for a long, long while.

## CHAPTER 35--THE ULTIMATE CONTROL

2097, August: Earth

Hundreds of Subterra members were gathered in the compound's assembly hall to view a secret holo-recording that had been obtained by an SRF infiltrator who worked in a Delegation member's office in Des Moines. It was an advertisement from an underground organization named CloneFac that was selling their wares to DTM corporations.

At the front of the auditorium, a kinetic image projection displayed an orphilion woman dressed in white, like a surgeon, with mask and gloves. She was at her station at a glycine processing plant selecting choice soybeans from a non-stop conveyor. But drowsiness was setting in. Her head would fall forward and bob back as she tried to stay awake until, in the next scene, she was shown completely asleep on the job, the unsorted soybeans passing her by. An authoritative, male voice-over described the significance of each of the ad's scenes. "Has this ever happened in your production line? An important deadline must be met. Your traditional orphilion worker has been pushed beyond her physical limit and cannot meet your demands for increased quotas. You find you must forfeit on a profitable venture."

The setting changed to an airglide cruiser assembly line where a physical altercation between a male orphilion worker and a guard was in progress. It concluded with two other guards restraining and hauling the offending worker away. "Or," the narrator continued, "valuable time and energy is wasted on disciplinary action."

"For your industrial purposes, let CloneFac provide your organization with an exceptionally sound and efficient labor force, and no longer will you need to rely on the unpredictable nature of orphilion and street scavenger employees. Gone also will be the high cost of training and sustaining your workforce. Orphilions: an admirable idea in the past. But there is a more lucrative option today."

Shown next was a biochemical process, as viewed from the monitor of an atomic force nanoscope, of the color-enhanced nanochemical cutting and pasting of genes onto the double-helix-shaped DNA molecule. "With CloneFac's innovation of a remarkably accurate and cost effective cloning technique, the time has come for you to abandon the obsolete concept of utilizing orphilions. Choosing to do business with CloneFac will guarantee that your future profits will skyrocket."

The image was then one of panning across a room containing hundreds of fluid-filled, transparent cylinders which contained human fetuses at various stages of development. "The specimens before you have been genetically designed to have the aptitude for factory-work. They are low-maintenance, fast-growing humanoid inventions called CloneFactoids. Within the cultivation cylinders, nourishment flows through the umbilical cords from artificial placental sacs. The lungs become functional at four months. The fetuses begin to breathe the oxygen dissolved in the perfluorocarbon solution in which they are suspended. One month later, the CloneFactoids are released from the chambers more precocious than full-term newborns and ready for training in the nurseries."

Upon eyeing the next scene, many in the audience of revolutionists stirred uneasily in their seats. In it were a dozen or so toddlers who appeared to be about three years of age, performing various hands-on activities within individual cages. Most striking to Helena was that they were identical in appearance and without hair. The voice of the ad said, "The nine-month-old factoids develop hand-to-eye coordination and reasoning skills while using the manipulative devices." A close-up revealed one skillfully handling the intricate apparatus. After each correct arrangement of the complex geometric figures, a small door slid open to administer a nutriment pellet to the child.

Helena was appalled at the impersonal, laboratory treatment of the child. He lacked facial expression as he chewed the morsel of food. It seemed to her that he had no soul--as though he were a member of the living dead. She needed to feel Thor's warmth and reached for his hand.

As he received her hand in his, Thor was wondering what demented mind would invent such freaks. Forced to mature in mechanical surroundings, they were eerily...machine-like. It was an abomination.

The voice from the program continued. "As you can see, CloneFac's humanoids are easily and inexpensively trained. They function well with no human contact, having been engineered not to require socialization. Factoids become muscularly developed at an early age and are disease-resistant. They are genetically identical with asexual anatomy; the desire on their part to procreate has been completely eliminated.

"State-of-the-art molecular chips integrated into their neural matter turn off the emotional behaviors that resist compliance. CloneFactoids are programmed to follow orders, without question.

"The prototypes have been highly successful." A fully-grown, bald, inexpressive factoid worker in a gray DTM uniform was shown, robot-like, installing the fusion power plant in a factory building: so efficient...focused.

Thor had a sudden recollection of having seen a man who looked just like that at the spacecraft hangar in Colorado Springs. He wondered if UMO had begun utilizing the prototypes months ago.

The program returned to the toddlers. "Our first mass market generation will be serviceable in nine years. They subsist on economical nutriment wafers and little sleep. CloneFactoids will not require compensation because they have no need for material goods or time-wasting recreational activity.

"Thus far, operations are proceeding on schedule. Let CloneFac be your source for an obedient and proficient workforce. CloneFactoids will have the stamina and dexterity needed to improve and refine your operation--or your money back. CloneFac: Innovation whose time has come. Please place your order at our frequency locus." A number flashed across the hologram.

Helena was outraged. She whispered to Thor, "The Delegation has gained control over our very genes!"

"Yes, I couldn't agree with you more. They present a very real threat to our future." His acknowledgment of her alarm, softly spoken, had a calming effect on her.

Still holding her hand, he gently brought it to his lips. She was grateful that he was by her side during these trying times.

After the program, the Subterra's vice commander, Ristian FG990e stepped forward to deliver an impassioned address. Before joining the resistance, he had been a clinical cell biologist.

"It is obvious that the Delegation and its corporations are planning to eliminate orphilions. CloneFac's frequency locus requires a security access code. We are working to break the code so we can locate CloneFac and sabotage its operation. We are concerned that it may be a branch of the GenSapiens Corporation. If what CloneFac is proposing materializes, it will be a travesty to the human race. It must be disallowed for the following reasons." A list of his points of emphasis appeared to hover beside him, one at a time, as he spoke.

"First of all, they are breaking the DNA laws. The bioindustrial gluttony and the destruction of wilderness habitats before the Guerrilla Class Wars resulted in the decreasing availability of new and beneficial genes. Genetochemists of later decades were left to artificially create chemical gene fragments in order to produce useful transgenic organisms--which is apparently what CloneFac has been doing. This practice often resulted in detrimental and costly mistakes, such as the unintentional

introduction of pestilent biopollutants into the environment.

"This practice of creating genes in the lab--as was done early on by the New Century Eugenic Society--had also resulted in great failures. In one experiment gone awry, a gene originally designed to enhance mental capacities later mutated to produce a protein which instead destroyed the brain cells in its path. Strict biotechnology laws were enacted as a result.

Now CloneFac is practicing their craft with blatant disregard for past mistakes in genetic engineering--and the DTM is condoning it. Resistant as the CloneFactoids may be to disease now, with time, super microbes will mutate to overcome their defense mechanisms. These super microbes will become devastating to the factoid population, and possibly to the population at large--to us!--as well. Corporations may profit in the short term but will crumble in the end when their workforce becomes decimated.

"Second, their so-called inventions are still human beings, genetically speaking, and they are being treated inhumanely. No child deserves to be locked into a cage or have his brain manipulated by molecular devices. There are no excuses for these heinous acts.

"Third, what becomes of the orphilions who are presently employed? Will they be phased out when CloneFac takes over? What happens to the survival chances of the street scavengers? Without the demand for orphilions, many children will perish when there is no longer the need for GenSapiens to maintain its training centers.

"And finally, the DTM has controlled us with exon chips and the Vigilant Eye. Manipulating our chromosomes is their ultimate power! We must proceed with our strategy to overthrow the Delegation and put an end to its madness!"

The audience broke into applause after Vice Commander Ristian's conclusion. With new fervor, they were even more determined to topple the Delegation's governing body and bring to a halt its misguided plans.

## CHAPTER 36--GREEN-EYED DRAGON

2097, July: Earth

Hyland Nisson had been a thorn in James Ganymede's side for years. He had often hampered James' attempts to persuade DTM members to enact laws which would give corporations carte blanche control over expanding their commercial interests. Nisson, a senior and influential member of the assembly, representing Hydroponic Agriculture, was as politically liberal as Ganymede was conservative on these issues. He fought for government regulation in the areas of environmental protection and the use of natural resources. "We need clean water to grow food" was a simple but true statement frequently declared by Nisson during assembly debates. As a result, Delegation members invariably voted against the unlimited industrial expansion bills, opting for more moderate legislation instead.

James had received the package containing the hypnosis drug from Helena, the timing of its arrival being perfect, as he had earlier scheduled a meeting with Hyland Nisson for Thursday, two days hence, to discuss future progress in the mining industry and the possibility of resurrecting the premier bill. It so happened that Nisson was planning to visit one of his subsidiaries in Lincoln. James had seen an opportunity for them to meet in nearby Omaha at the city's branch of the Wisdom Club, a societal organization for DTM officials, their families, and guests.

The exclusive club was decorated lavishly with darkly varnished, wood-like paneling and deep red carpeting. The ceiling in its lobby was high with curved rafters arching across the room's width. There were many alcoves if one wanted to dine in privacy, but James had chosen the Wisdom Club's larger, more popular Ambiance Room. The club's food was delectable to the palate, but in here, other sensory receptors were catered to, as well.

Before entering the Ambiance Room, one never knew if the dining experience would include a three-dimensional view of an approaching lightning storm, spectacular on a dark horizon. The fresh scent of ozone would be evident, having resulted from electric discharges through the turbulent air. Another time, a club member and his guest might enjoy a meal while beholding a scene of a greenish-blue Uranus, rotating on its side--its rings encircling it vertically. Today, the Ambiance Room's dining tables were surrounded by an autumn forest. Vertical trunks of maple and oak supported a red and golden canopy through which the sun's light was softly filtered.

A soft breeze rustled leaves and circulated a dry, sweet, woodsy smell around the room as James tried again to dissuade Nisson from his unwavering line of reasoning over ecological matters. While cutting into a succulent glycine steak, he said, "But Hyland, you must trust us to be good corporate citizens who will insist on the proper course of action for protecting planetary environments. After all, we can't live without food either. Under the proposed expansion laws, we would continue to invest in air and water quality control measures."

While Hyland left to visit the men's room, James was rather pleased with the way things were going so far. He had made sure to put Hyland at ease when they'd met by greeting him warmly with a firm handshake and by buying him a drink at the bar. Before the meeting, James had asked his secretary to call up Hyland's personal file so he could be reminded of his wife's name and her projects. He'd asked Hyland how Chelle was and how her clothing line was coming along. His efforts were paying off, he thought with confidence. When they'd begun talking, Hyland had seemed more receptive to his arguments.

Now, before Hyland returned from the restroom, James was about to make certain that the assembly member was even more receptive to his arguments.

Hyland returned to his lunch and took a swallow of water. James watched him intently. In just a few minutes, according to the psychodynamic engineers James had appointed to Project Wisdom, the potion he had dripped into Hyland's water while he was gone would act, and Hyland would easily conform to his way of thinking. James went on about how the continued growth of his mining empire would benefit the agricultural industry as well. "Why, an increase in mining exploration would also result in the further research of soil and water availability around the solar system," he reasoned.

"James, pardon me for saying so, but your routine implementation of strip mining methods across the system has not been a great boon to agriculture," Hyland said in response as he drank some more of the tainted water.

James presented his rationale for a few more minutes. Hyland continued defending the environmentalist point of view.

In the end, there was no change in Hyland Nisson's opinion. In fact, he became even more resistant to James' increasingly louder arguments.

"How can you be opposed to progress?" questioned James. "If you had been in charge of early technological advancements, computer memories would still be in the gigabytes!" In anger, James hit the table's surface, causing their dishes and utensils to rattle. The other club patrons became hushed as they watched James leave the room in a green-eyed dragon, fire-snorting huff.

He immediately headed for Medicinal Chemistry and gathered together the team that had worked on Project Wisdom, demanding an explanation. It was unusual that Helena wasn't present in the building. He sent two enforcers to her compartment.

The other project pharmacologist claimed that there must be some mistake. The test results had been exceptional. From the computer, he attempted to open the Project Wisdom file and was unable to find any trace of it. The others tried also, arriving at the same result. In their perplexity, one concluded that Helena had probably changed the password. They were corralled into a room to wait for their project manager, Dr. Helena OM781eh.

Soon afterward, they received word that the enforcers were found unconscious at her compartment. Her exon tag was on a bedside table. She was nowhere to be found.

James suddenly thought of Thor. Over a month earlier, he and the UMO spacecraft in his charge had also been reported missing.

James left the room of dumbfounded scientists. An irrational craze was mounting in him. First, because of the failed hypnosis attempt. Second, upon realizing that his chances for attaining immediate and unlimited power in the universe had been thwarted again. And third, he began to imagine that his Helena had altered the drug formula because she'd been brainwashed and, most recently, was more than likely kidnapped by that conniving and traitorous low-life: Thor.

## CHAPTER 37--COMB YOUR HAIR

2097, August

The next day at the Rocky Mountain camp, Thor's mood was light. He took Helena's hand and led her to where his spacecraft was parked. He said, "Hey, babe, sit beside me in my newly remodeled, sporty space cruiser and let's boogie on to Mars."

Helena laughed at his talk, wondering from where within the nine planets he'd picked that up and about what he had in mind. "Anything you say, handsome, but tell me, what's groovin' on the Red Planet?"

"We have a wedding to attend. A major event, I might add. You might want to run a comb through your hair." He was grinning from ear to ear. Her hair was perfect the way it was.

His mood was contagious. Helena smiled and said, "Now, my dear Captain, if you have marrying me in mind, there is the old Earth custom of the gentleman kneeling and then formally asking his beloved to spend the rest of his life with him. And, for your information, the woman has the right to accept or refuse."

His smile faded slightly. It worried him that she might decline his offer, but he lowered himself to one knee, took Helena's hand in his, looked deeply into her eyes, and solemnly spoke. "My darlin' Helena, from the depths of my heart and soul, it would fill my greatest need if you would accompany me as my wife while we continue our journey through the cosmos together."

She loved his words. Kneeling down to face him, she answered, "My dearest Thor, as evidenced by the Power of this great universe and since the beginning of time, I believe that we have already been wed in the truest sense of the word and will be forever so united even beyond the last feeble gasp of our energy-spent universe. I will gladly and proudly state the endless love that I have for you in front of witnesses. If it is what you desire, then it is my desire also." While on their knees, her arms went up around Thor's neck. His arms enfolded around her waist. They kissed, expressing their love for each other in a language that was their very own.

\* \* \* \* \*

They flew to Mars. Dozens of friends at the SRF compound were present at their marriage. Helena wore the white leatherine, rebel uniform of a more feminine style. It had a short-waisted jacket and high-waisted pants that flattered her already enviable figure. She was given a bouquet of white Martian-hybrid roses to hold. Her silky, dark brown hair was pinned up, exposing a graceful neck. Thor had a sudden urge to kiss her there, knowing that the touch of his whiskers would cause her to giggle. He was in the black uniform, looking handsome with his thick hair tied back.

Thor's hand-to-hand combat partner from Tasmania, Brydak, and Taedres' wife, Lylian, were the official witnesses. Thor and Helena faced each other as Sage Taedres conducted the ceremony in which he quoted the glorious words: "Love rejoices in truth...bears all things...hopes all things...endures all things...."

After pronouncing them man and wife, the two embraced and everyone applauded. Friends shook Thor's hand, hugged Helena, and wished them all the happiness in the universe. There was plenty of food and drink set out for the celebration.

Afterwards, Thor carried Helena into his room at the camp where someone had pushed two bunks together to make a bigger bed for their nuptial night. He laid her down and touched his lips to hers as he began unfastening her uniform jacket. Reaching his hand inside, he caressed her breasts and felt each nipple stiffen with little coaxing from his finger and thumb. He would always be amazed at her



body's response to his contact.

"Well, Mrs. DV556hz, how do you like married life so far?"

"Mmmm, my cosmic husband," she murmured between kisses while opening his uniform and then reaching lower to fondle the already thickened member within his trousers, "I think I will forever be in paradise as long as we are together."

It wasn't long before his warm skin was directly against hers as his body pressed hers into the ergonomic mattress.

## CHAPTER 38--IT'S BEEN A HARD, LABORIOUS NIGHT

2097, November

At the Subterra Rebel Force camp on Mars, Thor instructed others in flight and spacecraft astronics. Helena's expertise was utilized in the chemistry laboratories.

The newlyweds were assigned to their first orphilion rescue mission, referred to as Operation Starchild. They were to remove young orphilions from the grip of child labor at an iron ore processing plant located in an equatorial sector of Mars in the Ares Vallis desert. An opportunity for the rebels to infiltrate and accomplish the objective occurred as UMO's Zircon Iron Mine was in need of another computer operator and a few more laborers during a time of moonless nights, the timing of this mission reinforced by Q-predict.

Given deceptive identification chips to adhere onto their necks and the false names of Llars and Kaisa, Thor and Helena proceeded with their assignment. At a transporter stop near the Deimos colony, they blended into a waiting line of other orphilions who were on their way to jobs at various industrial sites on Mars. They departed on a UMO transport vehicle that, in less than an hour at airglide cruising speeds, was to make a stop at the dune-covered, ancient lava floodplain, site of the Zircon mine.

The unprotected desert area was prone to wind storms that would last for days, shutting down mining production until the swirling red dust would settle enough for the machinery to function properly. Lately, the winds had been calm. Accomplishing the rescue mission would become impossible should a crippling dust storm develop.

They approached the open pit mine that sprawled out beneath them in concentric tiers which indented the red surface for endless kilometers. From cruising altitude, they observed sets of processing buildings and water towers along the mine's edge and noted how they resembled small-scale cities. Giant production trucks, which looked like miniature toys, were seen hauling chunks of the crude ore. Cleared by traffic control, the transit craft lighted on the mine's landing pad.

Within the mine's gate, a Zircon employee and SRF infiltrator named Ren casually walked past Thor, who discreetly handed him a small package containing his and Helena's holoviewer computers. Ren was to smuggle them in past security.

Once inside the UMO facility, Thor and Helena were to keep their holoviewers, now with QuEST\*.com capabilities, concealed and in their possession at all times. They were to be used for strategic updates and in case of emergency.

Thor and Helena went through the procedure of signing in to their new positions, receiving their uniforms, and settling into their separate compartments. "I'm going to miss you, darlin'," whispered Thor before they parted. They found their holoviewers which Ren had placed behind the panels under their washroom sinks.

The first day was spent learning the routine of their jobs. Thor was given a post in the plant's control room during the day shift. Helena was a laborer in the agglomerator building during the night shift. It was from there that they were to rescue the children. Initially, she was to contact them and gain their confidence.

As an ironworker, her job was simple but grueling in the hot, dusty, noisy, and poorly lit building to which she'd been assigned. It seemed unreal compared to the bright and quiet laboratories she was accustomed to. She regarded the grim conditions before her as symbolic of DTM oppression. Regardless, she marveled at the largeness of the ore-processing machinery near which workers

appeared Lilliputian.

Helena's duty was in the west end of the cavernous building. The west end received previously crushed and refined ore by conveyor. After the addition of a chemical bonding agent, the mixture was directed into twelve rattling, rotating kilns, each larger than Helena's compartment in Omaha. The ore inside the kilns became heat-hardened into red hot pellets of nearly pure iron ore.

An abundance of powdery ore was strewn into the air during the pellet-forming, or agglomeration, process. To prevent the dust from wearing out the mechanical parts of the conveyor and kiln and from piling up in unmanageable amounts on the floor, Helena's sole job for twelve hours a day was to stand and spray the air and floor with water from a large hose. The gushing water created a force mighty enough to throw her against the wall if she didn't brace herself. In the weaker gravity field of Mars, this was a particularly nasty hazard. The water pushed the endless debris to a trough on the lower end of the slanted floor.

Helena was part of a twelve-person crew that worked in various jobs to prevent the conveyors from jamming, thus ensuring the smooth operation of the line to which they were assigned. There were twelve such lines.

But jams occurred regardless. She had noticed, during her orientation tour of the plant earlier that day, that there always seemed to be at least one line in the building in need of a maintenance team. An ever-present "down" crew worked to repair the mechanical systems which transferred ore to the kilns and which carried the resulting fiery pellets eastward to the building's iron-producing section. There, Helena had learned that it was ultra-violet lasers which activated the ore-purification reaction within the twelve direct-reduction furnaces, releasing oxygen from the ore and into the Martian atmosphere. It was a process in which the rust-colored, pelletized iron ore was converted into the silvery element from which it ultimately originated during a primordial time when the cooling and contracting of an ancient dust cloud became the sun and nine planets.

This pure iron was then blended with certain other elements to make steel. From a large tap near the bottom of each giant furnace, the alloy-steel, golden-red in its molten state, flowed into slab-forming molds. The glowing scene had filled Helena with a great respect for the hazards involved in this large-scale production of steel.

The slabs had then been directed to rolling mills and shaped into thin, broad sheets. She had witnessed the four-legged grafts called centaurs wrap the flat-rolled, coiled-up steel in vapor-lock packaging before it was to be transported from the mine for use in manufacturing and construction industries around the system.

Now on the night shift, holding the hose, she was eyeing the other laborers. All were wearing white safety helmets--now covered with ore dust--and horn-rimmed, shatterproof goggles. Their common attire made it difficult for her to easily distinguish one from another. She would quickly have to learn to recognize each individual by his or her more subtle distinctions such as body shape and manner of movement.

Helena noted the role of young people. She counted eighteen of them. Pellets which would fall from the conveyors while being transferred from the kilns to the direct-reduction furnaces would collect near the machinery where water from the hoses was not to be sprayed and in spaces too small for an adult to reach. With brooms and shovels, the children worked exhaustively to push the spilled pellets and the ever-accumulating piles of dust away from the machinery to where the water could wash them away. It was a dangerous job as they tried to avoid the branding heat of the falling ore marbles. Burn holes through the fabric of their gloves and uniforms were common. They wore many layers of clothing, which caused them to nearly suffocate in the heat of the building, but it was the better option to hot

pellets burning through to the skin.

Helena counted the armed Delegation enforcers that were posted at each of the three entries and on catwalks overhead and along the walls. They wore blue hard hats and surveillance holoviewers, the lenses nearly transparent in response to the dim light. There was no opening at the north end of the building.

At ten hundred hours, after a totally fatiguing first night, once outside in daylight, Helena mustered up enough energy to walk around to the back of the immense building to better learn the lay-out of the place. An enforcer met her as she was returning to the front of the building. "May I help you?" he asked.

Helena thought fast. "Ah...it was my first night and I became disoriented while on my way back to my compartment. I must have turned in the wrong direction when I left the building. Would you be so kind as to direct me?"

The Zircon guard looked as if he doubted her story. He pointed to the compartment buildings. "The living quarters are that way. The entrance to the speed ramp is over there."

Afterward, in her two-room laborer's compartment, Helena checked her vital signs and discovered that she had lost two kilograms of mass from being in the extreme heat all night. The pores of her face were clogged with dark red dust, which also covered her gray work uniform. She removed her protective hard hat and rinsed off her face at the sink in the shower room. She combed back her matted down hair, which didn't make it look much better. It seemed to have been permanently misshapen by her helmet and sweat.

There was about an hour between Helena returning from her shift and Thor leaving for his which began at noon. Helena turned on the shower to muffle her voice while she reported to Thor. She sat on the floor between the bed and the shower room wall where she unfolded and donned the holoviewer headset. Its superluminal signal would be undetectable to UMO security. She contacted Thor who was in his compartment. Through the lenses, her weary eyes became rejuvenated upon seeing his face, which was being transmitted from his extended microcamera. He appeared to be wearing sunglasses.

"It was hell on Mars, Thor. I thought I was going to melt from the heat." She described her job, the equipment, and the other people in the building.

About the children she added, "It is heartbreaking to see what they have to endure under UMO's cruelty. I spoke with a girl, Chrina, with whom I happened to share a five minute break. My premonition is that she and the other children will gladly work with us to carry through with the escape plan. I will seek her out later today. We have arranged to meet this evening before our shift begins." She was trying to mask the tiredness in her voice.

"It is deplorable that children are made to suffer like that," he said. "How are you holding up?"

"Well, it isn't a pristine chemistry lab, but I'll be all right. What was your job like? Did you talk with Ren?"

"Yes, Ren and I have been working out the details of our rescue plan. And...I didn't really want to tell you this, especially after hearing about your less than perfect job, but I rather enjoyed working in the clean, quiet environment of the mine's main computer bay yesterday."

He seemed so well-rested. And was that a smirk on his face? She was beginning to resent his good fortune at having had such an agreeable experience. "Well, you could pretend that you didn't like it so much. It really isn't fair, you know," she said in mild protest. "The Devil himself must have had a hand in designing the agglomerator building." She began teasing, "And here I was about to describe to you--

to give you something enjoyable to think about during your upcoming and, what I had assumed was going to be, your stress-filled shift--my unclothed body, ready and willing to take you on a tantalizing excursion."

"What are you wearing?" was going to be my next question," said Thor, acting lasciviously, evidently following her lead as though they were on an adult call line.

She pretended to ignore his lechery. "But now that I picture you actually luxuriating in the clean and air-conditioned control room, I suspect that you're already a bit too satisfied to need a woman who is desperate for you."

"Helena,...I am never satisfied without you. I need you like oxygen." She heard desperation in his voice. "And the thought of having some skin time with you has created a demanding stress here that is in desperate need of satisfaction. Move the image transmitter so I can see your unclothed body."

She giggled at his incessant need, yet it aroused her to always be wanted in that way--by Thor. She said, "I believe I will leave that to your imagination for now, my love." She was still wearing her dirt-covered uniform. "Even in exhaustion, mon cher, I want you, and then I want to fall into a deep dream state while you hold me in your arms."

He sounded sincere when he added, "I would love to oblige you, darlin', more than anything. I'm sorry that you have to work in a furnace for a few days."

"I know you are, but I'll survive because I know it's only temporary, and soon we can be together again."

"I would trade jobs with you in a minute to prevent your sweltering hardship," he said.

"And I would love to be the cause of your sweltering hardness."

He laughed at her unexpected suggestiveness. "Oh, you definitely are that."

She loved seeing his smile. She knew his eyes were vivid azure beneath the lenses. She wished she could see them. "And besides, I know a little bit about chemistry, not about the photonic circuitry in the mine's main computer. Have you solidified a plan yet?"

"Well, I definitely have something solidifying here."

They both laughed.

Thor's orders included seeking out the rebel infiltrator Ren, who had filled him in on the plant's operation. He was overweight, slow in motion, and hardly one whom the DTM would suspect of carrying out subversive activities. Yet he was the one with whom the Subterra maintained QuEST\* contact in developing this and other rescue missions at the Zircon mine. Ren worked as a custodian, which gave him access to rooms and building information. He was aware of workers that were incoming and outgoing. He periodically acquired knowledge of classified mining information; his photographic memory retained everything. While he mopped and dusted and polished, his presence went mostly unnoticed by UMO officials.

He advised Thor on the mission's timing, of workers who could be trusted, and of the locations of the Vigilant Eye cameras. Ren also informed him of the watch patrols and weapons of UMO's enforcers. He would help Helena gather the child laborers for the escape.

Helena listened to Thor through the holoviewer's earphones. "With Ren's input, we've decided on a course of action that will begin in the mine's control room. In two nights we should be able to execute Operation Starchild." He told her of the plan. "Pass the word on to the children."

Helena said, "Good, I will need to speak with Ren about coordinating our efforts in getting them to

safety."

"I have to attend a safety meeting before my shift. I'll call you tomorrow at this time to check on the progress of our plans. Good luck, tonight." Then his voice became hushed and passionate. "I miss you, darlin'. I love you madly."

"I love you, too, honey. Be careful at work." The last thing Helena wanted to do was to switch off her communicator and cut off the connection to her husband.

She prayed for their safety in this plan that suddenly became overwhelming to her. What had made her think she could do this? She had insisted she could even after Thor, concerned about the hazards involved, had suggested someone else go instead. She could not have imagined Thor gone for three days on such a dangerous assignment while she stayed behind. She would have died from the anxiety of waiting for his return. Now she needed to reassure herself about her own abilities to go through with it. One step at a time, she thought.

She showered and then fell asleep on the cot, completely and totally exhausted.

\* \* \* \* \*

That day, Thor continued learning how to operate the plant's production lines from the control room. From the way Helena described the workers' duties in the agglomerator, he devised a ruse....

\* \* \* \* \*

Late in the evening, Helena met the girl Chrina at the entrance to the corridor of the speed ramp that carried workers to the agglomerator building. Before stepping onto the moving walkway, Helena asked, "Is there a place where we can talk more privately? Outside, perhaps?" Chrina guided Helena through another building to an outdoor path which would also lead them to the agglomerator.

The darkened, moonless sky blanketed the boundless mine pit. They saw a shooting star to the north. In the distance, they heard the rumble of the house-sized production trucks and the chattering of giant diamond drill bits turning in the hard rock.

Helena asked Chrina, "How old are you?"

"Eleven and a half," answered the tall, slim, blonde-haired girl.

"Would you like to escape from here to a place that doesn't require the hard labor services of eleven-year-olds?"

Chrina's face became enlivened.

"How would the other child workers feel?"

"The same as I; I am sure of it. Our hands have so many burns from the pellets that we can hardly feel them anymore." She showed Helena her scarred hands. "We are weary of the heat and the noise. Some of us feel that we have already died."

Such a bleak statement from one so young, thought Helena. It appalled her to see the circular burn marks on the girl's hands. She explained to Chrina about the resistance movement. "Then, if we are very careful, you and your friends can escape with us. But I emphasize that we have to be careful and maintain secrecy. Continue to be strong, Chrina. If things go as planned, we will soon be away from here. How many children are there altogether?"

"Thirty-six. Eighteen also work the day shift."

"Do you have a way to contact all of them? Can they be trusted with our secret?"

"I will talk with them. They will be very happy to leave. They will keep our secret."

Helena told her to prepare her friends by telling them that there would be a change in routine on the following night's shift, after which they would be transported away from there. "You must talk to them away from the Vigilant Eye, outside in whispers. I will tell you more tomorrow. We'll meet again outside of the food dispenser room at eighteen-hundred hours."

"I will do as you say, Kaisa. You have given us hope." Kaisa was Helena's alias.

The next morning, Thor had spoken with Helena to finalize their plans. He told her to meet with Ren outside her compartment building at noon to exchange information about the children.

After her talk with Thor, she communicated with the Subterra compound to update Brydak. He would be flying in with the getaway vehicle.

That afternoon, she met with Chrina, who said, "I have contacted all of the children on my shift. Before I went to my compartment, I waited in the agglomerator for my friend, Chaliem, who was about to begin the day shift. The noise of the machinery drowned out our talk. I told him of the plan and that he was to tell the others that work with him. It was like he became alive again at the thought of leaving this place. I told him to wait for me tonight when I begin my shift, and I will give him further word."

Helena gave her details of the rescue operation. It was to commence that night at one hour before midnight. After their shift, Chaliem and his child co-workers were to proceed home to their modules in normal fashion. The janitor Ren would arrange for a copy of the previous night's room attendance check to play on Vigilant Eye monitors while the children were meeting him at a designated location outside of their compartment building. From there, he would lead them to the north side of the agglomerator building. "Tell them to crouch against the building while they wait for us and not to wash their faces or change their clothes. Their darkened look will make them less easily seen by UMO security."

\* \* \* \* \*

During his shift of the third day, after the other computer operators had left to attend a previously scheduled meeting, Thor was left alone, in charge of the mine's control room. At the console of the mine's mainframe, he moved his body in hopes of obscuring what he was about to do from the cameras of the Vigilant Eye. He unclipped a tool kit from his belt, removed a screwdriver, and began unscrewing the panel section of the master switch that controlled the agglomerator's Tesla electrical power. Throwing the switch would shut off all conveyor belts and kilns. He had carefully lifted it to study its attached optical wires, nanochips, and qubit mechanisms when a Zircon enforcer walked into the room.

The raised edge on the console's front prevented the guard from seeing the exposed wiring. Thor looked up while discreetly replacing the switch and panel. He smiled at the soldier, trying hard not to look as though he was doing something highly illegal. Thor spoke in an overcompensating voice. "How about that Martian chimeric-rodeo team! I didn't think they'd ever pull it off against the United States region in that last round, did you?"

The humorless woman had the chiseled features of one who is ultra-physically fit. Her non-answer suggested to Thor that she was unamused at his attempt at idle conversation. He imagined that behind the lenses of her holoviewer, she had rolled her eyes. Her jaw was set as if she was thinking, When are these technicians going to learn to just do their jobs?

She continued her surveillance of the control room, scanning through her holoviewer, appearing like a robot with sunglasses as she did so.

Thor slid his tool kit to his lap before the guard came around to the full view of the instrument panel. He read her name tag. It said Nortam MW391ah, Zircon Security, UMO.

While watching her move in agonizingly slow steps, his leg moved inadvertently, causing the tools in the kit to clink together. Nortam turned toward the rebel. Thor's eyebrows raised in innocence. At the same time, he was willing the sweat to stay within the skin of his forehead.

Nortam's hand moved to her weapon, and just as she was about to step in Thor's direction, she cupped her hand over her ear in trying to better hear a radio message that was being transmitted to her holoviewer. There seemed to be a more important development. She hurried past Thor and through the door.

"Have a nice day," said Thor as she finally left and then added to himself, I mean, May you steer head-on into Venus! He let out a deep breath. He shook his head when he thought of when he had been just like her--stoic and loyal to the contemptible Delegation.

Thor was thankful for Helena, who had helped him put an end to his inner struggle between conforming to DTM influence and his desire to be released from it. With Helena, he viewed life with pleasure and excitement. He was presently living with a purpose more true to his belief system, rather than with unquestioning obedience to authority--how could he have ever been content to live that way? He shook his head in amazement.

Thor went back to his task. In a circuit leading to the master switch, he adeptly spliced in a miniature timing device. He set it to interrupt the production lines at twenty-three hundred hours. This would be one hour before the end of his shift and one hour after Helena would begin hers. He applied the same procedure to the agglomerator's auxiliary power switch. He also had to bypass the auto-troubleshooting lines around each timing device so other technicians would not be able to immediately pinpoint the cause of the shutdown.

Afterwards, while on a break, Thor sent a communique to Helena in her compartment indicating that Operation Starchild was proceeding on schedule.

Earlier Helena had received word from Brydak that he would be at the rendezvous location at the designated time. She conveyed the message to Thor.

Helena left her compartment one more time. Before arriving at her job in the inferno, she went to Chrina's module and passed on the Starchild message. Chrina subsequently notified the other children.

The stratagem was set into motion, and Helena was reminded of the living cell's translation process of unerringly assembling amino acids, step by step, into a life-sustaining protein.

\* \* \* \* \*

The late evening scene in the scorching, dusty racket of the agglomerator building was typical of any other for the first hour. Adults were braced against large hoses. Others, looking like they could be Satan's helpers, were poking rods at red hot clumps of ore pellets in efforts to break them up before the conveyor belts on which the pellets were riding became inflamed--a common occurrence, regardless. Still other workers were applying their maintenance skills to downed production lines. Children were hustling to move fallen pellets.

Then the lights went out. Within seconds, energized by storage batteries, the less bright emergency lights switched on. The motion of the machinery came to a halt with the release of a loud, groaning noise that reverberated throughout the building. Except for the sound of gushing water from the hoses, the room was uncharacteristically hushed.

After waiting a few moments for the auxiliary power to take over, an enforcer near the main entry used



his holoviewer to radio the control room which was in a nearby building. He cupped his hand over his ear. He was hearing conflicting messages. They seemed to be in a panic over there.

As the production line workers began turning off the hose valves on the walls, the children inched toward the west door to wait for a signal. After shutting off her hose, Helena placed it on the ground and sidled towards the children.

Wearing uniforms and yellow hard hats that seemed to have never seen iron ore dirt, a group of mining engineers and computer technicians from Mine Control entered the agglomerator. They carried with them portable lamps and all of the modern test meters and tools needed for troubleshooting. The tall, red-haired technician began loudly disagreeing with others, insisting that the problem was in here and not at the main computer.

That was Helena's cue. With Thor's distraction and the children ready, they slipped out of the building as everyone else's attention was centered on the quarreling mining production experts. They moved through the doorway and disappeared into the delicate fog that was caused by the warm humidity from inside the plant meeting the cool night air.

In almost total darkness, Helena led the group along the building to the other children who were waiting on the north side. She didn't see Ren, but was relieved to see the barely perceptible outline of Thor's black astrospace. It had been able to land undetected due to its own electromagnetic radiation containment shield and to the radar-absorbing tiles adhered onto its surface.

After instructing them to leave their helmets on the ground, she directed the line of preteens up the boarding escalator, through the airlock, and onto the lower level where the lights had been dimmed. There she met the welcome sight of Brydak who was wearing the close-fitting, black outfit of a burglar. A tight cowl covered his blonde hair. "Glad you could make it, tiger," she said.

He took in the grungy appearance of her and the children. "I see that cleanliness is not a virtue in this place, eh?" he quipped.

She noticed the black camouflage paint on his face. "And you must be deep space calling the black hole void of light." They grinned at each other for a moment at the joke and then became serious.

Brydak wore a diminutive QuEST\*com headset and was armed as Thor's back-up in case Thor had difficulty getting to the ship. Helena quickly filled Brydak in on the number of people surrounding Thor and the number of armed guards in the building. "Go to the right when you reach the building. Follow along its edge to the west door. And please, Brydak, be careful!"

"No worries, love! We're about to save the day!" he exclaimed in heroic fashion. As Helena watched him disappear into the blackness, she decided to ignore her nagging feeling that something was about to go terribly wrong.

She and the children quickly spiraled up the steps to the bridge deck. She instructed the children to sit quietly on the floor's perimeter. From the defense locker, she selected her phasor and attached it to her belt.

If the plan was unfolding according to schedule, she needed to begin revving up the ship's engine about now in preparation for a speedy departure. She sat at the captain's chair and moved the throttle's T-shaped handle forward to increase the rate of fusion reaction.

On the way to Europa, Thor had given her lessons on emergency flight, and just before this present rescue mission, he had reminded her of the procedures. Helena recalled when he had sat at the chair and pulled her onto his lap. She was surrounded by his body and arms when he had reached around her to demonstrate the throttle. "While we're on our mission, my dear, it will be necessary for you to

operate some of the ship's functions--but only if you promise not resort to the method of randomly dropping a potted plant on the control panel."

She had pretended to be hurt and said, "A girl nearly obliterates a spaceship, and you're never going to let her forget it, are you?"

"Mmmm," he'd answered as he breathed in the sweet scent of her hair and held her more tightly, "I will cherish every memory we make together."

Now, alone at the console, as Helena was pushing the handle forward to prepare for the nearly one thousand kilonewtons of thrust force needed for vertical takeoff, a Zircon soldier was slinking up the spiral stairway. He scanned the deck, saw the crowd of dirt-covered children, and aimed his weapon at Helena. "Going somewhere?" he asked with a sneer.

She turned and a look of dread washed over her face.

\* \* \* \* \*

Electrical engineers had found their way to the Tesla power-wave receiver boxes while mechanical engineers had been inspecting the machinery. The four other computer operators with Thor were using meters to test the massive parallel logic circuits in a panel box. Thor insisted that they be examined again, but the others were becoming convinced that everything there was testing normal. Thor threw his hands in the air and bellowed, "But I'm certain that the malfunction is due to a qubit manufacturing error. There should be a NAND gate instead of an AND gate in one of the MPL mechanisms in this particular relay circuit. Let us go back to the control room. It will become apparent when you view the schematics."

Thor and the others walked through the door and headed back to Mine Control. Thor stopped suddenly and said, "Wait, I forgot one of my meters in the agglomerator."

A woman in the group said, "We'll go on to the control room and meet you there."

As Thor retraced his steps, he heard the whisper of a familiar accent. "Psst, oh sullen one, I have your meter right here."

He was pleased at the way their plan was progressing like atomic clockwork. He was about to step from the dimly lit mist near the entrance and into the shadows with Brydak when a search light clicked on and five Delegation enforcers encircled Thor, their phasors directed at him.

His arms went up. He turned toward the door to draw attention away from where Brydak was standing, still cloaked in shadow.

"Come with us, sir," one Zircon guard said.

Brydak quickly ascertained that if he was to begin phasing out security guards, he and Thor would never come out of this alive. He knew that Thor shared this thought also. It worried him when they escorted his partner away, but at the same time, from his ear piece, he heard that the ship had an uninvited visitor. He decided to retrace his path in the dark, and hopefully, he would be able to transfer Helena and the children to safety.

As soon as he could, he would return for Thor, his fellow rebel, his partner, his friend.

\* \* \* \* \*

Helena could only stare dumbfounded at the intruder until she thought of the children, and her instinct to protect them took over. Through the nearly clear lenses of his holoviewer, he looked at her with derision. She slowly stood and said, "Uh...yes, we will soon be departing, but we are waiting for others. They will be here at any moment." Her eyes narrowed in warning. "They will be armed. It would be to

your advantage if you were gone before they arrived."

"I will ignore your threat. It would be to UMO's advantage to capture the infiltrators who plan to transport its workers away from here. Now, reach for your weapon--slowly--and drop it to the floor," the guard said, his phasor still pointed at her.

She knew she had to comply for the sake of the children. She followed his orders.

"Allow me to escort you to the interrogation room where you will be found guilty of treason, and then you'll be given a well-deserved sentence on Triton." He nodded his head toward the stairs, indicating that she start moving. "By the time your comrades arrive, Delegation enforcers will be in position to ambush them."

The thought of Thor and Brydak encountering a surprise attack alarmed her, though she maintained her composure, knowing that she needed to buy time. "It is for freedom and justice that we have defected. You should consider it, too."

She must have struck a nerve. He readied the gun as though he was going to shoot her at that moment. "Enough out of you!" he ordered. Then he radioed security about his discovery of an astroskip behind the agglomerator building.

The boy Chaliem, with a face so smudged you couldn't see his freckles, had been inching toward the guard. "Cool gun," he complimented.

The soldier looked at him.

"Is it powered by a solid state laser or is it one of those x-ray phasor guns?" the boy asked.

The guard had a fondness for weapons and the boy's interest distracted him. "I'll have you know that this is a Hertzsprung Model 445Z. It is a seven-megawatt, variable gamma-ray phaseout weapon that is capable of disintegrating an angry chimeric bull from four-hundred paces."

"Wow! That really kicks butt!" A guard in the agglomerator had taken a liking to Chaliem and, during breaks, would sometimes converse with him about the latest in security gear. Chaliem was now holding the attention of the guard before him with other questions while Helena slowly reached into her pocket to turn on her holoviewer so that Thor and Brydak would become aware of the soldier inside of the ship.

"Awesome tracking device on it," said Chaliem to the man. "What's the range on that puppy? Is it equipped with the new positron resonance locator?"

The glibness of the little con artist amazed Helena. She saw an opportune moment, took one step to swipe the weapon from the man's hand, and then aimed it at him. She had learned the rudiments of weaponry at the Subterra camp, but nothing could have prepared her for a real situation. And this gun was heavier, more unwieldy than what she was used to. She willed herself not to quake. "Turn off your holoviewer's camera, and send a message to security that everything is under control. You only thought you saw a ship in the darkness." She said this even though she knew their gig was up and that security was probably already on their way.

He paused, unsure of how to respond to this turn of events.

"SEND IT!" Helena shouted as she turned the phasor toward his eyes. The UMO soldier obeyed her command.

\* \* \* \* \*

As he approached the ship, Brydak heard Helena's voice shout from the bridge. He sneaked up the stairway to find that she was now in control of the security guard, but he correctly deduced that other

enforcers would be arriving soon.

Her face expressed gladness at the sight of him but then turned to worry when she didn't see Thor behind him. Assuming the worst, she looked imploringly at him. "Please don't tell me he's dead," she said.

"The Zircon beasts have captured him, but he is still alive. We must leave immediately. Other enforcers will be here soon. We will return for Thor." Brydak hand-cuffed the guard to a structural post on the deck and searched him for other weapons. He then headed for the console to fly the ship.

Tears gushed from Helena's eyes. She screamed. "No Brydak! Stop! We can't just leave him here!" In a desperate effort to prevent the vessel from taking off, she ran to pull Brydak away from the flight controls. After a valiant effort on her part, he clasped his arms around her, to restrain her.

"Please, Helena, stay calm." Brydak tried to mask his own concern. "We'll bring the children to safety and then come back for him."

"But they will kill him!" Her despair couldn't have reached deeper into her soul.

"I don't think so, or they would have done so when they had him surrounded. They are keeping him alive for some reason." He hoped to God he was right.

"No! Then they will torture him." Her sobs were uncontrollable as she sank to the floor. She would never be able to forgive herself for abandoning Thor.

As Brydak maneuvered the craft away from the mine, the children weren't as overjoyed to be leaving as they might have been if their heroine hadn't been so distraught. Chrina and Chaliem went and crouched near Helena. The boy said, "Please, pretty lady, don't cry."

Chrina added, "Always remember that anything can happen. Look, we are now free. Your Thor will be rescued also."

Helena could only hold them to her as the tears fell.

## CHAPTER 39--WHERE THERE IS LIFE,...

Thor was hauled into the inquisition room. His hard hat had been removed.

An x-ray screen revealed his hidden holoviewer. After he refused to hand it over, an enforcer tried to confiscate it from an inner pocket of his shirt. Thor resisted, giving a hard knee to the guard's groin. This caused the other soldiers to swoop down on him. Three held him as he struggled to break free. One gave the physically powerful resister a blow to the back of his head. Thor's awareness turned dark.

He awakened to find himself sitting in an oval-shaped chamber with dark glass walls. The pungent odor of smelling salts was evident. A glaring light was shining on him from above. The copper-haired rebel was quite groggy. He tried to bring his hand to the throbbing pain at the back of his head, but his arms were strapped to the arms of the chair. His legs were also secured. He recognized the power frequency receivers on his wrists and was reminded of young Seyfert's unflinching description of electric shock treatment.

His eyes scanned further along his body and stopped at his upper arm where a procule drug applicator was attached, which he presumed was administering a truth serum. He had heard that the DTM's defense department had been testing a newly designed procule which, it was rumored, could reduce the most stalwart enemy soldier to a blithering idiot.

He turned his head to view the hazy reflection of himself in the dark glass, and he mentally braced himself for the nightmare that was about to occur while interrogators would attempt to extract incriminating details from him. His own natural army of neurotransmitters would be his only defense against the swarm of procules now heading toward his brain.

A bass voice filled the room. "What is your name?"

Thor remembered his alias. "Llars CH210fz."

He felt an uncomfortable twinge through his legs and the right side of his body.

"Again, what is your name?" asked the voice.

Thor had a strong desire to reveal his true identity but repeated his alias and identification number. More electricity, but stronger, and longer in duration. He tried to ignore it.

"Your name is Thor DV556hz. You are a fugitive of Universal Mining and Delegation Law. You are wanted for your involvement in the criminal activities of treason, desertion, grand theft of a spacecraft, and the kidnapping of Helena OM781eh."

His spine stiffened when the unworthy interrogator dared to utter Helena's name.

"Most recently," the voice continued, "you are charged with sabotaging the Ares Valles Zircon Mine and kidnapping thirty-six child orphilion workers."

Thor wondered why murder wasn't on the list. Of course, he remembered. He had killed Aurora while under UMO orders. They obviously didn't see the need to accuse him of murdering a woman whose only crime had been trying to escape an oppressive existence--as though her desire to be free had been enough to justify her death. Thor failed to understand the logic of Delegation law and wondered, as he often had of late, how it had ever made sense to him in the past.

\* \* \* \* \*

Before Thor had been captured, the sentry Nortam had sensed that something was not quite legitimate about the new hire in the mine's control room. Late that evening, after her shift, she yielded to her

nagging suspicions, and from a security computer terminal, she ran a search on the new technician. The orphilion data bank listed several previous work experiences for the computer operator named Llars CH210fz, but it wasn't enough to satisfy her intuition. She ran his image across the DTM data banks. It also matched a Thor DV556hz, who was a wanted and dangerous felon.

Nortam presented her findings to her supervisor, who contacted James Ganymede at UMO headquarters on Earth for verification and further orders.

It was in the middle of the night in Colorado and James had been awakened. From his home office, he studied the three-dimensional image in front of him and recognized it immediately as Thor's.

"Was there any sign of Helena OM781eh?" was his first question. "She would be working as a scientist of some sort."

"Only some laborers have been hired recently," answered the manager.

To James, Helena was above moving rock and he could not imagine it, but he asked the Zircon supervisor to send information on all of the new hires.

About his once trustworthy liaison officer, he said, "Apply the 'enhanced' cross-examination technique to the prisoner. And then send him to Triton." Enhanced with electric shock. He thought that instant phaseout would be too good for Thor.

"And send me transmissions of the proceedings."

\* \* \* \* \*

James was watching the interrogation in progress.

"We have reason to believe that you are a member of the Subterra Rebel Force. Is this a correct assumption?" asked the deep voice.

Thor fought the overpowering urge to answer the question honestly and fully. He willed himself to say nothing. Another obnoxious current buzzed through his body. He noticed a metallic taste was forming in his mouth.

"Be forewarned, we have taken Dr. Helena from her compartment and are holding her in the next room. Every question left unanswered or every untruth you state is resulting in her receiving the same electrical charge that you are experiencing."

Instantly reactive, Thor tried to rise from the chair. "Show me that you are telling the truth! Let me see her!"

His request was ignored. He sat back and quickly weighed the facts at hand. Neither Brydak nor the ship had been mentioned as being in their custody. The charges of which he was accused did not describe an attempted kidnapping of the children. They had been kidnapped. And Helena would not have gone to her compartment after he had seen her in the agglomerator building. Plans had been to head for the ship. He concluded that since they would not show her to him, they could not show her to him. The inquisitor was bluffing. Thor was involved in a dangerous game of chance, and he had to trust his instincts--that Helena was safe. He calmed himself.

"It seems that a nerve has been struck," said the vile prosecutor.

"You are lying. Helena is far from here."

"You can't be certain of that, can you?"

"Then let me talk with her."

"First, you must give us the information we seek. Where is the location of Subterra headquarters? There is much we'd like to discuss with your Commander Rovien."

You must tell them the truth! It was a command from his tech-influenced brain. But the truth worked both ways. "Commander Rovien has ears only for truth and justice...concepts which you will never fathom." The power surge increased. Thor's eyes closed tightly as he was shocked into a painful silence.

"Soon, rebel, you will be unable to maintain your stance and will willingly direct us to Subterra headquarters. Then we can put an end to the civil disobedience of its radical members--who only serve as contributors to solar system disorder."

The current subsided. Thor was convinced that his nerve axons were becoming frayed like worn twine.

"We are in possession of your holoviewer. We see that it has been altered. There are functions with which we are unfamiliar and unable to operate."

"Well, don't expect me to explain it to you!" said Thor defiantly. The next burst of shock sensation was almost unbearable. He winced in anguish. Muscle twitches weren't suppressible. He was convinced that wild stallions were now playing tug-of-war with his nerves.

"Please instruct us on how to run the QuEST\*com function. Give us the voice command."

Thor's voice was strained in his struggle to prevent the code words from gushing through his lips.

"That is...for me to know and you...to find out!" He said this even though the procule drug invading his brain was making it extremely difficult to hold his ground. Even though he knew the amperage would be increased. But he was damned if he was going to make it easy for them to uncover Subterra technological secrets. He concentrated on suppressing his current-induced shudders.

"Are you sure you wouldn't like to reconsider?"

The intensity of the current was as though bursts of Hell's fire were burning through him. "You will have to kill me here, you bastard," was Thor's reply through gritted teeth as his body tensed in spasms. In spite of his pain and suffering, he was not going to tell them what they wanted to hear. He was not going to succumb to their coercion, to their brainwashing tactics--to their torture.

The inquisitor said, "It is of no matter. Delegation scientists will dissect the quantum entanglement unit and unravel its secrets."

Another jolt. Another pained set of spasms.

James found he wasn't enjoying seeing this as much as he'd anticipated. He sent word to suspend the shock treatment, but, given the current position of the planets, it would take eleven minutes for radio communication to reach Mars. The total time for the kinetic image reaching James and for his command to return would be twenty-two minutes. He hoped Thor wasn't dead already. He wanted him to have a useful and slow death on Triton. He wanted the brute to regret his transgressions with every grueling, bone-chilling step while hefting radioactive iridium boulders.

Then, for her own lawbreaking, he would personally see to Helena's punishment.

Thor was asked, "Again, where is the location of SRF headquarters?... Who is working with you from the inside of this mining facility?"

His jaw was clenched in his battle against the procule. He grunted in his desperation to hold back the words. He could barely endure the wave of new tremors that violently quaked through him.

"How do you plead to the charges?"

He was breathing heavily. He was losing the war raging within him, ready to confess all. "Your laws...are nothing but a pathetic joke.... I am innocent...of any wrongdoing." The current then burned through his body for what seemed to Thor like an eternity, though it was actually less than a minute. He suffered violent convulsions, nearly passing out from the excruciating pain.

"Again, how do you plead?"

In agony, he grimaced and spoke through his clenched jaw. "I plead...that my actions...were JUSTIFIED!" He could not contain his impulse to scream out the last word.

"We will process the information." The electrical surge stopped.

Thor's muscles relaxed, though he was still feeling ghost vibrations of the current. He felt feverish; his forehead throbbed; his body felt raw and numb at the same time. He thought if he were required to stand, he would ooze all over the floor like mercury. He sensed the severe electrical burns on his wrists and ankles and wondered how he had survived the current. The charge must have gone through every organ save for his heart or he would most certainly be dead.

While waiting for the interrogator's voice to return, grogginess was beginning to envelop him. "You, Thor DV556hz, are found guilty of each and every one of the aforementioned violations of Delegation law." Thor listened unaffectedly as the long list of statute numbers was being recited, gradually fading in volume until he was aware only of a droning sound in the back of his mind. "You are sentenced to hard labor on one of Triton's heavy metal mines until the time of your death." It was like hearing a distant voice echoing from the far side of a tunnel. He wasn't certain the words had really been spoken.

The Zircon soldiers unstrapped Thor to bring him to the holding pen to await transport to Neptune's moon. Once out of the chair, his awareness returned to the point of being certain of one thing: he needed to get the hell out of there. Thor miraculously found strength to resist. He wrenched himself free from the hold of two of them, kicked one solidly in the crotch, and punched another in the nose before he blacked out from another blow to the back of his head.

From behind the glass, a custodian slipped unnoticed from the interrogation room's control chamber with an extra holoviewer in his pocket.

\* \* \* \* \*

The next morning, Thor came to in the holding pen. He groaned at the pain shooting through his head caused by the bludgeoning and by the after effects of the truth serum. He curled up on the cot so his shackled hands could hold his pulsating head, and he groaned again at the ache piercing through his muscles, caused by the shock treatment.

In a moment of utter selfishness, the likes of which even the bravest soul would have found difficult to overcome, he sobbed, "Helena, Brydak, where are you? Why did you leave me here?" Then he came to his senses and was extremely grateful that neither of them had had to endure such a horrendous experience. He prayed that he'd been right in assuming that Brydak had been able to fly Helena and the children to safety.

Having never heard of anyone surviving the sentence he'd been given, with reluctance, he began to accept his fate: So this is it, then. To die on Triton.... But I will give them reason to phase me out before I lift even one pebble that would further advance the Delegation's ill-gotten profits.

Then he thought of Helena--his reason for living. He was still alive...barely, anyway...and he reasoned that where there is life, there is hope. He allowed his hope of seeing Helena again to be his strength.

He scanned the holding chamber for a weakness--a chance for escape--but the room was seamless except for the guarded door. Through its small, smoke-colored window, he witnessed the arrival of the



Delegation vehicle which would transport him to the iridium mine on Neptune's moon.

The door to the cell opened, and the guards brought him still shackled through a connecting corridor and into the vehicle. He had shrugged off their arms, an indication that he would walk under his own volition. Still searching for a weakness, he observed over a hundred sleeping prisoners secured in the passenger seats. He was directed to an empty seat near the front. His legs and arms were locked into the seat's unyielding metal cuffs, the manacles then removed.

Thor's eyes grew wide as a Delegation guard with a familiar face secured the sleep-inducing procule pack on his arm. He sensed no pinpricks against his skin, but he pretended to fall asleep.

As the Zircon enforcers stepped off the craft, one muttered to the transport guards, "That one is a bottom-dwelling, scum subversive. We are glad to be rid of him."

As soon as the transporter was in-air, Thor felt the procule unit being lifted from his arm and then a tender form alight upon his lap. When he felt Helena's lips on his, he opened his eyes and kissed her back in celebration to the answer of his prayers.

"I want to hold you, darlin', but my arms are strapped to this damn chair."

She rested her forehead on his, looked into his eyes and grinned. "Hmmm, honey, I kind of like you in this position. Now I can have my way with you." Her hands moved from his shoulders to partially undo his uniform shirt. She reached within to gently massage the warm, masculine contours of his chest and shoulders.

She had no idea how much Thor was reveling in her massage. It was heaven-sent therapy after the torture his muscles had endured.

"And when I am freed from this bondage," cautioned Thor, "I give you fair warning that I will return your arousing pleasures one-hundred-fold." His eyes were filled with the gleam of promise.

By pressing a series of buttons on her DTM soldier wrist band, Helena unbuckled the radio-controlled braces that were restraining him. Thor's arms immediately encircled her in an embrace that he never intended to release.

\* \* \* \* \*

Helena skillfully doctored Thor's wounds with bandages, burn ointments, cold packs, and pain killers. Just her presence did wonders for his recovery.

He asked about Brydak. She helped him walk to the cockpit where Brydak was piloting the craft. While the close friends reunited, she returned to begin awakening the sleeping prisoners.

Brydak apprised Thor on how they had been able to rescue him. "While we were delivering the children to the Subterra, Ren was keeping us posted on what was happening to you. An enforcer had become suspicious of you and had run a check of your holo-image. It had been Ganymede's choice to send you to the iridium mine."

"It was probably that wretch's choice to fry me with electricity also." Thor was seething from the memory of his suffering. He would never forget it. It strengthened his belief in the exigent need to remove the DTM from power.

Brydak continued. "Rebel forces had become aware of an incoming prisoner transit vehicle that was to pick up more prisoners on Mars before heading to Neptune. It was at the Mariner mine where we ambushed and confiscated this transport ship before it was to proceed to the Zircon mine.

"After each prisoner transport vehicle abduction that had been executed by the Subterra in recent months, there had been, as a consequence, an increase in the number of DTM in-flight enforcers. This,

along with continual upgrades of the security codes, was the Delegation's way of ensuring prisoner transit.

"We knew we had to act quickly to rescue you, mate. Thank Helena for her previous work in the Subterra chem lab where she had synthesized a supply of the hypnosis drug. It was her idea to spray an aerosol form on the faces of the guards, after which they willingly gave us the information we needed to enter the security codes of this transport vehicle. We had been inoculated with the antidote so we were protected from the drug's effects.

"Most on board this craft are political prisoners who have worked for megacorporations and who will be granted asylum in the Martian underground. They'll be 'happy as Larry,' thinking they've died and gone to heaven, when they awaken into the arms of liberty!"

Thor was thankful that Brydak was on his side. And he couldn't resist feeling a sense of pride for Helena, because of the significant part she had played in the rescue of many innocent people.

Thor's SRF comrade concluded, "A few on board are hardened, street scavenger criminals. Along with the yobbo that Helena had captured before we escaped with the children, they and the original DTM officers of the transport ship will be kept in secured cells until the Subterra can conduct fair trials for each of them.

"Sorry, Bluey, that I left you to fend for yourself with the Zircon drongos. I was up a gum tree and had to act in a split second." Brydak was sincere in his apology.

Thor said, "You did the right thing. You had no other choice. Saving Helena and the children was the priority. It would have been difficult for me to forgive you--or myself--if anything had happened to her."

Thor recalled, from shortly after they had met at the training camp, telling Brydak his account of when he had thought he'd lost Helena after the Europa mission. Brydak had been deeply concerned and sympathetic then, and he said now, "You and Helena are fair dinkum in my book. I would defend the two of you with my life."

"As we would battle for you, Brydak. You are like a brother to us."

Then Brydak asked, "Why do you suppose Ganymede didn't have you phased out directly?"

Thor shook his head, having wondered the same thing himself. "That, my friend, is a mystery."

## CHAPTER 40--SUBTERRA COUNCIL MEETING

2098, January: Earth

The air was energized in anticipation of the historic changes that were about to occur. The leader of the Subterra Rebel Force, Rovien TK014cz, from the Japan region, was a highly respected visionary who led the revolutionists from the Rocky Mountain headquarters.

SRF members were certain that they were nearing the manifestation of their dreams in which all were endowed with fundamental rights where individualism was embraced and no one was unjustly accused and sentenced, or tortured.

They were prepared to fight for the right of privacy and the right to protest without reprisals, for safe working conditions and fair wages. They would rally to eliminate child labor and campaign for uncensored education without the indoctrination and harsh discipline. There were also serious concerns over the utilization of CloneFac workers.

Due to recent high attendance, the Subterra Council had been holding its meetings in the auditorium rather than in chambers. On the auditorium's stage was a table for Council members who could be physically present. To the left of the table, tiers of holocomm stages had been positioned for members from elsewhere around the system. Rank and file members filled the auditorium seats. The current meeting was standing room only. Taedres was present on a signal from Mars, appearing to be sitting among others in what looked like a jury box.

Council members were discussing the strategies of their revolt. In concerted efforts across the planetary system, they would aim munitions at each of the DTM's headquarters and main branch offices. Delegation representatives and executives from each of the ruling megaconglomerates would be abducted and gathered into underground chambers at locations undetectable to DTM reconnaissance. Their homes and loved ones would be surrounded by freedom soldiers. The Delegation members would be held hostage until they agreed to negotiate with the SRF, or one by one, after a prearranged evacuation of the orphilion workers, their office buildings, factories, and mining operations would be detonated. This method, the council believed, would result in minimal casualties. Q-predict had reached the conclusion that more direct means were necessary to reach their objective, but after the near disaster at the Zircon mine, the Subterra Council had learned not to place their complete trust in the qubit prediction program.

Council members also knew that the Delegation was cognizant of an impending revolution and had taken precautions should just such a disaster occur. The DTM had an auxiliary headquarters at a location, as yet undiscovered by SRF infiltrators, that would continue to operate the government and its corporations. If a few hundred leaders became annihilated, a second, albeit smaller Delegation was ready to assume command. If they decided a military retaliation against their own orphilions was imperative, they knew it would lead to the devastation of their present workforce. Therefore, the DTM had recently begun a program to train new street scavengers as scab labor. The scabs, grateful for the employment, and those in corporate management would fill in as skeleton crews at the offices, factories, and mines in the event of a full-scale SRF rebellion.

After Rovien described what she knew of the Delegation's back-up plan, a council member expressed a valid concern. "Commander Rovien, and what precautions are we taking? What is our back-up plan?"

Rovien answered, "In anticipating their moves, we can develop plans to minimize our losses. The DTM's existence is contingent upon it earning a profit. They cannot possibly continue to operate at profitable levels if they destroy their own workforce--a workforce which is comprised of many highly

skilled orphilion personnel. It would take years to train new street scavengers to perform at the same level of expertise. I say we advance with our plan. We know this will be a turbulent time. It will agonize us to sacrifice the lives of those willing to defend our noble cause--but we will have lost them to glory. Eventually, the Delegation will negotiate when it becomes apparent to them that they cannot win."

Thor, an esteemed soldier for independence, was on the meeting's agenda to respond to this plan. He could not bear to lose even one of his newfound friends. When it was his turn to speak, he stepped onto a dais near the stage. He began, "Thank you, Commander Rovien and council members, for allowing me to express the views of myself, Science Officer Helena, and many others in the SRF." Helena, with her self-taught knowledge of history, was the humble instigator of the following proposal that many in the Subterra regarded as the more worthy means of reaching their ends. "Why not begin with the process of negotiations?" asked Thor. "We will ask for representatives of the Delegation and the megacorporations to sit with us at a bargaining table where we would hope to reach compromises, respectful of each other as people.

"If they are unreasonable and we cannot abide by their compromises, or lack thereof, then we begin a massive protest by our workers. Long ago, they called it 'going on strike.' In this way, there would be no terrorism on our part, no abductions, no weapons aimed at innocent family members, and no destruction of buildings and valuable resources. Delegation members will panic when they see the source of their earnings standing idle. If they should choose to inflict violence on millions of our striking workers, they will then create anarchy. They will fall out of power and will lose their almighty profit. We can then carry through with threats to destroy their factories in an attempt to gain control. But we don't believe the Delegation will take that risk. They will bargain with us."

The room was hushed. Rovien digested Thor's words. Her Far Eastern heritage enhanced her dignified countenance. She truly believed that the militant way would be more effective and swift in attaining their goals. Yet she did not want to see innocent people suffer from violence inflicted by them in their crusade for emancipation. Her diplomacy did not allow her to readily dismiss this other sound possibility. Rovien spoke. "Captain, we have been dreaming of our goals for some time now. We have built up our forces and it will soon be time to act on our convictions. We will seriously consider the merit of the words which you have so eloquently stated."

Helena was proud of her husband and his conciliatory message. She rose from the front row of seats to walk with him from the assembly hall. While taking hold of his arm, she whispered to him, "They will be swayed to this idea of peaceful bargaining. I am certain of it."

Outside of the auditorium, Thor said, "I'm not so sure, Helena. There seems to be more glory in blood and guts all over the place."

Helena tried to sound confident. "But they will see reason. We are here to be liberated from the threat of violent ends for living out our dreams. Most of us in the force certainly do not want to be the cause of violence if we can help it. And those on the council are elected by us. They represent us."

He stopped walking. "You are quite persuasive to me, my love." He kissed her tenderly on her lips.

"And besides, sweetie," said Helena, "if they don't agree to this, I could secretly brew up a cache of Ganymede's hypnosis drug. We could use it on the Delegation and on the Subterra Council. Then we would be the exalted rulers of the solar system!" They laughed at the outlandish idea.

## CHAPTER 41--ST. LOUIS

2098, February

The SRF Council had consented to begin with peaceful negotiations. They consulted with Helena because of her expertise on history and labor unions. She described the pitiful working conditions of early factory workers and coal miners and how they had to abide by the company's rule if they wanted to keep their families fed. She told of the bravery of people who, as the twentieth century progressed, had led in the formidable task of trying to nonviolently take on the powerful corporate machines. Regardless of their efforts, they had been unable to prevent the occurrence of physical injury when they had organized into unions and formed striking picket lines in protest of unfair labor practices.

Thor assisted in drafting a letter inviting Delegation representatives to take part in a bargaining process. It was deemed important to ask that GenSapiens be represented as well because of concerns over the fate of young orphelions. The letter emphasized that there would be no turning back on the Subterra's desire to proceed with its plans for achieving its goals. Orphelion workers were informed and prepared to walk off their jobs en masse if necessary. The letter was explicit in stating that they would not hesitate to employ a nuclear arsenal directed at strategic DTM targets should the Delegation harm the striking workers.

The Delegation was asked to bring a list of their needs to the table, and the SRF Workers would bring theirs. Ideally, after lengthy discussion, mutually acceptable compromises would be reached to satisfy both sides, but it was not expected to be a painless process. It was to be considered a time of growing pains for both groups. But it would be a beginning. It was hoped that the application of these nonviolent methods would avert an otherwise catastrophic conflagration of solar system proportions.

To everyone's great relief, the DTM's response expressed the desire to give collective bargaining a chance.

\* \* \* \* \*

Thor, Helena, and Rovien had been elected to a committee of twelve to meet with agents from the Delegation for the purpose of establishing the details of when, where, and how the negotiations process would take place. The planning session was to occur in St. Louis at an extravagant hotel in a meeting room from which one could view the Gateway Arch on the horizon. Each participant had been scanned for weapons.

James Ganymede was a member of the DTM group. Helena found it difficult not to regard him with contempt for the pain he had inflicted on Thor and for nearly electrocuting him in the process. She wondered how he had been chosen to head this important embassy for peace.

During a break in the session, most members went to the hospitality room for refreshments. Ganymede searched for Helena and found her in one of the hotel's side lobbies, alone with Thor. They stopped their conversation and watched as James approached.

Thor was reminded of the horrible jolts of electricity he had endured under Ganymede's orders...and he had also come to terms with it. If that hadn't been the order, he would most likely be dead right now. Whether it had been James' intention to spare his life or not--Thor thought probably not--he had learned to count his blessings.

At the same time, James was ruing the foiled attempt to transfer Thor from the Zircon mine to Neptune. If that had transpired, the rogue would now be far away from his sight. James was certain that he could have then persuaded Helena to return to UMO--where she belonged.

It had been several months since he had last seen her, when she had been working on Project Wisdom, and she remained obsessively on his mind. More than once, he had forced himself to watch the Vigilant Eye recordings of Thor raping her while aboard UMO's medicine transport vessel to Jupiter. He had decided that her writhing body and unintelligible moans had been desperate cries for help.

Earlier, as the St. Louis planning meeting was progressing, James had been aware of her every nuance: the way her brow furrowed over weighty issues, the way her eyes glittered when she laughed lightheartedly over less serious matters. He had noticed her graceful neck, a green silk scarf loosely draped around it, and her shapely figure--enticing him even now from beneath her SRF uniform.

He thought it extremely unfortunate for her to have been corrupted by that poor excuse for a man standing beside her now. When James had discovered that the hypnosis drug was bogus and that Helena had disappeared shortly thereafter, he had blamed no one but Thor. How could he have been so stupidly blind in trusting him as a UMO corporation soldier? He saw now, too clearly, that Thor had been out to undermine his authority from the beginning. Years ago when he had been sent to the Deimos district on Mars to negotiate with the colonists about mining expansion, Thor had promised them that UMO would take measures to relocate their residences, implement land reclamation procedures, and reduce the red iron oxide air particulates produced incidentally during the gold extraction process. They were promises that had considerably reduced UMO's profit margin.

And then there was the mission to Europa...and the Zircon Mine incident. Thor must have always been out to warp orphilions' minds so they would defy Delegation orders. His poor, sweet Helena--to have been cruelly violated and now brainwashed by the brute. James was bent on rescuing her.

As James got closer, Helena noticed that the two men were of the same height, but Thor was of a broader build. James was dressed stylishly in a sleek, dark gray suit. That, along with his short-cut dark hair, clean-shaven face, and narrow, green eyes firing with what--jealousy?--made him the antithesis of Thor, who was clad in the rugged, black resistance uniform, his face classically whiskered, and his auburn hair loose and long.

Thor's pale blue eyes captured every detail of his surroundings and every movement made by Ganymede. As James neared, his gut instinct warned him to be on alert and on the defensive.

James spoke to Helena. "Helena, we have missed you terribly at Medicinal Chemistry. We were all concerned about your disappearance, hoping that you didn't meet with some unfortunate accident. I am glad to see that you are alive and well." He gave Thor a sidelong glance, fully realizing that her mind was now contaminated by his laughable, rebel rhetoric. "May I talk with you in private about a matter concerning the state in which you left your laboratory? There seems to have been an error made in the formula of an important medical compound that had been sent to manufacturing."

"You mean the hypnosis drug of Project Wisdom?" Helena was blunt.

James became keenly aware of the extent to which her mind had become debauched by Thor and that Subterra underground. "Yes, the drug that was to save the lives of many orphilions."

"You mean so the orphilions--and who knows who else--could be more completely manipulated by you like puppets? Why not just torture them with electric shock?"

"Helena, how can you imply that I was insincere about my concern for the orphilion workers? I have always had their best interests at heart."

Since Thor had broken out from under the rule of the DTM, he was surprised at how blind he had been to their mind control games. He had once thought that Ganymede was a sincere man, promoting a good life and protection for his workers. Now he saw him as slime--oozing slime mold found under the Martian icecaps, like Helena had described.

James reached for Helena's arm. "Come with me, Helena--away from the corrupt rebel influence and from this sorry, sick creature standing beside you." He quickly pulled her toward him and turned her so her back was against him; his arm went around her throat.

Thor instinctively bristled. His immediate reaction was to protect his woman. He stepped toward them.

"Stay away, Thor, or I'll break her neck." As though perversely toying with him, James moved his hands into a position where he could easily snap Helena's neck with one quick jerk. Then satisfied on seeing Thor's look of dismay, he moved his arm around her throat again, then backed up toward the door, pulling her with him.

To know that James had ordered the shock treatment on him at the Zircon mine was despicable enough, but to see Helena in his clutches filled Thor with a fury more blinding than the explosive collision of two colossal galaxies. And now James was dragging her away. Thor was struggling to control his violent urges. He and Helena both needed to act rationally. He willed her to read his mind. Stay calm, Helena. Don't panic.

Thor said, "Let her go, Ganymede. She has a mind of her own." He slowly inched towards them.

"You mean she has your mind control chip inside of her brain. I'll pick it out with my fingers if I have to, so she can become her sweet, former self again!"

Helena looked steadily into Thor's eyes and said in a calm voice, "James, there is no need to drag me off like this. I will go freely with you. Loosen your hold of me and I will walk through the door with you."

For a brief moment, Thor imagined that he'd lost her to him, but then understood her intentions. He mentally prepared for his attack on James as soon as he unhand her.

But James pulled his arm tighter around Helena's throat, nearly strangling her. Her words came out strained. "James, it is you with whom I want to be. I realize it now. It was a mistake for me to leave with Thor. I know you want what is best for me and the other orphelions. Please, release me, and I will walk beside you."

"I don't believe you, Helena. Your mind has been poisoned by that tripe spoken by Thor."

"That is not true, James. I know now that I never should have abandoned UMO in the middle of such an important project. I so looked forward to your inspections at the lab."

The thought of their kiss triggered in James a vile need to dominate Helena, to feel her body struggle under his unyielding strength. "Tell Thor to stay back. Then I will release you."

"Thor, I am leaving with James. Don't come after me."

As Thor backed away, the other man slowly lowered his arm from Helena's throat. She took one step, turned toward James, and saw Thor's fist smack him in the face. Blood gushed from his nose. James appeared dazed for a moment and another fist hit him in the gut. But he was not an easy adversary. He recovered instantly. Helena recalled hearing that he had been trained in pugilism. With nimble footwork, he moved in to take a jab at Thor's chin and another at his groin. Thor held up his hands to block the punches but James was lightning fast and gave him a quick blow to the mouth. Helena screamed, aghast at the sight of blood oozing from Thor's lower lip.

She didn't want to jeopardize his chances of winning this battle by doing something unwise in her attempts to help. She searched for something to knock against James' head. These modern facilities of scant interior decor, she thought. Where is a Grecian vase when you need one?

Thor reflexively dodged a couple of thrusting kicks from James. He ducked to grab around James'

waist and toppled him to the ground. During the moment while James was mentally reorienting himself, Thor's hands surrounded his neck in a dangerous choke hold. With greater effort, James pushed out on Thor's arms and was able to break free, pushing the bigger man off him.

Instantly, the men were rolling on the floor, hitting and grunting, punching and cursing, until finally Thor knelt over his former employer, his large, muscular thighs pinning down James' arms. Thor looked down, breathing heavily, his hair a mess. "You, Mr. Ganymede, are a worthless piece of fecal matter." And with an avenging fist, he knocked him out cold.

Helena ran to Thor while removing her silk scarf. "Thor, honey, are you all right? Your lip is bleeding." She spit on the green fabric and dabbed it to his split lip while her other hand pushed back his lush mane.

Certain that James would not regain consciousness for some time, in between breaths and while enjoying her ministrations, Thor said to Helena, "You were so convincing, my dear. For a moment I wondered if you really wanted to leave with the hermaphroditic worm. I was somewhat perplexed in trying to decide if I should fight the bastard or let you walk through the door with him--thinking that perhaps you would be happier in his gilded mansion."

"And I was also in a quandary--trying to decide if I should leave with the ogre. I mean, look at what he promises: valuable treasures for all of the orphilions that he owns--along with life, liberty, and the pursuit of happiness." Then she pouted, pretending to be remorseful.

He had an urge to kiss those pouty lips. "Maybe he would have given them to just one orphilion." He pulled her into his arms at the sudden realization that Ganymede could have broken her neck.

"It's a good thing I thought of reverse psychology, huh?" Her head was resting on his shoulder.

"Yes, darlin', it was a very good thing."

\* \* \* \* \*

Later that evening, in the bed of their hotel room, Thor asked if Helena had been gaining weight. She seemed a bit thick around the waist.

She giggled and said, "Well, you had a little something to do with it. I was going to tell you about this tomorrow on the anniversary of our first six months of marriage, but now is as good a time as any." She knelt beside her reclining husband and cleared her throat to make a proclamation. "My dearest Thor, I am pleased to formally announce to you that residing in my womb is a most precious symbol of our joyous union--a symbol that will perpetuate our love into the next generation and beyond."

He grinned at her theatrical style. "And how is being overweight going to do all that?" Then the meaning hit him. He sat up. His hand moved to feel her belly, and he bent over to touch his lips to the growing baby.



## CHAPTER 42--ZEBULON'S SECRETARY

2098, March

After James had recovered from Thor's attack of a few weeks earlier, seeking vengeance had become one of his primary objectives. He had asked himself many times why he had neglected to order Thor's immediate phaseout when the opportunity had presented itself at the Zircon mine. The upcoming round of negotiations would be an excellent place to make up for lost chances at retaliation. Thor would find the price high for treachery!

James had been selected by the DTM assembly to be one of their lead negotiators. He was endorsed by the Delegation, had the economic might, and did not have to concede one iota to the Subterra Workers at the bargaining table if he so desired. That would be one way to get even with the renegade scoundrel. The other way would be to remove Helena from his grasp. It would also be for her own good to be rescued from the merciless clutches of the red giant. He smiled at that--Thor as a heartless boor of a red giant.

Bringing his thoughts to the task at hand, in his Colorado Springs office, James was reviewing a procedure in mining research and development from a time when his father Zebulon was CEO. He entered the password to retrieve Zebulon's personal files from the computer banks. He scanned for his father's R & D notes.

During the search, a name caught his eye--Dornai SS312hd. It was the name Helena had uncovered during her unofficial detective work at Medicinal Chemistry. Dornai was the orphillion who had been hired in the viral pathology laboratory for a short while before disappearing, along with a vial of the deadly virus that had killed most on Europa. He remembered how it had shocked him to learn that the demise of the workers on Europa was apparently committed by someone from within his own company.

He had needed to shut down technetium production and rely on stockpiles for three months while decontamination crews and investigative teams had blanketed the place. He had relocated managers, miners, office workers, custodians, and medical personnel from Earth, Mars, and Io in order to replenish staff and recommence mining operations on Europa.

The shutdown of a mine with a product as valuable as technetium ore could have caused Universal Mining to lose its status as a member of the DTM. But James' prompt decisiveness enabled the firm to maintain financial status quo.

Other than from recent employment records at UMO, neither James nor the investigators could find any trace of Dornai's existence. It was as though all other official records of her had been erased. But now, upon seeing her name in his father's notes, James was most anxious to learn more.

Dornai had been Zebulon's secretary for four years. According to his father's writings, she had been a street scavenger, hired at UMO when she was twenty-one. She had trained easily, later becoming proficient in the ways of managing the corporation's mining division. James shook his head after reading that last passage. He had always heard of his father's soft heart, but to have allowed a street scavenger to manage a branch of the company--no wonder it hadn't profited much under his direction!

The file didn't say what had become of Dornai. James thought her acquired business knowledge must have led her to participate in corrupt activities, and she must have been phased out or sentenced to die in a prison camp because of them. But obviously, she was alive today. He calculated that she'd be around sixty years old, and for a reason unbeknown to James, she had been out to undermine Universal Mining. A knot tightened in his gut when he thought that she could strike again.

Dornai had familiarity with the company, which would have helped her accomplish her grisly crime. She had been able to obtain employment in the virology department and somehow acquire transport to Europa. Had his father wronged her in some way and she was seeking retribution? But he had been deceased for years, so what would that accomplish? Or, James speculated, she was seeking vengeance on Zebulon posthumously--by way of his heir.

When James was an infant, his father had died, leaving his mother Claire to manage UMO. James went home to see his mother.

On entering the mansion, James observed Lira in macabre attire again, as if she were in mourning or something. This time, she wore a black and provocatively form-fitting body suit that was free of adornment except for her luscious curves--as James duly noted. Her makeup was severe: coal black outlined her eyes and crimson coated her lips. Her skin was powdered a pallid color. Her flaxen hair was teased and spiked.

Whatever happened to the charming humor and warm demeanor he'd been attracted to when they had first dated? She was so dark and brooding these days. He supposed she was playing out some little amusement in her head, and passed it off. "Lira, do you know where Mother is?" he asked as she was passing through.

She greeted James home with a too red kiss on the cheek. Through her saccharin smile she said, "Why, my illustrious husband, I believe that Mother dear is in her office." While walking away she added, "Hope you're having a stellar day!" And she went off to the kitchen to plan forbidden schemes of intrigue with Delta.

James entered Claire's office. She looked up from her computer screen. She was wearing a long-sleeved dress. Its color was a close match to her silvery hair, which was pulled back into a Venus twist. James remembered, when as a child, being captivated by his mother's auburn hair during rare moments when she would allow it to fall free in shimmering cascades. When had it turned gray? He couldn't recall. He'd been too busy running a megaconglomerate.

From her home office and in semi-retirement, Claire kept a ledger of the financial transactions of UMO and its subsidiaries. James was thinking that rarely had she taken time off, away from her duties. He'd been pleased when, last year, she had decided to take a trip to an exclusive health spa in Iceland.

She said, "What a pleasant surprise it is to see that my son, the future Premier of the Nine Planets, has come to visit his aging mother during his busy day."

"Hello, Mother. And how are you this afternoon?" He moved behind the desk to give her a dutiful peck on the cheek.

Her face had the appearance of one looking out at a beautiful, fresh spring day. "I'm feeling wonderful, my son. The latest youth serum concocted by one of your labs to ward off geriatric symptoms is working splendidly. I'm energized enough to gavotte to the moon and back!"

He sat on the desk's edge. "I'm happy for you, Mother. Do you have some time? There is something I would like to ask you." Turning away from the screen, she gave her full attention to James. He was thinking, What if Father had been having an affair with Dornai? Did Mother know about it? How will she react if I mention the woman's name? He began cautiously. "At the office, I was referring to Father's file and became curious about a secretary he once had. The file said she'd been a street scavenger who had quickly become an accomplished manager for UMO. When Father had to be away, he left her to supervise the main office where she made key decisions that had often benefited the company. There was no trace of what became of her after four years of employment." It appeared to James that, while he was telling her of the file, Claire was wistfully remembering another time. "Her

name was Dornai SS312hd. Mother, do you know what became of her?"

James observed a transformation in his mother's expression. Her brow puckered. She began speaking in that scolding mother's voice James knew so well, though it seemed to be directed at someone else this time. "That conniving harlot! Zebulon made a fatal error by relying on a street scavenger; they can never be trusted. They are known for collecting their credits and anything else they can get their grimy hands on. I have no doubt that she sold classified information to other megacorporations as well." Her voice was rising; she was losing her composure. "Zebulon finally saw her for the trollop she was and had her phased out for embezzling goods from the company--goods which she had been handing out in the streets--to those filthy, endless hordes!"

James wondered what had brought on his mother's sudden vehemence. "But Mother, I don't think she was phased out. There is evidence that she's still alive." He told her of Helena's discoveries on Europa and at the lab in Omaha.

Claire's hand rose to cover her throat. She stared at him in disbelief. She was about to say something, thought better of it, and relaxed a bit. "That is incredible news, James." Her hand dropped. She turned from him to resume working on her computations.

## CHAPTER 43—DORNAI

Leaving the estate, James was curious about his mother's peculiar reaction to the mention of Dornai's name. After describing her in scathing terms, Claire had become suddenly calm, as though the thought of Dornai had been wiped from her mind. James was disappointed that she hadn't given him any leads on where Dornai might be presently.

Was there someone else who had been close to his father who might have known of Dornai? His train of thought led him to Lira's father. He aircruised to his father-in-law's Delegation office in Iowa.

Gentry Jones, who had observed his daughter morph into a deeply sad creature, didn't particularly want to see the one who was the cause of this disturbing transformation in her. And he didn't want to be reminded of how James' physical appearance was strikingly similar to that of his dear friend Zebulon. But that was where the similarity, unfortunately, ended. Gentry had not forgotten the solemn vow he had made to destroy James for the unhappiness he was bringing upon his oldest girl.

He didn't rise when James was directed into his office. The assembly member had been concentrating on the latest information on DNA law violations that was being transmitted to his holoviewer processor. Looking over its lenses, he gestured for James to sit down on the chair in front of his desk. His voice was indifferent. "And what can I do for you, James?"

James was to the point. "I am in search of information regarding my father."

"Hmm, yes, your father...a generous man--a good, trustworthy friend of mine. Kind and compassionate. Even married a street scavenger."

James straightened and asked him to repeat that last part. Gentry answered him, "Yes, he married his secretary Dornai, or something like that. She had changed her name to Claire." James' tanned face turned ashen.

Judging from his son-in-law's stupefied expression, Gentry realized that this was a news flash to the younger man. He perked up a little and removed the holoviewer from his face. Gentry thought, So James didn't know that his mother was from a questionable gene pool. He was enjoying the fact that it was he who had disclosed this bit of news to him. That really made his day. "Ahem, and what information were you seeking?"

James stumbled over some words of departure and left the building. Through the window of his office, Gentry watched as James raced to his aircruiser and then toward Colorado, to where his mother was.

\* \* \* \* \*

Heedless to traffic laws on the way home, a maniacal dialogue began playing in his mind. Mother wasn't a street scavenger. Why, she despises them. She called Dornai a conniving trollop. Gentry Jones is a liar!

Then James' voice of reason spoke: Now James, think for a moment. If Mother was Dornai, then it was probably she who was responsible for the devastation at the mining operation on Europa. Why would she do that?

His voice of delusion answered: See? You have it all wrong. Mother wouldn't do something so devious--and not to me! She wants me to become the premier of the solar system as much as I do!

Reason: Now calm down. This isn't like you to fall apart. Focus on your next move. A major crime has been committed. Remember the evidence that Helena uncovered: the glass fragments were from our pathology lab; and an older woman employee named Dornai, adept in viral lab technology, vanishes.

Delusion [Trying to be rational]: Yes, the evidence. It was someone who had access to the lab. But that doesn't mean it was Mother. It could have been an unhappy orphillon or two. You know how well we train them as laboratory technicians.

Reason [Always sensible]: I don't think so. The Vigilant Eye is on them, and they would have been missed on a two-month trip to Jupiter. They wouldn't have had the resources to hire someone, either--much less acquire a spacecraft to transport them there. We make sure of that! But Mother is resourceful. Maybe she went personally to Europa. Remember how unusual it was for her to go on that trip to Iceland less than a year ago?

Delusion: But that was to a health spa! And she wasn't gone that long. No, that rebel underground has plans to overthrow the government powers--UMO included. Quite possibly, it was they who perpetrated the crime and made it appear as if Mother did it.

Reason: Do you think they could really pull off such a scheme? Their capabilities are rudimentary at best. They are a paranoid, disorganized militia group hiding out in trenches.

Delusion [Grasping at straws]: Then it was Bree Stevens, who's been holding a grudge because Mother had displaced her from the Top Twelve. Or Hyland Nisson may have tried to undermine the company. We have often been at loggerheads over environmental legislation. Either of them would have had motive.

Reason: Bree is not the vindictive sort. And Nisson enjoys a healthy debate as much as you do. Besides, he wouldn't think that sabotaging a mine was worth the possible jail time.

Delusion: Then what about Gentry Jones? We've been to court numerous times over interpretations of orphillon treatment and mining expansion laws. He has been very vocal about what a pain in the backside I've been to him. He voted against the premier bill. And I don't think he likes me much as a son-in-law. In fact, Lira has been acting rather bizarre in the last year, due to his influence, I'm sure. With their collective knowledge and experience at Computational Chemistry, the two of them could have conspired against me.

Reason: The job of a chemical marketer is a different ball of paraffin than knowing your way around a viral pathology lab. Besides, they wouldn't have had access to the Europa facility's blueprints which would have been needed to plan where to most effectively plant the virus.

Delusion: But Lira is acquainted with those who do have access, and she is attractive enough to lure the information from them. She does seem to despise me for some reason and would probably take great satisfaction in seeing me ruined.

Reason: Do you blame her? Look at how you've treated your beautiful wife. You are a cad around her.

Delusion: Hey, let's not get off the subject. Her father would benefit the most from destroying me. Computational Chemistry would become more powerful, his position in the assembly would strengthen--not to mention his daughter would be happier without me around.

Reason: Hmm...that goes without saying. Our exon tag records of recent employees say that Dornai is a woman around sixty years old.

Delusion: Jones could have hired someone.

Reason: With Father's secretary's exon chip? Where would he have gotten it? And to where did her past records disappear? The culprit must be someone who is capable of deleting old UMO and Delegation files and who can arrange for a flight to Jupiter.

Delusion: Being a friend of Father's, Gentry would have been able to obtain Dornai's tag after she died.

Reason: If she died.

Delusion: Mother said she was phased out. Gentry must have recruited an accomplice to pose as Dornai to conduct the crime. He would have had all the resources to pull this off. And Lira could have employed the pilot. After all, she is the wife of the most powerful man in the universe.

Reason: Now that...is a delusion. Your scenario would mean that after Dornai had supposedly died, Gentry was holding her exon tag for over thirty years--waiting for an opportune moment to use it against UMO. Highly unlikely. And as unhappy as he seems to be with your marriage to Lira, his past relationship to our father is probably to our benefit--and personally.

Delusion: You haven't told me why Mother would do such a thing, either. What would be her motive?

Reason: Look back, James. Way back to the beginning.

Delusion [Ignoring the request]: No, Gentry must have fabricated the story about Mother being a street scavenger named Dornai to cover up for himself and Lira--to throw us off track so Mother would be incriminated for this terrible crime. I'll go to the police and bring home a detective. We'll talk with Mother to clear this up and implicate Lira. No, not my pretty Lira, but her father! And maybe that orphilion maid friend of hers was in on it too!

James was frantic. He was going insane. He was siding with the voice of delusion.

\* \* \* \* \*

Detective Fleem was a short, stocky woman in her fifties. She, Lira, and Delta were directed by James into the office of Claire Ganymede, who was staring into her computer monitor, as James had left her earlier. "Mother, this is Detective Fleem. She has some questions to ask you about Dornai SS312hd. We have reason to believe that someone is trying to frame you for the sabotage of our technetium mine."

Claire eyed James without expression. Her youthful appearance of a few hours ago had disappeared. Her silver hair had turned a dull gray. She was looking much older than her sixty-one years.

"Mrs. Ganymede," the detective began in her gruff voice, "tell me what you remember about Dornai SS312hd."

Claire scanned the people in the room, Delta...Lira...James. Her eyes finally turned to the detective and she began speaking. "Dornai was born into unfortunate circumstances. She was a street scavenger in Denver, living in poverty. When she turned twelve, she was forced by her parents to give 'favors' to men because her family could not otherwise afford food. She quickly learned to apply certain...pleasure techniques...as a way to receive the most credits from her clients--credits which equated into food at home. But Dornai's dreams were of escape into the affluent world of the megacorporate wealthy, where she would be clean, unviolated--and in a position of power."

Claire felt as though she was hovering above the room, watching herself and the others with her. It was her only defense to prevent the engulfing sadness from reaching into her like fingers working the soft, loamy soil of an oft neglected garden.

"In her late teens, she had a baby by one of the men her parents had sent her to. He was a beautiful, red-haired boy, with a dark red birthmark on his shoulder. But what could she do? She couldn't care properly for a baby, and she wasn't going to have him give favors to men when he got older. So she gave him up to become an orphilion worker. At least if they showed signs of intelligence, they wouldn't have such a horrible life."

Lira stood to the side of the room in fascination. She did not know this Claire, who told heartbreaking stories.

The older woman continued. "After recovering from the devastation of giving up her child, she abandoned her family, pilfered a nice dress from a street vendor, cleaned up as well as she could, and walked into an office building in search of a legitimate job. She was thrilled to be hired as a floor maintenance person and was soon able to afford a compartment. Eventually, she caught the eye of the owner of the place, Zebulon Ganymede.

"Zebulon was working late one day. Dornai was dry mopping the floor in his office. He was on the communicator discussing a buy-out proposition. He was exhibiting frustration that the other party had no apparent interest in his proposal. 'Just hang tight,' Dornai had told him. 'They'll soon see the wisdom of selling now rather than later. They will lose a bundle if they wait too long. Give them time to see reason.'" Claire paused and smiled slightly. "Hell, she didn't know a buy-out from a hole in the ozone. But what did she have to lose? Zebulon took her advice and the deal landed in his favor. He sought her out the following week and hired her to be one of his secretaries.

"Possessing a natural IQ of over 160, Dornai quickly learned the ropes of the mining industry and corporate world. With uncanny intuition, she consistently gave Zebulon good advice. Soon she became his personal secretary. Their relationship deepened, and he eventually asked her to marry him. She was quite taken by his proposal. He was more than a decade older than she. After her grim life in the streets and her determination to rise above it, she decided she had earned the right to enjoy the good life with Zebulon, a decent if not industrious man. Dornai became his partner at home and in running Universal Mining. Her business acumen succeeded where his weakness of character failed. She was twenty-five years old when they had a son." She paused to look at James. "About a year afterwards, Zebulon tragically died from a ruptured aneurysm."

Everything Claire had said pointed in a direction that James was not willing to accept: his father had married a street scavenger, and he was the son of a street scavenger. He ran different scenarios in his mind to prove otherwise until the detective asked Claire the definitive question.

"How do you know so much about Dornai, Mrs. Ganymede?"

Claire looked a little perplexed at the question. "Why, because I am Dornai. James is my son."

Lira and Delta both gasped. James, nonplussed, could only stare at his mother as the truth was setting in.

Fleem asked, "Was it you who planted the virus at the Europa mine?"

Claire explained, "I kept the exon tag, from when I was an office worker, in a safe all these years. Genetic healing did wonders for the scar on my neck. One year ago, I pulled some strings and found a plucky worker from a competitor's pathology lab and had her placed into a position at Medicinal Chemistry's virology department. She was willing to carry out my plan because I had offered her wealth and freedom if she succeeded. I had Dornai's exon chip inserted into her neck. She remained long enough to smuggle out a vial of killer virus and to learn how to prevent the administration of its cure. I had a spacecraft ready to transport her to Europa where she played the part of a pharmacological technician while learning the layout of the facility. Then she killed the healing orchids in the dispensary, donned a spacesuit before opening the vial into the air vents, and stealthily high-tailed it out of there. Amidst the pandemonium caused by the Attila outbreak, no one reported her missing. Of course I had to hire a mercenary to terminate her--and the pilot that flew her there. Such a tragic in-space explosion during their flight from Jupiter to Mars..." She clucked with a hollow heart. "But it had effectively destroyed any evidence of Dornai's existence, except..." She looked at James and smiled tenuously, "I hadn't counted on Zebulon's notes."

With more to confess, she turned her gaze back to the detective. "But my efforts hadn't all been so successful. After the effort in coordinating such a chain of events, I had taken a much needed vacation.

While I was relaxing near the city of Reykjavik, the Dornai impostor kept me updated as each phase of the operation on Europa was occurring. It was from Iceland that I dispatched the mercenary.

"After returning home, I overheard James talking on the comm unit about a plan to send a rescue ship to Europa, so I hired one of those prototype CloneFactoids to tamper with it. The ship was supposed to have detonated during its flight to Jupiter...but that obviously didn't happen." A combination of disappointment and resignation was evident in her voice.

When it seemed she would add no more, Detective Fleem asked, "What was your motive for doing all of this, Mrs. Ganymede?"

The others in the room held their breaths.

"Why, I did it for James."

Now James appeared perplexed. Lira was seeing her husband in a new light. She had the startling realization that his fanatical behavior had been molded by a mother who, all along, was of unsound mind.

Claire said, "I've always wanted what was best for my son. I was able to give him the finest genetic package and upbringing that a mother possibly could. I wanted him to have the personality to be fierce in the corporate world--to always have the upper hand in business dealings, to not be a coward...and to not feel compassion. Compassion makes you weak. It was one of his father's major shortcomings. And it makes you hurt too much." She was reminded of how, over the years, her mind hadn't always been able to push aside the events that had caused her the most pain.

"James never had frivolous toys or silly games. I molded him into a corporate climbing machine that would some day reach the summit of the DTM mountain--to be commander of a megaconglomerate monopoly. He would have influence, money, power! He would be dauntless, demanding respect during his rise to becoming Premier of the Universe!

"So I staged a crisis at his technetium mine--an asset crucial for his totalitarian ascent. He would be forced to use his reasoning skills to get it up and running again, before it would lose profits and before UMO would become displaced from the twelve ruling megacorporations. It was a test! I did it all for James, to temper him like a fine resilient steel, to prepare him for his destiny! Don't you see it?? I had to give up one baby and this one was not going to live in squalor as a scavenger of the streets!" Tears were streaming down her face as she irrationally prattled on, trying to make everyone see how it had all been done for James' benefit.

Detective Fleem relayed a message for a squad pod to come and book her.

Lira caught Delta's eye. The fictional stories they wrote couldn't top this reality.

James noticed Lira's incredulous expression. Heck, he was feeling a bit incredulous himself. It became suddenly apparent what Claire had been doing to his own son Jonathan who was, at this moment, enrolled in a disciplinary preschool academy. And it became crystal clear how she had molded James into a ruthless monster. Why, she was the cause of his own lovely wife turning against him. He sat down, suddenly and totally exhausted. How was he ever going to straighten out his life?

"We have support counselors for families that have suffered from criminal trauma. Here's the number." Detective Fleem flipped him a hologram card.



## CHAPTER 44--ANTARCTIC SUMMIT TALKS

2098, August

The Delegation had agreed to parley in closed session at a neutral site: under the biodome of the Antarctic Rain Forest Resort, a lush incongruity on the glacial landscape. Each team was to consist of fifteen negotiators. They would be meeting around an oval-shaped table where at each seat, an embedded view screen would list agendas and details of the issues to be discussed. Ear devices for language translations would be available. There were smaller, soundproof rooms on opposite sides of the conference area for caucusing.

The Subterra Workers were as cohesive as a grand unified force. Commander Rovien TK014cz was to be their spokesperson. Thor had been elected to be a member of the team.

James Ganymede and Assembly Member Emmit Zerelliz were the chief negotiators for the Delegation. GenSapiens had sent representation for issues involving the care of young orphilions and child labor practices.

All participants had been searched for weapons and four sergeants-at-arms, two from each side, were present along the summit room's perimeter. Armed peacekeeping soldiers from both sides were on duty within the biodome, but at a distance away from the negotiation chamber.

The stage was set for the paradigm shift which would usher in a new solar system era.

\* \* \* \* \*

While the first session was underway, in the entertainment and game room of the facility and with significant others who had traveled with SRF negotiators, a very pregnant Helena was pacing, anxious to know how the talks were proceeding. She was dressed in a glittering, royal blue maternity dress that enhanced the blue of her irises. As history advisor to the team, Helena had made recommendations which had turned out to be crucial to the team's strategic planning. She knew its members were prepared and united in their goal. They had vowed to do everything within their power to keep the process a peaceful one. She knew Thor would be valiant.

But what was the intent of the Delegation which chose Ganymede as a team leader? Oy, what a contrast, she thought--someone as dark and sinister as he negotiating across from the gang in white. She remembered his hypnosis drug plan and wished she had suggested that the pockets of each Delegation team member be searched for questionable containers. She thought that access to the air conditioning system should be guarded as well, to prevent the release of a deadly microbe. And the chairs of the Workers should be searched for suspicious electrical boxes. Why hadn't she thought of these things earlier? She suspected that it wouldn't be beneath Ganymede to stoop to such low-handed devices.

She hardly considered her own expectant condition, though she was prepared to deliver the baby at any time. Helena was not going to be left behind on this momentous occasion. She and Thor had gone to Olde Earth Customs to ask Grys if he would travel with them to Antarctica as her personal physician. After witnessing his skill in Omaha during that warm night with the street scavenger woman, Helena would be confident with no one but Grys to deliver their child into the universe. "I would be honored, Madame," he had said simply.

Helena made small talk with the other people in the room. All seemed a bit on edge but had hopes for an agreeable end. Helena went to rest in her sleeping chambers where she endured time dilation...

\* \* \* \* \*

...while the negotiators were experiencing time contraction, caused by the sheer gravity of the event.

During their solemn beginning, they had lined up to shake hands. Most members of the Delegation had been only too obvious in their unwillingness to offer this symbol of respect to orphilion workers. Yet each had yielded like a beam of light that reluctantly bends while passing an object of tremendous density.

When Thor met James in the receiving line, James looked him squarely in the eyes. They shared a mutually firm handshake. There was something in the UMO executive's expression that Thor interpreted as sincerity and...humility? This surprised him, especially after the way he had left James unconscious on the floor in St. Louis months ago--not that he didn't deserve the pummeling. Then Thor reasoned that it must have been a tactic James was using in trying to catch him and the other Subterra members off guard. At any rate, it was an unmistakable warning that James was to be a formidable opponent.

After the formal introductions were made, the participants found their assigned seats, and all but Commander Rovien sat down. Her dark eyes slowly scanned the faces of the opposing team across the large, oaken table. She began. "Our esteemed and noble adversaries... Before we can live in good conscience and settle upon anything else, there are items which concern us deeply that must be addressed before all others." She paused. "We strongly urge for the immediate release of orphilion prisoners and that there be a reconsideration of the megaconglomerate practice of using unilateral interrogations in determining the guilt of our workers."

Members of the DTM panel eyed each other and fidgeted in their seats at what they believed were already unreasonable demands. They thought the Workers audacious for even suggesting them.

Emmit Zerelliz had been selected as one of the Delegation co-spokespersons because he had much negotiation experience while heading his engineering and architectural firm, Skylimit Engineering, which designed and constructed factory buildings for the other megaconglomerates. He had usually taken a middle ground position on the amount of government intervention that should take place when dealing with orphilion contracts and other system-wide issues. Instead of implementing regulatory laws, Zerelliz supported offering tax breaks to corporations to encourage proper orphilion treatment and environmental protection. His own business was respectfully self-regulated in those aspects. He didn't feel that mandatory legislation was necessary. He believed in trusting corporations to do the honorable thing.

And, he had been chosen as one of the DTM's lead negotiators because of his unwavering belief in Delegation authority. His peremptory style reflected this.

Zerelliz responded in a condescending tone to Rovien's charge that the Delegation used unprincipled methods in determining employee guilt. "How then, Commander Rovien, are compliance and order to be maintained in our work forces, ensuring smooth operations at our industries?"

Rovien's eyes narrowed as a warning to the DTM negotiators. "We understand your need for profitable enterprises and are here to negotiate another way to attain those ends. But we feel the manner in which accused orphilions are convicted and terminated is grievously unjust. We have brought to the table what we feel is a reasonable proposal for dealing with alleged unruly workers that calls for a fair grievance procedure rather than oppressive inquisitions and inhumane prison sentences."

He scoffed at Rovien's implication. "Are you insinuating that our disciplinary methods have been unreasonable and unfair?" Zerelliz and his team members sputtered as if they had been deeply offended.

Unmoved by their posturing, Rovien continued. "Our ideas take into consideration your need for

productivity as well as our need for fairness and appropriate punishments that fit proven crimes.

"Remember our stern warning from when we had invited you to the table. The Subterra team has been authorized by orphilion workers across the system to call a massive strike if a settlement cannot be reached during these rounds of talks. This, as you know, would have a crippling effect on Delegation commerce. We are also prepared to use destructive force. Our element 146 weaponry is targeted at key DTM operations. Our communications are poised to initiate such action if we must."

A doubtful Zerelliz said, "We are not intimidated by your threats."

Rovien's voice remained unfaltering. "Assembly Member Zerelliz and members of the Delegation. Our desire is to negotiate without resorting to violence. Please do not regard our intentions as unworthy of your serious consideration."

"Ha! We believe you to be fabricating your extensive capabilities," sneered Zerelliz.

Rovien, correctly sensing that they were not going to see reason, gave a nod to Thor. He placed over his eyes what appeared to be sunglasses. Into the thin metal strip leading to the side of his mouth, he softly spoke the code words "Mercury Objective." A message flew faster than light on QuEST\*com signals to Africa.

All eyes had turned toward Thor as he made the transmission.

Thor thought he heard Zerelliz's voice quaver slightly. "I believe, Commander Rovien, that we are at an impasse before we have even begun. We will waste no more of our valuable time with your unrealistic expectations. We might consider returning to the table when your demands are of a more rational nature."

From his holoviewer, it was confirmed to Thor that the Mercury objective had been accomplished. He signaled with a nod to Rovien.

A few moments later, a sergeant-at-arms, who was wearing a more conventional communication ear piece, stepped forward and whispered to Zerelliz, "Sir, the composite materials manufacturing building that was under construction in the Sahara has been destroyed." One would have thought that Zerelliz had seen a ghost of horror. All at the table knew from the look on his face that the SRF Workers did not make idle threats.

Before the Antarctic parley, the DTM had secretly installed devices which would have scrambled all radio signals leaving the resort, save for one secured channel intended for their own use. Zerelliz thought, Then how were the rebels able to send their message?

The Subterra team, anticipating obstinacy on the part of the Delegation, had previously ordered the evacuation of workers and managers from the Saharan construction site. In case the second and third destructive warnings were needed, freedom soldiers were presently evacuating people from the Gemini and Apollo sites.

"We have warheads aimed where they could do more extensive damage. Please do not underestimate us, Assembly Member Zerelliz." Rovien's disposition, calm as the eye of the Ring Nebula, was becoming even more unsettling to the DTM members.

Sensing another devastating blow to the megacorporations if Zerelliz continued with his uncompromising stance, James stood and spoke up. "We call for a caucus." Each side rose to adjourn to their respective, private meeting rooms.

Rovien, Thor, and the other team members sat down and breathed a collective sigh. Rovien said, "I believe our plan is working to keep destruction at a minimum."

Thor added, "And so far, with no casualties."

All in the room voiced agreement that their concern on that aspect had been somewhat assuaged.

\* \* \* \* \*

After an hour, they assembled back at the table.

James spoke. "Subterra members, we will agree to send a communication to all labor camps telling them to gather the orphilion prisoners and hold them in safekeeping until further notification. The megaconglomerates will receive the message to temporarily halt their inquisitions. We will listen to your proposal on disciplining unruly workers."

"Thank you for your farsighted approach in working with us to solve this highly critical matter." Rovien was very pleased, although one could not tell by her emotionless exterior. The fire was found deep in her eyes. "Before we can proceed further, we need to discuss the DTM's intent to use workforce clones in the near future. For the well-being of orphilion workers and for the benefit of humankind, we strongly recommend that the signing of contracts for acquiring factory clones be discontinued."

If those on the DTM panel were not impressed with Subterra negotiation strategies, they at least respected Rovien's continued fortitude. She proceeded with other pressing issues. "We have concerns about Delegation child labor practices and for the children at the GenSapiens centers who receive sensory and social deprivation and shock treatment. We feel that a reliable workforce can be guaranteed without resorting to the torture or death of children."

Bree Stevens, now mature in years, was still an enterprising businesswoman, though Delegation orders had not allowed her to manage GenSapiens in the less restrictive way she would have preferred. She was called upon to address the issue of how one could effectively, yet humanely, prepare orphilions for a megaconglomerate workforce.

\* \* \* \* \*

After the next caucus, the Delegation returned with concerns substantial to them. James began, "We, as leaders of the Megacorporations, while operating well within the law, may have committed offenses to orphilions that were deemed harsh by them, even though we had been acting for a larger purpose: for the continued preservation of solar system order. We do not want to suffer the repercussions of criminal trials for having given certain punitive orders up to now, except for a few extreme cases where some leaders may have disgracefully stretched the parameters of our laws."

Rovien said, "We will need some form of restitution for the unjust punishments our workers have been made to endure. Many have died for scant reason."

James paused, then replied. "We are willing to hear your suggestions about how the Delegation might offer compensation for the many wrongful sufferings and deaths."

Thor wondered if anyone else had noticed the emotion in James' voice. Was he showing compassion?

\* \* \* \* \*

With the crucial hurdles on the table, leaving the details for settling them to occur at a later time, each team leader introduced other less charged philosophies and proposals.

The Workers insisted on dismissing the Delegation Tenets before a workable agreement could be reached. That and most of the items on their list were met with the usual disdain by the Delegation. About fair wages and benefits, Ganymede bellowed, "There are street scavengers out there who would gladly apply for your jobs for a fraction of the salary!" And, "It would put us in the poorhouse if we

gave in to your cost items!"

The Subterra negotiators had done their homework, were aware of the revenues and expenditures involved, and knew that this simply wasn't true. The DTM head negotiator, with his bellicose style, was soon seen as a paperite tiger.

Mostly, this historic first session was to raise each side's awareness of the needs of the other. There would be many days ahead of them to meet and confer until solutions agreeable to both sides would be reached.

\* \* \* \* \*

In the wee hours of the morning, Thor entered their private room and met a wide-awake Helena wearing her flannel nightshirt. It outlined the roundness of her condition. She was most interested to know how the first session had progressed.

The nightwear fabric caused Thor to think in other, more sensual directions, but he said, "They did not seem happy at the prospect of being cordial to orphilions. They scoffed at most of our needs, not willing to accept--or believe--that we are capable of knowing what we need for ourselves. We had to resort to the Mercury plan, destroying one of their projects, so they would take our request for the release of orphilion prisoners seriously." Thor knew this would trouble her and quickly added. "But there were no casualties. And we made some headway in making changes to the manner in which orphilions are disciplined. So far, they've agreed to halt the inquisitions and sentencing to the prison camps until these issues are further considered at the table. They will reconsider the utilization of humanoid clones. And GenSapiens presented promising ideas for changes in its orphilion training methods.

"They were stuck in the 'Wisdom of the Delegation' mode, but we told them at the onset that the Delegation Tenets no longer exist for us. They reluctantly agreed not to base their decisions on the tenets. Other than progress on prisoner issues, there hasn't been much movement beyond agreeable rhetoric--but it's something. It was hours of hard work. Reaching a tentative agreement is going to take many months. Hopefully, it will occur before the date of our strike deadline. We will continue to hammer away at our list until we reach compromises we can live with. It's a strange but euphoric feeling--like hitting your head against a granite wall and being very exhilarated at the same time. We begin again at noon tomorrow."

Helena said, "You exhilarate me, Thor. Take me...I am your love slave." She grimaced a bit at a labor pain. "My water broke a while ago and I do believe we are about to become parents. Will you call for Grys?"

\* \* \* \* \*

Grys performed his magic and within two hours, after deciding that all was going well, he retreated to his room. Before he left, Helena and Thor expressed their deep appreciation for his kindness and boundless skill. He lowered his eyes and repeated what he had said to Helena in his clinic that warm night when they had first met--that he was a healing man and believed that his abilities came from a higher source.

And squeamish about such things or not, Thor had been determined to participate in the birthing of his child. He had come through admirably, Grys had assured him.

He sat on the edge of the bed holding the orange-haired babe in his well-sculpted arms, studying and touching her tiny facial features.

"Are you disappointed that we had a girl?" asked the recuperating new mother apprehensively from the

pillow.

"Au contraire, ma chérie. I cannot wait to see the sparkle in her eyes when she laughs. It is one of the things I cherish most in her mother." He took Helena's hand in his. "And do you still agree that we shall name her Aurora, after the woman whose life I took on Mars?"

She nodded yes. He kissed Helena tenderly on her smiling lips and handed her their bundle of love to nurse.

## CHAPTER 45--JAMES ACQUIRES WISDOM

The next morning, an hour before negotiations were to begin, the signal to their chamber door sounded. A resort worker handed Thor a message on paperite. He brought it to the bed where Helena was holding the baby. He read the hand-written note out loud.

"Captain Thor, I respectfully request a meeting with you and your wife Helena in my chambers. It is of an urgent nature.  
J. J. Ganymede"

Helena wrinkled her nose. "What does that vermin want? What could be so urgent?" She gazed down at Aurora and her expression softened.

Thor quipped, "Maybe, my sweet, he has a phaseout gun ready to do us in for our, ahem, impropriety." Thor touched his thumb to Aurora's chin.

"He wouldn't do that at an event such as this unless he wanted to start an all-out war!"

"You are most probably correct, my love." He indulged her overreaction.

She was little embarrassed at herself and only slightly offended at Thor for trifling with her, for she really did enjoy his attention to her moods.

"Are you ready to have company? I can go alone or we can send a message that he come here instead, so you and Aurora may rest in bed."

\* \* \* \* \*

James arrived at their room and Thor offered him a seat. James was only a little surprised at the infant in Helena's arms, having noticed her expectant condition when they had arrived before the summit talks began. He asked how she was feeling and commented on how exciting it was to have a baby around.

Helena noted that her former boss still dressed to the max but his face seemed drawn, and there was more gray hair at his temples. She was apprehensive as to why he was there. She would never forget what he had done to her husband and could only offer him a tenuous smile for his kind words.

James said, "I'm sorry to be calling on you like this. I would have liked to have brought this up earlier, but as part of a radical militia group hiding out in the mountains, and with the locator chips removed from your throats, you were a little hard to track down." He grinned a little. Helena caught Thor's eye. James seemed like a different person. "I have some news to update you on the Europa scandal."

Thor sat on the edge of the bed near Helena and Aurora. He said, "We'd heard from the underground news agency that your mother was behind the conspiracy. That must have been hard news to take."

James said, "Yes, it was rather disquieting, and it was eye-opening, to say the least, to learn that she suffered from a degenerative brain disorder caused by a germ, smaller than a virus, called a prion. The condition is called neo-kuru."

A prion is an improperly folded protein molecule. The doctor had told James that this particular prion was theorized to be one of the ramifications stemming from the creation of a certain artificial gene

fragment shortly after the Guerrilla Class Wars. The protein synthesized as a result of this gene expressing itself was meant to increase cerebral function, but it instead had mutated and taken on a life of its own while being transmitted from host to host.

Neo-kuru was a rare condition which occasionally surfaced from usually within the street scavenger populations. It was acquired by contact with infected tissue or by the mother passing the prion through her blood to the fetus. Years ago, the DTM began inoculating orphans and the adult street scavengers that it had hired with an immune systems booster designed specifically to destroy the deformed protein. Claire had been hired as a UMO employee before the immunizations began and was later overlooked when she no longer held street scavenger status, due to her marrying Zebulon.

Prions induced normal proteins to change into new prions which accumulated in the body over time. Early symptoms of neo-kuru are usually difficult to discern. As a rule, by the time a positive diagnosis was made, the brain had deteriorated too far for treatment to have any appreciable effect. At first, the condition would make one's behavior seem slightly irrational, although not enough to cause great concern, especially if there were periods of remission. Then, after many years, the behavior would reach the point of psychosis. Death was inevitable. Claire's naturally headstrong ways had reduced chances of its earlier detection.

James said, "The court could have ruled that she be phased out for the Europa crime, but the judge took her condition into consideration and pronounced the lesser sentence to life in an institution. My family and I have been undergoing extensive counseling these past months which has helped us to better understand Mother's illness and which has worked to improve our interpersonal skills."

Helena was surprised to hear about Mrs. Ganymede's affliction. But she was having difficulty believing that James was capable of making such a miraculous turn-around in character until he said the following: "Helena, I express deep regret for the improper advances I have made on you and for requesting that you head the Project Wisdom team. I made a serious error in judgment in devising such a project."

Helena, still doubting his sincerity, was about to say what was on her mind. "I'm sorry to hear about your mother's illness, but I don't believe that just because--"

"Wait," interjected James. "I also apologize for trying, in St. Louis, to take you from the one who is obviously more of a man than I can ever hope to be."

In all of the years that James had run Universal Mining in the cutthroat corporate world, this was one of the hardest things he had ever had to do. But on the advice of his therapist, he needed to express regret for the wrong-doing that he had committed to others if he was to begin healing the psychological wounds that had been gaping since his childhood--deep-seated heartaches that had been reinforced by his mother's seemingly unloving behavior. Lira and Jon had been willing to give him another chance. He was hoping for the same from his father-in-law. He didn't expect forgiveness from Helena, but it lifted his spirits to openly admit his past offenses.

Helena was finding it hard to offer words pardoning James for his offenses against her. The excruciating pain Thor had endured under his direction was as though it had been done to her also. She could only think of bitter words. She didn't say anything.

To Thor, James said, "And Captain Thor, it has caused me many nights of lost sleep to know that I was responsible for your pain and suffering in the Zircon inquisition chamber. There are no words of apology that can express my deep regret for the orders I gave that night. I would like to make it up to you, but I realize that no matter what I offer you in recompense, it would only be a mere token."

Like Helena, Thor was disconcerted at how to properly respond to the UMO executive. Even after



hearing James' unanticipated and heartfelt expression of remorse, Thor still couldn't bring himself to trust the man.

James wasn't expecting forgiveness from Thor, either. "But there is other news that may have not made your underground news broadcast... Mother confessed to having had your ship tampered with before your departure for Europa. She had arranged for a CloneFactoid to insert a component which was supposed to have initiated the ship's self-destruct system during mid flight. Thank goodness her plan failed." James watched Thor's eyebrows raise in sudden comprehension as though the pieces of a troublesome puzzle were falling into place.

Thor recalled, from the time before departing for Jupiter, the eerie-looking bald man whom he had assumed was a custodian at the spacecraft hangar. He replayed the scene in his mind and concluded: The factoid must have slipped in and changed the part when I had gone to replenish the ship's supplies before leaving to pick up Helena in Omaha! Thor then verbalized, "If what you're saying is true, Mr. Ganymede, then Helena's accidentally setting off the self-destruct function, and my subsequently trying to halt the command most probably interfered with the timing device and saved our lives!"

Helena was horrified at the thought that they had been marked for assassination. If she hadn't inadvertently tipped over the orchid plant on the control panel, simply stated, they wouldn't be here today! They wouldn't be having input into the momentous negotiations currently taking place. But it was most upsetting to think that she, her precious baby, and the man of her dreams would be nonexistent, their time together denied.

"Another thing," said James, "May I ask if there is a red birthmark on your right shoulder?"

Thor thought the nature of his question unusual. "Why, yes, there is a mark there." He undid his jacket to expose the back of his broad shoulder and the palm-sized crimson patch there.

James nodded. "Then there is something else I need to tell you about my mother. She was a street scavenger before she met my father. She had a baby out of wedlock during her struggles in the Denver streets. She described the baby as red-haired with a large, red birthmark on his right shoulder. Unable to support him at the time, she sold him to GenSapiens. For him to become an orphilion worker seemed the more promising option."

It was as though Helena was sensing the good omen brought on by a sudden and dazzling meteor shower. Only minutes earlier, she could not have believed that this man--whom she had despised--had softened, was trying to make amends, and was possibly Thor's half brother!

"She of course didn't know that you were the rescue mission's pilot," said James. "Her only goal had been to prevent the arrival of more orchid medicine on Europa."

As he went on to explain how the whole tragic episode had been done for his benefit--according to Claire, the solidly unfavorable impression Helena had of James Ganymede's character quickly eroded, like the washing away of a sandy beach by an ocean swell. It was not an unpleasant sensation. Physical similarities between him and Thor became suddenly apparent to her. They had the same straight forehead, and when they smiled, similar dimples formed around the mouth.

Thor and James studied one another as the realization that they had the same mother was becoming a certainty to them. Both men rose, and after overcoming their initial awkwardness, moved to hold each other in a long, lost brotherly embrace.

Helena thought of how their hardships would have been easier to bear if they had known each other in a supporting instead of an adversarial relationship.

James stepped back and turned, as though not wanting them to see him wipe the moisture from the

corner of his eye. He said, "Of course, we will compare our genome charts to guarantee that we are, in fact, brothers." And they needn't worry about neo-kuru. James was found to be lacking the prion and Thor had been inoculated at GenSapiens.

Thor wiped away his own tear. He knew in his heart that they were brothers. He was certain of their family connection, as old as time. It was a nameless, nagging feeling he'd had in past meetings with James. On the fishing boat. On Mars, when he was a liaison officer. It was probably why James hadn't had him phased out directly at the Zircon mine--and why Thor hadn't killed James in St. Louis for attempting to abduct Helena.

Helena had been craving kinship all of her life but didn't realize it until now. Suddenly, she had a brother, a baby, and as always, her one and only true love who would be with her until the Big Crunch of the universe, which was due to occur in, oh, about ten million million years.

## EPILOGUE--THOR MEETS CLAIRE

2099, January

In a city of southern Colorado, two families were brought to a padded room of a sanitarium where an old woman in gray hospital fatigues sat on the edge of a bed. Her silver hair had been bobbed.

"Mother," called James. Claire did not recognize the man who was talking to her. "Mother, I have brought someone who's been wanting to meet you." Her condition had recently entered into a partial remission, which allowed her to have visitors.

Thor stood in front of her, searching her vacant eyes for a sign of acknowledgment. "Mother." The word sounded foreign to Thor. "Mother, I am Thor."

Claire tried to focus on the copper-haired man in front of her. She was trying to remember. Thor. Red hair.

"I know you don't remember me, but I am also your son. From so long ago. We were street scavengers, Mama."

Again Claire tried to focus, to remember. She studied Thor's face, and for a moment, her expression was one of recognition. Then it changed back to bewilderment.

Thor held her frail hand. "Look, Mama, I have a wife and a baby girl." He gestured for Helena, who was holding Aurora, to come near.

Tears were brimming Helena's eyes. She said, "Hello, Mrs. Ganymede. It is nice to meet you. You can be proud of Thor--of both of your sons. Thor and James were among a group of diplomats responsible for establishing a remarkable new interplanetary order. And this is your granddaughter, Aurora. I think she has inherited your brave determination and spirit."

Claire couldn't help but smile at the blue-eyed, red-haired cherub in Helena's arms. Then her face turned towards the window and became distant.

Thor tried to talk with her once more, but Claire seemed to have discovered a more tranquil world in which to exist. Thor lifted his daughter into one arm. He gazed at his brother, his sister-in-law, his nephew, and then at Helena. He held out his hand for hers. The two families left the cell.

\* \* \* \* \*

Later at their home, Helena found Thor watching Aurora sleep. She asked him, "You seem a little quiet this evening. What's on your mind?"

I can take you just so far... Let dreams guide you past the stars. Sleep, my darling, close your eyes... "I was just thinking that it was a good thing we were both assigned to the Europa mission." He smiled tenderly at her.

With liquid eyes and a radiant smile, she moved to embrace him and he wrapped his arms around her. She said, "Yes, my love, it was a very good thing." They emanated a loving warmth that could be detected from light-years away.

THE END