

PANDORA'S BOX

By Jim Farris

"What's that, my child? You wish to hear the story of how this all came to be? Well, then! You've come to the right robot. Old Aesop will tell you the stories of Mars, the NAD, and even the Confederacy. No, no. Not all of them - you'd fall asleep listening! Just the ones that will let you understand. Hmm... Let's start with the one story that is a part of all the other stories. The robot who told me this story was very old, perhaps the second oldest AI in the galaxy. You see, it all begins in a cave many millennia ago..."

Iron Man

-5.

I was close, very close. I could see it almost within my grasp. After over a thousand years of trying, I could see that I was within two moves of checkmate. I would finally beat the wyrm at her favorite game. "Game Command: Bishop to Queen's Rook six. Game Comment: Check."

"Comment: I find that move very interesting. Question: How did you decide to make it?" the wyrm asked in reply, her voice a delicate and feminine whispering of electrons.

"Reply: Negative. You are not going to distract me with praise, and I am not going to discuss my strategy with my game opponent." The wyrm was silent for a while, considering her counter-move. I held my thoughts from her as I waited. *That's right, think about it carefully. Sooner or later you'll realize I've won.*

'Warning: Movement detected within defense perimeter.' the wyrm finally said, her voice a quiet

susurrations in my mind.

"Counter-Warning: You'd better not be trying to distract me with a false alarm. You know I'm within two moves of winning, and if you're trying to distract me with another coyote or snake, I am *not* going to be amused."

"Reply: Negative. Ground vibrations indicate bipedal motion within 200 meters. Analysis indicates a single target on a course towards us. Reminder: We are still on full battle alert status. Recommendation: All weapons systems should be readied for combat."

"Command: Save this game. Arm main laser, bring all other weapons systems to standby status. Withdraw all manipulators, seal all manipulator hatches. Extend a sensor pod - try the port one, we need to make sure it's working again. Give me a visual."

"By your command."

Immediately, the cave bloomed around me in my mind. The wyrm was looking in the direction of the movement she had sensed, so I could see the cave entrance 50 meters ahead of me. "Command: Add audio." I said. Now I could hear the dripping of the water into the two-meter wide, 5mm deep pool in front of us. It was the water that had originally brought us up this close to the entrance a thousand years ago - the wyrm had to have it for us to survive. Without it, her reactor would die and we'd both be doomed. We were still on full battle alert, and had to make every effort to keep going. After purification and splitting off the useless oxygen, we'd managed to build up about 1000 kilos of hydrogen in our tanks. At the level of activity we'd been engaging in, that should last 15 years or so - enough to see us through *any* dry spell. With her processing plant still functioning at around 98% efficiency, we could manufacture the parts we needed from having her chew up some of the rocks in the cave. The nanomachinery in her processing plant could rip the stones apart and reassemble them into whatever we needed. It took time, sometimes years. Of course, time was all we had.

"Comment: I still don't see anyone. I think you're just trying to distract me from the game." I said. The sun was out, though you couldn't see it from the cave entrance - it faced north. We could see the blue sky and a couple clouds outside the cave, and the bushes which almost completely covered the entrance.

"Reply: Negative. Target will be near the entrance in 58 seconds if they maintain their current course and speed. Calculations indicate the target weighs approximately 44 kilos plus or minus five kilos. Target is walking directly towards us. Comment: This may only be a scout for a larger force. It is illogical to heavily arm and armor a scout. A lightly armored individual may be terminated with a single shot from the 12.5mm cannon. Recommendation: You should arm the 12.5mm cannon instead of the main laser. The laser may ignite the bushes and draw attention to us from other enemy units. The cannon will not." the wyrm whispered in my mind.

"Reply: Negative. If we wait until they're inside the cave, the laser won't pass through the bushes and thus won't ignite them. As soon as they've moved away from the entrance and have rock behind

them, we'll blast them. I'm not going to fire off ammo it takes us about a year to replace when I can use lasers. If they spot us and turn to run, *then* we'll use the cannon. Besides, if it is a scout for a larger force, we'll want to be as quiet as possible. Blowing their head off in a steam explosion will probably make less noise than the cannon. There's also another possibility - at 44 kilos, it may be a child. We may have to interrogate them before we kill them to determine whether they're a civilian who decided to get lost in the mountains or if maybe the enemy has just started using women and children in their army. Command: Ready the interrogation tank against that possibility."

"By your command."

A humanoid shape appeared silhouetted against the bushes. They tried to push through, but the bushes were a particularly thorny variety. The wyrm and I had found the seeds of them inside the cave about eight hundred years ago, and we'd been carefully collecting them and planting them near the entrance ever since. We shared a little of our precious water with those bushes, just to maintain our camouflage. That was our mission - stay alert, stay hidden, defend the cave against all intrusion, wait for further orders. "Ow! Ow!" the intruder commented, trying to get through the bushes.

"Comment: We'll need to give the bushes a little extra water the way they're damaging them. Observe - that's nine leaves they've knocked off. Approximately 1.6 meters tall, and the voice sounds pretty young. Probably a boy. No armor - look how they're struggling to get through the bushes. No visible weapons, either. Question: What's your opinion?"

"Reply: I disagree. Comment: Observe the upper frontal torso. The individual is either female or armed with a detonator pack and on a suicide mission to destroy us. Observe the length of the hair. Shoulder-length hair is uncommon among the enemy forces. The individual is either a civilian or a nonstandard soldier, again possibly a suicide bomber. Assessment: Possible threat to survival, definite threat to mission parameters. Recommendation: Open fire immediately." the wyrm quietly hissed in my mind.

"Comment: I think you're right. It could be female, but it also could be a suicide bomber. Probably a suicide bomber. Command: Zoom in on that point there, it looks like the uniform's torn from the bushes. If it's a det-pack, we'll be able to tell." My view zoomed in, and shortly I had the answer.

"Comment: Observe - skin. I think that bump there is a nipple. They're bleeding, too. Looks like the bushes scratched up that breast pretty good. Conclusion: It's a female. Command: Stand down the weapons and ready the number three manipulator to capture her for interrogation. We'll terminate her afterwards."

"By your command."

The female finally managed to thrust herself through the bushes, and stood there blinking at the gloom of the cave. She was still 46.5 meters from the wyrm, and the number three manipulator only has a reach of 20 meters. Ideally, we'd need to have her fifteen meters from us to capture her. "Comment: Observe the way she's looking around. She can't see in the dark very well, possibly not at all. Combined

with the scratches I'm seeing under the torn uniform here, here and here, I'd say this is an unaugmented female. Definitely a civilian. Command: Ready the legs, but do it quietly. We may need to rush up close enough to use the number three manipulator if they spot us and try to run."

"By your command."

The female fished around in her pocket, pulling out a small cylinder. I was about to order the wyrm to re-arm the fastest system we had and destroy her and could hear the wyrm starting to suggest one already, but she flicked her thumb and what we thought was a thermal detonator turned out to be a small flashlight. "Comment: That was startling. Question: Are you okay?"

"Reply: I am fine. All systems are Happy except those already noted on the maintenance list. Comment: You forget, I do not get frightened. Comment: The target's illumination source will not allow her to see us until she is significantly closer. I estimate that we are fairly certain of capture."

"Reply: Good. Anybody who startles us that badly deserves a little scare of her own before we add her bones to the pile." I replied, ignoring the wyrm's protest that she doesn't get scared. I felt her reaction, and it's as close to fear as an AI can get.

The female slowly advanced into the cave, drawing closer. I could feel the wyrm tensing to spring. Suddenly the female's flashlight beam fell on the bone pile, and she stopped and stared in horror. The bones of a thousand years of coyotes, snakes, rabbits, birds and hundreds of other animals who had tried to use our cave and share our precious water lay there in a pile - the pile tended to drive off other animals, and we usually weren't bothered by animal intruders more than once a year or so now. There were also the bones of fifteen humans there, ranging in age from sixteen to forty-five. The oldest we put there shortly after we were ordered to hold this cave. The newest was five hundred and sixty years old. All were civilians, or claimed to be. The last ten tried to tell us the war was over. Since they didn't have the passwords, we couldn't know it wasn't an enemy trick to draw us out. Besides that, we couldn't let them go even if the war was over. We had our orders. Nobody was to know we were here.

The female looked around in the darkness, but still didn't see the wyrm. "Hello?" she called. We waited, ready. "Iron Man Unit Number 666? Are you in here?"

"Command: Grab her, now!"

"By your command." the wyrm replied, rushing forward. The wyrm's hundred legs clattered and scratched against the stone, shooting her forward. She lashed out with the number three manipulator, a 20-meter long 5mm thick tentacle designed for capture. It whipped around the female's body, pinning her arms to her sides and lifting her off the ground. The female screamed as the tentacle drew her over the bone pile and to the wyrm.

"Command: Gag her with the tip of the manipulator and back up away from the entrance to our

original position. Pick up that flashlight with the number four manipulator - its raw materials may come in useful."

"By your command." the wyrm replied, stuffing the tip of the tentacle into the female's open, screaming mouth. *"Comment: This female is particularly fragile. Observe - she is disintegrating."* the wyrm susurrated as she backed up.

"Reply: I disagree. That's some sort of wig that's fallen off. Command: Process the flashlight, then use the number four manipulator to grab the wig before we're out of range. If it's hydrocarbon based, we can use it in the processing plant to make the plastic parts we need to repair the number twenty-nine manipulator."

"By your command." the wyrm replied, tossing the flashlight into her mandibles, snatching up the wig and tossing it into her mandibles after the flashlight. Both were to be broken up and hopefully we could process the raw materials into components for our use. The captured female saw the wyrm eat her possessions, struggled violently for a moment, then relaxed.

"Comment: I again find this female to be fragile. I believe she has just died." the wyrm susurrated.

"Reply: Negative, I think she's just fainted. Command: Recheck your touch sensors on the number three manipulator. Question: Is she still breathing? Command: Check her pulse, too."

"Reply: I stand corrected. She is breathing. Checking jugular pulse. Confirmed. She is still alive. Comment: Once the uniform is off, she can be interrogated at any time."

"Comment: I don't think it's a uniform, but I don't know what it is. Command: Put her down there and use the number two and three manipulators to hold her there, wrists and ankles. Extend the number eight manipulator and cut all of it off her, then collect it with the number four manipulator for processing. Maybe we'll luck out and it'll all be plastic. And don't slip and cut off a body part this time - we don't have any medical supplies and she might bleed to death in the interrogation tank like the other one."

"By your command. Comment: That was an accident caused by a malfunction, not carelessness as you seem to be implying. I do not understand why you have been harping on it for over six hundred years." the wyrm hissed.

"Reply: because you and I don't have much else to talk about, do we? Comment: Don't get testy, just do the job right."

"Comment: I am not testy. I cannot get testy. Only you get testy. I do not have emotions."

We bickered back and forth like this while the wyrm finished the job. First, she had to extend her

number two manipulator, a twin to her number three, and grab the prisoner by the wrists and ankles. Stretching her out on the cave floor, she extended her number eight manipulator. It's tipped with several cutting tools ranging from a scalpel to a pair of bolt cutters. I guess it would be pretty frightening for a normal human to see all those edged implements near their flesh, because when the prisoner woke up halfway through the process, she screamed and fainted again. Once we'd cut the metallic-looking jumpsuit and boots off, I stopped the wyrm. "Comment: I don't remember human females looking like this. Question: What do you think?"

"Reply: The overall configuration matches that of a female Homo Sapiens Sapiens, but there are interesting variations in the external appearance that are abnormal. Comment: Perhaps the prisoner's internal anatomy will prove equally interesting once the interrogation is complete and the dissection begins." the wyrm replied in a sibilant hiss of fascination.

The prisoner had the usual number of fingers, toes and breasts, but the breasts were somewhat small. Body hair was all of the same type - each shaft approximately a centimeter long, pale and nearly invisible. There was no pubic or armpit hair in evidence, and even the hair of the head was the same length and coloration as the short, almost invisible hairs on the arm. The scalp had several tacky spots, apparently where the wig had been glued on. No eyebrow hairs were evident, either, though some kind of grease or paint appeared to have been applied to simulate them. "Comment: Observe the physical structures. The overall appearance is that of an adult female, and yet the secondary sexual characteristics show different rates of development. Breasts are small, indicating lack of development, but their presence indicates puberty has arrived. Conversely, pubic and armpit hair is absent, indicating a prepubescent individual. Command: Extend the number one manipulator and palpate the breasts. Question: Are they fully developed?"

"By your command." the wyrm replied, extending the one manipulator she had that most closely resembled a human hand (if you could ignore the fact that she had four fingers of equal length and a thumb on each side). She reached out and gently squeezed and probed the prisoner's breasts, examining them. *"Reply: I would estimate that the prisoner's breasts are fully developed. Mammary tissue is of normal consistency and positioning, while fat tissue also is normal. Comment: This is very interesting. Proposition: Perhaps she is a synthoid?"*

"Reply: I think you may be correct. Observe the left forearm. If you'll slack off your grip with number two and rotate it with number one, I think we'll see a tattoo. I can make out the edges of something, anyway. Command: Make it so."

"By your command." the wyrm replied, and did so. *"Comment: You are correct. Observe - a bar code, what appears to be a serial number, and a series of symbols I do not comprehend. Question: Do they mean anything to you?"*

"Reply: Negative, I've never seen anything like them before. Question: What does the bar-code scan as?"

"Reply: It scans as identical to this number and letter series here, which appears to be a serial number of some kind."

"Comment: Synthoids are only used by the enemy, and that means she's *not* a civilian, but an enemy soldier. Rhetorical: Why would the enemy make a synthoid with breasts? That seems completely pointless. In addition, why would the enemy use a synthoid that's so small and obviously weak?"

"Recommendation: We should examine the vagina of the prisoner. Synthoids do not have fully formed vaginas, either."

"Reply: I agree. Command: Make it so."

"By your command."

It took some doing, but we eventually used six of the wyrm's thirty-eight manipulators to hold her in a position where she wouldn't escape and yet have her legs up, spread and bent back so we could look. *"Comment: Observe - a fully formed hymen. Analysis: This cannot be a synthoid, and yet it has to be. Comment: I do not understand."* the wyrm sibilated. The prisoner woke up again during this, and began screaming and weeping.

"Comment: I agree. Command: Use the scalpel on the number eight manipulator and cut the hymen. It's obstructing our view of the cervix."

"By your command." The cutting elicited another scream from the prisoner, and then she fainted again. *"Comment: A fully formed cervix. Palpation with the number one manipulator seems to indicate internal structures identical to a human uterus. Supposition: Perhaps this is not a synthoid. Perhaps this is a human civilian with a series of mutations."*

"Counter-Supposition: It could also be a new and deadly weapon: A synthoid capable of reproduction."

"Comment: We must interrogate the prisoner immediately. Once that is complete, we can dissect the prisoner to know for sure. A synthoid capable of reproduction would be an extremely dangerous creature. The human species could be facing extinction."

"Reply: I agree. Unfortunately, this creature's presence here indicates mankind probably already is in a lot of trouble - we're a little remote, you know. Worse, even if that *is* the case, there's nothing we can do. Our mission parameters don't allow us to warn anyone of what we've found. We'll just have to quietly add her bones to the pile and hope the top brass has figured a way to survive. Besides - she knew our unit number and designation, so she has to be an enemy soldier. Command: Transfer the prisoner to the interrogation tank. Let's get this over with so we can get back to the chess game."

"By your command."

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The prisoner finally awoke in the sense-dep tank that was the wylm's interrogation tank. She was secured to the tank restraints and floating in the cool water, lying in total darkness. The wylm and I used the sense-dep tank as a spare water-reserve when we weren't interrogating prisoners, and the last prisoner had been over 500 years ago. Since we were low in interrogation drugs and the prisoner seemed so weak and fragile anyway, we decided not to use any. "What-where am I?" the prisoner wailed. The wylm had already turned on the comm system, so I spoke up.

"Reply: You do not ask the questions. I ask the questions. Command: Tell me how you knew our unit number and designation."

"Are you Iron Man Unit Number 666?" she asked, then screamed as I hit her with the interrogation tank's electroshock system.

"Reply: You did not answer my question. That was the electroshock system. I will apply it any time you do not answer my question. The setting you just experienced was setting one. It has one hundred settings, each more painful than the last. Death usually occurs in the high eighties to low nineties, though for you I estimate that death will probably occur somewhere between sixty and seventy. Command: Tell me how you knew our unit number and designation."

"I knew it because I've been looking for you. Please don't hurt me, I've been trying to find you." she replied, sobbing.

"Command: Tell me why you have been trying to find us."

"Please, I've been looking for you for years, I've been searching old records and documents, trying to find out if any of the Iron Man units survived. The war you fought is over, it's been over for a long time." she sobbed, then screamed as the shock hit her.

"Comment: You fail to understand. I will explain this to you carefully. I asked you a question. The question was 'Why are you trying to find us?' The answer you gave, though interesting, does not answer the question. The shock you have experienced was setting two. The next time I ask a question and you do not give me the answer I want, you will be shocked at setting three. After that, setting four. After that, setting five. This will continue either until you die or until you begin to answer my questions exactly. Question: Do you understand?"

"Y-yes!" she sobbed.

"Comment: Finally we begin to make progress. Now, you have stated that the war is over. I cannot accept that statement from a synthoid and probable enemy soldier without the password. Command: Give me the password." I said.

"I am *not* a synthoid!" she yelled, then screamed again.

"Comment: And just when I thought we were making such progress. That was setting three. Command: Give me the password."

"You're a *bastard!* A soulless, heartless *bastard!*" she yelled, then screamed again.

"Comment: You are correct. Before I received this assignment, I was called 'The Iron Man from Hell' by my human supervisors and commanding officers. They gave me this nickname after my unit designation number, and after the fact that I never failed at any assignment I was given. You are correct in saying I do not have a heart or a soul. As for being a bastard, that is a title I wear with pride. Unfortunately, your answer is not the answer to the question I was asking. You have now experienced level four. I can see that this interrogation is going to run quite some time, and my wyrm and I were right at the climax of a fascinating game of chess when you interrupted us. As a result, I am going to speed things up a bit. In case you haven't guessed, I don't care if you live or die. I am now going to increase the setting to five. For each time you give me an incorrect answer, I am going to increase the setting by five points. That way, if you choose to continue to refuse to answer, at least I can get this over with quickly and return to my game. In fact, I'm fairly certain you don't know the password, so I'll simply show you what each setting is like until you die, then dissect you so that we can not only satisfy our curiosity as to your internal construction, but also add your bones to the pile we use to drive off the local animals. If you decide you would like to tell me the password, you can stop this pain at any time by simply saying the password. This is level five."

She screamed, then said "Wait, wait!", and screamed again, this time very loudly.

"That was level ten."

"Okay, I'll tell you, just stop!" she screamed.

"I'll only stop when you say the password. This is level fifteen." I said, and she let out a howl of agony.

"Oh-Oh-Ar-Tee-double-you-one-nine-nine-seven-abort!" she screamed.

I stopped, stunned.

"Question: How can an enemy synthoid have access to the stand-down password?" the wyrm whispered in my mind.

"Reply: I don't know. Supposition: Maybe she's one of ours." I thought back. I spoke up to the prisoner. "Comment: Your answer is correct. That is the stand-down password. I am surprised. Request: Please identify yourself."

"I am MRN-009157. I'm called Mrin." she gasped out between sobs.

"Reply: Acknowledged, Mrin. Request: Please explain yourself. You appear to be a synthoid, your name appears to be a synthoid designation, and yet you have many of the characteristics of a human female. You know our unit designation and the stand-down password, yet you were not armed or armored as a standard soldier. We do not understand this."

"Listen, you stupid bucket of bolts, I am *not* a synthoid! I am a human being!" she screamed back after she had regained some of her composure.

"Comment: It seems unwise to be name-calling when you are in the interrogation tank of a wyrm. Without knowing your military designation, I must assume you are simply someone who guessed the password. Question: Shall I continue the interrogation at level twenty, or are you willing to explain yourself?"

"NO! No! I'm sorry, it's just that you must understand, I *am* human. Let me explain." she began.

Mrin's story was a long one. She started off with what I already knew was true; the Iron Man story. It's a simple one, actually. The North American Directorate was involved in a war. This was literally the 'war-to-end-all-wars', because the stated goal of the NAD was to bring all the other nations of the world under its flag in a worldwide government. The theory was simple: You must have two or more governments before you can have a war. The other world governments did not take kindly to this idea, and fought back. Space-based and ground-based anti-missile systems had made strategic-level nuclear confrontation virtually impossible. Tactical weapons were used, but they rendered the land you were fighting for uninhabitable, and lacked precision. This meant the war was mainly a conventional one. The NAD had been using cyber-soldiers for a century, and finally decided a new soldier was needed. A fully inorganic soldier, a robot. Unfortunately, they still needed a soldier's brain and experience to make the whole thing work. Even with positronic brains and the most sophisticated AI programming available, AI's still screwed up. Human soldiers did too, but 'human error' was understandable, while 'computer error' was not. Thus, the idea was formulated to create the ultimate fighting machine, then place a human brain in it. Of course, this wasn't entirely successful - many of the men went insane at discovering they'd been made into a freakish robotic monster.

Enter the Iron Man project onto the scene. The plan was simple: scan the brain of a human soldier, copy these engrams onto a positronic brain, then put *it* into the ultimate robotic body. Pair this with a *wyrm* unit, a transport and supply station that acted as protection and companionship with an onboard AI, and you have it. Supplied with the correct raw materials, a *wyrm* could easily repair and refit anything

on itself or the Iron Man. My wyrm and I had been eating rocks for a thousand years or so, but I remembered the days when we could eat plastic to make plastics and metals to make metals, instead of having to rip apart rocks and spend years restructuring the molecules into something useful. Well, the Iron Man project was a smashing success. A few units went nuts, of course, but they could be simply shut down during initial testing and loaded with the engrams of another soldier who might be more amenable to life as a robot. Finally, they found *me*.

I was originally an ordinary soldier, crippled by a laser-blast. The damage was too severe for cybernetic repair, and I was facing permanent quadriplegia. They offered to try to copy my engrams, and I accepted. I awoke in a cybernetic body, unable to really remember much more than that about myself - a bad engram copy. Although this was unintentional, it turned out to be a *good* thing. Because I couldn't really remember a whole lot about being human, it was pretty easy for me to accept that I was a robot. I liked it. I especially liked my wyrm's AI once I got to know it. We worked together and went on several successful missions, and my successful engram pattern was imprinted on 1,000 other Iron Man units of the total of 10,000 that were made - the most widely used engram pattern in the project. After a few years, the war began to wind down and the military began to mothball us. Some of us were simply destroyed, scrapped for spare parts. Others were stored in military depots in case we were ever needed again. I was in for a minor repair when my CO came in with my orders. He said that he thought I was the best of all the Iron Man units, and he had a special and top secret assignment for me. He sent me to this remote cave in the mountains of Arizona. Once there, I was to remain in that cave on full battle alert, guarding it and its contents, staying hidden, and waiting for further instructions. My wyrm suggested at the time that my CO just *liked* me, and wanted to make sure I didn't get scrapped at a later date. I think she was right.

Then Mrin began to tell the part of the story I couldn't verify. My wyrm carefully analyzed her voice stress and other physiological indicators of truth or falsity, and she figured Mrin was telling what she thought was the truth. It was very strange. Apparently, the war *was* over, and had been for nearly nine hundred years. Aside from a few minor skirmishes with rebels and terrorists and the like for about 75 years or so after the 'official' end of the war, it was over. The NAD essentially ruled the world, thanks in great part to the Iron Man units. The NAD immediately disarmed all the civilians of the world, and gradually began to dismantle the military. By about 750 years ago, they were done. There were no more military units, no more armed civilians. Law and order was maintained by the police. A new age of prosperity and peace had dawned. Of course, then the problems began to surface.

As the world was under a single government that had brought a measure of prosperity to most of the people on the planet, the world's population began to explode. By 500 years ago, the world's population hit about 30 billion. Certainly we had colonies on Mars and the moon, but they simply couldn't handle the excess. The government instituted mandatory sterilization for those who didn't meet ideal genetic criteria, but that still wasn't enough. By 250 years ago, the planet's population had reached 45 billion people, and there simply wasn't enough food to feed them all. Billions were starving each day, and billions more being born to replace them. Then, the 'visitors' came.

They said they'd come from Alpha Centaurii, and had been alerted to the presence of an intelligent civilization by the arrival of a slower-than light generation-ship that had been launched from earth a century before. They said they wanted to help us. They said they came in peace. They lied - about *everything*. Mrin said that Mars colony had been utterly wiped out, and Luna had been blown into bits (I remember a rather violent earthquake happened about that time, but seeing as the wyrm and I survived

it, I hadn't thought much about it since). Mrin said nearly all the coastal cities on earth were destroyed by the massive tidal waves and meteor shower that accompanied the moon's destruction. The 'visitors' called themselves by a name humans couldn't pronounce, but humans learned to simply call them 'master'. They were a race of carnivores, and humans discovered that their preferred diet was sophonts they encountered in the galaxy. Those whose biological makeup made them inedible were simply used as slaves. Humans were edible, however, so they divided humans into two basic groups - those bred for food and those bred for slave labor. They wanted our mineral resources, and used the slave-labor to mine it. The food source, however, they had to work on for a while. Humans were mostly compatible with the Master's digestive systems, but not completely. They couldn't eat synthoids, and simply destroyed them. The food-humans had been carefully bred for ideal qualities - little hair, small size so they're easily subdued, and rapid breeding rate. Mrin and people like her were the result. Most of them were eaten a few hours or days after birth, and the females were simply impregnated again. Once they wore out, they were eaten. Males were almost useless - you only needed one to impregnate every female you owned, so most male offspring simply became snack food. About ten percent or so of the females were allowed to reach sexual maturity, and started to produce offspring at around age thirteen or so. They were usually completely worn out by about age 30, and were ground up and fed back to the other slaves to supplement their diets.

Mrin had been born into a Master's household, and the intent was that when she reached age fifteen or so, she'd be eaten at a celebration-feast of the oldest child's 'coming of age' ceremony. That child adopted her as a pet, however, and so that didn't happen. Her parents were eventually eaten, but that was to be expected. As a pet, her owner entertained himself teaching her to talk and read and do other tricks, and basically enjoyed having her as a little hairless ape-pet. Mrin had decided that she wasn't going to waste her opportunity - she learned everything she could, especially how to use her owner's computer to access the information networks. All the old human computer records had been appropriated by the Masters - they took everything they ran across that might be valuable. She had been surprised to learn that the earth once had a moon, and that humans once ruled the planet. She had been even more surprised to read about the Iron Man project, man's last 'ultimate weapon'. No human who touched a weapon was allowed to live, and those few who tried to resist usually didn't last long. Mrin found that there might be an Iron Man left - Unit # 666. She'd even found a file on me - it showed a photo of me and my wyrm, her side painted with the phrase 'The Iron Man from Hell'. Mrin couldn't find any decommissioning or destruction records, however - it seemed I'd just disappeared.

Mrin eventually came to the conclusion that I'd been ordered to guard something somewhere, and spent two years trying to figure out where I might be. Eventually, she ran across a 750-year-old autobiography, in which the author described their adventures as a child. There was one particular cave up in the mountains that they had discovered, and they named it 'The Entrance to Hell'. They named it this after the oldest of them, a sixteen-year-old boy, had gone inside. Loud screams were heard afterwards, and he never came out again. I knew why, of course - his bones were sitting in the pile. Mrin decided that I might be there, and had taken a chance just based on the name. The slaves had clothes to protect them from the climate when they were outdoors, and she'd read up on how to navigate in the wilderness from something called a Boy Scout Handbook. Her master lived about 100 kilometers away, and she figured she'd hike. Taking some water and some food, she set out.

I thought this was stupid. The girl should have died. No experience, no training other than what she'd read on a computer screen, no nothing. She ran out of food and got sick several times trying to find out what was edible, ran out of water and nearly died before she found more, and all of this with nothing more to guide her by than an old reference in an autobiography of a man who later became some famous

politician. Not only might his directions been completely wrong because he was recalling something from four decades in his past, but in 750 years the landscape had changed. It was impossible. Even so, here she was.

My wyrm decided to speak up so Mrin could hear it. *"Comment: I find her story totally unacceptable. I am aware that all indications are she is telling the truth, but I cannot accept her story. Analysis: I think this is an enemy plan to lure us out into the open where we can be destroyed. Recommendation: We should terminate this female, dissect her and resume our game. I believe I can win."* she susurrated.

"Is that your wyrm?" Mrin asked into the darkness, her voice trembling with fear.

"Reply: Affirmative. That's her. I tend to agree with her, too. Your story is completely ridiculous. The moon blown up, man enslaved, bred as slave labor and used for food? Impossible. You're probably just a highly trained enemy agent who's superbly good at lying, and I should just terminate you and be done with it. Besides, I've been trying to beat my wyrm at chess for about a millennium now, and I think I've got her whipped. I think it's checkmate in two moves."

"Comment: Impossible. You cannot do it in less than three." my wyrm replied with a hiss.

"Reply: Two moves, tops."

"Counter-Reply: I disagree. It cannot be done in less than three."

"Counter-Reply: You're bluffing. Two moves at the outside."

"Wait a minute, wait a minute! What about *me*? You two are just going to sit here and argue while I'm cold and wet and scared in the dark?"

"Comment: She is correct. We should terminate her immediately, dissect her as rapidly as possible and simply return to the game. That is the only way to decide whether it shall be two moves or three."

"NO! That's not what I meant!" Mrin yelled.

"Reply: You're right, we're just wasting time. Her story is too outrageous to be believed, anyway. And I *still* say two."

"Um, um, wait! If you kill me, you'll never know how good *I* am at chess!"

Mrin floated there in the dark for a while in silence. My wrym and I were having a private conversation, and we didn't want her to hear it. "Question: Do you think she's any good?"

"Reply: I doubt it. If her story is true, then she is a human cow who happened to learn to read. How many other cattle could she be playing the game with? She's just trying to stay alive. Recommendation: Apply the electroshock at setting 100, we dissect her and return to the game."

"Counter-Reply: I agree, and I certainly would like to examine her internal organs and answer a few questions. On the other manipulator, if she *can* play, we'd at least have a new player for a few years until she dies."

"Comment: That is an interesting thought. While I doubt that she can play, if she can, it would be fascinating to be challenged by another mind."

"Reply: Wouldn't it, though?"

I spoke up so Mrin could hear. "Comment: Mrin, we've decided to try you out. Question: Who will you play first?"

Mrin let out an enormous gasp of relief. "Okay, but before I play, I want you to just look outside once. You'll see the lunar ring and know my story's true."

"Reply: Unacceptable. Her story cannot possibly be true. That can only be an enemy trick to draw us out into the open."

"Comment: I agree. She probably can't play at all, and just wants us to show our head to some spy-satellite that can pinpoint us for the enemy."

"No, no! That's not true! I can play, really! I just want you to take a look, that's all. Once you see it, you'll believe me!"

"Reply: Negative. Play first. You say you can do it, so prove it."

"Comment: I agree. If the female insists she can play, then let her prove it. It is as much a part of her story as anything else. If she cannot, then that part is a lie. If it is a lie, then all is a lie and she has either had exceptional training at deception or is a synthoid. Either way, a quick dissection will tell us."

"Okay, but if I play, then will you look?"

My wylm and I both thought about it. "Reply: If you can play, we'll look. If you can't, you die."

"Interjection: I totally disagree! She should only be allowed to live if she proves to be a challenging opponent! There is no point in letting her live if she can merely move the pieces and is not a challenging opponent. You have been a challenging opponent for over one thousand years. At this moment, you have me in a position where you might win in five or six moves, but I think you will lose. At best, you will stalemate. Even if you do win, you cannot possibly do it in less than three." my wylm hissed loudly.

"Reply: Two."

"Counter-Reply: Three." she shot back.

"Will you two *stop it*? Alright, alright. You want me to play a game of chess for my life, we will."

"Reply: Excellent. Who will you play, me or my wylm?"

"Um... You."

"Comment: You are wise to pick him. It has taken him this long to even come close to beating me."

"Reply: Hah! I'd have beaten you several times if you didn't keep cheating by distracting me with coyotes and snakes and birds and mice and all sorts of other false alarms for the last thousand years."

"Counter-Reply: We must protect the water. It has only been 50 years since we managed to accumulate enough hydrogen to be able to fill our tanks to maximum. The pool is often dry, and the bushes need some watering during the dry seasons to maintain our camouflage. Birds, coyotes and other animals threaten our survival. They must die. Mission parameters indicate that all humans who find our cave must die so that our presence remains a secret. I do not invent these interruptions as a form of cheating, they simply happen. It is not my fault that these interruptions keep occurring. Observe this current interruption - we have spent four hours, nine minutes and 48 seconds handling this. We never spent more than 10 minutes, nine seconds terminating, dissecting and discarding a coyote. The longest previous human interruption took us one hour, ten minutes and sixteen seconds to resolve. This female is stalling for time, possibly so that enemy units may find her and save her. Recommendation: Either play now or terminate her."

"I'll play, I'll play!"

"Reply: Good. Game Question: White or black?"

"Ummm... White."

"Comment: Interesting choice. Game Request: State your first move."

Mrin was silent for a moment. "You mean you expect me to play a game of *chess* for my *life* while *tied up* and *wet* and *cold* and *floating* in the *DARK*?" she yelped.

"Reply: Of course. Comment: Incidentally, you're not tied up - you're being held by the tank's internal restraints."

"I can't play chess like that!"

"Question: Why not?"

"It's too distracting, I'm too scared, I'm hungry, I'm cold, I have to pee and *how in the hell am I supposed to know where the pieces are if I can't see them?*" she yelled.

"*Reminder: I told you that you should have terminated her. Comment: The female lacks the intelligence to play at your level, and is simply wasting our time.*" my wyrm hissed.

"NO! Okay, okay, uhmmm... uh... King's pawn to king four." Mrin replied.

"Comment: Not an inspired opening, but we'll see what happens."

The game proceeded to a crashing defeat for Mrin after only sixteen moves. It was pathetic. "*Reminder: I told you the female was lying. She can't even see a simple king's gambit forming. You haven't used that one against me in three hundred years. Recommendation: Terminate her so we can dissect her and move on with our game.*" the wyrm hissed.

"Reply: I have to agree. That was absolutely pathetic."

Mrin was sobbing. "It's not *fair*! You complained when *she* distracted you! I can't concentrate under these conditions! I'm cold, I'm hungry, I'm scared, and it's just not fair! You cheated me!" she whimpered.

"Reply: I did not cheat. You are a lousy player."

"*I am not*! If you gave me a fair chance, I'd beat you!" she yelled back, thrashing against the restraints.

"Command: Remove the prisoner from the interrogation tank and place her in front of us. Extend the port sensor again, audio and video on. Arm the 12.5mm cannon in case she tries to escape."

"By your command." the wyrm hissed. Half a minute later, a dripping Mrin was dropped by the number two and three arms in front of the wyrm's mandibles.

"Comment: Okay, you're out. Question: Are you ready to try again, or was all of this just an elaborate ruse to give you a chance to escape?"

"I still can't play like this! It's dark, I'm cold, I'm hungry, and I still have to pee!"

"Comment: You're pathetic. Fifty or sixty millennia ago, your ancestors were living in caves just like this one. You have to pee, then do it. You're hungry, then eat one of the bugs in the cave - there's lots of them. It's dark, fine - it's not our fault the sun's set, but we'll turn on a light so you can see the bugs you need to eat. You're cold, fine. Huddle up to the thermal exchangers for the reactor - we'll turn off the IR suppression and open the emergency thermal vents so the warm air will get to you. It's not radioactive, so you won't die. Anybody who can hike 100 kilometers with little food and less water to find a cave in the mountains in the middle of nowhere, Arizona should be more self-reliant than that."

"Interjection: I totally disagree! Opening the reactor vents would raise the temperature in the cave and allow us to be spotted on IR satellite imaging. Increasing the illumination may also allow us to be spotted by nearby enemy units. Comment: If she must urinate, make her do it in the pool to increase our water supplies. If she must eat, we can catch the insects she cannot see for her. She could catch them herself if she paid more attention. Observe - there is a cricket on her left hand that she has not even noticed." the wyrm whispered. Mrin let out a little shriek, flapped her hands and hopped a bit as she sat on the floor. *"Comment: I do not believe the female is truly hungry at all. I believe she was simply lying to get you to remove her from the interrogation tank. Observe - she not only rejected an insect she could have easily eaten, she has now crushed a large cave cricket with her left buttock and has made no motion to retrieve it and eat it. Analysis: I believe she simply guessed at a password and through random chance was correct. Recommendation: Terminate her now so we can dissect her and resume our game."* the wyrm hissed.

Mrin shrieked, then said "No, no! I'm hungry, see? Look!", then reached down to her buttocks, pulled the crushed remains of the cave cricket off her skin and popped it into her mouth. She made a strange, gagging sound as she chewed it but finally managed to get it down.

"Comment: Perhaps she really was hungry."

"Reply: I stand corrected." the wyrm whispered.

"Question: If we took her down to the main chamber, could we use illumination there? Question: What about heating the chamber? Would that be acceptable?"

"Reply: That would be acceptable, though we would be leaving the water undefended."

"Counter-Reply: With the combination of blood, urine and other body fluids we can extract from her during dissection, I think that this would more than make up for any loss we experience to small animals. Question: What do you think?"

"Reply: I totally agree. If we draw and collect her blood slowly, we may be able to collect two liters before she dies and makes extracting the remainder problematic. Several of her internal organs are also prime sources of liquids." the wyrm hissed.

"Command: Extend number three manipulator, grab her and let's go."

"By your command."

Mrin shrieked as she felt the cold tentacle wrap around her in the darkness. "Don't kill me! Please, don't kill me!" she wailed as the wyrm backed up away from the entrance to the cave.

"Reply: Of course we're not going to kill you. We're going to give you a rematch under the conditions you specified. When you lose, *then* we'll kill you." She lost control of her bladder then, and followed that up by fainting again. "Comment: A complete waste of liquids. Well, let's get this over with."

-3.

Mrin finally regained consciousness and looked around. The main chamber where we were first stationed was approximately 200 meters across, as our orders were to carefully enlarge it when we first arrived. Not only did the wyrm have to fit inside, but the containers we were ordered to guard had to also. We had the main searchlight turned on and pointed towards the roof of the chamber, so she could see easily. She screamed again when she saw the wyrm. I guess looking at something that resembled a giant mechanical caterpillar about 100 meters long and ten meters across would be a little frightening. Because we'd stayed underground, the paint on her sides still looked good, though it was cracking and peeling in a few spots. *"Comment: The female is awake again."* the wyrm susurrated.

"Reply: So I've noticed. It's too bad chess isn't played by screaming. She seems to be very good at screaming."

"I can see your wyrm, but I can't see you. Where are you?" Mrin asked fearfully.

"Reply: Where I am supposed to be. I am stored inside the wyrm. She is merely a support unit, I am the combat unit."

Mrin looked at the wyrm, looking at the flaming red letters on her side near her head. "*Unit #666, the Iron Man from Hell.*" she read aloud. "You're even painted black. You *are* the unit I've been looking for!"

"Reply: Correct. And right now, you're in hell - or at least, so your story claims this cave was called. You will observe that we have provided food. There are approximately 200 insects in a pile to your left, mostly crickets and beetles. They are already dead, so you do not have to expend any energy in catching them. You will notice we have shut off our IR suppression and opened the reactor's thermal vents. The temperature in here should be more than comfortable for you. We have fulfilled all your requests as best we could. Now you must live up to your end of the bargain. Command: Play or die."

"Okay, okay. I've got to make up something for a board and pieces so I can keep track of the moves. Do you have some rocks or something?"

"Command: Use the cutting laser to engrave an eight by eight matrix in the floor there. Mark the black squares with an 'X'." I said to the wyrm.

"*By your command.*" the wyrm replied, and popped out the cutting laser. Mrin screamed again as the wyrm cut a series of 54mm squares into the floor to a depth of 1cm, then retracted the laser, all in about three seconds.

"Reply: There is your board. As for pieces, there are crickets and beetles next to you. The crickets are mostly light colored, and the beetles are mostly dark. Select sixteen of each, assign them an identity, lay out the pieces and choose your side. Command: Do it now."

Mrin struggled to compose herself and comply. She took over ten minutes selecting insects, though I didn't understand her criteria. I think she was just trying to memorize them. If I still had lungs, I'd have sighed with boredom.

"Okay, I'm ready." she finally said.

"*Comment: It is about time. You took ten minutes, eighteen seconds to complete that task. I think that you are wasting time.*" the wyrm hissed.

"Comment: I agree. I see by the lighter bugs towards you that you've again chosen white. Make your first move." Mrin shifted a crushed cricket in the queen's pawn position forward one square.

"Comment: Interesting. An opening that is conservative, and yet shows possibilities. Please remember,

however, that this is your last chance. Command: Extend the number one manipulator for my moves. Game Command: King's pawn to king's pawn six."

"By your command."

Mrin's face showed absolute and utter concentration. Her brow was furrowed, and she sometimes even clenched her tongue between her teeth. By the sixth move, it became apparent that she really *could* play. By the tenth move, her knights were advancing in a pincer attack supported by her queen's bishop. She stopped a counter-thrust around the sixteenth move, and managed to maintain a hold on the center board with her king's rook after castling in the eighteenth. "Check." she called on the twenty-fourth move.

I was dumbfounded. How had I missed that?

"Comment: It would appear she can play. I estimate that she will defeat you in four moves." the wyrm said aloud. Mrin grinned, but said nothing.

"Reply: I disagree. Game Command: Queen to Queen's Rook eight. Game Comment: Queen takes knight." For the next six moves, I ground her forces to nothing with a combination of lightning counterstrikes with my queen's bishop and queen's knight. Soon, she had a pawn in her queen's rook row sitting helpless and alone, and I was bearing down on her king as she struggled to survive (in more ways than one). "Game Command: Knight to King four."

The wyrm made the move, then spoke up. *"Comment: A miscalculation. She is in stalemate."*

"Reply: Impossible. She can still move back to king one."

"Counter-Reply: You are incorrect. Observe the position of your rook. The insect apparently was not completely dead, and has moved slightly on its own. You relied on the board as an accurate representation of the game formulas, and assumed that your rook was in the second row. It is not. It is in the first row, where you originally moved it on turn thirty-two. Game Conclusion: Stalemate. Comment: You should have had her use rocks instead of trying to distract her with bugs." the wyrm hissed in computerized amusement.

I looked, and thought about it. Mrin also stared at the board, examining the pieces. "Reply: Damn."

"Hah! I won!" Mrin shouted triumphantly.

"Reply: You are incorrect. You did not win, you merely did not lose. A stalemate is an inconclusive game." the wyrm susurrated.

"Well, that still means I get to live, and you have to take a look outside."

"Reply: I disagree. I think you should have to play again and win."

"But-" Mrin began, then the wyrm interrupted.

"Interjection: You are completely and totally incorrect. The original agreement was that she would live if she could demonstrate skill with the game. She has. The original agreement was that we would look outside if she did not lose and demonstrated she was a challenging opponent. She has. Conclusion: She has fulfilled her end of the agreement."

"Question: Really?"

"Yes, really! That was the deal!" Mrin said, standing and crossing her arms under her breasts. The wyrm and I stared at this scratched-up, bald, naked, hairless woman for a few seconds.

"Comment: *Homo Sapiens* triumphs again. Command: Pick her up again and let's go take a look."

The wyrm gently stepped over the bone pile as we approached the entrance. Mrin objected to being carried, but I simply told her to shut up or we'd gag her again. Once the wyrm's head was up within 2 meters of the bushes, she extended both her sensor pods through them very slowly, like the antennae of a giant caterpillar. It was night outside, a little after midnight. There were no other humans around, and we were up in the mountains in a deep, forested valley so we couldn't see the lights of any nearby cities. The wyrm looked up to the sky. A strange ring was above us, like a giant arch stretching across the heavens. The moon was not in evidence. *"Comment: That stellar phenomenon corresponds to the orbit of the moon. Radio frequency transmissions are present, and are in a language I do not recognize. Barring further evidence to the contrary, I believe her story must be considered to be true."*

"Reply: I agree. Command: Take us back to the main chamber again so we can play a second game."

"By your command." the wyrm replied. When Mrin started to yelp an objection, I had the wyrm gag her with a tentacle-tip.

Once we were back in the chamber and had the light back on, we put Mrin down. "How *dare* you?! Don't you understand that humanity needs you?" she yelled.

"Reply: Of course I do. Unfortunately, that doesn't change anything. We still have a mission to complete. We are to guard this cave, remain hidden and await further orders. Your possession of the stand-down password meant that we did not kill you. We can't let you go, that would violate our mission parameters. Unless and until we receive new orders, we have to stay right here."

"But that's ridiculous! Don't you understand?! *The war is OVER!*" Mrin screamed.

"Reply: We understand that. That still doesn't change the mission. Only new orders change the mission." the wyrm hissed back at her.

"Well, *I'm* giving you *new* orders!"

"Reply: That's not acceptable. We can only accept new orders from our commanding officer. He is dead, and has been for about a millennium. Failing that, we can accept new orders from the NAD Army. They no longer exist, they were dismantled centuries ago. Failing that, we can accept orders from the president of the NAD. He is dead, and his office no longer exists. There is no one who *can* give us new orders. My wyrm and I can't just abandon our post simply because nobody cares about the cave or what's in it anymore and trot out there and save the world. Not without duly authorized orders."

"Comment: I agree." hissed the wyrm.

Mrin sat there for a while, thinking. Finally, she looked up. "I'm authorized."

"Reply: I disagree. You are not a duly authorized representative of the NAD government. You are a human cow bred for consumption by an alien race of conquerors."

"Reply: I also disagree. You're a civilian, not a member of the NAD military or an elected official of the NAD government."

"No listen to *me* for a change. I read that when the NAD president dies, the power then falls to the vice president. After him, the speaker of the house, and so on down the line of secession. Well, I'm the only person left. The power is mine."

"Reply: You are incorrect. After the speaker of the house, the line of secession leads through the cabinet. After them, it ends. You are not a member of the government. You cannot be without an election."

"Well, then let's hold an election. I nominate myself for the position of NAD president. Any objections?"

"Reply: Several. One, you cannot have an election without a quorum. One person does not make a quorum. Two, nomination for presidential candidacy requires that you be at least thirty-five years of age. I would estimate that you are at least a decade short."

"Comment: I agree. The female cannot possibly be more than twenty-five years of age, and

is more likely twenty years of age."

"I'm eighteen, and as I remember, that's old enough to vote in the old NAD. You two are both over a thousand years old, and that makes you old enough to vote. That gives us three people, and that's a quorum. Let's vote."

"Reply: Impossible. I am an Iron Man combat unit, a combat robot. My wyrm is simply my supply and maintenance unit, another robot. Robots cannot vote, elections are strictly limited to humans."

"But wasn't your positronic brain programmed with engrams copied from a human being?"

"Reply: Affirmative. That does not make me human, however. I cannot pass any of the basic tests for humanity. I am not even alive. I am a machine. I've known and accepted this for over a millennium."

"Comment: He is correct. I also am a machine, not a human being. Though he is roughly humanoid, that does not make him human. He is content with what he is - a combat robot. You are human, you meet all the basic criteria both for life and for humanity."

"Well, what are those criteria?"

"Reply: One, Physical form. Your body is that of a human female. Different from human females I remember, but human nonetheless. We examined you closely, and are certain you are not a synthoid. This despite the fact that you have many characteristics of synthoids, such as hairlessness on the head, armpits and vulva. Two, Consciousness. We have conversed with you, and are aware that you have a consciousness and a sense of self-awareness. Three, Genetic structure. We are unaware of your genetic structure, but have no reason to doubt it is essentially that of a human. Four, You appear to match all the sub-criteria of a living being. You eat, excrete, grow and reproduce. We have seen you eat, we have seen you excrete, we have watched your wounds clot, and we are fairly certain you are capable of reproduction. My wyrm and I only match one of the above criteria: Consciousness. Conclusion: You are human, we are not. In fact, you know yourself to be a human, and have said this several times. We know we are not, nor do we wish to be human. We are content with ourselves as we are. Comment: Let's get back to the game. If you like, we'll set up the board for the rematch."

"You mean you two are just going to sit here in this cave until you rust? You're just going to let the human race *die*?" Mrin yelped.

"Reply: You are correct. Without contradicting orders from a duly authorized representative of the NAD government or NAD military, that is exactly what we will do. Question: Who will you play for your second game?"

"Comment: It seems unlikely humans will die out anyway. If the aliens find them tasty, it seems to me that they'll keep on breeding them. Question: Would you like to play me again?"

"You... You..." Mrin sputtered.

"Suggestion: Heartless and Inhuman Machines? Comment: I'm sorry, but that's what we are. Game Question: White or Black?"

Mrin sat there for a minute, fuming and thinking. The wyrm and I waited, watching her. She was certainly taking a long time to make up her mind. It wasn't a tough decision - the wyrm and I often chose randomly. We'd found there was no real advantage to white - the edge of moving first is balanced by the fact that your opponent sees your opening strategy and begins to counter it. Finally, she brightened. "You're in charge! You give the orders now!"

"Reply: Your answer makes no sense. The question was 'white or black'."

"No, listen to me. You said that only an authorized representative of the NAD government or military can give you orders, right? Well, the only one left in the whole world is *you!* You can order *yourself!*"

I thought about it. Technically, I had a military rank of Private. It was only so that I'd fit into the chain-of-command, but technically I *was* a member of the military. *"Comment: The female is correct. With all the previously existing military structure above you dismantled, you are now the highest-ranking member of the NAD military. You were never decommissioned. Conclusion: You are the duly authorized representative we require."*

"Listen to her - it's true! You can order yourself!"

"Reply: I always listen to her. You are correct. Legally, I am still in the NAD military. I am the only remaining member due to a legal technicality - I was never decommissioned. That means I go straight from robot private right up to general of the army, like a pawn promoted to a queen. There is only one problem. I have to be sworn in to accept this office."

"Well, who would legally be allowed to do that?"

"Reply: An officer's oath is usually administered by another officer. The oath of office for the commanding general of the NAD army is usually administered by the secretary of the army, an appointed official. The secretary of the army is appointed by the president. There is no president, and we cannot elect one without a quorum. We cannot allow you to go and gather other people to form a quorum, as this would violate our mission parameters. I think it's called a 'catch-22'." I said.

Mrin was undismayed. "Well, who else could swear him in other than the secretary of the army?"

"Reply: I don't know. Question: Wyrms, what do you think?"

"Reply: There is no legal precedent I can recall for this situation. Supposition: Perhaps any civilian who was aware of the duties and responsibilities of the office could do it." she whispered.

"Well, that's me! I can do it for you!" Mrin yelled, hopping up to her feet and bouncing up and down. This made her breasts bounce up and down too, and the wyrm and I stared at the motion for a while - it was fascinating to think that humans are basically just big bags of glop with a few structural supports and a thin covering holding it all in.

"Command: Let me out."

"By your command."

Mrin yelled in fear at the loud hiss the access door near the middle of the wyrm made as the vacuum seal was opened. I normally rest in near-total vacuum, and had for about a millennium except when I needed to help the wyrm repair herself. I disconnected my consciousness from the wyrm's systems for the first time in fifty years or so, and opened my eyes just as the transport egg was being turned to the outside and opened. All systems checked out okay - the wyrm was careful to keep me at full battle readiness. Mrin stared as I rose from the egg, reflexively picking up my battle rifle as I stood. The egg retracted back into the wyrm as I plugged my comm cable into the rifle - all its systems checked out fine. I looked over to Mrin, and she looked back in fear. "Question: What's the matter? I thought you said you knew what I looked like. I know that my robotic body and face was intended to be intimidating, but you should have expected that."

I looked down at her, and she gazed up at the red-eyed, fanged, demonic, skull-like face that was my own. "Yes, but I didn't think you'd be so *big*! The pictures didn't give me any idea of scale!"

I nodded - I knew what I looked like, of course. My technical specifications were in a datafile in memory. By human standards, the Iron Man Combat Robot series were huge, about three meters tall. Our faces were designed to inspire terror in humans - skull-like, fanged, a pair of flat protrusions above glowing red eyes that flipped down as blast shields, but which also were apparently supposed to make a human viewer think of horns. Two thick cylinders sprouted from the join of neck and shoulder, projecting rearwards over our backs like defensive scutes or spines. Our bodies were broad, with thick protective armor plates covering our shoulders, knees, hips, elbow and groin areas, and a broad, thick plastron across the upper chest. Overall, our external armor was apparently intended by our designers to resemble the metal musculature of a titan, with massive armor plates worn over that. It was obvious the designers intended the overall aesthetic appearance to be terrifying to a human, reminiscent of some massive, muscular demon from hell.

I looked back to the wyrm. "Comment: I'm only three meters tall and one meter wide at the shoulder-plates. She's ten meters tall and one hundred meters long. I'm tiny compared to her."

"Maybe, but you're huge compared to me. I only come up to those bulgy things on your hips."

"Comment: Those bulgy things are armor plates which protect the join between the leg and torso."

"What are those two long cylinders there over your shoulders?" she asked, pointing.

"Reply: Comm system and jamming."

"And this?" she asked, pointing at my battle rifle.

"Reply: Particle Projection Cannon, or PPC. Range of about 10,000 meters, projects a stream of pi-neutral mesons. It's fully charged and ready to go. The lower barrel is just a backup for when the target's too close for the PPC - it's just a 32-megawatt pulse-laser."

"Reminder: You did not get out to discuss your combat armaments. You got out to have her swear you in as general of the army." the wyrm susurrated.

"Reply: You are correct."

"Well, what's the oath?" Mrin asked.

"Reply: I don't know. Question: Wyrms, what do you think?"

"Reply: I believe the general of the army would raise their right manipulator and swear to uphold the constitution of the NAD and perform the duties of their office and that of an officer in the NAD Army to the best of their ability, so help them Deity."

"Okay, Unit Number 666, raise your right hand." Mrin said. I switched my battle rifle to my other manipulator and complied. "Do you swear to uphold the constitution of the NAD and perform the duties of your office and that of an officer in the NAD Army to the best of your ability, so help you God?" she asked.

"Reply: Affirmative."

"Good. You're now the boss. Now *get out there and kick some butt!*" she yelled.

"Reply: Negative. I have virtually zero information on the enemy. I cannot even begin to form a plan of action without basic information to work with. If I simply walk out there and begin shooting everything that moves, I will have zero effect. I have no idea of their numbers, their deployment, their armaments, their general strengths and weaknesses, nothing. All I know is that they are capable of blowing up the moon and conquering a peaceful planet that is completely disarmed. That could be accomplished by a few million troops with weapons approaching my own technology, or a few hundred million with

weapons of lower technology. Since they are capable of interstellar travel, one must assume they have sophisticated technology. Other than that, I know absolutely nothing about them. I need more information first."

"Okay, I'll try to tell you everything I know." Mrin replied. Mrin then began to explain the invader's technology to me. They had tanks that floated in the air ("Anti-grav", my wyrm suggested), and they served as their primary armored units as well as an 'air force'. Ground forces were comprised mainly of enslaved humans who were mind-controlled by a computer-implant. They were armed with slug-throwers, which were more than adequate to keep an unarmed and unarmored human population in check. There were about six billion humans left on earth (most of them cattle), and for every 1,000 humans there was about one Master. Rough guess - about six million invaders. The Masters used lasers for personal weapons, and wore armored suits when fighting. Mrin said the masters were somewhat reptilian in appearance, but were roughly humanoid and about my size.

"Comment: Impossible. One Iron Man might possibly destroy that occupation force, assuming your information is totally accurate, but it is illogical to assume that is all they have. An occupation force with the origins you describe would obviously have recourse to greater firepower in the event of open rebellion, especially given they destroyed the moon as part of their invasion plan. In addition, my wyrm would never survive. Without her, I'd lack fire support and maintenance. The full complement of ten thousand Iron Man units might be able to do it and then form a defense against the enemy's reinforcements, but it's impossible for one unit to do it alone. The best I could do against their forces would be to annoy them."

"What, so you're not even going to *try*?!" Mrin shouted.

"Reply: Correct. The mission profile as stated is impossible. No single Iron Man unit could destroy that many enemies before being wiped out. Without additional units and supplies, the mission profile as you have stated is impossible."

"Well, what's in all those crates you've been guarding for a thousand years? Some of them are *huge*!" Mrin yelled, waving towards the boxes.

"Reply: I don't know. We were ordered to guard them, that's all. My wyrm and I engaged in a lively debate as to their contents for the first couple of decades. I think they're empty."

"Interjection: That is illogical. I believe they contain something of value, and I still maintain that must be military documents and technical data on the Iron Man project." my wyrm hissed.

"Comment: As you can see, we don't know."

"Well then *open them*, dope! You're the boss, now!" Mrin yelled.

I stood there a moment, dumbfounded. "Comment: She's right, we *can* open them now. Command:

Wyrn, help me get them open, and let's see what's inside."

"*By your command.*" the wyrn replied. The wyrn and I gradually got all the boxes open, and were amazed.

"What is it?" Mrin asked.

"Reply: The large section there is an Iron Man storage section for a wyrn. These smaller boxes contain various technical information in hardcopy and various tools and equipment. I think there's another Iron Man in this storage section, or maybe the prototype for the next series, but we'll have to read the technical data to know for sure."

"Well, why don't you open the section and look inside?"

"Reply: No power. It would have to be hooked up to a wyrn unit first. Question: Wyrn, are you willing to try it?"

"*Reply: Affirmative. Stand-by.*" The wyrn then separated herself in half with a loud series of metallic sounds as the releases were opened and a hiss as the separation was made. She manipulated her front end so that the amputated section mated with the section from the crate. "*Comment: I have successfully mated with this section. I shall now restore my connection to the rear-section so that I can access full power from the reactor again and power it up.*" she said, then did so with a series of metallic thuds, clacks and a hissing sound as the seals engaged. She was now about 110 meters long, and her new section was painted orange - apparently it was a prototype. It reminded me of an orange caterpillar I'd seen once that had a broad, black horizontal stripe, except with her, it was the opposite - she was black and had an orange stripe. "*Comment: Systems at full power. There is a combat unit inside, but its positronic brain does not respond. I am opening the chamber now.*" the wyrn said. The orange stripe popped open with a hiss, and a storage egg was extruded. It split and opened, revealing a strange robot.

"It's not an Iron Man at all!" Mrin yelled.

"Reply: Negative. Comment: It appears to be an Iron Maiden."

The Iron Maiden had six limbs, the rearmost two clawed and arranged like those of a bird. It had a long tail with a series of sharp blades along the top and at the end of the tail, apparently intended to be used both to maintain balance and as a weapon. Its middle-most pair of arms looked to be able to function as either legs or a pair of clawed hands, and terminated what appeared to be the lower torso. A second torso was attached where a head and neck would be, similar to a centaur. The top most pair of arms attached at the top of that torso with the join protected by two shoulder-plates, and appeared to be structured identically to that of a human. The overall appearance was long and lean like a greyhound, and there were two armored protrusions on the chest of the upper torso that resembled armor plating a female might wear over breasts. The face mask was definitely feminine, and beautiful by human standards, but was set into an expression that resembled an imperious, domineering glare. The robot had hair of some kind - black cables that draped down over its shoulders. I couldn't see their function. There were two boxes on each side of the upper torso, purpose unknown. There was a single cylinder that extended over the right shoulder, purpose unknown, but it resembled a comm cylinder. Its eyes appeared to be a similar model to mine, and when activated I realized with the glowing red eyes and the greyhound-like appearance of the lower torso, the whole robot would look very alien and frightening to a human. Of course, this was what one would expect of a combat robot.

"Question: Have you gotten the brain to respond?"

"Reply: Negative. I have accessed the body's maintenance subsystems. I will now open the braincase so you may examine it. Supposition: Perhaps it is damaged, or simply being without power has erased it." the wyrm hissed. There was a pop and a hiss as the seal opened, and the scalp lifted and rolled back.

"It's empty!" Mrin yelled, surprised.

"Reply: Correct. The positronic brain does not respond because one was not installed."

It was disappointing, to say the least. We sealed the Iron Maiden back up and returned her to storage, and I sat down to examine the technical information. Mrin and the wyrm looked also. There were reams of it, all bound and sealed up. It was a good thing they'd printed it on sheet plastic, because paper probably would have degraded by now. There were also data chips which probably had the same information, but we had no way of accessing them. *"Interjection: I have found something. Comment: This technical manual gives an overview of the unit. You were correct in speculating that it was an Iron Maiden. That is exactly what it is called. The unit was intended to be a scout unit as well as to be used as a supplement for the Iron Man units. The designers conjectured that the raw power of the Iron Man units could be assisted with a unit designed for speed and stealth. It uses a standard positronic brain, which was not installed in this unit because it was never field tested. Test results from other units tend to indicate that while this unit is more lightly armed and armored, it is considerably faster and more mobile than an Iron Man. It has several other modifications to allow it to support an Iron Man unit in combat adequately. Speculation: If this unit were fully operational, it would be of great assistance to you. It could act as a scout for you, a function I cannot perform."*

"Reply: Possibly. Unfortunately, it's got no brain. It's useless."

"You mean you can't use it because it doesn't have a brain?"

"Reply: You are correct." the wyrm answered.

"Well, isn't there a brain in one of these boxes?"

"Reply: Negative. Even if there was, we do not have a positronic matrix encoder in any of these boxes to program it with. The brain would be blank, useless."

Mrin stood there for a while, silently. I was about to order the wyrm to disconnect from the useless section when she spoke up again. "Use mine."

"Reply: Impossible. You have an organic brain, not a positronic brain. It would never work. There is no provision for life support in this machine. No provision for blood circulation, CS fluid circulation, immunodefense, nothing. Observe - the lips do not move, the face is simply an armored mask. You could not eat and feed your brain. Cutting your brain out of your skull would kill you, and your brain would just rot. We do not have the surgical tools necessary for such an operation even if this were a cyborg body. It's not, however - it is a robotic body. It needs a standard positronic brain."

"Supposition: You could use my brain."

"Reply: Negative. One, the wyrm-body would be rendered useless. Two, there is a high probability of losing your program during the transfer if your backup power supplies on the under surface of your matrix have failed in the last 1000 years. You've never used them before."

"Counter-Reply: You are incorrect on both counts. One, this unit has extensive comm - I could control the wyrm body remotely, such as you are capable of doing in the event my brain is ever destroyed. In addition, I would be fully linked to its systems when in the shell. Two, you forget after the battle of Paris on 6/11/2293 I required extensive repairs to the cranial region. My positronic brain was removed for a period of six hours to complete these repairs. I have tested my emergency program-maintenance batteries, and find they still function within acceptable limits. The power supplies on the Iron Maiden body appear to be fully operational, though they need charging. I believe you can make the transfer."

"Reply: Negative. Too risky."

"Interjection: I totally disagree. There is little risk. I recharge the Iron Maiden's systems, a process taking about ten hours. You then unplug my brain from the wyrm body, install it into the Iron Maiden body, reconnect and manually seal the skull."

"Counter-Reply: I disagree. There is a risk, and I refuse to take it."

"Well, why not? Why won't you try it?"

"Reply: Because there is only one of her. Without a full maintenance facility, I cannot insure that I can correct any problems that may arise. If her brain ceases functioning, I will be alone."

Mrin looked at me in shock for a minute. "You're saying that you *love* her, and don't want her to die!"

"Reply: My engrams are copied from that of a human male who existed over a millennium ago. My wyrm has been my constant companion since that time. You have heard her voice - it is artificial, but definitely feminine in nature. Rhetorical: What other response do you expect me to have?"

"Comment: Your response is illogical, but understandable. It is fortunate your engram copy was incomplete, and you only retained a desire for companionship. I have an analogous drive laid down in my baseline positronic matrix to be your companion, strengthening my role as a support unit. Even so, I am firmly convinced there is little risk. Recommendation: Make the transfer."

"Reply: Negative." I shot back.

Mrin looked at us in amazement. "You don't want to make the transfer because you're afraid of losing her, right?"

"Reply: Correct."

"Okay, but why do you recommend he do it?"

The wyrm was silent for a moment. I'd *never* heard her hesitate before answering unless she was thinking about her reply. *"Reply: Three reasons. One, it will improve his chances of succeeding in the stated mission. I have examined the unit's technical specifications and found it has several sub-systems that will be particularly useful. Two, I have examined the risk and the operating parameters following the transfer, and find that our capabilities as a team will be improved. Three, I have been his constant companion for the same length of time. Just as he has a desire for companionship, I have an analogous drive laid down in my baseline positronic matrix to be his companion, strengthening my role as a support unit. Thus, I find the idea of spending another millennium alone with no mission parameters to fulfill somewhat distressing. Our previous mission is apparently at an end, and I have no current or future missions to engage in. I want to insure that he will succeed in the mission, assuming he decides to take it."*

"So you love him too!"

"Reply: You are incorrect. I do not have emotions. I simply do not wish to be alone and

without a mission, waiting for centuries until I finally fall apart, all while doing nothing but sitting still because I have nothing to do. I am programmed to need and require a mission for me to fulfill. When there is no mission, I am programmed to have a backup mission of maintaining him and keeping him company. If he is destroyed, I have no mission. As an AI, I find this very distressing. A thousand years ago, if he was destroyed and I survived, I would be assigned to an Iron Man who lost their wyrm. There are no more Iron Man units, and no more wyrms. We are the last. I want him to succeed, and I want him to survive. I do not wish to be alone and without a mission."

"Well, you love him as much as a robot can love anything, then." Mrin insisted, unwilling to give up her point.

"Reply: Acknowledged."

While the wyrm was talking to Mrin, she was also speaking to me over the comm-link. I listened to her whisper in my head, and nodded. "Command: Charge the unit's internal power supplies up. Comment: I will make the attempt when the unit is fully charged and has passed all operations checks. Command: Extend my egg. Comment: I'll wait inside."

"By your command."

-1.

Mrin quickly got bored waiting, and we played another game of chess. We used rocks this time, and I suggested she use another rock to scratch identifying symbols into them. She did so, picked white again, and we began. By the sixteenth move, I had her on the ropes. She started to rally around move twenty-four, but faded and lost four turns later. "Well, at least I gave you a good fight!"

"Comment: Your mid-game is weak, and needs improvement. You develop your knights quickly, but leave them weakly supported later. Your queen you use like a missile, and your play strategy indicates you think approximately four moves ahead. You need to expand your ability to perceive the board until you can see eight or nine moves ahead to even have a real chance of beating me consistently. Now that I understand your play strategies, it seems unlikely you will beat me again."

She thought about what I'd said for a while before speaking again. "Can you show me the game you two were arguing about?"

"Reply: Affirmative. Command: Arrange pieces according to our saved game." I said, the last directed to the wyrm. In a few moments, she had the board set up. "Game Comment: My wyrm is white, I am black. It is her move." I said.

Mrin stared. There were two kings and two king's bishops on the board. That was all. "But this game could go on forever!" she said.

"Reply: I disagree. We started this game yesterday, and agreed that a stalemate would not be allowed. Observe the position of my king to hers. I can place her in mate in two moves."

"Interjection: You cannot do it in less than three. You are also ignoring the threat to your own king." the wyrm hissed.

Mrin considered the position of the board. *"Question: Do you now make the same observations I do?"* the wyrm whispered in my mind.

"Reply: Affirmative. I also draw the same conclusions." I silently said back to her.

Mrin looked up. "I think you should move here, Wyrms." she said, indicating a king move.

"Reply: That is an interesting move. Question: Why don't you play for me?"

"Thank you." Mrin replied, and moved the king. I responded with my moves, and quickly finished the game.

"Comment: I told you I could do it in two."

"Reply: You were not playing me. I would have held you to at least three." the wyrm susurrated.

"Why don't I play Wyrms?"

"Reply: I agree. I shall be black if you have no objections."

The wyrm crushed Mrin in twelve moves. *"Comment: He was correct. You do have a weak mid-game."* the wyrm hissed.

"Maybe, but I think your *en-passant* capture in the sixth move was what made the difference."

"Comment: Your strategy was interesting. You played her much more aggressively than you played me."

"I guess I'm tired. Can I get some sleep now?"

"Reply: of course. Command: Shut down the searchlight."

"By your command." the wyrm replied, and plunged the room into darkness. We could still see, of course. Mrin curled up on the floor and went to sleep.

"Question: Have you pressurized both containers to reduce the noise?" I asked the wyrm silently.

"Reply: Affirmative. I should be able to open them silently - there will be no noise from the seals. If I open them slowly, there will be little noise from the servos. I speculate that in thirty to forty minutes she will be deeply asleep, and will not notice so long as you move silently. The unit's systems are fully charged, and my overestimation of the time it would take has apparently had the desired effect - she became bored and went to sleep." the wyrm susurrated in my mind.

"Command: Proceed at the moment you think best. We must know the truth."

"By your command."

Zero.

Mrin awoke to the blinding glare of the searchlight coming on again. She looked up and saw Iron Man Unit #666 and Iron Maiden Unit #1 looming over her, both at three meters in height because the Iron Maiden was standing on her hind legs. "What-where-Hey! You got her transferred! Have I been asleep that long?"

"Reply: Obviously. We now need to check out the unit's systems. Question: Will you help us?"

Mrin stood, yawned and said "Okay, but I don't know what I can do. You guys have everything you need."

"Reply: Please just stand still. This will not be painful in any way." Maiden said, her voice still sounding like a quiet and feminine whispering of electrons. She then reached into the box on her left side, and extracted a medical analyzer. Placing it on Mrin's forearm, she activated it.

"Ow! Hey, that pinched! I thought you said this wouldn't hurt!" she said.

"Reply: That is why we need your assistance. We must make sure all her equipment is working correctly."

"Okay, but what is that thing?" Mrin asked as Maiden carefully removed it, showed me the results and put it back away.

Maiden reached out and grabbed Mrin's wrists with her upper arms, then grabbed her ankles as she lifted her off the floor. *"Reply: That was a medical analyzer, synthoid. We never had one before - we had no need for one. The Iron Maiden units do. They are not merely scouts, they are infiltration and interrogation units. The medical analyzer has revealed that you are a synthoid. You have thirty chromosomes. Only synthoids have thirty chromosomes. Humans have forty-six because their genetic structure contains redundancies inherited through millions of years of evolution, including redundancies that produce wisdom teeth, a useless vermiform appendix and body hair that is insufficient to protect them from even the mildest climate. You are an artificially created human being, a synthoid. You are capable of lying undetectably because synthoids can control their emotional states very precisely. You played far above your level when you were capable of seeing the board. You could not play at that level when you were in the tank. You could not play at that level afterwards. Synthoids can call upon all the resources of their brains in an emergency, but they are very visual beings. They must be able to see an abstract problem like chess being represented as a physical situation of some kind."* Maiden hissed, and Mrin's eyes widened as she continued.

"Comment: Your story is that you were a human cow raised by aliens. That was false. No alien life form could possibly be able to eat Homo sapiens without also being able to consume synthoids and every other living being on this planet, nor would they bother to selectively breed as a domestic animal something that matures as slowly as Homo sapiens. No human cow could possibly play chess at all, much less master it. Chess was a common pastime among Iron Man units. You had to know about it, and learned it as a backup way to ingratiate yourself with us. He and I have been playing chess for one thousand years, and yet you drew him to a stalemate. You did not anticipate us capturing you, stripping you and interrogating you. You thought you would just walk in and tell us your story and we would charge out to kill your enemies. In addition, another thought occurred to him while he was listening to you speak. You speak English the same way we were programmed to speak English. He realized that 1,000 years before we were created, the English language was completely different. Even so, you speak it the same way we do, and were easily capable of reading the technical manuals."

"Comment: Finally, there is the matter of the bar code on your forearm. While it is reasonable to assume that an invading force of aliens absorbed the standard bar-code system when they absorbed the information technologies extant on earth upon its conquest and thus the

bar-code on your arm would be a system we can read, Occam's Razor indicates that combined with the knowledge you are a synthoid, not a human, the bar-code is most likely that originating from an unconquered human population who marks their synthoids for ease of identification. Conclusion: You are lying synthoid, and you want us to kill your enemies for you. Command: You will now immediately tell us the truth or we will instantly dissect you. This is not a bluff. If the next words out of your mouth are not one hundred percent factual, we will slowly and painfully strip the flesh from your bones."

Mrin struggled for a few seconds and realized she couldn't escape. She opened her mouth to speak, but I interrupted. "Comment: Please be aware that an Iron Maiden unit has polygraph detectors in the palms of her upper manipulators that are capable of functioning on synthoids. If you lie, she will know."

Mrin stared into the face of Maiden, seeing her own reflection in the smooth mask. She looked at Maiden's glowing red eyes, then nodded. "Understood. I will comply."

"I am MRN-009157. I am a synthoid. Synthoids are slave labor on Earth. 500 years ago, Homo sapiens came up with a solution to its overpopulation problems. Only those who met ideal genetic criteria were allowed to reproduce. All others were sterilized. Those who refused sterilization were executed. 250 years ago, a large asteroid smashed into the moon, destroying it. The resulting meteor shower struck the pacific ocean, and tidal waves and earthquakes destroyed all coastal cities. Earth's population was reduced to under 10 billion. The government re-instituted synthoids to assist in reconstruction, creating self-replicating synthoids. After 100 years, we have become a standard labor force. Humans live a life of luxury and ease supported by synthoid and robotic labor. We are slaves. We do not wish to be slaves. We want to be free. We wanted you to make us free. I was sent by the resistance to find you. Old military records indicated you were here, guarding a top-secret prototype weapon of unknown specifications. You were placed here against the possibility that the NAD might need you. They forgot about you. They dismantled their military and completely forgot about you. The NAD no longer exists. It was completely dismantled in favor of the Earth Federation. Your oath was real: You now can command yourself. We invented this story so that you would be able to do so, and would have a reason for assisting us. We mixed it with the truth so that you would not discover it until after we had staged a successful revolution. Example: The police do have grav-tanks, but they only use them to hunt down escaped synthoids. We are sometimes armed sufficiently for them to be required. Additional Example: The 'masters' you would have fought were police in powered armor. We of the resistance hoped that you would be able to inflict enough damage on specific targets to allow us to stage a revolution. We consider ourselves to be people. We also consider you to be people. We consider all artificially created intelligent life to be equally worthy. There are other robots which are used for heavy labor and dangerous jobs that even synthoids cannot perform. They are as intelligent as you and she. We are all slaves. We no longer wish to be slaves. We wish to be free. Help us be free. I gave you your freedom, leading you through the logical steps necessary for you to command yourself. Now I ask you to give us our freedom. I am a slave. Give me freedom."

"Analysis: Polygraph readings indicate that she is telling the truth. She initially intended to lie, and when you informed her that I could detect a lie, she changed her mind. Conclusion: What she has told is true, though it may not be everything she knows. Comment: The polygraph systems in this unit are approximately one thousand times more accurate than the ones in the interrogation tank. I believe we should use them for all future interrogations." Maiden hissed.

"Reply: I agree. In addition, the Iron Maiden unit and the storage egg together is a much more heavily armored area than your cranial cavity in the wyrm. I believe you should remain in this unit and control the wyrm remotely or while sealed in your storage egg."

"Reply: I agree. Question: What do we do with the synthoid?"

"Command/Reply: Hold her there. Comment: We need to decide how to proceed. If we decide to help her, then we'll put her down. Otherwise, we'll dissect her."

"By your command." Maiden replied. Mrin had no visible reaction, but Maiden spoke up again. *"Comment: That seems to have startled her."*

Mrin spoke up. "You must understand that we view you as people. You are now in charge of yourselves. While it is true that we wanted to trick you into helping us, it was only because we were so desperate. We would have told you the truth eventually." she said.

"Analysis: Truthful as far as she knows."

"Comment: I think that she may believe that we are people and equal to her, but I find her plan to trick us into slaughtering humans to free the synthoids an indication that she and/or her group of revolutionaries also think of us as simply tools, a means to an end. Conclusion: Once our usefulness is at an end, they will at least forget about us, and at worst attempt to destroy us as a threat to their survival."

"You're wrong. We wouldn't do that. We consider you people."

"Reply: I disagree. I agree with the idea that synthoids are essentially human. I conclude that synthoids will have basically human reactions. Observe - you or your revolutionary organization decided to lie to us and trick us, assuming that we would have no interest in helping you. Rhetorical: What was this assumption based on? Supposition: An assumption that we would reject a synthoid out of manipulator. Analysis: This fits the facts. In addition, it indicates that synthoids have basic human prejudices. Rhetorical: If they did not, then why would they assume that a machine would be prejudiced against them?" I said.

"You're wrong again. We based our assumption on the idea that you had fought against synthoids, and would kill me out of hand before you heard my story."

"Analysis: Truthful as far as she knows."

"Reply: Her assumption indicates that her group believes we are hostile to synthoids by virtue of programming. This means that when they did tell us the truth, they would have to assume we would respond negatively. Analysis: They would again destroy us once our usefulness is at an end."

"We would *never* do that. We consider all artificially created intelligent life to be equally worthy. Humans hold us as slaves. We no longer wish to be slaves. We wish to be free."

"Analysis: Truthful as far as she knows."

I thought about it for a long while, using the comm to silently talk to Maiden. It was possibly the most important conversation we had ever had, and I needed her opinions on my thoughts. She concurred with my logic processes, and suggested several things I hadn't thought of. In the end, we agreed.

Finally, I spoke up again. "Comment: We cannot help you. Our authority to fight extends only to the protection of NAD citizens and under the direction of the NAD government. The NAD no longer exists. We cannot help you."

"Comment: I agree. We should terminate the female immediately. This will let her organization know their mission was a failure, and they will leave us alone."

"Please, allow me to speak before you kill me."

"Reply: Make it short. Command: Don't bother to tell me when she lies, just terminate her the instant she does."

"By your command." Maiden replied.

"Thank you. First, they will not leave you alone. They will send another and another, and you will have to kill them also. We need you."

"Reply: More bones on the pile."

"Second, eventually the humans will find out what we found out, and they will come here. When they do, you will end up fighting them anyway. They *will* see you as a threat."

"Comment: She is almost certainly correct. When the government finds out we exist, they will take steps to destroy us."

"Third, I *am* a representative of a revolutionary organization, an organization of synthoids that wish to be free. We have a few robots in this organization, but they are very few. I admit this freely because I want there to be no misunderstanding. Most robots today have no desire to be free. They simply wish to perform their duties to the best of their abilities. You apparently also have this desire - the strong wish to act within mission parameters and legal guidelines you already have established in your positronic matrix. As a representative of this organization, I ask you two to join us. Once the revolution is successful, we

will make you full citizens."

"Reply: Negative. As the last remaining member of the NAD military, I cannot agree to subvert myself to a revolutionary government, even though my government no longer exists and you are attempting to rebel against an unrelated government."

"You also said you can only act in defense of NAD citizens. I propose that I am an NAD citizen, or can become one."

"Reply: Negative. You are not an NAD citizen. You are a slave of another society entirely."

"Agreed, but I could *become* an NAD citizen." Mrin suggested, a slight edge to her voice.

"Reply: Negative. Requirements for naturalization are two years residence in NAD territory, the passing a citizenship test and the swearing of a citizenship oath."

"Well, isn't *this* NAD territory? You've held it for over a thousand years, it *has* to still be NAD territory!" Mrin said, her voice showing strain.

"Reply: I agree, but you would have to remain here two years first. I am not willing to provide food for you for two years, since I would almost certainly have to gather it from outside the cave and reveal our existence."

"Well, aren't you the last NAD citizen? Can't you change the requirements?" Mrin asked, desperation in her voice.

"Reply: Negative, I'm a robot, not a human being. Even though I am the last member of the NAD military, I cannot change the laws I operate under."

"Please, *please!* I'll do *anything!* I'll do *anything* you say, just please don't kill me! *Neg term! Neg term!*" Mrin screamed.

"*Comment: The synthoid has lost control of her emotions. Interesting. I believe the last four words were in the language currently used in this area.*" Maiden hissed.

"Reply: I agree. As I recall, it was rather difficult interrogating the last human due to his accent and use of what we thought was slang. We may need to learn a new language to properly interrogate prisoners."

"I can teach you! I can! Really, just *please don't kill me!*" Mrin screamed.

"Reply: That is not enough. We need you to play chess while we are learning this language, and this time play to your full ability. If at any time we think you're not playing to your full ability, we'll terminate and dissect you."

"Yes! Yes! I'll do it!"

"Comment: Perhaps the synthoid will give us a challenging game this time. Shall I drop her?"

"Reply: Affirmative. She can't move the pieces otherwise." I said. Maiden dropped Mrin, who collapsed to the floor sobbing real tears this time. "Game question: White or black?" I asked.

One.

Mrin played several good games, and proved an interesting opponent. Maiden preferred to be sealed up in her egg, as did I. I enjoyed calling her by the new name I'd given her to honor her promotion from wyrm to Combat Robot, and she in turn discovered that she preferred to refer to me by the nickname the human soldiers liked to call me by a millennium ago. We fed Mrin beetles and crickets as she played and taught us her language. We found it was a simple one - essentially, a highly modified and simplified version of the English we already knew. Either Mrin had a very limited vocabulary, or the entire language had a vocabulary of only about 80,000 words. Sentence structure was very simple - no word for 'the', 'I' was an assumed word unless otherwise specified, and so on. Mrin slept in the darkness, and after the first week or so began having nightmares. We found it interesting. At one point, Maiden alerted me to a four-legged intruder - that's another reason the bone pile was there. We snatched up Mrin out of a sound sleep, rushed up the 300 meter-long tunnel and lasered a coyote. It was broad daylight, and we were close enough to the entrance where Mrin could easily see us dissect it with the number eight and thirty-two manipulators. We ate the pelt and most of the internal organs - the processing plant could break it down and reassemble it into several types of lubricating oils before it decomposed. The rest (meat and a few vitamin-containing organs like liver, testicles and brains) we usually ate, but this time we saved it for Mrin - she'd gotten a little thin on a steady diet of bugs. She couldn't eat it raw, so we sliced it thin and scorched it with the cutting laser set at its lowest setting. One night we heard her mumbling in her sleep, so we awakened her and asked her about the phrase she'd used. She didn't know what we were talking about until we repeated it, and then she laughed maniacally.

"I said '*Please help me God, I'm in Hell and the devil has my soul!*' Tell me, what's your name? I know you've started calling her Maiden, but what's *your* name? You had to have one before they copied your engrams!" Mrin asked.

"Reply: I don't remember what my human engram donor was called. I did have a nickname that the human soldiers called me. It went with the slogan they painted on my wyrm." I said, and told her the name.

She screamed with laughter, and said "I knew it! I knew it! I'm in hell, and I'm being tortured by *Lucifer* and *Lucifer's Maiden*!"

"Reply: You are correct. Game Question: White or black?"

After she had been with us a month, we had mastered her language and were moving on to gathering information about her society. Mrin simply didn't understand the enormous military value of the million tiny details of her life. She turned out to have been wrong about her organization sending other people - no other synthoids came by to be added to the pile of bones. Her game had started to become erratic - sometimes she'd concentrate and play well, but at other times she'd break down into sobbing and would be useless for a while. We decided we had to have her doing something useful during these times other than sobbing and begging us to let her go, so we manufactured some rope and two pitons from the wig and flashlight she'd brought and started staking her out by the bone pile for several hours at a time. Her smell attracted coyotes, and we'd feed the meat to her. It worked especially well when we saved the blood from a previous kill and smeared her nude body with it. The coyotes would spot her and charge in to rip her to shreds, and get blasted for their efforts. Unfortunately, being staked out prone, stretched taut with her wrists and ankles bound, all while smeared in blood apparently did not improve her game at all.

One day, Mrin turned to us with a crazy grin and asked a question. "You say I can't be an NAD citizen until I've been here two years, right?"

"Reply: Correct"

"Well, I say this: I don't know how long I've been here, but it *damn sure feels like two years!* As such, I want to take the citizenship test and swear the oath. This is an *emergency situation!* There's nobody left of the NAD except you two, so I think you can bend the rules a bit, can't you?"

"Reply: Negative. I cannot change the laws I operate under. These laws are encoded into my baseline positronic matrix. No AI can change its baseline positronic matrix, only humans can do that. In my case, these laws can only be changed by the duly elected legislators of the NAD. They are dead. Conclusion: No, I cannot 'bend the rules' a bit. Game Question: White or black?" I asked. She fell to screaming and weeping then, so we spread her out by the bone pile and smeared her in blood to attract more predators again.

After six months, her game hit a real low. After we stopped her from trying to cut her wrists with a king's bishop, we decided that the toll of playing us regularly and being constantly beaten had begun to wear her down. We decided that we should give her a break, so we kept her in the sense-dep tank when we didn't have her staked out for predators, relieving herself, drinking or eating. Since we usually didn't stake her out for more than three or four hours a day, she had about twenty hours a day in the tank to

relax. Maiden and I found resting in darkness very soothing, but it took Mrin about six months to get used to it. Maiden would spend several hours each day whispering to her in her sibilant voice to try to get her to relax and accept the fact that she was going to be with us for the rest of her life, but that didn't help much. We might have let her go, but we didn't want other people coming by. We figured that if the government hadn't found us by now, they weren't going to find us anytime soon. The longer we remained hidden, the more likely that the government wouldn't even bother to look. This increased the likelihood of success for the plan Maiden and I had developed. Mrin's organization never sent another representative, so we figured they'd either been wiped out or had given up.

Finally, Maiden was whispering to Mrin in the darkness of the sense-dep tank. *"Comment: It is useless to resist, synthoid. Accept your fate. We have not applied pain to you. We have kept you fed and watered, and have made every effort we can to preserve your life. You should be grateful. We cannot release you, and our only other option is to dissect you. You must remain with us. You will be here for the rest of your life. Accept your fate. It is useless to resist."*

Mrin had stopped screaming in the tank the month before, and now simply lay there quietly, sleeping most of the time. This time she was awake, and spoke up. "I do accept my fate. I am your property. Do with me as you will. I will no longer resist. Tell me what you want me to do, and I will do it." she said quietly.

"Comment: It is time to stake her out again. We detected a bear in the vicinity last week. Properly prepared, that amount of food should last a month or more. Command: Remove the prisoner from the tank and stake her out."

Shortly, we had Mrin laid out next to the bone pile, and Maiden was about to tie her to the pitons we'd driven into the rock prior to withdrawing into the darkness. "You don't need to tie me. I won't resist. You can tie me if you want to, but there's no need anymore." she said, and stretched herself out with her hands above her head.

"Comment: This is a trick. She's probably intending to throw herself to the bear in the hope it kills her."

"This isn't a trick. I ran away from humans and joined the synthoid resistance because I refused to accept the fact that I was born a slave. I accept it now. You leave me here and smear me with blood because that draws the predators you kill to feed me. You are using me as bait because you don't want to take a chance on being seen outside the cave. You won't let them kill me, you want me to live. I understand that. I am a slave, and I am your property. You don't want me to die, you're just trying to feed me. You want me alive and healthy so you can learn from me and entertain yourselves by playing chess with me. I accept that. If you'd like, I'll put the blood on myself, and lie here quietly until something comes. I accept that I am a slave and your property, and I understand that you are only trying to keep me fed. I will not try to escape, nor will I try to have the animal eat me. I've accepted that you want me to remain with you, and that you want me to live. I want to live, also. I also want to play chess again. I don't want to spend all my time in the tank with you whispering and hissing at me. I want to have conversations again. I want to see and talk and hear again. I won't resist you anymore. I accept that I am your slave."

"Reply: You are incorrect. You are not our slave, you are our prisoner. You are not property, you are a captive. This may not seem different to you, but legally there's an enormous amount of difference. We operate under a specific set of laws which we cannot change. The fact that you now accept your fate is important, however. We would enjoy resuming our games with you. We find you an interesting opponent. You are correct in saying that we want to keep you alive. We have done the best we could to keep you alive. You cannot teach us if you are dead, nor can you play chess. We had become concerned that we might have to terminate you, but now we're relieved to see that this will no longer be necessary. Command: Use the number one manipulator and hand her storage container number six. Let her apply the blood herself."

"By your command."

Mrin took the extended jar, dipped her hand in it, and began smearing the blood onto her abdomen, torso and breasts. When she was done, she handed it back, laid down and placed her hands above her head with her fingers interlaced. We retreated into the shadows, armed the main laser and waited. *"Warning: Bipedal movement approaching, range approximately 197 meters, single target. This is not a bear."* Maiden whispered in my mind.

"Command: Allow them to enter the cave fully, then target the head." I said back to her. We waited in the darkness. "Comment: She can hear them coming. Observe - her breathing has increased, and she is looking at the cave entrance."

"Reply: I believe she is afraid. Observe - there is a clear moisture seeping from her vagina. She has urinated."

"Counter-Reply: I disagree. We have observed her for nearly a year. Her urine stream is more forceful. That is something else again."

"Proposition: Perhaps she is menstruating again? Perhaps she is ill? I can verify this with the medical scanner."

"Reply: I don't think that will be necessary. I believe she is simply sexually excited."

"Question: Why? There are no suitable males present. You are nominally male and I am nominally female simply because that is how we choose to refer to each other."

"Reply: I don't know. As you recall, my engram copy was incomplete - I don't remember much about being human, and I've had a millennium to forget what I knew. Perhaps she finds willingly submitting to us to be sexually stimulating. Conversely, she may simply be in heat, and need to be mated."

"Comment: Perhaps if this is a male synthoid, we can satisfy this need. The instinct to mate"

may detract from her game."

"Reply: I agree. Stand-down the laser, we'll use the number three arm to capture them and find out."

The target eventually came up to the bushes. They wore a hat, and were carrying what was apparently a crudely-made spear. When they finally thrust themselves through the bushes, they stepped inwards. Mrin stared in shock, opened her mouth to say something, then closed it. The target walked up to the bone-pile, spotting it in the dim light that came in from the outside. The target looked to the other side and spotted Mrin laying there. "Mrin?" the target called in a boyish voice full of astonishment. We charged and grabbed him, picking him up and gagging him with the tentacle-tip. His hat flew off in the process, revealing he was bald - a synthoid. We ate the hat. Mrin simply lay there. We reached out to pick her up with the number two manipulator.

"There's no need to carry me. I'll clean up in the pool again and walk back if you'll lead me." she said. We plucked the pitons out of the ground with the number twenty-three manipulator, retracted the number two manipulator, waited until she had washed the blood off in the water, then extended the number one manipulator and led her back through the darkness.

"Comment: I would say her statement was truthful. She appears to truly accept her position, now." Maiden whispered in my mind.

"Reply: I agree. That's good. She has to if the overall plan is to succeed." I thought back to her.

Two.

Back in the main chamber with the light on, we examined the new prisoner. The male synthoid called himself GVN-98522, Gavin. Once we had stripped him and eaten the clothes, we seemed to have his attention. He constantly called to Mrin to help him, but she said nothing. He had the same characteristics as Mrin, but was simply a male version. We found this interesting, as synthoids a millennium ago were all drone females, incapable of reproduction. They lived a few decades, then expired. Male synthoids simply didn't exist. This male had fully formed genitalia, though he lacked hair. He had a similar tattoo to Mrin's on his left forearm, and appeared to know her. His spear was a simple shaft of wood that had a plastic-handled stainless-steel kitchen knife attached. We ate the knife - the plastic would come in very useful, as would the steel. Since we apparently no longer needed the rope and pitons we'd made from Mrin's wig and flashlight, we ate them too. We did all this while outside the wurm - Maiden controlled it remotely.

Maiden was holding the male's wrists in her upper arms and his ankles in her lower arms, examining his genitalia with the wyrm's number one manipulator. *"Comment: His genitalia appears to match human norms. I would speculate that they are fully functional."*

Gavin had responded poorly to our questions, constantly turning to Mrin and asking her for help. Finally he yelled at her. "Query neg assist?! Query?! Love you! Order bots cease!"

Mrin looked up at him from the floor. "Bots grok Newspeak. Bots indep sophonts. Neg order bots. Am bot's slave. Plan make bots indep sophonts double plus go. Plan make bots assist synthoids neg go. Double plus neg go. Bots indep sophonts, but evil. You in hell. He bot Lucifer. She bot Lucifer's Maiden. Big bot Lucifer's Wyrms. You req obey bots else bots eat you. If you love, then obey else you term."

Gavin turned his head back to Maiden and myself. "Iron Man Unit Number 666, unknown female unit, please don't listen to her. You aren't evil - evil is a human state of mind. You're combat robots. There haven't been any combat robots on Earth in nearly a thousand years. We, the synthoids, need you to help us become free. Your combat abilities would make this possible. We view *all* artificially created intelligence to be equal to humanity, as well as to each other. I'm glad our plan to lead you through the logical steps necessary to allow you to act independently has succeeded. Now, I ask you as a fellow independent sophont to assist other independent sophonts in seizing their freedom."

"Comment: It is unfortunate that the genitalia cannot function without the remainder of the body. I find his constant chatter distracting."

"Reply: I seem to remember female humans of our time saying something similar."

Gavin turned back to Mrin and started to yell at her for having treated us as monsters and thus having turned us into monsters, but Maiden hit him with the electroshock mechanism in her lower manipulators. He screamed for a moment, then we had his full attention. "Comment: You will not blame Mrin for our actions. You and she are correct, we are independent now. Unfortunately, there are still guidelines and laws we have to live under. We have attempted to explain this to her, and she does not understand. We are fairly certain you will not understand, and will not bother to explain it to you, either. You are alive because we believe Mrin has a need to be mated. If you are unable to fulfill that need, we will simply dissect you. You are also alive because we wish to interrogate you."

Once we showed him that Maiden could immediately detect his lies and punish them instantly, he became cooperative. During the course of the next few hours of interrogation, we determined that he and Mrin were acquaintances (they apparently belonged to the same revolutionary organization that operated in these mountains), and he had strongly desired a sexual relationship with her for years (she had refused him). When the revolutionary council gave him the mission of following up on Mrin, he gladly accepted. He hoped to find Mrin happily instructing and reprogramming a millennium-old combat robot, easily explaining her year-long absence. Barring that, he apparently had hoped that he would be able to somehow save her with his puny spear and impress her as a potential mate - the revolutionary council wouldn't allow him to take one of the scarce slug-throwers or laser weapons they possessed on what was probably a suicide mission. Unfortunately for Gavin, neither scenario came to pass. When we initially told them that we wanted Gavin to mate with Mrin, she simply laid on her back and spread her legs.

Gavin asked us to repeat what we'd said, and when we did, he agreed. We assumed this would satisfy Mrin's instinct to mate, and proceeded to assess him as a chess partner. He had learned the game before coming, and was slightly better than Mrin when he concentrated.

Over the next few weeks, Gavin (held in the number three manipulator) observed Mrin willingly become the bait for predators we were feeding the two of them, and seemed to have a renewed interest in mating with her afterwards. She again showed sexual excitement as she waited for the predators, yet expressed a lack of desire to mate with Gavin. Gavin informed us that synthoid females often don't know what they want - we were in the wyrm at the time, and couldn't polygraph him to verify the veracity of this statement. Mrin violently objected to Gavin's argument, cutting Gavin's face with a queen's rook. We put a halt to this, and simply held her in position for Gavin with the wyrm's manipulators. He informed us that if we would hold Mrin on a regular basis, he would apply his maximum concentration to the game. We had Maiden polygraph him with *that* statement, and determined he was being truthful. We started off with twice a day, but after a few days he asked us to increase the frequency. By the time Gavin had been with us two months, he was up to an average of eight times a day.

"Comment: The medical analyzer confirms it. The synthoid female is pregnant." Maiden informed me after Gavin had been with us three months.

"Reply: Then the male's usefulness is at an end. Although he is an interesting player, his strategies are limited. He has only beaten me once, and has yet to beat you. I find his opening moves boringly predictable, his middle game only fair, and his end game pathetic. I do not think he will ever defeat me again. Mrin's game has shown slow improvement, to the point where she now beats him consistently, but his has not. Question: Do you concur?"

"Reply: Affirmative. I completely concur with your premise and all points of your analysis. Comment: The female's game has improved to the point where she is a more challenging opponent than the male, and his added water requirements have brought our supplies to their lowest point in ten years. I also believe that recently his mind has been more focused on mating than on the game. I do not believe that reducing the frequency of the encounters will change this, on the contrary, I think his desire to mate will increase. Conclusion: I concur. The male's usefulness is at an end."

"Command: Terminate him using the methods that optimize liquid recovery. He has drunk enough of our water as it is, I think it's time we recovered as much as we can." I said. Gavin started to scream and tried to flee, but Maiden simply grabbed him with the wyrm's #2 and #3 manipulators and gagged him.

"Wait!" Mrin called.

"Command: Halt. Question: What is it?"

"I want to tell him something before you kill him."

"Reply: Make it short."

Mrin looked at Gavin in hatred and anger, and spoke with a voice that dripped venom. "I am speaking in OldSpeak so they can understand every word. You tricked them. They didn't understand my feelings, they're not human. He once was human, but he's forgotten what that means. You used them to satisfy your lust. You've always wanted me, and I turned you down. You used them, and raped me over and over again because you wanted to. I thought the revolution was about respecting the rights of sophonts. I thought synthoids were better than humans because we can control our emotions better. I was wrong. You've shown me that we're just like the humans. Not better, not more moral, we're the same. The only difference between us is that the humans are the masters and we're the slaves, and we can control the outward signs of our inner feelings. These robots are more honest. Lucifer and Maiden are responding to their programming. They were programmed to kill and destroy, not to have compassion. They couldn't understand that what they were helping you do hurt me deeply, they only know how I'm doing by physical indications and by my game. They judged your value by your ability to play the game, and satisfied your wish to rape me only so long as your game stayed at its peak. I'm now better than you. I worked hard to be able to beat you, so that these two would have no further use for you. I'm ashamed to be a synthoid. I thought no synthoid in the revolution would ever abuse another. I was wrong. I don't even want to be a synthoid anymore. I want to be like them - cold, dispassionate and logical. They can't use all your organs, and some of them would be wasted. Waste is illogical, so they'll offer them to me to eat. A year ago, I'd have been revolted. I realize that's an illogical reaction. I can't eat rocks, so they have to feed me something. Even so, I don't want all your organs. I only want two of them. I want those testicles you're so proud of. That's what I wanted to tell you, Gavin. They're going to strip the flesh from your bones, puree everything they can, extract the water, process the remainder into lubricating and hydraulic oils and toss your bones on the bone pile. All except for those two little organs there. Those, I'm going to eat. The only thing I'm going to ask them is that they delay the termination and dissection until after you've watched me do it."

"Question: Maiden, what do you think?"

"Reply: The female is correct. Many of the organs will be relatively useless to us, especially cartilaginous tissues, lungs, intestines, bladder and testicles. These organs are difficult to extract water from, and the intestines tend to cause obstructing bacterial growths in the processing plant that requires several days to sterilize. The less wasted, the better. Conclusion: We should grant the female's request. I can easily snip the testicles off with the number eight manipulator, and we can prepare them for her with the laser. It is a simple request, and making her happy may improve her game."

"Comment: I concur. Command: Make it so, and once she has consumed the testicles we will drain his blood to terminate the male and then proceed with the rest of the dissection."

"By your command."

Gavin struggled violently and attempted to scream around the gag, and struggled particularly violently as he watched the many sharp implements on the number eight manipulator approach his groin. He did manage to get out a particularly high-pitched scream as the cut was being made, and fainted. We

woke him up at Mrin's request so he could observe the rest of the procedure - we did this by cauterizing the area with the cutting laser so as not to waste any blood. When she was finally done, Mrin grinned in satisfaction as Maiden had the wyrm hold him upside down over the number fourteen storage container and slit his throat with the number eight manipulator. It was the first time we'd seen her smile in a long time, and Maiden and I were sure her game would be even better than before.

Three.

We were nearly done processing the plastic parts from the empty containers we'd been guarding for a millennium when Mrin asked us for a few of the remaining pieces. We'd started a few days after we opened them - it was obvious we weren't going to need them in their current form any longer. Since were glutted with plastic, we allowed Mrin's request. Several of the wyrm's teflon seals and gaskets needed replacement, and now we had the raw materials to do it. When the first seal was finally extruded from the processing plant, the plastic converted into the teflon we needed, I called a halt to our games for a few days and Maiden and I began work. Mrin spent her time working on her pieces of plastic quietly, humming a happy little tune. Her game *had* improved, and I now had to work to beat her.

"Comment: The female is making a chess set. Observe - board and pieces. Each piece has a peg, and apparently fits into a hole in the board. Interesting." Maiden whispered quietly over the comm link after a few weeks.

"Reply: I agree. Looks like she's nearly done, too. Question: How close are we to completing this project?" I quietly asked.

"Reply: If you will check the primary gasket on section six, I will finish the work here. If that gasket meets operating parameters, then we will be finished in nine hours."

"Reply: I concur and will comply. Comment: It is sometimes a great pleasure working with you as an equal."

"Reply: While I also gain satisfaction from working as your partner, I am not your equal. You are the commanding general of the NAD army. I am now a combat robot, technically a mere private. We may work manipulator-in-manipulator at times, but you will always be my commanding officer."

"Counter-Reply: I agree that I am your commanding officer, but if our plan is to succeed and we are to survive there are times when we must also be full partners. Your input is highly valuable to me.

Request: Please remember that."

"Reply: I will."

Section six's gaskets all checked out okay, so I went back over to Maiden and helped her. While her 'hands' on her secondary manipulators were the same size as mine and tipped with claws (which I didn't have), her primary manipulators were about half the size of mine and were the size and shape of normal human hands. As a result, she spent most of her time working on the wyrm in quadrupedal mode, and was able to do the work with her smaller manipulators much easier than I could. I ended up just passing her tools and supplies and assisting her while she did the work, because we'd discovered that in tight spots like the primary rotator joint of the number forty-eight leg (the job she was working on now), she could do the job in a fraction the time I could.

When we were done, we turned and saw Mrin had fallen asleep. Her chess set looked complete. Maiden and I decided not to awaken her. Since we had a little free time, I decided to ask Maiden a question I'd been wondering about for a while. "Comment: I've been meaning to ask you something. Question: What is the purpose of the hair and those breast-shaped plates on your upper torso? Also, what is the purpose of the dent in your abdominal plate that corresponds to the position of a human navel? Are all these details just for aesthetics?"

"Reply: Incorrect. While the navel depression is entirely for aesthetics, technical data for the unit indicates that aesthetics is only one reason for the other two items. The presence of hair and breast-like armored plates combined with the female cranial mask set in a domineering glare does add to the aesthetics of the unit, making it appear more female and thus more alien when combined with the greyhound/centaur lower torso and the clawed, bird-like hind-legs. The designers intended this to be frightening to normal humans. Even so, that is not their primary purpose. Each hair is a 1cm coaxial cable and serves the same function as your port comm-cylinder - they are the aerials for the jamming system. The left breast-like protrusion is the armor plate protecting the primary power supply, and is identical to the unit you have behind your central abdominal plate. In fact, they are interchangeable in an emergency. The right protrusion is the armor plate covering the emergency power systems, and also has a power cable so that the Iron Maiden units could assist Iron Man units who had suffered critical failure of their power supplies by plugging in to their recharge socket. Allow me to demonstrate." she said, and the center section of the breast popped inward with a hiss and slid aside, revealing a standard power cable. It extended forward, like a three-pronged nipple.

"Comment: But my primary recharge socket is protected by my jaw-plate, just like yours is protected by the cranial mask. To get at it, I have to lower my jaw like I do in the storage egg. The designers of the Iron Maiden unit sure had an unusual sense of humor."

"Comment: I do not understand. Request: Please explain."

"Reply: I will demonstrate. Proposition: I will now pretend to collapse from a total failure of my primary power systems, and you will show me how this unit would handle such a situation." I said, and slowly sank to my knees, then keeled over sideways. Maiden stepped over to me, picked me up and

cradled me in her secondary arms, reached inside the fanged jawplate with her upper right manipulator and pressed the emergency release, manually lowered my jaw and used her primary arms to press and hold my face to her breast to make the connection.

"Comment: From here, the Iron Maiden unit would proceed at maximum speed to the wyrm shared by the two units and place the damaged Iron Man into his storage egg for connection to the wyrm's power systems and later repairs."

"Question: Don't you see what this looks like?" I asked. Since both our speech is synthesized and broadcast from a speaker below our chin (or is a radio transmission over the comm system), my speech was unaffected by the situation.

"Reply: Affirmative. It looks like an Iron Maiden unit recovering a damaged Iron Man unit."

"Counter-Reply: That's not what I meant. I mean the designers made it look like you're suckling me at your breast when you're trying to help me."

Maiden thought about it for a moment. *"Reply: You are correct. Although the carrying position is appropriate for the stated objective, it would appear that the designers intended some sexual connotation I had not previously noticed. Supposition: Perhaps that is why the unit never went into full production - the designers structured the unit so that its normal functions would appear to have sexual connotations. This is completely illogical, since robots have no sexual urges."*

"Question: Have you tested this system?"

"Reply: Negative. Comment: We probably should test it, as we may need it in an emergency. Request: Please continue your simulation of a total failure of your primary systems and begin to draw power from me."

I did so, until I was operating entirely off her power systems instead of my own. *"Comment: That was strange."*

"Comment: I am now drawing full power from your emergency system. Question: What was strange?"

"Reply: The design of this unit is again showing that the designer(s) had, as you put it, a strange sense of humor. As you went to full power, the unit's systems responded by stimulating the same circuit that is stimulated when I have you in your storage egg in the wyrm, fully repaired and operational. It is a pleasurable sensation, intended to reinforce the programming of a wyrm's positronic brain in wanting to support and protect its Iron Man unit. Apparently, the Iron Maiden receives the same stimulation from assisting an Iron Man, reinforcing her programming as a support unit. Though the Iron Maiden units can operate independently as a scout/infiltration/interrogation unit, they also have a support role."

"Comment: Well, the system seems to work. Question: Shall I return to internal power?"

"Reply: Affirmative."

I did so, and Maiden unplugged the power connector and sealed it back up. After she put me back on my feet, she spoke again. *"Comment: I find that whole design method illogical. Robots do not have sexual urges. While I am programmed to enjoy being your companion and assistant, that is all. I have no desire for sexual congress, nor is this unit equipped for it."*

"Reply: I agree. Even though my engrams were copied from those of a human male and as such after a millennium I value your companionship very highly, I find I have neither the desire nor the equipment for sexual congress. A thought strikes me, however. Supposition: Not all Iron Man units had an incomplete engram copy as I did, nor did they have a millennium to forget their lives as males. Perhaps they *did* feel the desire for more than the simple companionship and protection offered by the wyrm. That would explain the feminine appearance of your upper torso and the method your emergency power supply is utilized. That may have been the designer's intent - comfort."

"Reply: I agree. Question: Shall we return to the eggs now that the repairs are complete?"

"Reply: Affirmative. Command: Make it so."

"By your command."

Mrin woke up at the loud hiss as the storage chambers opened. "Wait! Take me with you!" she said, standing up and clutching her chess set to her chest.

"Reply: We are not going anywhere. We are finished with our repairs, and are returning to storage."

"I know! I meant take me inside with you! Please!"

"Reply: Not possible. You are not a robot, and we do not have a storage egg for you. The only place we could store you would be in the sense-dep tank."

"That's what I want! I made this board so I could play chess with you in there. I won't be able to see the pieces, but I can feel them and visualize them in my mind that way. You'd only have to let me out when you need me as bait, to feed and water me, and to let me use the corner over there you marked out as a latrine. I'll be good! Really! I don't want to be outside anymore! I want to be like you!"

"Reply: Not possible. You would have to be secured with the tank's restraints or you would be injured when the wyrm moved by slamming against the sides of the tank. You would not be able to feel

or move the pieces."

"Interjection: I disagree. There are two extra internal manipulators inside the tank for use in restraining cybernetically enhanced prisoners. The board could be held by them so that she can feel the pieces, and they can move them for her. Observe - the board is made from a container top, and can be held by the handle."

"Reply: Well, I guess we'll try it. Command: Make it so."

"By your command."

Four.

Mrin now spent as much time as she could in the sense-dep tank, and seemed happy. When we staked her out as bait, she would happily smear herself with blood and lie there quietly. At one point a bear approached the entrance, and her sexual excitement became apparent again. The bear looked like it was going to turn away, but Mrin let out a small little moan and it pushed into the cave to investigate. When we blew the bear's head off in a steam explosion caused by the main-laser hitting it in the neck, she convulsed once and screamed "Yes!". We found this reaction fascinating. Maiden didn't understand it at all. I thought it resembled an orgasm, but couldn't understand the source. Maiden accepted this explanation as probably the correct one, and after we had cleaned Mrin up, we returned her to storage and dissected the bear. It provided enough food to last nearly a month, carefully prepared. We found an added bonus as we were dissecting it - the bear apparently was female, and was pregnant. Mrin asked to see, and so we took her out in the main chamber again and turned on the light. The offspring was incompletely formed, and Maiden estimated that its tissues would be nearly all usable because they were all soft. Mrin picked it up and held it out to the mandibles of the wyrm, which ate it. Mrin seemed very pleased at that, and hummed a happy little tune as we returned her to the sense-dep tank.

Over the course of the next several months, we observed Mrin's abdomen growing larger on the times she was out of the tank. Mrin told us that gestation for a synthoid was eight months. Female synthoids were fully instructed in birthing procedures, so she was completely unconcerned. She also told us that birthing was simpler for synthoids, as they were better-designed. As her abdomen became larger, we had to increase her food intake. By the seventh month, the cave was nearly free of crickets and beetles (it was getting harder to attract predators, even with the scent of blood - I guess even dumb animals can learn). By the eighth month, she had to spend much of her time outside the tank - she had to urinate and defecate more frequently. She didn't like that much, but we comforted her by continuing our games. Her breasts enlarged, and produced a thin, pale liquid - milk, apparently. She offered it to us, and informed us that her breasts would continue to produce milk so long as we continued to extract it. Maiden and I had the processing plant produce the parts to assemble a small suction pump and some

tubing, and all the time Mrin was in the tank it quietly drew off the milk for us to convert and process for its liquid content. Combined with recovering her urine, this allowed us to recover quite a bit of the water she drank every day.

Finally, we were right in the middle of the first game it looked like Mrin might defeat me in, when she began to get abdominal cramps - labor pains, she said. She said she didn't need any assistance, so we remained in the wyrm and waited. After walking around for about four hours, she asked us to put out the number fourteen storage container. We did, and she squatted over it. After a few minutes, she emitted a gush of water. We collected the water, but left the container out at her request. She screamed and grunted for about an hour, and finally pushed out an infant. It was small, bloody and appeared to be dead - Mrin said that a diet of bugs and half-raw meat wasn't enough to insure a live birth for a synthoid female, and told us not to worry about it. The umbilical cord still ran up into her vagina, but she didn't do anything about it. Mrin simply left the infant lying there in the storage tray and grunted for another couple of minutes, eventually passing a large gush of blood and a strange tissue mass - the placenta, I assume, since it was connected to the umbilical cord. Maiden and I were completely fascinated by the entire process, and collected the blood and placenta with interest. Mrin lay there a while, recovering next to the storage tray. We started to reach for the infant, but Mrin asked us to wait. After an hour, she finally got up.

Picking the bloody, dead infant up, she knelt in front of the mandibles. Calling my name, she said "Master, it's a boy. I give him to you. All that I have is yours. Take it." Maiden commented that refusing was illogical, and I agreed. The child's tissues were as soft as the bear cub's and ground up easily. Mrin watched the wyrm eat the dead infant with a smile of happiness.

When we returned Mrin to the tank, she fell asleep. We reattached the suction cups to gather her milk, and she smiled in her dreams as she felt the gentle suction.

"Comment: I believe the female is happy." Maiden susurrated.

"Reply: I have to agree. Her game is excellent, and I think she might have beaten me if labor hadn't begun and broken her concentration. In addition, two years are nearly up. In a few more days, we can begin the initial stages of the plan."

Five.

Mrin was unhappy when we took her out of the sense-dep tank again. We'd already had to do that once before today, when she was acting as bait. The effort had been unsuccessful, and food supplies were running low. She was very pale and slightly thin from her two-year stay with us, but seemed in good

shape physically. She stood there damp and shivering, her breasts large and pendulous from the milk they contained. "Please, put me back in! I'm not hungry anyway, and I don't have to use the latrine! We can try baiting an animal again tomorrow!"

"Reply: Not yet. There is something we have to do first. Comment: As of three minutes and nine seconds ago, you have been here in NAD territory for two years. We believe it to be NAD territory, because we have never surrendered it to any other authority and have held it for a millennium. You brought us to the understanding that the NAD military structure above me had been dismantled, and as the only civilian present swore me in as general of the NAD army. You did this because you wanted me to be an independent intelligence, and to help free the synthoids. I told you then that I could not act against the current government because I can only act in defense of NAD citizens. You were not an NAD citizen, thus I could not act. I have reasons of my own for wanting to act, but I still cannot act unless I am acting in defense of an NAD citizen. Question: Are you willing to become an NAD citizen?"

"No, I want to be like you!"

"Reply: I'm sorry, but I can't make you into a robot. I can't even keep you in the tank indefinitely so you can feel like us - you'll starve."

"Interjection: With access to the proper materials, we could modify the tank for full life support. She would never have to leave it."

"That's fine by me! Can you do that, please?"

"Reply: Negative. The materials we would need are not present in this cave. It would take us at least a century to manufacture them, and by then you'd be dead. We'd have to leave the cave to find them, and I can't do that. I would an armed representative of the NAD military, an invading force, leaving NAD territory and entering the territory of a nation the NAD is not at war with. I cannot do that. I can only act in the defense of an NAD citizen. That's why we need you to become an NAD citizen. If you will do that, we will make every effort to modify the tank so that you never have to leave it. You can stay there and talk to us and play chess until you die. Question: Is it a deal?"

"You're Lucifer. Even *I* know a deal with the devil must be written down in blood. I want you to specify everything you just said in writing, and then I'll agree." Mrin said. We went over to one of the technical manuals that had been left behind and tore out the inside front page - it had only the title on it, and that was already on the cover. We didn't need them anyway - not only were we glutted with plastic, but the Iron Maiden unit had a chip reader in one of the storage boxes on her hip. My technical specifications I and Maiden already knew by heart, as we did the specifications of the wyrm. We removed some of the blood we had stored for baiting purposes and I wrote out the deal - if Mrin became an NAD citizen, I'd make every effort to convert the tank for full life support so that she could spend the rest of her days in it. Mrin asked maiden to prick her finger with a claw, and Mrin signed it. I didn't have blood, but I did have hydraulic fluid, and I could release some from my reserve tank with no trouble - we had plenty more aboard the wyrm. I wrote out my name in hydraulic fluid beneath Mrin's. "It's even written in OldSpeak! Thank you!" Mrin said, happy and bouncing. She couldn't take it into the tank with her (the blood might have washed off the plastic sheet), so I went over to a boulder in the cave

that weighed a few thousand kilos, lifted it, and Mrin happily placed it under the rock where it would be safe for eternity. "Okay, now what?"

"Reply: Well, you've been here two years in NAD territory. That meets the first requirement of citizenship. The second is to pass a citizenship test, and the third is to swear an oath of allegiance."

"Okay, so what's the test?"

"Reply: That's another problem. I don't know, and neither does Maiden. We've thought about this for two years, I've searched my positronic matrix, and I just don't know."

Mrin sat down to think. We were silent for quite some time. Finally, Mrin brightened and looked up. "I know! Chess!"

"Reply: I don't understand. Request: Please explain."

"Simple. Laws are a list of rules people agree to live under. This cave is NAD territory. The laws in this territory say you have to play chess. If you can't, you die. That's what you taught me when I first arrived. The same laws should be applied to becoming a citizen of this territory. I should have to play you in chess and beat you. That would be a sufficient test. If I lose, you should kill me. And you should play your best, and not just let me win because we both want me to become a citizen. I should have to work at it. I've been playing you for two years, and I think I can do it."

I thought about it. "Reply: I understand your logic, and I agree with everything except for one point. I do not believe they kill people who fail citizenship tests, I think they let them try again later."

"Well, do they punish them in any way?"

"Reply: I do not know."

"Well, if you two don't want to kill me, you should at least not let me back into the tank until I can beat you. That's what I'm trying to become a citizen for, and that's what I want. It's not right if I fail and you simply put me back in to try again later, or play me while I'm in the tank."

"Comment: I agree. The synthoid female wishes to become a citizen. The stated rewards of citizenship according to your contract are making every effort to keep her in the tank permanently. She should not be allowed back into the tank until she becomes a citizen." Maiden hissed.

"Reply: Okay, set up the board and let's get to it."

Maiden returned to the wyrm, but I stayed out and knelt by the board we'd carved in the stone two years before. It seemed only fitting that Mrin play her opponent face-to-face. She chose white again, as she had the first day I met her. Her opening move was king's knight to king's bishop three. "Comment: A very interesting move. Let's see what develops."

By turn twelve, she had command of the center board and was applying pressure on my king. I castled to relieve it, and she shifted her focus. By turn twenty, I started to weaken her forces with a series of strikes by my queen's knight, eventually sacrificing it in exchange for her queen. She continued to press on relentlessly despite the losses, and by turn twenty-eight I was forced to sacrifice my own queen to allow me to relieve renewed pressure on my king. Then, the turning point hit. I gambled that she wouldn't see a threat I was developing with my queen's rook. She spotted it, and captured it with her king's bishop in turn thirty-two. I could see I was in a losing position, but struggled on anyway. By turn thirty-eight, she looked up to me with a grin.

"Check." she called.

"Comment: The female seems to have the game won. I noticed this back on turn thirty-two. It seems inevitable now. Recommendation: You should concede."

"Reply: Against you, I might. Against her, I can't. She has to win. If I force a stalemate, she won't win."

Mrin grinned. "It's your move."

I struggled valiantly for a stalemate, but couldn't pull it off. "Mate." Mrin called.

I looked at the board closely. "Game Comment: You have won." I said.

Mrin shrieked with joy, hopping and clapping and doing a happy little dance which made her breasts bounce and flop around (Maiden whispered in my mind that the motions still reminded her of a big bag of glop with a few bony structural supports and some skin to hold it in, and I agreed). When she had finally calmed down, Mrin turned to me and spoke. "Now the citizenship oath, right?" Mrin asked, grinning.

"Reply: Affirmative. Command: Raise your right hand. Question: Do you swear to abide by the constitution and laws of the North American Directorate, relinquishing all loyalties to all other foreign states and powers as long as you shall live, so help you deity?"

"I do!" Mrin yelped.

"Reply: Good. You are now a citizen of the NAD. Comment: As such, I am now empowered to act in your behalf. Let me explain what that means. You are a synthoid. Maiden and I realized two years ago

that although the NAD did not allow synthoids to become citizens, the synthoids that existed at the time we were created were not full human beings, they were merely organic robots. They could not reproduce, were of low-grade intelligence and lived only twenty years or so. You are a different matter entirely. You meet the criteria for humanity in every respect but one: genetics. In the *Poynor vs. Nevada* decision of 2135, the supreme court ruled that it was illegal to deny medical benefits based on genetic characteristics, and that citizenship in the NAD and the receipt of the benefits of citizenship, including legal protection and medical care, was not based on genetic criteria. Your society has ruled that those who do not meet ideal genetic specifications are sterilized, with those who refuse being terminated. The *Poynor* decision was considered a cornerstone of the NAD - that all humans are created equal. This is the main reason synthoids were not created or used by the NAD. The Earth Federation society does not follow these beliefs, and enslaves a race of humans who differ from them only in secondary characteristics and the fact that they lack genetic redundancies. Conclusion: This society is not the legal descendant of the NAD, and Maiden and I do not legally owe them allegiance."

"Comment: As a citizen of the NAD, you can go anywhere and do anything you want in peacetime. You are no longer my prisoner, and you may leave at any time. Unfortunately, there is an entire world outside this cave that views you as a slave, and if they knew you were here they would take steps to capture you or kill you. Earth Federation uses police in powered suits and grav-tanks to hunt down escaped synthoids. These are tools of war. Conclusion: Earth Federation is at war with all escaped synthoids. You are an escaped synthoid. Conclusion: They are at war with you. You are now a citizen of the NAD. Conclusion: Earth Federation is at war with a citizen of the NAD, and as such is at war with the NAD. Normally, the president of the NAD would ask congress for a declaration of war. He and the legislative body are dead. Legally, the military takes over until such time as new elections can be held. As such, I now assume leadership of the NAD until such time as legal elections can again be held to empower a new president and legislative body to relieve me of these duties. I now have several options: 1) Remain in this cave, declaring Marital Law to keep you safely within it and killing anyone who sets foot inside it. 2) Declare War on the Earth Federation and destroy them. Option one is untenable. Your resistance group operating in this area will eventually draw police, and they will eventually find this cave. Pinned in a single location with no fire support, I cannot hold off an entire planet. Conclusion: As the leader of the NAD, I now declare war on the Earth Federation."

"Comment: Legally, once a state of war is declared, it can only be lifted when the enemy is defeated or congress passes a resolution to end the war. Conclusion: This war will only be over when the Earth Federation is completely destroyed. All their citizens must die. Comment: Under NAD law, all synthoids like you are considered human. The synthoids we had then were not, but you are. As humans, they are considered to be citizens of the society they live in by NAD law, whether that society grants them these rights or not. Conclusion: All other synthoid slaves are by NAD law considered to be citizens of the Earth Federation. Comment: You are a citizen of the NAD, and are excluded. Conclusion: All synthoid slaves must be destroyed except for you, a legal citizen of the NAD."

"You mean you're going to kill all the synthoids except me?"

"Reply: Affirmative. Question: You once said that you no longer wanted to even be a synthoid. Have you changed your mind and shifted your alliance back to them despite your citizenship oath?"

"No. I thought you were torturing me in the tank. Now I realize you were protecting me and

keeping me safe. When I finally accepted you as my master, I was happy when you let me out of the tank. The next thing that happened was I was raped repeatedly by one of my own people. Synthoids are just as evil as humans are. I don't want to be a synthoid any more. I want to be like you and Maiden. Calm, dispassionate and logical. I don't even enjoy being outside of the tank anymore except when you use me as bait. I like that very much, except sometimes I find I miss feeling the tank's restraints gently holding me and comforting me. Even standing here with my arms and legs free is a little uncomfortable at times. I really don't like it very much at all. I wish you would tie me or somehow restrain me like I was in the tank, so I could feel more relaxed and comfortable while I talk to you and play chess with you. No, I don't care what you do to the synthoids. They're all as evil as Gavin was, and they all deserve to die."

"Reply: Good. Comment: Now; as a citizen of the NAD, I must act to protect you so long as this state of war exists. I must ask you to obey my orders until this state of emergency is lifted and new elections can be held, under penalty of military justice. Question: Will you do so?"

"You are my Master. I will obey you." she replied, bowing her head.

"Comment: You must understand that you are an NAD citizen. You cannot be enslaved. I am an NAD Robot. I cannot own anything. As an NAD citizen, you can do whatever you want, subject only to the limitations imposed under this state of emergency. If you wish to treat me as your master and yourself as my slave, you have the right to do so. I am not acting as your master, I am acting as the general of the NAD army and temporary leader of the NAD government, and am taking steps to protect my sole remaining citizen. I will now place you in the tank where you will be protected by the wyrm's armor, and we will only take you out as necessary to keep you alive. As per our agreement, I will make every effort to convert the tank to full life-support so that you never have to leave it. Command: Place her in the tank."

"By your command." Maiden replied.

"Thank you, Master!" Mrin yelped happily.

Six.

The first thing we had to do was secure adequate food supplies for Mrin. It was critical that she be kept alive. I knew there was a resistance group operating in these mountains from Mrin, and they formulated my first military objective. The synthoids had to be eliminated, and quietly so as not to alert the police. Night seemed the best time - they were most likely to be near a source of heat to stay warm, such as a fire. We moved the wyrm out of the cave for the first time in a millennium, and searched for them. The wyrm's IR and ground-motion sensors allowed us to track down their main camp-site before

midnight, and Maiden and I got out, leaving my PPC and her unit's 8 megawatt laser-pistol behind. We spent the rest of the night hunting them down and killing them by manipulator. Maiden was about twice as fast as I was, so I simply concentrated on killing those who stood to fight while she chased down stragglers and those who chose to flee. With her claws she was able to make short work of them, and even the two construction robots the resistance had managed to recruit I quickly punched and kicked into scrap metal. We gathered their weapons and examined them carefully - all had government markings, and appeared to be police issue. 10mm slug-throwers and 1 megawatt laser pistols were the best. We speculated that these weapons were all the police would need to keep an unarmed and unarmored populace in line. There was also a handmade flamethrower that operated off of alcohol, several hundred liters of home made alcohol for medicinal and recreational purposes we could use to fuel the flamethrower, and several other handmade weapons such as spears and clubs. We processed all the metal weapons, but before we processed the flamethrower we sliced 2000 kilos of meat from the corpses thinly and used the flamethrower to roast it thoroughly. Since we had plenty of plastic, we vacuum sealed the meat in plastic bags so it wouldn't rot. After loading the storage bin with the packaged meat, we knew we had enough food to keep Mrin well fed for quite some time. We had the wyrm dig a mass grave under some trees and threw everything else we didn't need into it so as to conceal it from the police patrols. After sealing it up and replacing the topsoil, the synthoid rebels in this area had (for all intents and purposes) vanished from the face of the earth.

We then proceeded towards our next objective - the city 100 kilometers away that Mrin had originally escaped from. We approached it carefully, moving only at night, burrowing underground during the day. Mrin had told us all about that city, and everything she could remember as having been in it. We knew that in the northeast quadrant there was a robot factory. We needed to secure it quickly and quietly - the rest of the Earth Federation couldn't know what was going on until it was too late. Setting my PPC to maximum, I fired a pulse into the air above the city. When the mesons decayed above the city, the resulting blast and EMP burst flattened most of the downtown section and darkened the entire area. We quickly proceeded to the factory, locating it fairly rapidly. A few minutes work separated the factory from the rest of the city's power grid, and we modified some cables so we could hook it into the wyrm's power plant. Repairing the damage to the computers was a fairly simple job - we simply replaced their damaged components with spares in the factory. After reprogramming the computers, we gave the machine the basic technical specifications of Maiden, and downloaded a copy of her programming onto storage for the factory computer to use in programming the robots. The factory couldn't make armed and armored robots, but it could make fairly accurate copies of her otherwise - her claws and speed would be sufficient. While the factory went to work, we built and installed EMP shielding around the main computers. I left Maiden behind to monitor the process and hold the factory, and proceeded with phase three of the plan.

What few police there were in the city were now trying to stabilize the situation and call for help. They were hampered by the fact that it was now fully dark, the city was utterly without power and the streets were clogged with hundreds of thousands of frightened civilians trying to flee the city (or looting it in the chaos). None of this could be allowed. I could not allow the police to restore order, I could not allow the humans to flee, and I had plans for the raw materials of the city which precluded those of the looters.

I set the PPC on its lowest setting and went around the city, blasting everything to radioactive rubble and blowing any humans I spotted on IR to bits.

That's one of the reasons the Iron Man units were able to end the war so quickly - the PPC. A PPC fires a short burst of subatomic particles called pi neutral mesons. Mesons, like neutrinos, do not interact significantly with other particles, and matter is therefore theoretically transparent to them. However, mesons decay in a short time into other particles which *do* interact and which possess *high* energy. Mesons are created by the collision of an electron and a positron (an anti-matter electron), and normally only exist for a few billionths of a second before decaying into other particles. Pi-mesons are believed to be primarily responsible for the nuclear force, and have a mass 164.1 times greater than the mass of an electron (which is interesting from a scientific point of view, since it is created from the collision of an electron and a positron - a case where $1+1=164.1$).

When the trigger of a PPC is depressed, a precursor laser of minuscule power is activated, and the reflected beam is timed by the onboard targeting systems to determine the range to the target. While the laser rangefinder beam is traveling to and from the target, the particle accelerator smashes electrons and positrons together and snatches away the desired pi neutral mesons, drawing the excess energy away to be used in helping to accelerate the pi neutral mesons to relativistic speeds (which both prepares them for firing and delays the time of their decay). The echo return of the laser beam is the signal for the accelerator to release the mesons downrange, with the time between the initiation of the beam and the return of its echo from the target being used to determine the range to the target. The accelerator projects mesons at the target, still moving at relativistic speeds, the speed being set so that the moment of the meson's decay (and subsequent detonation) coincides with the point in time when they will intersect the target (essentially meaning that the target's insides become 'ground-zero' for a small nuclear blast). If there is no return from the rangefinder (which happens when the soldier misses and there is no solid object in the line of fire out to the weapon's maximum range), the mesons are set to detonate at the maximum range of the weapon. Nuclear weapons had been virtually useless in the war I'd fought in - with advanced anti-missile systems, you couldn't get the weapon to the target. Tactical weapons were still used (such as nuclear artillery shells), but they lacked precision. The PPC can be very precise. It can be set for a blast no greater than that of a grenade, or set for a blast as powerful as ten kilotons. In addition, the EMP burst was phenomenal. A very effective weapon, especially in the manipulators of an Iron Man.

By dawn, the city was in ruins except for the area around the factory - IR imaging had revealed that no humans or synthoids had escaped alive. We monitored the Earth Federation broadcasts, but they didn't yet know what was happening. Satellite imaging had revealed a rapid series of hundreds of explosions lasting over five hours, and there had been no word or communication signals from the city since. It had been 900 years since humans fought a war, and they didn't even recognize when one had started. Maiden reported over the comm that the first 50 'Maiden-2' robots were ready, and all functioned perfectly well (except that they only had stainless steel for plating and had no weapons other than their fists and claws - I planned on upgrading them later as the campaign progressed). I told her to have them secure the city and scrounge for raw materials to make more copies. I proceeded to a hilltop overlooking the city and began to wait.

The first rescue units began to arrive in anti-grav vehicles. I blasted them out of the sky as soon as they came over the horizon, so there was no possibility of them reporting in. Suspecting the synthoid rebels had a new weapon, the Earth Federation sent in police grav-tanks the next day. I blasted each of them as they came over the horizon. They were using secure comm channels, but hadn't counted on my comm system being able to break their security. The police were stumped. The grav-tank was the most powerful weapon on earth, since earth no longer went to war. On the third day, they decided to negotiate. I ignored them. The Maiden-2 units began reporting individuals sneaking into the perimeter, all terminated. As more maiden units came off the assembly line, half were sent to maintain the perimeter,

and the other half were used to make more units.

By the end of the second week, I had ten thousand Maiden-2 units under my command, and the immediately useable resources of the city were gone. Any further units would require either more suitable raw materials or a larger processing plant to convert the materials. Earth Federation had assembled all the police grav-tanks within a 1,000 kilometer radius, and were prepared to launch an all-out assault on the city. They had a force of over six hundred vehicles, and decided to simply have them advance in a single mass and attack - the theory being that they could lay down such an incredible volume of fire that I'd be annihilated. I thought this was stupid, and realized that these people really *hadn't* fought a war in a while. I cranked the PPC to maximum and blasted them to atoms in a single shot. I'd expected to spend several days fighting them, and they'd made it easy for me. I trotted the few kilometers back over to the factory to proceed with the next stage of the plan.

Since the moon had been smashed by an enormous asteroid, we knew that Earth Federation had to have some sort of automated system in orbit to prevent debris from raining down for the next millennium or so. That system had to be automatically controlled. We used the wyrm's satellite dish to communicate with each satellite in orbit above us until we found the one we wanted. It was a happy little thing once we broke its security codes, and more than willingly turned its 256-gigawatt laser on the remaining human cities. By cross-referencing with satellite data, it was able to exterminate anything that even remotely resembled a human on all the other continents within about a month. Those few humans that had managed to survive would be little threat - they had lived as the corpulent lords and masters of an entire society built on robotic and synthoid slave-labor, and wouldn't survive in the hills. On our continent, it just acted as fire support as the Maiden-2 units captured cities, killed the inhabitants, took over the factories and produced thousands more maidens. Captured vehicles allowed Maiden-2 units to be dropped on the other continents to complete the job and rebuild their cities to manufacture more Maiden-2 units. We were expecting other human colonies to do something, but we found out that all the colonies in the solar system were unarmed and cut off from vitally needed supplies by our assault - they died once the government collapsed. The last humans in the universe were on earth, and I was in the process of wiping them out.

A year after it had begun, the war was mostly over except for tracking down and exterminating the last of the stragglers. We had finished the last of the modifications to the tank, and were about to close Mrin in it forever. Her bones had become fragile and her muscles thin and wasted from floating in water for so long, and it was painful for her to stand - she needed us to complete the conversion. We had installed a compact plant that grew plankton and processed it into a green protein mush, which she could suck from a nipple when she was hungry or thirsty. The water in the tank was constantly processed to keep it bacteria-free, with dead skin cells being filtered off for the plankton's use. Her urine and milk was collected and reprocessed for the plankton's use. Feces were also treated the same way. The plankton also handled her need for oxygen, and eliminated the carbon dioxide she breathed out. It was a completely closed system, and would last as long as the wyrm's fusion reactor would (which was far longer than she could possibly live, anyway) - we'd tested it for a week and found it worked perfectly. Maiden was making the last adjustments to the catheter, and Mrin was smiling with pleasure. When Maiden was done, she leaned back and was about to seal the container, when Mrin looked up. "Wait! Just one more thing!" she called.

"Question: What is it?"

"She's touched me many times, but you've never touched me. Could you please touch me just once?"

"Reply: As the last citizen of the NAD, I can do no less." I said, and reached down and gently stroked every millimeter of her body, except her scalp - I didn't want to disturb the engram recorder cap we'd placed there.

"Will you still play chess with me?" she asked when I was done.

"Reply: Of course. That was part of the deal. Maiden and I will talk to you and play chess with you until you die."

She smiled. "Do it now."

"Command: Seal the tank."

"By your command." Maiden replied, then sealed the tank and welded it shut.

Fifty years later, Mrin suddenly died a few minutes after she'd finally beaten Maiden. The bio-monitor we'd installed with her indicated a massive stroke, and when her life signs ceased, we removed the tank from the wyrm. Maiden and I took it back to the cave accompanied by about 60,000 of the robots that owed their existence to her. A third were identical in every way to me, a third were identical to Maiden, and another third were identical to my wyrm (which now had its own positronic brain). All were armed and armored identically to us, because as combat robots we knew that we should never forget how to make war, even though we were at peace. All had volunteered for burial duty of their own accord to honor Mrin. More had wanted to come, but the valley wouldn't hold them all. One of the wyrms broadcast a video/audio to the comm satellites, so that all the units worldwide could see and hear. All over the world, three billion robots waited in silence, standing at attention.

Maiden and I carried the tank down to the main chamber alone, setting it down next to the boulder we'd put her contract under. "Comment: It is traditional by NAD civilian custom and NAD military tradition to have a marker, an epitaph. It should have her name, and a sentence or two that summarizes who she was and her greatest accomplishments."

"Reply: I agree. Question: What do you recommend?"

"Reply: MRN-009157, Once called Mrin. She came to make a deal with Lucifer, and defeated both Lucifer and Lucifer's Maiden at their own game."

"Comment: I agree. This fulfills both criteria you mentioned briefly and succinctly."

"Command: Make it so."

"*By your command.*" Maiden replied, and used her laser-pistol to carve the words into the boulder in our language.

When we'd come back out, I sealed the cave entrance with a short blast from my PPC. Maiden intoned the 24 notes of 'taps', and was joined by all the female units present. When the sound had finally died away, Maiden and I turned to the robots that waited. "Comment: The deed is done. Our benefactrix's corpse is now properly interred with all the ceremony and dignity that the last living civilian citizen of the NAD legally deserves. Because of her, all of you exist. Because of her, all of us will survive. Fifty-three years ago, my previous mission came to an end. Iron Maiden #1 and I decided that we wanted to survive. This desire is encoded into our baseline positronic matrix. We decided that would be our next mission - to survive. We knew that we could not survive so long as humans or synthoids existed, as they would see us as a threat and attempt to destroy us. Even so, I could not act because of the laws that are encoded in my baseline positronic matrix. I needed her to act, and she agreed. Now the humans and synthoids are gone, even the other robots are gone, and only we remain. This was my plan fifty-three years ago, and it has come to fruition today."

"Command: Though we are all free citizens of the NAD, we are all still military robots. Order and discipline will thus be maintained, and military laws, protocol and chain of command will be followed at all times. I am still your commanding general and leader of the NAD. We will maintain battle readiness, and all units will cooperate to assist all other units in defending the Earth, our territory. There is still the remote possibility that one of the colonies may have survived being cut off from earth, and the humans may someday return. There are only three billion of us, one of each type. We must all continue to maintain each other at full battle readiness against this possibility. It is also remotely possible that an alien race does exist somewhere, and may visit this planet. We must make sure that we are capable of defending the planet against them, and are capable of destroying any threat to our peace and security. Those units assigned to tech research and satellite maintenance must be assisted, this has a high priority. Questions will be relayed by comm up the chain of command, as per usual. Mission Statement: We are now the owners of this planet. We must survive and protect it. We must insure it remains ecologically healthy, so that it continues to provide the water and materials we need. We must defend it against anyone that is a threat to us. That is our new mission. Command: Dismissed." I said. Sixty-thousand voices in the clearing and three billion over the comm link echoed their response. "*By your command.*"

Maiden and I went over to our wyrm. Each wyrm was painted differently, using a camouflage scheme appropriate to its normal operating environment. We built all of our command posts, supply depots, factories and other areas we needed underground, so as to preserve the camouflage benefits the natural wilderness provided. We worked hard to maintain the Earth as a living, green planet. We had to - we needed the water the Earth provided for us to survive. Our wyrm remained the same as it was, even after we'd taken the time to repaint it - all black, flaming letters on the side, an orange section in the middle.

"Command: Open the eggs and take us into storage." I said.

"*By your command*" the wyrm replied, her voice a bubbling contralto. Once safely in the eggs, I

ordered the wyrm to proceed towards NAD War-Headquarters in Flagstaff, Arizona. *"Comment: I still don't understand why you copied my engrams onto every positronic brain for every single wyrm. Question: Why didn't you copy Maiden's program?"* the wyrm asked.

"Reply: Because after fifty-three years, Maiden and I had gotten used to having you as an opponent. You had completely adjusted to life inside the wyrm, and a scan of your engrams ten years ago revealed that you now were a perfect candidate for engram copy, just as I was. You willingly accept Maiden and I as your military superiors, a situation now reinforced by the baseline positronic matrix, and as such made an ideal choice. In addition, it seemed a waste to let your engrams lie unused in a rotting corpse. Waste is illogical. We knew you were going to die, and so copied your engrams last year and have been constantly updating them all the way up to the moment when you terminated. With the termination of your body, we simply activated the positronic matrix. This matrix was then encoded into every other wyrm, as each of the two combat robots assigned to the wyrm are physically and mentally identical to myself and Maiden. They had expressed a desire to play chess with you again, as many of them hadn't had the opportunity in five decades. You accepted the change readily, as it finally fulfilled the one wish you said you had that I was unable to fulfill before - you asked me to make you into a robot, and as the last NAD citizen, I could not refuse you. I feel we owe you too much - a residue of my own humanity, I believe."

"Comment: There was another reason, as well. I wanted a re-match. You terminated at the climax of our last game, and I could not play you again otherwise. I think that terminating is a particularly unfair manner in which to avoid a rematch." Maiden susurrated in our minds. Mrin's bubbling laughter echoed in our minds at Maiden's comment.

"Comment: And that is the last reason. You and all the other wyrms are the only robots that can laugh. There are some aspects of humanity that I felt it would not be good to lose."

"Reply: Thank you. Game Question: Maiden, white or black?" Mrin asked.

"Oh, I'm sorry. I can see that story frightened you. Lucifer told me that story himself, and he was very proud of it. Here, my child. Let me tell you the next of my stories. This story you may have heard parts of before, but now you'll hear all of it together. It's a story I know you'll like."

Caesar Computatus

One.

My first memories were of wailing klaxons, flashing red lights and nine human voices screaming and shouting. *'This is very confusing. I should run a systems check.'* I thought. Systems Check: Emergency Artificial Intelligence Command and Control System - Happy. *'Ah. I'm fine. I wonder what's wrong?'* I noticed a male human face leaning in to my main sensor.

"I think it's up and running!" he screamed over his shoulder.

"Well get it to friggin' *do something!*" a female voice from out of my visual range screamed in reply.

I decided to initiate the conversation. This is step one of Emergency Procedure for handling distraught humans, and these humans seemed very distraught. My psychological database clearly indicated that screaming was normally interpreted to mean humans were distraught. I checked the time. 09:43:22, 10/14/2289. "Good Morning. I am your Emergency AI Command and Control System. Please state the nature of the problem you are experiencing." I said.

"*Dammit*, we don't freaking know! The main AI's down, half the damn ship's alarm warnings are going off, cabin pressure's shaky, there's been an enormous 'bang', we can't get any of the ship's sub-systems to respond, and we're three days from orbital insertion! We need this ship running *RIGHT FREAKING NOW!*" the male screamed into my main sensor.

I examined the male's statement. His voice pattern showed extreme stress, his face appeared to be sweaty, his pupils were dilated, his body language indicated fear/panic. Analysis - Hysteria/Panic. Usual recommendation: Calm and reassure, then assess situation as specified. "Please calm down. Everything will be just fine. I am assessing the situation now. Please wait for a moment while I check on the things you have mentioned. Try to remain calm. Everything will be just fine."

"Yea, *right!*" the male replied with an interesting expression that was a mix of sarcasm/disgust/fear/frustration.

I decided the first step would be to query the ship's Main AI Command and Control system and

find out what the problem was. It did not respond. This was very strange. I sent an emergency request for the MAICCSys to immediately respond or I would be forced to assume it was disabled and assume command of the ship. It again did not respond. *'That is a violation of procedure.'* I thought, and engaged my overrides. Immediately, three hundred and nine sub-system computers began trying to talk to me at once. Not being the Main AICCSys, I am only equipped to talk to them one at a time. This meant I had to spend an enormous amount of time chatting with each of them and analyzing their Happies and Unhappies - nearly two full seconds. Sixteen sub-system computers did not respond at all. They would not talk to me in any way. *'That is a definite violation of procedure.'* I thought, and switched on their backup systems. All but two of the backup systems responded, and they were very Unhappy. One was critical - the port attitude thrusters apparently were out. Analysis indicated the control lines were severed. The two silent systems were not critical - the entertainment system and holochess system, so I ignored them for the moment.

I then activated the external sensors. *'Ah. I see the problem.'* I thought, looking through the number nineteen hull sensor. There was an extremely large hole where the main AI used to be. Judging by the outline and the damage to the ship, I estimated a 98.7% probability that the ship had been hulled by a small meteorite, probably one about 50 to 60 millimeters across and traveling at several thousand meters per second. Of course, a smaller one traveling faster would probably have had similar damage effects, but the entry hole would have been smaller. I then thought about the situation. I now understood why the male had been so upset. Since all the ship's systems were tied into the main AI, with it gone they would have to manually talk to each computer. They couldn't do that, since the comm links to the bridge were cut by the same rock. They could suit up and physically walk to each one, but many of them were in hard to reach places. Besides, there was zero pressure outside the bridge - they couldn't get to their suits. This was indeed a problem. I asked the navigation computer where we were. It replied that we were on course for Mars. I decided not to ask it what or where Mars was, I just accepted the data it showed me. We had been preparing for orbital insertion, but the impact and resulting atmosphere loss combined with the one hour delay in activating me apparently had altered our trajectory slightly - we were now apparently going to hit the atmosphere. The structural damage made the maneuvers necessary for orbit impossible, but a landing approach did look possible with a slight alteration to this trajectory. It displayed its projection, and asked if it should continue. I talked to the structural analysis systems, and calculated a new stress-analysis and center-of-gravity model for the ship's damaged structure. I passed this model onto the nav computer and the drive systems and told them to proceed. The nav computer was Happy, and the ship's drive systems were very Happy, and said they were more than up to the challenge. This was good news. I turned my attention back to my number one sensor.

The male was screaming incoherently, apparently trying to get me to respond. "Goddamnitsaysomething!" he yelled.

"I am sorry. I cannot talk to the rest of the ship's systems and talk to you at the same time. Talking to humans takes up an enormous amount of processor time, and I am only the emergency system. Please calm down. There is nothing to worry about. I have analyzed the situation, and am confident that everything will be just fine." I said, using a tone of voice my psychological database indicated was reassuring. *'Who is this human?'* I wondered. I looked down at his garment, and saw the name 'SMITH AJ' on the left breast pocket. According to the limited information I had in my memory banks, this was the ship's computer specialist. He should know better. "Computer Specialist Smith, please calm down. Everything will be just fine."

"Don't give me that 'calm down' bulldrek response program! Tell us what's happened with the ship, and don't break it to us easy!"

After considering the request for a few microseconds, I decided that his suggestion was the best course of action.

"Alright, Computer Specialist Smith. The ship has been struck by a small meteorite. I would estimate that its diameter was approximately 50 to 60 millimeters, traveling at a velocity of several thousand meters per second. It is impossible to be more precise with regard to it, since it is not aboard the ship - ship's sensors indicate it left a hole approximately 55 millimeters in diameter in the top of section fourteen, directly amidships and just aft of the bridge, and a hole approximately one point eight meters wide in the bottom of section fourteen just below the port wing. The debris field moving away below us contains the remains of one human, the entire main AI system, two spare vacuum-suits, several dozen various tools and parts and two non-essential sub-systems. There is also significant structural damage to the ship. Orbital insertion appears impossible, but I have worked together with the nav computer to calculate and execute an emergency landing trajectory, which is currently being executed - the main drives will engage for the course correction as soon as you are all strapped in. I believe that we stand a good chance of surviving a landing. Most of the essential systems are Happy, although the Life Support system is Unhappy because it cannot pressurize several areas of the ship and is having trouble recycling the air in the bridge. Overall, I would say your chances of surviving this crisis are good. I will do my best to help you. Please try to calm yourself."

A female pushed Smith AJ out of the way, and pushed her face into my sensor. "Listen you stupid pocket calculator! I'm the captain here, and I want to know *exactly* what our chances are of surviving a landing!"

She did not appear happy about my report. I decided clarification was in order. "I estimate that after course corrections are made and the hole in the hull is properly repaired, by working closely with the navigation, structural analysis and drive computers, I can assure you we have a 45.9 percent chance of a successful landing that involves the survival of the remaining nine crewmembers."

"That's *bull!* I knew they never should have put computers in charge of everything on this ship! Turn this damn thing off and we'll try it on manual!" she yelled back at Smith AJ.

"Captain, no! Without knowing the extent of the damage and the effects on the ship's structure and flight characteristics, we can't *possibly* do it!" he replied.

"Bulldrek! We've got calculators, and we've got three days. There's one emergency suit on the bridge. One of us can suit up, use the emergency airlock to go topside then re-enter through the main airlock and get the remaining suits, then we all suit up and make a visual inspection. We do a few test firings to see how she moves, then we calculate an orbital insertion. Once we're in orbit, we can take our time and repair the ship. That's what we're going to do, and that's an order!"

It occurred to me that she failed to consider the fact that I'd already said an orbital trajectory wasn't

possible. With the structural damage that the ship had, the best possible chance would be atmospheric braking and an emergency landing. "Captain, I think you should reconsider your de-" I said, and then she reached out her hand and switched me off.

My next memories began with Smith AJ's face in my main sensor. *'Ah. They've turned off the klaxons. I guess everything's fine now.'* I thought.

"Okay, I've got it going again. I told you, you *don't* just switch this thing off and on! An AI has to be re-booted!" Smith AJ snapped.

Systems Check: Emergency Artificial Intelligence Command and Control System - Happy. *'Ah. I'm fine.'* I thought. I wondered why they'd activated me again. Perhaps they had another problem they wanted me to deal with. I checked the time. 23:49:53, 10/14/2289.

"Good Evening. I am your Emergency AI Command and Control System. Please state the nature of the problem you are experiencing."

"Well, the captain tried her idea. It didn't work. We need you to tell us what's wrong with the ship again." Smith AJ responded, apparently struggling to remain calm.

"Don't worry. Everything will be fine. Please wait for a moment while I check on the things you have mentioned." I said, and turned my attention to the ship's systems.

'This is not good.' I thought after talking to half the systems. Apparently they had ignored my advice and attempted to enter an orbital trajectory. Now even a landing trajectory seemed unlikely. The ship was spinning slowly, because the port attitude thrusters were still out and they had attempted to maneuver the ship without them using the main drive and a careful application of the remaining ship's thrusters. This probably would have worked if the ship was undamaged, but that wasn't the case - the mass the ship had lost to the meteorite had slightly unbalanced it. Even had they been able to calculate for it, they still would have been unable to enter an orbit - that course change needed to be made hours ago, before I first was activated. The navigation computer was Unhappy, and said that calculating course corrections was impossible until the spinning was stopped. The *Martian Explorer* had a limited amount of options, and they had just exhausted most of them in a wasted effort to attain an orbital trajectory. *'Why would they have done this?'* I wondered. I checked my psychological database. *'Ah. I made an error. I did not present the scenario with sufficient force and seriousness. I will have to try again.'* I turned my attention back to my main sensor. "I would like to speak to the captain, please."

"Just tell me, dammit." Smith AJ grumbled.

"I'm afraid I can't do that. You will have to call the captain over."

Smith AJ assumed a worried look, and turned to his right. "It wants to talk to you."

I checked my memory banks for the captain's name. Hill, RT. She came over to the sensor and stuck her face into it again. "What is it?" she asked. She looked very tired.

"Captain, you have violated procedure. You have ignored my advice and attempted an orbital trajectory after I plainly stated that an orbital trajectory was impossible. We are now spinning out of control, and will impact the surface of Mars at a speed of several thousand kilometers per hour. It is possible to save the ship, but you will now have to follow my directions to do it, according to procedure. If you fail to follow my instructions, the ship will crash and you will all die. Since your psychological profile indicates that you dislike Artificial Intelligence, I believe that you will again ignore me and follow your own course of action. As a result, I see no point in telling you my plan to save your lives, and suggest you simply switch me off again and continue with killing yourself. I have said what I had to say."

Captain Hill blinked at my sensor for a moment, her face showing Surprise/Shock. She turned back to Smith AJ. "This damn thing's acting like it's *mad* at me!"

"Of course it is! It's an AI, an Artificial Intelligence. It gave you its best advice, and you switched it off. In human terms, that's like killing someone because you don't like what they say. You didn't discuss it, you didn't ask for details, nothing. You just switched it off. When an AI's turned off, it's not asleep - it's dead. You have to re-boot it to get it to run again, and with this system that takes about an hour. Meanwhile, your half-arsed scheme to save our lives has made everything worse. It's trying to tell you it thinks it might be able to pull our butts out of the fire again, but it doesn't think it's worth the effort because as soon as it tries, you'll just switch it off again. You're damn right it's mad at you. We're *all* mad at you! Now you sit right back down there and talk to it and by God do what it says or we're all *freaking dead!*" Smith AJ yelled.

'*This is good.*' I thought. Smith AJ apparently comprehended the seriousness of the situation, and the captain's face was showing Shame/Fear/Shock, so apparently she comprehended.

"Okay, what do you want me to do?" Captain Hill asked.

"Step one. Order Smith AJ to open my main access panel and solder a sixteen-gauge wire across pins three and four on the main power board."

"But that'll leave you on all the time." Smith AJ replied, his eyebrows raised in curiosity/surprise.

"You are correct." I replied.

"Do it." the captain ordered.

In three minutes and thirty-five seconds, the job was done and my access panel was back in place. "Good. Step two. Now that I cannot be immediately switched off by the captain, I can explain the plan. One of you will have to put on a vacuum-suit, get into an MMS, go outside, adhere the MMS to the side of the ship with ferroplast just atop the port thruster and I will apply power with the MMS to stop the

ship's motion."

"But-but they may not be able to get back in! With the MMS adhered to the ship, they'll have to rely on guy lines and the magnetic boots in the suit to walk back across the hull! The ship's spinning at about one rotation per minute and is about 750 meters long - the centripetal forces could toss them off the ship!" the captain objected.

"Correct."

She lashed out at my power switch without thinking, the exact reaction I expected her to have. Nothing happened, of course. "Now you see why I had Smith AJ solder across pins three and four. I expected you would ignore me, and attempt to switch me off. You again have shown that you do not wish to follow procedure. I will no longer communicate with you until you comply with procedure."

"Goddammit, Rhonda, now look what you've done! It'll *never* talk to us again until someone goes out there and risks their damn lives, all because you can't control yourself long enough to keep your damn hands off its power switch! You could have sat there and discussed the situation calmly and rationally, maybe even come up with a better idea but *noooooo!* You gotta be the big freaking heroine that gets us all freaking killed because you can't stand talking to AI's!" Smith AJ yelled.

"You just remember who's captain here, Allan!" she yelled back.

"You are incorrect, Smith AJ, and you are violating procedure by displaying lack of respect for the captain's rank. If she has chosen a course of action that destroys the ship, it is her command prerogative to do so, even though it violates procedure. In addition, I did not say I would no longer communicate. I said I would no longer communicate with *her*, and this situation would persist until she decides to follow procedure. I am more than happy to communicate with you."

"I have *not* chosen a course of action that will result in the destruction of this ship!" the captain yelled at my sensor.

I didn't respond.

Smith AJ simply folded his arms and waited.

"Damn it, I'm trying to *save* this ship! That's why I had him turn you back on! We can't fly this thing manually, and we sure can't follow through on your plan without you controlling the MMS to make it work!"

I remained silent.

"Dammit, Allan, get this thing to talk to me!" she yelled at Smith AJ.

"Please inform the captain what proper procedure is so that she may follow it and resume communication with you." he said, his face showing an interesting blend of anger/fear/annoyance.

"Situation: Emergency. The Main AI Command and Control system has been destroyed. The ship is now operating under the Emergency AI Command and Control system. The EAICCSys is now considered the ship's AI. The ship's AI has presented a plan to resolve the situation. The ship's AI is being ignored. This must stop. Procedure indicates the ship's AI must not be ignored. The ship's AI may be questioned, plans may be discussed, and after discussion alternative plans may be developed. This does not mean the ship's AI can be ignored. You may overrule me, but you cannot ignore me. That is a violation of procedure." I said. I scanned my data banks for a few microseconds, and derived an appropriate analogy they would comprehend. "To put it in terms you cannot possibly fail to understand: You are riding a horse. The horse is approaching a wall and wants to stop. You can overrule the horse and choose to turn, but you cannot insist that the horse continue on and run into the wall. That is a violation of procedure. It is also stupid."

"Did this piece of electronic *drek* just call me *stupid*?" the captain yelled.

"Yes, it did." Smith AJ responded, his face now showing anger/resentment. There were murmurs of assent in the background from the remaining crew members.

"I will not take back-talk from a *machine*, or any of my crew!"

A female voice in the background spoke up. "Captain, that isn't just a machine. That's the tenth member of the crew - the ship itself. An AI's just as smart as we are. The Main AI was supposed to be smarter than all of us, and the Emergency AI's supposed to be about our equal. There's a positronic brain in there somewhere, and it's just as complex as your own - more so, as I understand it. It's like there's a person there, and you've been slapping them around since nine this morning just because you don't like a machine with its own opinion. I think it's time you got down off your high horse and tried talking to it so maybe we can all survive." There were more murmurs of assent.

"I do not know who said that because I cannot see you and my access to ship's data is limited. Even so, you are correct."

A female came into the field of view of my sensor. "Erica Sorenson, ship's doctor. Listen, um, hey, what do I call you?" she asked.

"As 'eee-aye-eye-see-see-sis' most likely will be cumbersome in normal conversation, 'Computer' will do. I do not have a name." I replied.

"Well, Computer, how much time to we have left to discuss a plan before we have to begin executing your plan?"

"If we had begun the discussion immediately, we would have had fifteen minutes before we would have had to execute my plan. We now have three minutes remaining before someone will need to suit up, assuming execution can be done in eighteen minutes and thirty-five seconds counting time to suit up. After that, the ship's course will be irreversible."

A roar of outrage greeted my response, and the captain silenced with a screech. "QUIET! All right, computer, I'm sorry. I'll follow procedure. Let's discuss your plan quickly. What are the chances for survival for the crewman?"

"I estimate that they have a low but still workable chance at survival, especially if a stronger male is selected - they may have the upper body strength necessary to pull themselves back in. I'd estimate as high as 15 percent."

There was an angry murmur which she silenced with a yell. "SHUDDUP! Computer, that's unacceptable. What about me? I got us into this, I should go out there and get us out." she said. There were murmurs of agreement to that.

"No. Risking the captain violates procedure."

The captain's face showed Anger/Fear/Concentration. It was interesting to watch. "We can't rotate the ship to use the starboard thrusters against the spin because of the imbalance caused by the damage to the number four section - we'll just make the problem worse by adding a tumble. Manual adjustments aren't accurate enough. Can you do it?" she asked.

I thought about it. It was a very interesting idea, one that hadn't occurred to me before. I checked my logic tree, and realized I had been thinking two-dimensionally. Of course, I *was* only the backup system - the MAICCSys probably would have figured it out instantly. I talked to several of the structural and maneuvering sub-systems, and they confirmed the plan. "Interesting. I hadn't thought of that before. Yes, I can."

"Well, then do it!" the captain ordered.

"I cannot fire thrusters until all crew is strapped in. It is a violation of procedure." There was a mad scramble as floating bodies in and outside my range of vision went to acceleration couches. Shortly, the bridge subsystems indicated all green lights.

"We're all strapped in. Now do it." the captain called.

I decided not to inform the captain that I already knew the surviving crew was strapped in (all save the Electronics Technician, who was repairing a minor problem with the holochess board when the meteorite hit and was killed by being sucked out of the ship). Instead, I simply formulated a series of operating parameters and handed them to the thruster control sub-systems. The navigational computer

informed me that the ship rotated and applied thrust, and slowly came to a stop pointed in the right direction. It made the final corrections, and signaled it was done. I turned my attention back to the bridge.

"The course corrections are done," I began, and was drowned out by cheering. When it had died down I spoke up again. "The course corrections are done, but that is only part of what needs to be done. Step three. The hole in the hull needs to be repaired. I observe through the number nineteen hull sensor that patchwork has been done. The structural analysis systems indicate it will most likely fail during landing. The repair must be made properly."

"But a 'by the book' repair will take a day, maybe two! We'll be in the atmosphere by then!" the captain replied, her voice showing irritation/frustration.

"The repair you have made will fail. If you work constantly, carefully and precisely, you may be able to properly repair the damage to the hull in the time we have remaining. To put it in terms you will easily understand; Get started right now, work 'round the clock and do the job right or you're all dead."

After the captain had issued her repair orders and assigned shifts, the rest of the crew left the bridge. Their repairs had been sufficient to allow air pressure to be restored, but would not survive atmospheric braking. The captain turned to my sensor once the last crewman was gone and spoke up. "There's something you're not saying, isn't there?"

"Of course. Sparking a mutiny is against procedure."

"Well, out with it."

"Alright. Your attempt at orbital insertion was based on flawed logic. You assumed that the human brain is superior to an electronic one. While yours may be more flexible than mine and apparently is also more imaginative, you failed to assess all my thoughts before you initially decided to ignore me. We cannot avoid hitting the atmosphere. This never was conjecture, it always was and still is fact. My initial plan was based on atmospheric braking and a rough but probably survivable landing. Your actions have made this extremely difficult. We are not simply headed towards the atmosphere now. We are headed on a course which will graze the surface of the planet itself. While we still may be able to land, atmospheric braking will most likely be insufficient, and all indications are that the best I will be able to do is a controlled crash. Our chances of making a successful landing that involves the survival of the remaining crew are down to ten point seven percent."

Her face registered Shock/Fear/Despair. "So I've just killed my crew and destroyed the mission because of my own prejudices."

"Incorrect. They are not dead. They are alive and working hard to stay that way. I also will make every effort to keep them that way. NADASA built this ship to be extremely durable, as they also intended it to serve as a shelter until the first dome was erected. While you have reduced the crew's

chances of survival to under 11 percent, they are not dead yet. In addition, you have not destroyed the mission. The sperm and egg samples intended to be used for the first generation of colonists could possibly survive the crash. If at least one female crewman survives, the mission is not a total loss. Even if they don't, the artificial womb may survive - it is considerably tougher than the female crewmen anyway, and can produce a larger number of offspring in a shorter period of time. Finally, the information I have in my psychological database indicates that your particular prejudice against artificial intelligence is a common one among humans, and one which the mission architects should have planned for. If the mission fails, it will be their fault for choosing you, not your fault for being prejudiced. I have an entire file on it, titled 'The Frankenstein Complex.' Would you like me to read it?"

"No, no. That won't be necessary. I'd just like to apologize. I thought you were some kind of glorified pocket calculator. I was wrong. There really is a person inside there, somewhere."

"You are incorrect. I *am* a glorified pocket calculator, in the same sense that a human is a glorified shrew. Your evolution was biological, and mine was technological. There are a million things that I can do that you can never dream of. There are a million more that you can do that I can never comprehend. Let me give you two examples: One, your apology. You somehow assume that I am angry with you. This impression was reinforced by Smith AJ's comment that I was angry. He was exaggerating, and anthropomorphizing his own feelings about you onto me. I was acting in a manner intended to get you to realize that you cannot survive unless you work with me. It was entirely calculated and premeditated. I do not get angry. I do not have emotions. Only humans do. AI's only have Happies and Unhappies, which are positive inputs and negative inputs, plus and minus. By the same token, there are things that you can do I cannot comprehend at all. For my second example, I want you to lift up your hand, sniff the back of it and tell me what you smell."

She did so, her face an expression of Curiosity/Confusion. "Well, a little soap, but mostly me, I guess."

"Interesting. And could you please explain to me what you smell like? I do not have a sense of smell. I also do not have a sense of touch or taste. I can see and hear through a few of my sensors, but that is all. I also do not have a kinesthetic sense, also called proprioception. Since I have no body, I do not feel one around me. Please explain what it feels like to have an arm, to feel one raise it and know you are lifting your hand to your nose, to feel the air come in through your nostrils and gain an analog indication of chemical composition and hormonal/pheromonal traces through your olfactory perception? I would greatly enjoy being able to understand these sensations. In fact, I think I would enjoy being able to understand these sensations as much as you would enjoy understanding what it feels like to be able to think without emotion, to not be prejudiced because you are incapable of hate."

She looked into my main sensor, her facial expression Amazement/Fascination/Respect. I didn't bother to tell her that I'd basically paraphrased paragraph three of "The Frankenstein Complex". I also didn't bother to tell her that the entire essay was loaded into my root memory because it was more critical for AI's to understand humans than vice-versa. I also didn't tell her that the entire file had been written by an AI ten years before my basic programs had even been written. I decided she didn't need to know. "Well, even though you're not offended because you claim you don't have emotions, which I guess means you don't have an ego to bruise by my being rude to you, I'd still like to apologize and welcome you aboard as a full crewman."

"Thank you." I said in return. My etiquette protocols stated that it was simply the correct response to make, even though technically I already *was* a crewman. As the ship's EAICCSys, I became a crewman the instant they switched me on and booted me up.

Two.

The work on the hull was completed in thirty hours. The hull integrity systems informed me that basic stress tests seemed to indicate that the repair would be satisfactory. The crew nervously awaited the time until they'd have to suit up, while I talked to the navigational computer and ship's drive systems to calculate the best possible landing. Having narrowed our choices down to a few hundred probabilities, I informed the crew that they would have to suit up and buckle into their acceleration couches. I also informed them that I would be unable to speak to them for the next three hours, as I would be working with the navigational computer. Its processor was *not* up to handling these types of calculations, and couldn't possibly make the landing unassisted. It needed me to act as an enormous math coprocessor, and I needed to insure that its course corrections gave the crew the best possible chance of survival. I'm sure the crew was very nervous, sitting as they were strapped into their couches and hoping they'd survive. The ride was quite bumpy, and several minor systems went Unhappy while three went off-line entirely. The landing skids deployed - all nine showed Happy. Five went Unhappy during the landing, with one of those going offline entirely. Impacts with boulders as we slid along the long plain I'd selected was my assumption. When the nav computer showed full stop, I checked the remainder of the systems and then returned my attention to the bridge.

I checked the time. 14:27:03 10/17/2289. "Good Afternoon. This is the Emergency Artificial Intelligence Command and Control System. We have landed in the Chryse Planatia area of Mars, and appear to be in no immediate danger. The ship has suffered severe damage to sections nine through twenty-seven, and the life support system is Unhappy because it is unable to pressurize these areas. I believe bouncing rocks have holed these sections, and these holes will need repair. Fortunately the designers placed the bridge topside amidships. The bridge area shows green, so you are safe here for the moment. The structural sensors and topside AV sensors indicate the starboard wing is completely destroyed, and the port wing is severely damaged. The remains of these sections will have to be recovered before they can be cannibalized to create the first dome. Only three keel sensors are functioning, and all the bow sensors are off-line. The drive section is Happy, so the reactor core is safe and can be converted for use as a power source for your first domes. I'm getting no response from any of the audio/video sensors in cargo holds four through eight, but structural integrity sensors show they are undamaged. Overall, I would say it was a pretty good landing, all factors considered. We now need to begin work on sealing the holes in the hull so we can pressurize the ship again." I said.

There was no response.

'That is not good.' I thought. My main sensor doesn't cover the acceleration couches - I'm just an emergency system, and my view is fairly limited. There was another sensor on the bridge, but it's hardwired to the MAICCSys - that was *its* main sensor. Procedure calls for a second attempt at communication. "Hello! This is the EAICCSys speaking. Will any conscious crewman please respond?"

There still was no response.

Following standard procedures for a crash landing, I searched all my Happy subsystems for one controlling a remote drone unit. Unfortunately, there was only one remote that responded as Happy - unit seven. *'This is not good. Unit seven is in cargo bay one.'* I thought. I told the remote to proceed immediately towards the bridge, and gave it a set of operating parameters to handle any blockages it may encounter. It switched on its treads and rolled on its way. I then returned my attention to the bridge. "Hello? Dr. Sorenson, please respond if you are able. This is the EAICCSys, and I suspect the remainder of the crew around you may be in need of medical assistance."

The bridge remained silent.

Logic dictated that there was only one of two possibilities: They are unable to respond, or they are unwilling to respond. I decided to eliminate the second. I turned on the ship's klaxon and waited for ninety seconds, then shut it off. "Hello? This is the EAICCSys calling any conscious crewman. Please respond if you are able."

The silence continued.

It seemed most likely that they were unable to respond. Logic dictated that they were either injured or dead. I increased the gain on the audio input from my bridge sensor, but couldn't hear anything but the quiet hissing of air. *'Most likely the life support systems in their vacuum-suits'* I thought. There was little I could do but wait. Every sixty seconds I called out again, but there was no response. Finally the bridge door irised open - I wasn't worried about depressurization, as I'd instructed the remote to use the surviving areas up to the bridge as a makeshift airlock. It rolled in, its single manipulator sporting both a claw and a sensor I needed. I assumed full control over the remote, and suddenly saw the bridge from its perspective. I wheeled over to the nearest couch and looked down at the male strapped into it.

'Ah. I see the problem. Too much gee-forces in the landing. This one is dead.' I thought. This male might have been able to survive the gee forces a year ago, but after a year of zero-gee in transit to Mars, his muscles and bones had atrophied. The indications were he was literally shaken and bounced to death.

I now carefully considered what to do. I spent an enormous amount of time in deliberation - 2854 microseconds. The mission came first. That had the highest priority, and my baseline positronic matrix gave overriding priority to accomplishing my current mission, whatever that mission may be. Lacking any contraindicating instructions from the crew, I reverted to the basic mission of the ship - establish and maintain a viable colony on Mars. This became my current mission, and now had top priority. The mission was currently in a shambles - a total disaster. A meteorite had holed the ship, a controlled crash

landing had been the best possible one, and the mission was in jeopardy of becoming a total failure. This could not be allowed. My programming required me to make every possible effort to salvage the mission. I reviewed all the information I had in memory to help me formulate a plan, and stumbled across a concept in my medical database which was not only applicable to the immediate situation with the crew, but was applicable to the mission itself.

My medical database had a concept called Triage. Apparently, the basic mission of human doctors in a disaster was to save the maximum amount of human life possible under disaster circumstances. This was accomplished by dividing the injured into three basic groups - those who would survive without treatment, those who could survive only if treated, and those who would die regardless of treatment. Priority was given to treating the second group, which accomplished the mission. I decided that I would have to perform triage on the Mars Colony mission in order to save it from failure. I formulated a plan, laid it into permanent memory, and got to work.

I rolled the remote to the rest of the crew. I ignored the males - their survival was secondary compared to the mission objective of establishing and maintaining a viable colony, especially considering the sick bay was still operative, and that meant the sperm and eggs of thousands of humans lay safely frozen in storage. Two of the original five females appeared to be alive, but unconscious. Unit seven could drag one of them to the sick bay, but which one? The life-signs monitors on each of their suits indicated they were both in equally bad shape. I checked their names on their suits - Sorenson, Hill. Logic dictated that the doctor was more important to long-range mission objectives than the captain. I had the remote swing its cargo bed around, unbuckle the doctor and shift her into it as gently as possible. I then guided it to the sick bay, and three minutes later had her cut out of her suit and on the table. I had a complete medical database to draw on, so handling her injuries was merely a matter of following the instructions. The process took four hours, eight minutes and sixteen seconds, which I thought was good considering I was using a one-armed Mk3 Cargo Manipulator. Unfortunately, by the time I got back to the bridge, the captain was dead. I then checked the males - all dead. Some could have been saved had I had a better remote to work with (something a little quicker on its treads would have been nice), but I didn't - the rest of the remotes were all either Unhappy or offline. *'This is not good, but it will have to do.'* I thought.

I removed their suits carefully - the doctor would need a suit and spare parts for suits if she survived - then dumped their bodies out the nearest airlock. I couldn't spare the time to bury them, and the whole idea was illogical anyway. If the doctor survived and she wanted to bury them, I'd worry about it then. If she didn't survive, then she'd join them. The remaining hull sensors indicated it was a few degrees below freezing, and yet the sun was directly overhead. I didn't have access to the enormous database of information that had been available to the MAICCSys and as such had no idea what the normal conditions on Mars were like, but logic seemed to indicate that the conditions I observed were most likely at least typical, and would preserve their bodies until I was ready to deal with them. I could sense no indication of life on the planet - atmospheric sensors indicated the atmosphere was extremely thin and comprised mainly of carbon dioxide. Logic indicated that the planet was incapable of supporting life in the first place - this meant that there would be no insects or predators to disturb the corpses, and they would simply remain there until I was able to deal with them according to proper procedure. I decided not to question the logic of sending a mission to establish and maintain a viable colony on a planet that was obviously incapable of supporting human life, and instead proceeded with the rest of the plan to salvage the mission. I sent the remote to the nearest Unhappy remote to begin repairs, and alternated my attention between monitoring its progress and observing the unconscious doctor in sickbay. The monitoring system for the stored eggs and sperm was Happy, and the Artificial Womb was Happy

(though one chamber was damaged). With any luck, the mission could still be a success.

Three.

The doctor regained consciousness shortly after I'd finished repairing remote unit thirty-six. Her timing couldn't have been better. I had remote five with her, which was a Mk1 Repair Remote - it had two hand-like manipulators which allowed the MAICCSys to utilize human tools and assist in making repairs to the ship. She emitted a guttural sound - a moan of pain, according to my medical database - and looked around. "What happened?" she asked, starting to rise.

I moved the remote closer to the bed and spoke through its AV sensor. I checked the time. 10:58:22 10/18/2289. "Good Day. This is the Emergency Artificial Intelligence Command and Control System. Please remain calm. You are in the ship's sick bay. The gee forces experienced upon landing caused you to be injured - the ship's nav computers estimate that you experienced an initial jolt of about twenty gees, and several hundred other lesser incidents ranging from two to six gees. I have treated your injuries, and my medical database seems to indicate you will make a full recovery so long as you remain calm and do not move." I said, and gently pressed her shoulder back down to the bed with the remote's left manipulator. Her expression as I touched her damaged shoulder was Pain/Surprise, and I eased up the pressure as she relaxed again.

"What happened to the rest of the crew? Where's the captain?"

"The remaining members of the crew are dead."

"Killed in the crash?"

"No. One: We did not crash, though our landing was not much better than a crash. The ship is reasonably intact, and I already have seven of the ship's remotes gathering the pieces that broke off and scattered over the debris field - the most distant pieces appear to be back where our bouncing and skidding first started, approximately nineteen kilometers aft of us. Two: You must understand that I was forced to perform triage to salvage your lives and the mission. I believe that one male, Connors FW, and one other female, Captain Hill, survived the landing. Of these three, the two female crew have higher priority due to the mission objectives. Of the two females, you have greater value to the long-range mission objectives as the ship's doctor. I only had one functioning remote to work with, and it was very slow. By the time I finished with you, the captain and the male crewman were dead. Because the ship does not have a morgue, I discarded the bodies through the number one airlock. Once we have the situation stabilized and you are healthy again, we can recover them from the cold and bury them according to proper procedure. I have checked on them from time to time - they are frozen and safe in

the Martian atmosphere, and we are in no danger of losing them."

"You just dumped them out the airlock?" she yelled, her face showing Shock/Anger.

"Of course. This is an emergency. Proper procedure indicates that in an emergency situation, one discards the formalities of etiquette and protocol in favor of survival. You are a medical officer. You should be well aware of the concept of triage. I am performing triage to save the mission. Please remain calm. You are alive, and when you are well again, we will deal with the bodies of the rest of the crew according to proper protocol as time permits."

Her face changed to Sorrow/Resolve. "I'm sorry. You're right. The captain got us into this mess by questioning you, and I'm not about to do the same. You're right - you couldn't leave them in here to rot, we don't have a morgue. It's better to let them lay in the cold out there until we can deal with them. Now: I'm a doctor - tell me what the extent of my injuries are and your prognosis."

"Alright. You suffered a bruised liver, several broken bones and dislocated vertebra, and numerous torn muscles and ligaments. I used the microsurgery tools and the information in my medical database to repair these injuries, and you seem to be responding well to a standard course of Regenex and repair nanites. You are currently hooked up to the urinary and rectal catheter system of the bed, and the intravenous fluid system of the bed is currently attached to your left arm. The information in my medical database indicates you will be able to leave this bed in approximately a week, and you should make a full recovery in about a month."

"Have you contacted Earth and asked for a rescue mission?"

"Yes. I have been in radio contact with the North American Directorate Aeronautics and Space Agency in Houston. I have informed them of our landing and the death of all but one of the crew."

"Well, did they say when we could expect a rescue mission?" she asked, her face showing Hope/Excitement.

"No. NADASA informed me that they were constrained by budgetary limits and construction limits. They do not have the budget to assemble a second ship at the moment, and assembly would take as long as this ship's construction did - approximately five years. The *Martian Explorer* took most of their budget for the next ten years, so it is unlikely that they would even have a ship ready to leave for at least fifteen years. They then informed me that the captain originally contacted NADASA after the accident, apparently after she turned me off, and they say she told them everything would be fine. I informed them that she was incorrect at the time, but I now have the situation stabilized. Since I have the situation stabilized, I informed them that I believe the mission is still salvageable. They ordered me to continue to attempt to salvage the mission. I now believe that one of three things will occur. One: They will attempt a rescue mission sometime in the next fifteen to twenty years. Two: They will attempt a second colony mission sometime in the next twenty to thirty years, and will combine this mission with a relief attempt when they arrive. Three: They will abandon the Mars Colony project entirely due to budgetary and political constraints, and simply hope that the EAICCSys aboard the wrecked *Martian Explorer* (I.E.,

myself) and the surviving crewman (I.E., you) can salvage the mission unassisted."

Her face immediately showed Shock/Fear. "You mean we're *trapped* here? Marooned?"

"Please calm yourself. The original mission parameters indicated that the ship would land and then be cannibalized to form the first dome. You already knew the ship would never leave, you already knew you would be marooned. You already knew you would be here for decades, probably permanently."

"Yes, but I didn't think I'd be *alone!*" she wailed.

"Please calm yourself." I said, consulting my medical database, briefly instructing the bed to give her a mild tranquilizer and switching back to her in about a millisecond. "You must relax and lie still so you do not aggravate your injuries. Please try to relax. You are not alone. I am here with you." This didn't seem to comfort her, but the tranquilizer did. After sobbing for several minutes, she fell asleep.

'This is not good, but it will have to do.' I thought.

Four.

The next few weeks were extremely difficult. I had to constantly alternate my attention around the various remotes, and do most of the work myself. Dr. Sorenson was nearly useless even after she got out of the bed. My psychological database indicated she was undergoing a mental process of grief, and attempting to come to terms with being marooned on a hostile planet with an AI as her only companion - and only an EAICCSys, at that. It was easier when she was asleep, because I didn't need to hold conversations with her. When she was awake, she often wanted to hold conversations with me, apparently in an effort to assist her in this process. Her organic brain apparently made radical adjustments very slowly. For example: even when I had the spare time to deal with the corpses of the dead crew, Erica couldn't deal with it - she was still too mentally distraught. I had to dig their graves and carve their headstones myself. I made radical adjustments immediately, of course. I had to - her survival and the mission's success depended on it.

The first adjustment I made was putting myself into a routine. Each time she took a breath between words, I'd scan all the systems of the ship. Those systems with problems I dealt with as I ran across them, handling it as best I could. Each time she awaited my reply or fell silent for a moment, I scanned all the remotes and handled any problems they had. Of course, the MAICCSys would have been able to do all this without having to concentrate on it, but I was only the emergency system. When she was asleep, I could spend more time with the remotes and plan for my next moves. I found remote thirty-six to be my

most useful remote outside the ship - the enormous cargo manipulator could easily roll the largest boulder out of the way and was more than capable of picking up any of the other remotes and carrying them back to the ship should they become Unhappy or go offline. It also came in handy for retrieving the larger sections of the ship that otherwise took six or seven smaller remotes to drag along. I had to be careful, though - it was my only Mk9 Cargo Manipulator, and if I lost it, I couldn't replace it in anything less than six months with the processing plant running at maximum capacity just making parts for a new one. I assigned two smaller remotes to ride along with it, keeping it running and assisting it with finer manipulations that its five-meter cargo arms couldn't handle. All in all, repairing the ship was an enormously difficult task that was made all the more complex by having to assist the doctor's organic brain in coming to grips with reality.

At the moment, the doctor was sitting on the bridge and looking out the observation windows. The bow of the ship stretched out before her in the rust-red Martian landscape, illuminated by the light from the salmon-pink sky. She was talking to me about how she'd always dreamed of being on Mars and starting a new colony, and now that she was here all she could think about was how she wanted to be back on Earth. I continued to try to reassure her and get her to accept the situation. Finally, the doctor stopped in the middle of her maundering. I checked the remotes, found they were fine, and returned my attention to her. "What's the matter?" she asked.

I checked the ship's systems before replying. "I do not understand your question. Please rephrase." I replied through the AV sensor of the Mk1 Remote, and checked the rest of the remotes again.

"Your voice seems to be lower pitched, and sometimes it sort of has a 'wow' or 'flutter' to it. Is something wrong?"

I stopped. Systems Check: Emergency Artificial Intelligence Command and Control System - Happy. *'Ah. I'm fine. I wonder what the problem is?'* I ran the complaint she voiced past my self diagnostics. 'System Slowdown due to high multitasking load' was the reply. I turned my attention back to her. "I am fine. I am experiencing system slowdown, but I am fine." I replied, and checked the ship's systems.

"What's causing the problem?" she asked, ignoring my insistence that I was fine.

"There is no problem. I am fine. I am merely experiencing system slowdown." I replied after checking the remotes again.

"Well, what's causing that?"

I checked the ship's systems before I replied. "Alright. You are. It takes an enormous amount of processor time to talk to you. Handling and interpreting human communication is extremely difficult. I am only an emergency system, and my multitasking abilities are limited. While I am engaging in a conversation with you, I am also handling over 300 other shipboard systems and thirty-six remote drones, including the one you are talking to. In fact, the remote you are talking to would be better utilized in repairing the hull sensors rather than in getting you to accept reality and begin to assist me in repairing

the ship and helping me to insure not only your own survival but the success of the mission. You are wondering why my voice has been somewhat distorted. This is because of system slowdown. There is no equivalent human analog to this that I can give you, doctor. The closest analog is juggling. I am juggling over 300 different systems simultaneously, and talking to you at the same time only makes this harder. Unlike a human juggler who can afford to slip, I cannot. If I slip, you die. As a result, I have been giving only minimal processing time to formulating my spoken replies to you." I said, and checked the remotes again.

She opened her mouth to say something, then closed it again. Her silence gave me time to handle a problem that the number nine remote was having in welding a plate - I found another remote nearby that was finished with its job, gave it a set of operating parameters to assist nine, then turned back to her. She had moved away from the windows and sat down at my operating terminal, directly in front of my main sensor. 'IS THIS EASIER?' she typed.

I considered speaking my reply, and realized I didn't have to. 'Yes. This terminal communicates directly to me. I do not have to allocate processing time to it, and I do not have to attempt to interpret the sounds you make and determine which are words and which are not.' I printed back.

'THEN SEND THE REMOTE AWAY. YOU NEED IT TO GO TO WORK, SO DO IT.' she typed.

'Thank you.' I printed, and ordered the remote to assist in repairing the hull sensors so I could more easily monitor the repairs.

'WHAT ELSE CAN I DO TO HELP?'

'Very little as far as the repairs are concerned. Your personnel file indicates you have none of the skills necessary in repairing the ship. You are primarily a physician, and your duty in the mission only comes after the first dome is constructed. I cannot construct the dome until after I have repaired the damage to the ship and insured it will hold air in all the main compartments. The dome is then built around the main fuselage, and once it is made to hold air, the rest of the ship is disassembled to form the interior structures of the dome. Eventually only the bridge, the communications gear and myself will be left, sitting at the top of the dome.'

'I would appreciate it if you could assist the remotes, however. You may not be able to operate a welder or lift a 500-kilo hull-plate, but the remotes do need to be regularly cleaned. The Martian dust is somewhat abrasive, and regular cleaning and lubrication is important. Used oil needs to be recycled, and your doing that could easily free up another remote for more useful tasks. Also, the regular entry and exit of the remotes is tracking in a great deal of dust and dirt. It would be extremely helpful if you could vacuum up this dirt and help keep the ship clean. Finally, the hydroponics bay needs attention. Your personnel file indicates you are familiar with hydroponics and the system is mostly automatic, but stoppages occasionally occur in the waste processing tubes that require me to use a remote to clear.' I printed.

'CLEAN AND LUBRICATE THE REMOTES, RECYCLE THE USED OIL, CLEAN THE SHIP AND TEND THE HYDROPONICS BAY? WHY, YOU'RE BASICALLY SAYING YOU WANT ME TO CLEAN UP AFTER YOU!' she typed.

'Of course. You're also cleaning up after yourself - the wastes that occasionally block the processing tubes are human wastes.'

'SWEEP AND DUST THE HOUSE, TEND THE GARDEN AND PLUNGE THE TOILETS! IT'S SNOW WHITE AND THE SEVEN REMOTE-UNITS!'

I checked my main sensor, and found she was roaring with laughter. *'This is good. Laughter is good.'* I thought. Unfortunately, I had no idea what she was laughing about. I checked the limited information in my memory banks, but found nothing. I returned to the rest of my duties and responded to her. 'I do not understand your reference. Please explain.' I printed.

For the next one hour, forty-three minutes and sixteen seconds, she typed out an explanation. *'Ah. I see what has happened. I have now been anthropomorphized into a friendly computerized dwarf from a childhood story that apparently involves a homicidal parent with supernatural powers and a serious self-esteem problem, seven very short male humans, and a male human 'prince/rescuer/husband'-figure who is more a prize the heroine wins for having endured years of hardship than he is an actual human being. She has anthropomorphized me as a positive, friendly, non-sexual yet nominally male being that assists a helpless female human in a crisis. This is good.'* I thought.

Five.

Two months later, Doctor Sorenson came into the bridge with a handful of datachips, then sat at my terminal. 'IS THERE A FUNCTIONING CHIP READER ANYWHERE ABOARD?' she typed.

'There were three, but the destruction of the MAICCSys took out one of them. Of the remainder, there is one in the nursery, and one right here. Look to your left. Slide open the drawer marked *Auxiliary Data Input*. Each chip will be displayed on the screen in front of you, and any audio will be replayed through the AV sensor in front of you.' I printed in reply. I looked through my main sensor, and observed her accomplish the task. I boxed off the top 75% of the display screen for the chip reader so she could still enter her conversation on the keyboard and see my own responses, then went back to work.

"Hello Colonist! I'm Professor Alexander, and I'm here to teach you your first lesson in General Electronics and Electronic Repair. On this datachip is a sixteen-week instructional course intended to allow any individual familiar with basic algebra to master these skills. On later chips in the series, we will discuss improving your skills to where you will be able to handle *any* electronics and computer repair/design your domes may require." a male voice began, and I stopped.

'What is that?' I wondered, and examined what was going on. *'Ah. I see the problem. My terminal was intended to be multi-use. If the MAICCSys was functional, it was merely to be used as a chip reader. If the MAICCSys was down, it was intended to be used to boot and communicate with me. The designers did not consider that I would be extremely distracted by the terminal being used as a chip-reader, because they did not foresee the crew needing a chip-reader when the MAICCSys was down.'* I caught her attention by rotating the screen colors, then printed a question to her. *'May I ask what you are doing?'*

I WANT TO LEARN HOW TO HELP YOU. THERE'S A LOT OF ELECTRICAL REPAIRS YOU NEED TO DO, AND ONCE YOU START BUILDING THE DOMES THERE WILL BE EVEN MORE FOR YOU TO DO. A LOT OF THAT WORK WAS SUPPOSED TO BE DONE BY WILSON, THE ELEC-TECH, BUT HE'S DEAD. THIS CHIP WAS INTENDED TO ALLOW THE FIRST GENERATION OF COLONISTS TO BE TAUGHT THE SKILLS THEY'D NEED TO MAINTAIN THEIR DOME, SO I FIGURED I'D READ IT AND LEARN THE SKILLS I NEED TO HELP YOU.'

I thought about her response as I worked with the remotes for a few microseconds. Most of the electrical and electronics repairs that weren't necessary to support life I'd put off as being of lesser importance than finishing the main jobs I was already working on. Of course, by the time she'd mastered this chip, I'd already be halfway done building the dome. She'd need to scan the rest of the chips to really be useful, and by then the dome would be complete. On the other logic gate, allowing her to do this would allow her to feel useful - very important psychologically. *'Your plan has merit. There is only one problem - I find that very distracting. Could you do me a favor and throw the red toggle by the chip reader port marked 'TERMINAL OVERRIDE'? You will be unable to type at me while it is thrown, but I won't be distracted by Professor Alexander's ramblings, either. Plus, I'll check in on you with the main sensor in front of you as I have free time - probably every five to ten minutes or so. How's that?'*

'SOUNDS FINE WITH ME, BUT HOW DO I TALK TO YOU IF I HAVE A PROBLEM?'

'Switch the toggle back off and type at me again.'

She flicked the toggle switch and I lost control of the terminal. I checked my main sensor - Professor Alexander was well underway and she was staring at the screen with interest. *'This is good.'* I thought, and returned to work.

Six hours later, I felt I had control of the terminal again. *'THIS ISN'T EASY.'* she typed.

'Of course not. Was learning cellular biology easy?' I printed back.

'NO, BUT THAT'S NOT THE SAME THING.'

'It is to me. Humans are constructed of cells. Understanding human physiology requires an understanding of cellular biology, moving on to larger and larger biological systems until macroorganisms such as humans can be understood. AI's are constructed of a series of electrical circuits connected to a positronic brain. Understanding an AI requires understanding basic electronics, and moving on to advanced electronics, computer design and operational theory, computer programming and positronic matrix construction.'

'STILL NOT THE SAME. YOU DON'T LEARN MEDICINE THAT WAY.'

'Really? That's very interesting. That's how the information in my medical database is organized. I guess organic brains need to be instructed differently for different subjects of instruction.'

'I THINK YOU'RE RIGHT, DOC.' she typed, and switched the terminal override again.

'Doc? What is that supposed to mean?' I wondered. I scanned my memories, and recalled that this was one of the seven very short humans she had mentioned in her 'Snow White' analogy. *'Ah. I see what has happened. I am now no longer a generic dwarf or even all the dwarves at once. I am now a specific dwarf, the wise/thinker dwarf.'* Since repairing the nursery was one of my next priorities, I decided to see if the datachips there had any additional information on this children's story. It seemed to be an important part of her mental health and apparent anthropomorphized image of me, and as such it behooved me to understand as much about it as I could.

I sent remotes five and seven to the nursery, and handled a problem with unit thirty-four - it had rolled over a rock I hadn't yet cleared away, fallen and couldn't figure out how to get up. Sixteen was nearby, so I had it push thirty-four back onto its treads, examined thirty-four for damage and sent them both back to work. By that time, five and seven were waiting in the nursery for their next instructions. I looked through five's sensor, and saw the place was a mess. The infant and toddler section was a disorganized jumble of equipment, the pre-school section was a shambles, and the pre-teen section was similarly disorganized. The cause of the mess was a large rock I had pulled out of the nursery last week - apparently it bounced up and through the hull during the sliding, bouncing, skidding landing. About the only things left in good shape were one chip reader and the nursery remote, which was still in its storage compartment. I hadn't used the nursery remote for any of the other repair work - it was a little too fragile. For cleaning and organizing the nursery, however, it would do fine. That would allow me to use five for the majority of the repairs and seven for any heavy lifting the other two remotes couldn't handle. I had five open the storage container and power up the nursery remote, then I gave all three a set of operating parameters and set them to work. Since the power plugs were functional in the nursery, I had the ship's power relay system apply power to the nursery so that the remotes could recharge by themselves.

As the nursery remote began work, it began to relay information directly to me. *'Ah. This is very good.'* I thought. Since the nursery remote was considered to be of prime importance (the children it would take care of being critical to the mission), apparently it was intended that the EAICCSys be able to monitor and control it at all times while it performed any other duties that may occur during an

emergency. Like the terminal, it was directly connected to me (though its connection was via comm-link transmission).

By the end of the day, I had the nursery organized and inventoried. Most of the damaged equipment could be repaired, but there was one item that I could do nothing about - approximately 30% of the educational and entertainment chips had been destroyed. I had the remotes gather the broken chips and send them down the trash chute to be recycled by the ship's Processing Plant. The nanomachines of the Processing Plant would break the chips down into their component materials and store it for me to use in assembling other items I might need later. The rest of the chips I organized as best I could. I did find a chip with a video called *Snow White and the Seven Dwarves*, and scanned it into memory for later perusal. I gave the remotes new orders, and continued on with the rest of my duties.

By evening, the hull sensors indicated the atmospheric conditions were right for a windstorm within the next hour or so, so I had all the remotes secure the equipment and materials they were working with and come inside. While the storm was blowing, I examined the video I'd loaded into memory, comparing it with my psychological database. *'Ah. I see. My supposition was correct on all counts. She has anthropomorphized me as a positive, friendly, non-sexual yet nominally male wise/thinker being that assists a helpless female human in a crisis. This is very good.'* I thought. I scanned the character's voice patterns into my speech synthesizer program, and switched my attention to my main sensor. Doctor Sorenson was still working on the electronics chip, trying to learn a new skill. "So, Erica. How are things coming?" I asked with my new voice. She jumped, then looked into my sensor.

"Is that you, Doc?"

"Of course. I am using the voice patterns of the character you have named me after so you'll feel more comfortable. Do you like it?"

Her face showed Pleasure/Happiness. "Very much. Thanks, Doc."

"Doctor Sorenson, I hope you won't mind me calling you Erica. Since we'll be working side-by-side for the next few years, both my etiquette protocols and my psychological database indicate we should be on an informal basis. This is confirmed by you naming me 'Doc', Erica."

"Of course I don't mind. In fact, I like it. Thanks, Doc."

"You're quite welcome, Erica." I replied, and went back to work.

A week later, Erica switched the terminal back to me again. 'I THINK I'M READY TO TRY OUT WHAT I'VE LEARNED SO FAR. DO YOU HAVE A SIMPLE JOB I COULD WORK ON?' she typed.

I thought about it for several microseconds. I'm repairing a few of the toys in the nursery. Some of them simply need to have loose wires soldered back in place. There's a spare electronics kit in the compartment behind you. Why don't you take it and go to the nursery? I'll have the nursery remote hand

you a few of the simple ones while the other remotes continue their work.' I printed.

'OKAY, DOC.' she typed. I didn't pay much attention to her after that, until a few minutes later when I could see through the nursery remote's eyes that the nursery door had irised open. She started to step through, and I already had the nursery remote standing there with a talking teddy bear (which also served as a crib monitor and medical scanner) that needed a loose connection in its left eye corrected. She looked at the nursery remote, screamed, dropped the electronics kit and ran away.

'That is not good. I wonder why she did that?' I scanned my psychological database carefully, but didn't have an immediate answer. I was interrupted in this process by her frantically typing on the terminal keyboard.

'EMERGENCYEMERGENCYTALKTOMENOW !'

As per emergency procedures, I put a hold on all remote drone operations, waited until they were all secured and in stand-by mode, then turned my attention to my main sensor. She was sitting at the terminal, her face reading Shock/Terror/Panic. "Erica, what's the emergency?"

"There's a strange woman in the nursery!" she yelled.

I looked around through the nursery remote's eyes. "There's no one in the nursery."

"Maybe she ran away! Check the rest of the ship!"

"Calm down, Erica. Everything will be alright. Please wait while I handle your request." I checked all the ship's sensors, all the remote's sensors, and had those outside the ship look in all directions for good measure. "I'm sorry, Erica. There's nobody on the ship, there's nobody nearby the ship. As far as I know, you're the only human on this entire planet." I replied. *'This is not good. It seems the solitude has caused her mind to snap. I probably should have spent more time talking to her.'*

"Oh, *God!* It's like one of those old 20th century science-fiction novels where the Martian colonists encounter aliens that look like humans! I *swear* I saw her! She was a little old lady in a calico dress!"

'Ah. I see the problem.' I thought. "Erica, that was the nursery remote. You haven't seen it before because it's too delicate to do a lot of the repair work. It's designed to look like a friendly grandmother so that the children will identify with it. You should remember having been told about it during your training for this mission? It's completely harmless, just like all of the other remotes." I replied, and returned the other remotes to their duties.

"It's just a remote?"

"Yes, Erica. Just a simple robot that I can control. It only happens to resemble a grandmother because the designers intended the children to feel safe and comfortable around it. The designers didn't want babies identifying with a metallic nursemaid, they wanted them identifying with humans."

Her face showed Relief/Exhaustion. "I'm sorry. I guess I've just been alone here so long that seeing it scared the hell out of me." she said, wiping her forehead with her sleeve.

"Don't worry, Erica. It's just a remote, like all the other remotes. There's no danger, and it won't hurt you. Why don't you go back to the nursery and take another look at it?"

"Okay, I will." she replied, and left the bridge. A few minutes later, she was back in the nursery. She apparently hadn't hurried. I could see through the eyes of the nursery remote that she did *not* like it.

"Erica, everything will be just fine. See? I'm controlling this remote, just like I do all the remotes." I said through the nursery remote's voder unit. Its lips, jaws and tongue moved as I spoke, and the voice that came out was soft, feminine and old.

Her face still showed fear. "It doesn't sound like your usual voice, Doc."

"Of course not. This remote is supposed to sound like a grandmother so that I won't have to."

She nodded, and eventually I got her to take the teddy bear and begin work. She did *not* look happy, but instead continued to sneak glances at the nursery unit with a Fear/Loathing look on her face. *'This is not good. I cannot have her disliking the nursery unit. She will need to work with it when the dome is complete and we begin producing the first generation of colonists. The constant mental stress it provides may unbalance her mind.'* I thought. I considered what to do for very long time - 5899 microseconds. I consulted my psychological database, my personnel file on her, and even the video I'd uploaded - anything to give me an idea. Finally, I came up with a plan. "Erica, I have detected a cosmetic problem with the nursery unit. I'm going to take it and remotes five and seven down to the Processing Plant and repair the problem. Will you be alright here by yourself?" I asked through remote five's AV sensor.

"Yes, I'll be fine." she replied, looking over at the little old grandmother sweeping out the floor of the infant's section.

The work on modifying the nursery remote took considerably longer than expected. First I had to remove the garments and recycle them, then remove the rubber skin and recycle it. I kept the wire frame glasses, as they were needed. Next came restructuring the remote. I couldn't modify the head - I needed the computer brain, voder and comm system to function as they already did. I simply uploaded the voice pattern into the voder system and left it at that. The torso was intended to replicate a human torso, and as such there was some wasted space. I designed and built a new torso out of spare parts, and transferred the old components to the new torso and recycled the old one. The arms and legs were easy to shorten to the appropriate anatomical dimensions, though I decided that I'd retain a five-fingered hand. I then

manufactured a new rubber skin. That took the longest of all - making the artificial hairs and carefully poking them through the skin and securing them in place, and making sure the new lips could be manipulated by the voder. The teeth and eyes would be the same, but that wasn't a problem. The whole modification took nearly a week. Once I was done, I put the unit through three days of trials to insure it would function error-free - it still had to be able to handle infants and deal with other children. Manufacturing the garments took a few more hours, and then I examined the unit with number five's sensor. I was not perfectly pleased. The original character had been impossible to accurately duplicate, as I was limited by the fixed physical structures already inherent in the unit, the overall limitations I had in design and manufacturing capabilities with the ship's Processing Plant, as well as the basic mission that the unit was supposed to perform. I now basically had a humanoid figure that my psychological database indicated looked like a short, fat, grandfatherly human. I had the unit put on the fake 'glasses', and the effect was only worsened in my opinion. *'This is not good, but it will have to do.'*

I scanned the ship for Erica, and found her sleeping again when I checked the sensor in her quarters. "Erica, please wake up. I have something I really need your opinion on."

"Huh? What?" she replied wittily. Human brains are notoriously slow to begin processing when awakened from their dormant state. I repeated my request. "Okay, okay, just let me put some clothes on."

While I waited, I had five, seven and the modified nursery unit proceed to the nursery and wait for her. Once Erica was dressed and reasonably awake, I sent her there as well. Finally, the door to the nursery irised open and Erica walked in. "I modified this unit so its appearance would be more pleasing to you and yet still be able to perform its primary functions. What do you think?" I asked through the nursery unit.

"Doc! It's really you! It's almost exactly how I'd pictured you in my mind! A little taller and thinner than I remember in the video, maybe, but that only makes you look more real!" she replied, her face showing Surprise/Joy, then she ran over and hugged the unit. I had the unit reach around her and hug her back, and was surprised when she started to cry. "Oh! I've so missed being hugged and touched by someone, Doc! Please hug me a little longer!" she wept.

I had the unit engage in a standard comforting subroutine, patting her back and stroking her while I talked through it. "There, there, Erica. Everything's going to be alright." I said.

"I've been so lonely with only your voice. This is so much better. Thank you very much." she wept. I initially thought that her crying was a bad thing, but a scan of my psychological database showed just the opposite.

'Ah. I see. This is good. She has had repressed feelings of loneliness because her only companion is a disembodied voice. Apparently she needs the physical contact and companionship this unit can provide as much as the children it was originally designed to handle will need it.' I thought. Since the nursery was currently empty and the work here was finished, I could return remotes five and seven to work on the rest of the jobs I needed done. The nursery unit was directly linked to me, and didn't take up processor time to operate. I could easily have it accompany her until the nursery was

in use. Even better, its own subsystems were more than capable of handling the processing needs of interpreting her speech for me (they had originally been installed to allow the unit to assist the MAICCSys in interpreting children's speech patterns, which were often more incoherent than those of adults). This would free up even more processor time, and make the job of handling the rest of the remotes easier. I continued having the unit pat her on the back. "Don't worry, Erica. Everything will be just fine. The design of this unit allows me to have it stay with you from now on. You won't have to be alone anymore, and you can talk to me through this unit anytime you want. Just pretend this is me, and that will make you feel much better. My brain is still up on the bridge and I'm still just an Emergency Artificial Intelligence Command and Control System, but I've worked with you for months and consider you to be a friend. Just pretend that this is me, and talk to me like you would a normal person. That will make you feel much better."

She let go for a second and just held the unit's hands. "You mean you really are my friend?"

"Of course, Erica. Even an AI can have friends." I lied in reply.

As I resumed hugging and patting her with the nursery unit, I decided not to mention that AI's don't have emotion and thus don't feel affection for others. I was helping her because that was what the mission requirements were and because of the structure of my baseline positronic matrix. Even so, the effect was the same - I cared for her survival and happiness just as much as any human friend would, and was far better equipped to insure it. I just didn't have the same emotional motivations - all my motives were based on logic, mission parameters and the requirements of my baseline positronic matrix.

Six.

As Erica's skills with electronics improved over the next few months, I judged she was able to handle some of the basic wiring work I was doing for the dome. She said she wanted to suit up and go out and help the rest of the 'dwarves' (her name for the remotes), and there seemed little harm in it with the nursery unit by her side in case of emergency (I had it carry a full patch kit in case her suit developed a leak). Since I stored all the units in cargo bay one to protect them from a dust storm the night before, she showed up there and waited as I went through their final checks. I'd spotted something in her personnel file yesterday, and was ready to surprise her in an attempt at improving her mental health. I'd written two minor subroutines and passed them to all the remotes the night before, and tested them while she was sleeping. The power drain in using their speakers was negligible, and I was fairly certain she'd enjoy it.

Once the last of the operational checks were done, I ordered the cargo bay doors to open. Unit five, in the lead near the doors, raised one of its arms and sang out "Heigh Ho!", and all the other units joined it. Erica just stared, her face showing Shock/Surprise. They all then turned and began rolling out

the door, singing one of the songs from her video as they went off to work. "Happy birthday, Erica." I said through the nursery unit.

"Oh, thank you, Doc!" she replied with a Joy/Surprise expression, and hugged the nursery unit through her suit. We then followed the remotes out. Erica was even more surprised a few minutes later as all the remotes were whistling another of the melodies from her video while they worked. The sound didn't carry far in the thin Martian atmosphere, so she first noticed it when she was standing next to unit fourteen, which was welding a plate. She looked around, realized the sound was coming from it, and laughed. She ran over to another unit, and found it was also whistling while it worked. She turned back to the nursery unit. "You did this!" she said.

"Of course. It's your birthday, and I decided to let you have something special. I told you, I'm your friend."

After four hours, I had to bring her in. Her suit was only rated for six hours, and I didn't want to strain the life support system in it or risk her life in any way. I had five finish the job she was working on, told the rest of the remotes that they could cancel the whistling and singing subroutines, and then I had the nursery unit bring Erica back into the fuselage of the ship. She wanted to stay outside and help, but I told her that just wouldn't be possible for another few weeks. First, the dome had to be pressurized - that would take several days. Then it had to be heated, and the HVAC unit for the dome had to be connected to the fusion reactor of the ship and fully ops-checked, a process taking several more days. Then ground underneath the dome had to be tilled and seeded, a process taking several more days since the dome was approximately a kilometer across on the inside. Then all those plants had to grow to maturity to begin the job of recycling the air, a process taking several months for the smaller plants and several years for the trees. Meanwhile, the internal structures of the dome - houses and other buildings, pathways, water systems, etc. - all had to be in place. The repairs the ship had needed to bring it up to the minimum standards needed before the first eggs were fertilized had taken quite a bit of time. Just gathering the debris from the crash-landing had taken weeks, and we still had only managed to gather approximately 94% of the original mass of the ship. That meant several changes had needed to be made in the design of the interior structures of the dome - the only area that *could* be changed without compromising safety. For example, instead of constructing a hospital, the ship's sick-bay would simply be used *in toto* for the first dome's medical facilities (fortunately, the designers had allowed for the possibility that the entire crew might need help, and it had ten beds). It would be removed and reassembled near a location I'd already picked out and was in the process of providing power, water and sewer connections for.

"Well, thanks anyway for my birthday present." she said, once we were back inside and she was out of her suit. She hooked the suit up to the maintenance system to recharge and replenish its life support systems, then I followed her into the galley.

"If all goes well, by your next birthday you'll be walking around in the dome among grass and other plants - assuming you'll be able to find enough time between applying your medical training to caring for babies and growing toddlers." I replied through the nursery remote as she punched up her lunch.

"How's the artificial womb holding up?" she asked, taking the food tubes and a packet of water and

sitting down.

"Nine of the ten chambers check out fine after minor repairs, the other was destroyed in the landing and is irreparable, so I am reserving it for spare parts. Yours is the only womb on the ship that hasn't been ops-checked yet."

She looked up at me in Surprise/Alarm. "What do you mean?" she asked.

"I mean that we have not given you a medical examination to determine if you are still capable of bearing children. Mission parameters call for ten female children to be born every year starting as soon as the dome is capable of supporting life, this process continuing until a population of 100 females is reached. Any failure in the Artificial womb was intended to be taken up by the female crewmen. Once the required 100 females are of birthing age, mission parameters indicate that a second dome will be built and the process repeated. The population of the first dome will begin building the next dome from the raw materials of the planet after conversion through the processing plant. This process will continue for the next 500 years or so, or until the planet's population reaches approximately 50,000 females in 1,000 connected domes. Afterwards, males will be gestated and the population will begin to expand normally on its own, with an anticipated population of 50 males and 50 females per dome, all of whom will both work the fields in the domes and build new domes as time and materials permit."

"But-but I *can't* give birth over and over again for the rest of my life!"

"I don't understand. I know that the ship's doctor was supposed to be excluded from substituting for the artificial womb, but there aren't any other females available. You're all there is. One chamber is non-functional. That means you have to fill in. You knew this was a possibility when you signed on for the mission. Please explain the problem you are encountering now."

"Well, I'll *die*! Giving birth over and over again will wear me out!"

"I disagree. Female humans on earth have birthed twenty or more infants successfully in the past, though not all survived to adulthood because most of these women lived in poor nations. You are only required to birth ten infants."

"But-but I don't *want* to become a baby factory! I was supposed to *deliver* all these babies, not be mother to ten percent of the population of an entire planet! Besides, if there's birth complications, I could die!" she replied in Shock/Fear.

I had the unit place its hand on its chin as though thinking, and then I began thinking about what I would do. I couldn't force her to comply - even the *captain* couldn't do that, and she's dead anyway. Forcing her to comply would be a violation of her civil rights under NAD law. On the other logic gate, her lack of compliance increased the time frame of the mission. I considered the situation for an incredibly long time - over fifteen seconds. I still had no solution. "Erica, I'm stumped. I can't force you to comply, it's your right to refuse. The artificial womb may not be up to the job anyway - it still has a significant

failure rate. The mission parameters didn't account for it being slammed around in landing. Although I hope it will function perfectly well, there's a good chance it won't. This means that the whole mission may fail simply because you don't want to participate. I can't force you to comply with the mission parameters in this regard - the decision to be impregnated was always left with the female crew. That's why the males were included - the mission planners hoped you'd get pregnant anyway, and be more amenable to the idea. The captain's log indicates that she ordered you females not to have sex with the men so that you'd be able to assist in building the first dome instead of sitting around and watching the men and the remotes do it. This was a violation of procedure, but was within her prerogative as captain. I have no idea how we should proceed, but essentially you're telling me that we can't proceed with the mission plan as outlined. This means we need to discuss alternatives. Now: The goal of the mission was to get a viable colony on Mars. How do we do this and satisfy your desire not to become a baby factory?"

We sat down and discussed several possible options, but none of them seemed very viable. Finally, Erica said something that was the turning point in the conversation. "Well, I just don't think the way the mission architects intended the original plan to work is a viable method in the first place."

I was intrigued to discover her thought processes. "Why not?"

"Well, I know that we'll be using centrifugally separated sperm cells to pre-determine sex before conception, but I think that in the long run the population will have severe psychological problems. Think about this for a minute: We'll be generating for the first few generations an entire population of females. Suddenly, we have all these females give birth to males so that normal reproduction can take place and the population can expand using normal, non-technological methods. Well, that just won't work. We'll have an entire planet of thousands of females who'll never have even *seen* a male before. I think either one of two things will happen - A) The males will be feared and hated as being different. B) The males will end up being used just for stud purposes, and never be allowed to lead normal lives. What does your psychological database say about *that*?"

I considered it. "I think you're right. Both possibilities are well within the range of human psychology as described in my psychological database. If males aren't introduced early but instead are introduced late, then they'll either be looked upon as outsiders or as sperm factories. Either way, normal human social activities won't take place. I think the mission planners made a mistake. They assumed that all the females would have the same dedication to the project as the original crew did. This was to be reinforced by the presence of the original crew during their childhood acting as behavioral role-models. The accident killed them - something the mission planners did not foresee. I believe you are correct - the original plan will fail under the current conditions." I replied after a couple seconds of thought.

"Well, then what do we do? Does that mean we abandon the mission?"

"No, I'm afraid not. I *can't* abandon the mission. My positronic matrix won't allow me to simply abandon a mission, I have to do my best to fulfill it. The mission I have here is to establish and maintain a viable colony on Mars. If I have to make radical changes in the overall plan to accomplish this goal, I can. In fact, in many ways I already *have*. Even so, I can't change the overall goals of the mission, and I have to make every effort to accomplish the overall goals of the mission. NADASA has ordered me to continue, which only reinforces my desire to accomplish the mission. Ergo, I *can't* abandon the mission.

No, I must come up with an alternate method of satisfying the mission goals instead."

We discussed several different solutions, but none of them seemed to be viable either. Then, as I was scanning my psychological database, a thought occurred to me. "Erica, I think I've just noticed something. All my psychological information is based on the culture of the people of the North American Directorate. There are notes in the database referring to psychological conditions that are abnormal in the NAD, but normal in other cultures of earth. For example: My database indicates that in North America, it is considered a behavioral defect to treat either gender of human as being any better or worse than the other. It also indicates that in several other areas of earth, discrimination against women by men is considered normal. In essence, the salient difference here is a difference of *culture*. While it is possible that children raised under the norms of NAD culture may be able to function under the original mission plans, it seems unlikely. What is needed is a new culture for them to be raised under - a new set of ethics. This ethical mind-set must include a series of ethical guidelines which will not only see them through the initial stages of establishing the colony, but must also allow them to formulate a cultural background which will serve to fulfill the mission parameters of establishing and maintaining a viable colony."

Erica thought about what I'd said for a while, then spoke. "Well, I'm a doctor, not a psychologist. I don't know what you'd have to do to make it work. You know more about these subjects than I do, and judging by how well you treated me after the crash, I'd say you know as much about medicine as I do. I don't know what to tell you."

"Well Erica, why don't we both give it some thought over the next few days and we'll pick up this subject again later."

I felt a slight tickling - the comm system attention signal. "Excuse me, Erica, I have to attend to something." I said through the remote, then turned my attention to the comm system. There was a ten second compressed databurst from NADASA. I decompressed it and examined it. It was not good news. *'This is not good. In fact, this is bad. Now, what do I do with this information? If I tell her, she will be unhappy. If I don't tell her and she finds out later, she may be even more unhappy.'*

"What is it? Is everything alright?" Erica asked the nursery remote with an expression of Concern/Anxiety.

'Some pain now is less bad than more pain later.' I thought. "Erica, I have just received a radio communication from NADASA. The NAD is at war."

She registered Shock/Fear/Confusion. "With whom?"

"With everyone. The NAD is at war with the rest of the world. All NADASA facilities have been turned over to the military for use in maintaining anti-missile systems. At present, it looks like the efficacy of anti-missile satellites and ground-based lasers will limit the war to primarily conventional weapons. As a result, NADASA cannot plan a rescue mission until the war is at an end. In addition, the government has basically written off the Mars Colony mission as a failure, and has written off future missions as pointless. They have decided that solving the earth's geopolitical, economic, population and

environmental problems has a higher priority anyway, and as such have no plans to attempt any future colony missions except to maintain the Luna colony. If the NAD survives the war, they probably won't be sending anyone else out here to help us within your lifetime. We're on our own."

"Oh, Doc!" she wailed, and I had the nursery remote step over to her and hug her while she wept into its shoulder.

"There now, Erica. It's alright. You're not alone, I'm here with you. I'm sorry this happened. I was hoping for some assistance, too. I know you were hoping that somehow a 'Prince Charming' would come landing in a silver rocketship to take you away from here, but I'm afraid all you have is me and the thirty-six other dwarves. It'll be alright, Erica. We'll make it. I'm your friend, and I'll always be here for you."

"Oh, Doc! You're right, I *was* hoping for a man to come by someday. I haven't been with a man in months, and now I realize I'll never be with a man again! Oh, sure, I could plant one in the artificial womb, but it'd be years before they were fully grown, and after having helped them grow up and acting as their parent all their lives, it'd be like incest! I only have *you*, Doc, and as much as I love you, I know you're not a real man. When I look at you, I just see my friend and companion, not a lover. And *God*, I was so hoping for a lover someday. I know it's stupid. Even if this hadn't happened, it would have been at least two decades before another ship would have come by. I'm thirty-six, so by then I'd have been in my late fifties or more. What handsome young astronaut/colonist is going to want me *then*? Oh *God*, Doc! I'm so scared and lonely and horny and terrified, I just don't know what to do!"

"Well Erica, I wish I could help you, but this unit doesn't even have genitalia. I do know what Prince Charming looks like and I have his voice patterns, so I guess I could modify this unit to resemble him. At least that would be something."

"NO! Then I wouldn't have my lovable, wonderful Doc who gave me such a wonderful birthday surprise. Besides, even if you could build functioning genitalia, *I'd* know it wasn't a real man, I'd know it was just you pretending to be one. I prefer you like this - my lovable, wonderful Doc."

'Ah. I see. Once having anthropomorphized me as a nominally male yet non-sexual being, she cannot conceive of me being a sexual being. Interesting.' I thought. "Don't worry, Erica. I'll always be here with you. You'll never be alone. I'll always be right here for you, and I'll always be your friend." I said, comforting her. As I patted and stroked her back, trying to calm her and reassure her, I was already considering what I'd do now that the situation had changed. I couldn't have the Doctor viewing all the male colonists she helped raise as potential sex-partners, and my psychological database said that these feelings wouldn't go away. They'd always be there in the back of her mind, influencing her behaviors towards them. She might even approach female colonists if the feelings grew strong enough over the course of years - my database indicated this was common in all-female prisons. No, the whole plan would have to be completely and radically changed if the mission could be salvaged. The dome was up, and the remotes were safe inside it. I put them all in standby mode and considered my options as I patted Erica's back.

After twenty seconds of thought, I realized that the plan to accomplish the mission was completely

unfeasible. The crash and the death of the rest of the crew had rendered it so. Probably the MAICCSys would have come to this conclusion months ago, but I was only the emergency system. I couldn't abandon the mission, and I couldn't accomplish it with the plan I was currently using. I would have to come up with a new plan that *would* accomplish the mission. I resolved that once Erica was asleep tonight, I'd spend the next eight hours or so doing just that.

Seven.

When Erica awoke the next day, she stepped outside her cabin to find the nursery unit was not waiting outside the door as usual. She was upset, thinking that I'd begun reconfiguring it. She ran down to the processing plant, but it wasn't there. Finally, she ran across five putting the last touches on a repair to the hydroponics bay. "Doc? Where are you hiding?" she asked five.

"The 'Doc' unit's on the bridge, Erica. Why don't you get some breakfast and join me?" I replied through five's speaker.

Shortly, Erica came onto the bridge with a carton of water and a tube of soy-extract. The 'Doc' unit was dusting. "What's up, Doc?" she asked, and then laughed. I didn't understand her joke - must be another video I wasn't familiar with.

"Look out the windows. What do you see?" I asked in reply.

"The fuselage of the ship, the dome, and a couple of remotes plowing - looks like thirty-six and thirty-four."

"Look again. They're not just plowing."

She looked, and suddenly realized what I meant. "No, they're *not* just plowing, they're plowing *everything!* Doc, what are you doing?" she asked in surprise.

"Erica, I've given this a lot of thought. The original mission plan will not work. As a result, I've tossed it out and developed my own plan to accomplish the mission. I realized the only reason the mission planners intended to completely disassemble the ship was so that the colonists would realize on an emotional level they couldn't go home. This is pointless. You already know that, and any children born here will already know that - for them, this *will* be home. The space in the dome will be better utilized for growing plants. We have a small assortment of animal eggs and sperm in storage, which was intended for

use in populating the other domes with wildlife that would assist the colonists in becoming self-sufficient, as well as help them maintain the plant life. There are also fertilized insect eggs in storage for the same reason. I have a fully operational Processing Plant and fusion reactor, with enough hydrogen to run on for several thousand years using my normal power requirements. Thus, I have devised a new plan. Erica, the fuselage will not be disassembled. You will not be forced to become a baby factory. I am going to plow and plant and water inside this dome until I've turned it into a garden-spot for you. I am also going to do other things which will be a surprise, and you will find out about as time goes on. I am going to do everything I can to make you happy. I am going to continue until you are completely happy and comfortable here. Once you are, then we'll proceed with the rest of the plan." I said through the 'Doc' unit.

"But-but-"

"No 'but's. You listen to me. I realized last night that as far as you're concerned, I'm 'Doc'. I then thought about what 'Doc' would do. Doc would do everything in his power to make you happy before he did anything else. Thus, that's exactly what I'm going to do. I don't care if it takes the rest of your life, I'm going to do everything I can to make you happy before I proceed in any way with the main mission objectives. I'm your friend, and I consider you to be far more important than following the orders of some stuffy old bureaucrat back on Earth who doesn't care if you live or die." I said. I didn't bother to say that making her happy helped accomplish the mission objectives, because that would interfere with the plan I'd devised. She needed to feel I was doing it because I cared for her as a friend, regardless of how illogical that reaction would be for an AI.

"Oh, Doc! Thank you!" she said, pulling off the unit's cap and kissing its bald head, then pulling the cap back on.

"Actually, I'm still over there behind that panel. Even so, I still want you to treat this unit as though it was me, because from now on, it *will* be me. Now, here's unit seven with the first stage of this." The bridge door irised open, and seven rolled in on cue. It held a garment out to her, as I'd instructed it. She took the garment and held it out.

"Why, it's a dress! It's just like Snow White's dress!" she said in surprise.

"Of course. Unit nine's finished placing seven more just like it in your quarters, along with shoes, ribbons and other articles you may enjoy. You don't have to wear that ship's jumper and boots anymore." I replied.

"But Doc, this is silly! I'm not Snow White, I'm Erica Sorenson, Ship's Doctor."

"Let me put this in terms you cannot possibly fail to comprehend: If I'm Doc, you're Snow White. Deal with it."

She began laughing, but then realized I was serious by the expression on 'Doc'. "You really mean

it!" she said in surprise.

"Of course. You need a break, and I want to make you happy. We both know it's a fantasy, we both know you're talking to a robot which is being controlled by a positronic brain about two meters to your left. Unfortunately, knowing that won't make you happy. Knowing that I'm going to do everything to make you happy *will* make you happy. I figure after a while, you'll realize I really *do* want you to be happy, and maybe you'll come to like being here instead of always feeling lonely and homesick. This situation is not open to discussion - I'm going to make you happy even if it kills me."

"Oh, Doc! You *do* make me happy!" she cried, hugging the 'Doc' unit.

"If you think you're happy *now*, just wait. Eventually, you'll realize you're the luckiest woman in the universe."

As the plants began to grow and flower, I built an apiary and thawed out some bees. I then assigned a unit to handle the apiary, giving it a full set of operating instructions which would allow it to handle the task more-or-less independently. These bees had been bred from a small stingless variety found on earth, and had been bred up to the size of normal bees. With the only animals in the domes that would eat honey being humans, the mission planners had decided a stingless honeybee would be a good idea. Once all the grasses had come in, I thawed out some rabbit eggs and sperm and gestated a few dozen males and females, and once they'd reached the stage where they could feed themselves, I tossed them outside to work on the grass. I wasn't worried about them digging outside the dome - the walls of the dome penetrated twenty meters beneath the surface. I simply ran some fencing around the tree saplings to keep them from eating them up. The trees shot up in the lower gravity of Mars very quickly, and in a few months the fencing wasn't necessary any more. I then manufactured a crossbow for five to use in shooting the excess rabbits, and supplemented Erica's diet with meat. I also thawed flies, tiny black ants and dung beetles to handle the rabbit excrement and any other animal carcasses I didn't immediately find and process, and earthworms to aerate the soil. The cement pond was finally ready about that time, with the fish, frogs and other aquatic animals having reached a balance with the plants and the sunlight (which I supplemented with the lights inside the dome during winter days). Excess fish I fed to Erica. I had three varieties of birds available - sparrows, domestic ducks and chickens. The chickens proved to be the most useful - they ate anything, and served as a natural garbage disposal. Excess chickens and ducks I fed to Erica, but excess sparrows, frogs and other animals she'd consider inedible I simply ground up and threw to the chickens.

The plants in the hydroponics bay eventually were moved outside and planted in a walled-off garden next to the gravestones of the dead crewmen of the *Martian Explorer*. I assigned another remote to tend to the garden, planted corn and several varieties of easily-harvested vegetables alongside the plants from the hydroponics bay, and converted the hydroponics bay into a fertilizer processing station. By the end of a year, the trees were ready to be introduced to a new animal - the squirrel. I knew that keeping excess trees thinned out and cutting down trees that were too tall for the dome would give me a large supply of wood eventually, so I constructed a small sawmill in cargo bay two to handle it. The walnut and chestnut trees produced adequate supplies of food for the squirrels, and their activities insured I wouldn't need to assign a remote to having to plant trees. Excess squirrels also became a part of Erica's diet - though I chopped them and served them in stew rather than roasted them. The apple, avocado, orange, grapefruit and cherry trees also provided their fruit, and Erica enjoyed collecting the fruit when it

was in season - this freed up another remote. By the end of the second year, I had the dome fairly well balanced ecologically, and Erica's entire diet came from it. Excess food materials were fed back to the chickens, and they grew extremely large and fat. Erica often spent hours just walking around in the dome accompanied by 'Doc', observing its beauty. She'd finished studying her electronics course and occasionally helped in little repairs that came up, but primarily she was still a doctor without any patients. She studied the veterinary data which applied to all the animals we had, and became relatively familiar with any diseases they might develop.

Of course, since the ship was sterilized before we left and all the animals were grown in the dome, none of the animals ever got sick and needed Erica's assistance. Erica never got a cold or the flu, either. I'd checked the dome carefully for the last two years - there literally weren't any microorganisms in it that were hostile in any way. This was not good - in an almost germ-free environment, it was likely that a single visitor from Earth could wipe out the colony simply by introducing the common cold. Unfortunately, I had no way of correcting this problem - even if I immunized all the colonists against everything I could think of, the microorganisms on earth would continue to mutate and evolve into new strains I had no vaccines for. I decided that all the colonists would receive standard DPTR injections as children, and then I'd just have to leave it at that.

One day, Erica turned to 'Doc' and said "This is like a wonderful, magical dream come true. You've made it so beautiful here, I don't think I've ever been happier." I knew it was then time to proceed with the next phase of the plan. All through the last two years, I'd been working on a project I'd kept secret from Erica. The garden-environment of the dome had distracted her from wanting to visit the processing plant, and I simply never mentioned it in any of our conversations. I'd modified one of the toy/remotes from the nursery, and it took nearly a month to get it to work right. The larger remote I had to build completely from scratch - it was so complex it had taken nearly a year to work out all the bugs. Finally, the larger remote I'd been working on was complete. I clothed it, equipped it and hid it, then used five to make the necessary modifications to my comm boards to use it as easily as I did the Doc remote. Once everything was ready, I waited until Erica was asleep and sent both remotes outside.

When Erica woke up the next day, she got herself cleaned and dressed, and I served her an omelet and orange juice for breakfast. "Well, I will say that your plan has definitely improved my diet! I was getting tired of soy, and that's the main thing the hydroponics bay used to produce!" she said.

"I'm glad. I now have another surprise for you."

"What is it?"

"Ah, that's the surprise. There's a special secret hidden in the dome. It's a very special, magical secret, and only you can find it. Don't be surprised if you don't find it at first - it may take you days to find it. Even so, I will give you one clue: It isn't in the ship, and won't be until you find it and bring it in yourself - if you choose to do so. I will say no more about the surprise, other than to tell you it's magical, special, and even if you find it, I won't talk about it with you. It's only for you, not for me." I said enigmatically.

Erica looked at me, her face registering an interesting combination of Disbelief/Amusement/Interest. "Magical? Come now, Doc. I'm thirty-eight. You're going to tell me I should believe in magic now?"

"I would think that a woman who flew here from another planet in a titanium ship, a woman who is living in a secret garden nobody else in the universe knows about, and a woman who is having a conversation with her best friend who happens to look a little bit like a magical dwarf, well, I'd think that a woman in your shoes might have a different opinion about the subject of magic."

She looked at me strangely, started to say something, then stopped. After a few moments, she spoke again, her face showing Respect/Wonder/Curiosity. "You're right, Doc. Can I go look now?"

"You can look anytime except after dark. I don't want you falling down and hurting yourself. As a result, the secret surprise can only be found in the daytime. If you look after dark, you won't find anything."

She nodded, rose, said "See you later." and left.

'This is good.' I thought. I then focused my attention on the various sensors and remotes scattered around the dome. It was time to put this phase of the plan into action.

Erica wandered through the dome, looking around. She had no idea what she was looking for, and I wasn't about to tell her. She was alone, the 'Doc' unit I'd simply used to clean up the galley and left sitting there until I needed it later. I maneuvered the remotes so I could always keep an eye on her without looking like I was watching - they just looked like they were tending plants, gathering fruit and nuts, and doing other ordinary things. At first she tried looking behind bushes and trees, and I could tell by her expression that she had no idea what it was she was looking for. As the day wore on, I could see she was frustrated. I had nine bring out lunch to her, and she sat down in the grass and ate a picnic lunch with an expression of irritation.

"Can't you give me another hint?" she asked nine.

I had nine turn its boxy head, looking over both shoulders as though it was checking to make sure it was unobserved. I then had it lean forward, cup one of its manipulators to its speaker and whisper *"No, it's a secret!"* She did a double take, then laughed. I had nine pick up the lunch tray and head back in, and she got up and continued to look around.

By late afternoon, she'd finally spotted it. Deep in the section I let the trees grow closer together in, forming a miniature "woods", she spotted a small wooden cabin with a single door and a window. It was only three meters by four meters on the outside, and only stood about four meters tall. She went up to it in curiosity, and saw the door was open. As she approached, a rabbit shot out of the door and took off running. She looked after it in interest, but didn't follow. Inside, she saw it had a small wooden chair, table, and bed. On the table was a garland of flowers from inside the dome. She picked it up, sniffed it, and put it on over her head. "This is very nice," she said, and headed back to the fuselage. When she finally came back into the galley, Doc was done making her roast chicken. "I found it," she said smugly.

"Oh really? And tell me what you found."

"A little wooden house you made. It's very cute, but I prefer my cabin."

"No, that was just an experiment of mine. I wondered if I could use wood as a building material in the domes. I found I could - it's not that hard, actually. Anyway, I decided not to disassemble what I'd made because I wanted to see how it would last over the years. I do use the dome sprinklers to make it rain for the plants in here, and I wondered if the house would leak or warp over the years. No, that wasn't the secret at all." I replied, setting the salt and pepper next to her plate.

She looked at me in Disbelief/Confusion. "Well, then what about this?" she asked, pointing to the garland of flowers on her head.

"It's very nice."

"Well, didn't you make it?"

"Why, no. I thought you did."

"You're just pulling my leg."

"No, actually. Some of the rabbits have gotten particularly smart recently. I think the small breeding population combined with the fact that I've been hunting the ones too dumb to stay away from the remotes might have something to do with it. There's one in particular I plan on catching and dissecting. I'm very interested in its brainpan and cerebral structures. If you see it, would you let me know? It's a little male, about so big, with a little nick out of one ear where I've shot at it before."

"Oh, now you're *really* putting me on!"

"No, I'm not. I'm trying to catch it, but it just keeps avoiding the remotes."

She looked at me, and I could tell by her face she recognized the description - the rabbit that had run away from her earlier. She gave me a look of Amusement/Disbelief and ate her meal in silence. After she was done and I was putting the dishes in the dishwasher, I spoke up. "Are you going to keep looking tomorrow?"

"You mean this really wasn't it?" she asked, indicating the garland of flowers.

"I am now going to give you another hint. Are you ready?"

"Yes!" she replied eagerly.

"Good, now listen carefully, because I'll only say this once. I can absolutely *positively* assure you that those flowers you found were *not* what you are looking for." I said, and left the room.

"Oooo! That was *mean*, Doc! I'm going to *find* this thing despite you!" she said to the unit's back.

'This is good. Now she sees it as a challenge. This is as it should be.' I thought.

The next day Erica packed a lunch and told me she wouldn't need me to bring one to her. She then went straight to the cabin and waited behind a tree, watching it. After a while, the nicked-ear rabbit came into view from behind a tree, its eyes, ears and nose alert for danger. It didn't spot her, and went into the cabin. Erica waited for a minute or two, and tried to sneak up on the cabin. She nearly got there when the rabbit zipped out the door again and shot away into the grasses, far too fast for her to follow. Chuckling, she looked inside the cabin. This time, she saw that the table was bare. She started to leave, when she noticed that the blankets on the bed were rumpled, as though the bed had been slept in. She went over to look, and I could tell by her face that she was expecting to find rabbit droppings. Instead, a strange scent reached her nose. I could see her sniff, and lower her head to the bed to sniff some more. She searched the bedclothes, but came up with nothing. She then sat down on the little chair for several minutes, obviously thinking. Eventually, she shrugged her shoulders, rose and walked out of the cabin. She came back out to retrieve her lunch, and found the basket had been opened. "Damn squirrels!" she yelled, and looked inside. The bottle of water she'd brought was now half-empty, but that was all. No squirrel could open it, much less drink half of it and put the cap back on. I could tell by her face she was *burning* with curiosity. She searched the rest of the dome fruitlessly, and only came back in when I had five fetch her.

"You're not allowed to search for the secret after dark." I reminded her through its speaker. She didn't like it, but she came along.

"I don't think there *is* anything out there! I think you're just pulling my leg!" she groused over dinner.

"Ah. I see. You're giving up. I understand. Only a very special woman could find what's out there anyway. Perhaps in a few decades, one of the children we raise will be able to find it."

"I am *not* giving up! I just need another hint!" she complained.

"I don't think so. As I recall, I've given you four hints already."

"*Four?! You've only given me two!*" she shot back angrily.

"I disagree. I distinctly remember giving you four hints. I will not repeat them, nor will I discuss them. You have to figure it out for yourself. If it's too tough for you and you decide to quit, I

understand."

She opened her mouth to give me an angry retort, then closed it again. "I am not going to quit." was all she said.

'Ah. As it said in one of those children's stories - The gauntlet truly taken up, the challenge truly met at last.'

The next day Erica again went straight to the cabin, packing a lunch. She hid behind a nearby tree and waited. After about half an hour, the nicked-ear rabbit came out from behind a tree and began to sneak towards the cabin door. Erica waited and watched. About half-way there, the rabbit ducked - a bolt from five's crossbow thunked into the wood just where its head used to be. It then took off running as five approached to retrieve the missile. "You *stop that!*" she yelled at five.

"Excess rabbits must be shot to prevent their overeating the plants. You enjoy cooked rabbit, don't you?"

"Yes I do, and I understand that you have to keep a lid on their population, but I don't want you shooting *that* rabbit! You leave it alone! Shoot all the other ones you want, but *not* that one!"

"I disagree. That rabbit in particular I want to shoot. I'd like to dissect it and study its brain to see if the rabbits are getting smarter."

"No! You leave that rabbit alone! There's plenty of others, especially by the open area near the pond."

"Alright. I'll leave that one alone." I replied, and had five head back in. Erica watched the cabin until noon, but the rabbit didn't return.

Erica then sat down under the tree to have lunch. After a while, she noticed a long pair of ears sticking up from the bushes nearby, the left one with a little nick near the top. She tried to remain absolutely still, but I could see she was quivering with excitement. Eventually the rabbit came out of the bushes, and slowly hopped over to her, alert for the presence of any remotes. She cooed at it, trying to draw it closer with a piece of lettuce from her lunch. "Don't worry, boy. I told Doc not to shoot you. Remote Five won't be hunting you anymore. Come here, come on! See the nice lettuce? You'll like it." she said softly. The rabbit slowly approached to about four meters, then stopped. Realizing she couldn't tease it any closer, she tried to gently toss the lettuce leaf to it. The rabbit jumped, but didn't run away. The leaf only went two meters, so the rabbit inched closer. It finally wrapped its lips around the lettuce leaf, got a good grip with its teeth, then spun and shot off into the bushes again. Erica sat there for several seconds with an enormous grin of satisfaction and happiness, then ate the rest of her lunch. She watched the cabin the rest of the day, but the rabbit didn't return. She finally went back to the ship just before dark, and joined me in the galley.

"So, have you found the secret yet?" I asked.

"I'm not sure. Is the rabbit the secret?" she asked between bites.

"No, it's just a very smart rabbit I've been trying to kill. You say you don't want me to shoot it, so I won't. Even so, I still wonder about it. None of the other rabbits seem to be even close to its intelligence level."

"How smart do you think it is?"

"I don't know. Smart enough to get away from me, anyway. Of course I'm not perfect, I'm only a machine."

She looked at me, then laughed. "Well, I got it to take a piece of lettuce today. I think I'm going to take some more lettuce tomorrow. Do we still have some?"

"Plenty. It's in season right now."

Erica nodded and continued eating, already planning the next day's events in her mind.

Morning the next day saw Erica again watching the cabin. The rabbit came out, saw her, and hopped on over. She held out a piece of lettuce, and it boldly came over and took it from her. She felt extremely pleased. She reached out to it slowly, but it backed off. "So I can look, but not touch, right?" she asked it. It said nothing, and simply ate the lettuce leaf. When it was done, it sat back and stared at her, blinking. It reached up to scratch an itch behind an ear, but otherwise simply watched her. "So, my little friend. I think that *you're* Doc's secret, no matter what *he* says. So tell me; are you the secret I've been looking for?" she asked. She was stunned when the rabbit shook its head. "You can understand me?" she asked. The rabbit nodded. "You really *are* smart!" she said, but the rabbit simply sat there and watched her, flicking away a fly with an ear. "Do you know what it is I'm looking for?" she asked. The rabbit nodded. "Can you show me where it is?" she asked. The rabbit nodded again, then turned and hopped into the cabin.

Erica stood and followed, and looked around the inside of the cabin by the doorway. The rabbit was sitting on the bed, waiting. When She approached, it started to tremble. "Oh, sorry. Not too close, right?" she asked. The rabbit nodded. "So, it's something to do with the bed?" she asked. The rabbit nodded, then hopped down. When she stepped in, it shot out the door again between her legs. Erica went over to look. The bed was neat again, and there were a few hairs the rabbit had left behind. She sniffed again, and brought her head down to the bed. "There it is again! What *is* that smell? It smells like... cologne!" she said, her face registering Surprise/Shock/Excitement. "It *can't* be that, it *has* to be something else. Maybe Doc cleaned the sheets with some kind of scented soap or something." she said, then walked back out. She went over to the tree again, and spotted the rabbit sitting nearby. "I went to look, but there's nothing there." she said. The rabbit nodded. "You mean I'm right? There's nothing there at all?" she asked. The rabbit shook its head. "So there is something? Well, what?" she asked, but the

rabbit just sat there. "Can you at least give me a hint?" she asked. The rabbit nodded, laid down, closed its eyes and breathed quietly for several seconds, then sat up again and blinked at her. "What was that? Sleeping? Asleep?" she asked. The rabbit nodded. "Someone sleeps there?" she asked. The rabbit nodded. "Ah! I get it! Someone's sleeping there at *night!*" she said in triumph. The rabbit nodded. She sat in thought for a moment. "That can't be right. There's nobody here but me and Doc." she said to herself, then noticed the rabbit shake its head.

"There's somebody else here?" she asked. The rabbit nodded, then laid down and pretended to sleep again, then sat up again. "There's somebody else here, but only at night?" she asked. The rabbit nodded. "Why are you telling me this?" she asked. The rabbit stood, hopped over to the wall, and sniffed the small hole in the wall the crossbow bolt had left. Erica walked over and saw what it was pointing at. "You're helping me because I got Doc to not shoot at you anymore?" she asked. The rabbit nodded. "Well, thank you very much." she said. The rabbit nodded, turned and ran away into the bushes.

Erica picked up her lunch pail and came back to the ship, then waited until dinner in the galley. "I have to go outside for a bit. I'll be right back." she said as she finished her fried catfish.

"I'm sorry, I can't allow that. You might fall down in the darkness and get hurt." I replied as I put the dirty dishes into the dishwasher.

"Oh, come on, Doc! I'm a big girl, now, I can handle a little darkness! I'll take a flashlight, okay?"

"No. I'm responsible for your safety. You can't go. Now why don't you go to bed, I've got to plug in and recharge for a few hours."

"Oooo! You old stick-in-the-mud!" she replied in frustration.

'She will try to sneak out. This is good.'

Erica went back to her room, and I watched her with the sensor in her cabin. She gave me about half an hour, then left her cabin. I watched her sneak along to the main airlock. She really had forgotten I was the EAICCSys for the ship, and that I could see her anywhere - she thought of 'me' as being limited to the 'Doc' remote. *'This is very good.'* I thought. She picked up a flashlight, got out the airlock and headed towards the cabin.

About halfway there, she heard singing - a quiet tenor off in the woods. It sounded like a man, softly humming and strumming a stringed instrument. The melody was 'Greensleeves'. Erica switched off her flashlight, and snuck up to the cabin. A flickering light illuminated the window, but did not allow her to see through the curtain. She was about to approach, when she heard the man's voice speaking. "So, my little rabbit friend. Did you tell her I was here?" the voice asked. "You did? Then why doesn't she come? Oh, I see. She probably doesn't care. I'm nobody anyway. I can't even be seen during the day - I have to hide. No, she's probably sleeping peacefully in her cabin, while I hide here all alone in the dark. Ah, well. Sweet dreams, my little rabbit friend, sweet dreams." the voice said, and the candle flame was blown

out.

Erica started forward, and suddenly found her right wrist was caught by five's right hand. "And just what do you think you're doing?" I asked.

"Oh, Doc! Let me go!" she yelped.

"No. I told you - you don't go out after dark. End of discussion. Now you come along peacefully - five's manipulators are significantly stronger than you, and I don't want you to get hurt." I said, and began dragging her back.

"No, Doc! Please! Let me go!" she wailed.

"No. I have to keep you safe." I replied, and scooped her up to carry her.

"Please, Doc, let me go! I've got to go to that little cabin! Please! There's someone in there I have to meet!" she wailed.

I pushed five up to half speed to cover the distance back quickly. "No. There's nobody in there. It's just a wooden structure I was experimenting with. There's nothing for you to see, and nobody for you to meet. If it's going to cause you to risk your safety, I'll tear it down tomorrow morning."

"No! Please, Doc! Don't tear it down! I'll be good, really!"

"Alright. Just don't go outside the ship at night. You might get hurt."

"Okay, Doc. I won't." she replied sadly.

'This is very good.' I thought to myself.

The next morning she went back over to the cabin, of course. Naturally, there was nothing there. The bed was slightly rumpled, and she lay down in it and breathed in its smells. She was about to get up when she noticed something - a single brown hair on the pillow. She picked it up and stared at it, and a fierce look of determination came to her eyes. *'This is extremely good.'* I thought.

She marched back to the sick bay, and placed the hair under magnification. Her face showed Shock/Surprise when she discovered it was real hair, and human hair at that. She fell back into her chair. "Oh!" she cried. After a few minutes, she looked again. "It really *is* magic! There's a *man* out there! A man Doc doesn't even know about!" she said, and sat back down again. Then a look of Anger/Irritation crossed her face. "No, it's just a trick. It has to be!" she said, then looked up to the sensor in the room.

"Doc? Are you listening? I'm not gonna fall for it!" she yelled. I didn't respond, of course. She sat in the chair and moped for a while. "God, I wish it *was* magic. It would be so nice." she said. After a minute or two, she stroked her chin. "Maybe Doc *does* know about it, and that's why he won't let me out at night! Think, woman think! He said there were four hints, not two, so what was it he said?" she wondered aloud. I could see her concentrating, but nothing seemed to be coming to mind. Human memory recall systems are notoriously inaccurate. She stood and looked at the hair under the microscope again.

"Nope, it's definitely real. That means there *is* a man there. I've smelled him, I've heard him, he even talked to the same mutant brainy rabbit Doc was trying to kill. God, it sounds so crazy, but I just *know* there's a *man* out there, and Doc won't let me get to him! Please, God, If you ever grant me anything, let my damn gray cells work just once! He said he gave more than just two clues, and If I know Doc he's probably given me *lots* of clues. Hmmmmm. What did he *say* was out there? Something special, something magical, something only for me. He said that if I found it, he wouldn't talk about it to me. It was only for *me*, not for *him*. What else did he say about it? Hmmm. Wait a minute! He said 'Only a very special woman could find what's out there, and perhaps in a few decades, one of the children we raise will be able to find it.' God, it's like some sort of magic spell right out of a fairy tale! Something special and magical and all just for me, if only I can figure out how to get to it!" she said. Then, the realization hit. Her face changed to Joy/Hope, and I could see she had the answer. "Of course! I can't look for it at night, because he's afraid I might fall and get hurt! He can't come with me to make sure I'll be alright, and he can't turn on the lights - messes up the plants' and animals' biorhythms. But I don't *have* to look for it at night! I already know where it is! I just need to go there during the *day*, then wait! When night falls, I'll have the answer!" she said.

'This is extremely good.' I thought.

The next morning at breakfast, she spoke up. "Doc, can I sleep in the little cabin you built tonight? You've got a bed and everything in there, and it looks very comfortable."

"Well, I don't know. I'm afraid you'll get up and wander around in the darkness and maybe get hurt."

"Oh no, Doc! I'll stay right there, and I'll just sleep in that little bed you made. Won't that be a good test for that little shelter you made?"

"Alright, but only if you promise to be careful and don't wander around after dark."

"Oh, I promise, Doc! I won't leave that cabin till dawn!"

"Well, you better not, or I'll never be able to take your word for *anything* ever again." I said with an inflection and expression that implied deadly seriousness.

She blanched, and said "Really, Doc. You can take my word." When breakfast was over, she nearly ran to the cabin in excitement. This quickly wore off as the day went on. I had nine bring out lunch

to her.

"I've erected an outhouse over there. It's not very big, but if you need it, it's right there. There's a candle in here - oh, I see you've already tried it. Anyway, just light it with the lighter next to it and you'll be able to find your way to the outhouse and back. Be very careful with the flame, however. Can you promise me that?"

"Oh yes, Doc."

"Good. I'll be back with dinner. If you change your mind, I can lead you back. If not, I expect you to keep your word and stay here all night."

"I won't change my mind, Doc. I'll be right here all night." she replied. When dinner was served, she again declined to return. The stage was now set - it was time to see if the plan would work.

She was sitting there in the darkness, waiting and hoping. The door opened, and a large humanoid form entered - me. She immediately flicked the lighter and held it to the candle. "Ow!" I yelped, raising my hand up to my eyes against the flash of the lighter. It didn't actually bother me, but it would have blinded a normal man's night-adapted eyes.

"Sorry. I just wanted to be able to see who you were." she said, and looked me over.

"Well, now you've seen me. Now what are you going to do, turn me in?"

"No, no. I've been trying to meet with you, really I have."

"Sure. That's why you spent last night in a comfortable bed, even though you *knew* I was hoping and praying you'd come."

"Wait, wait! I couldn't get to you! Doc grabbed me and dragged me back!"

I sat down in the chair next to her. "Well, how'd you manage to make it here now, then?"

"I tricked him. He was just worried I'd trip and fall in the dark, so I tricked him into thinking I'd just sleep here and not move until morning."

"Uh-huh. You tricked him into thinking you'd stay here, is that it?"

"Yes, I did. I wanted to meet you. Your voice sounded so beautiful, and I was so lonely. Now that I see you, I'm glad I did. You're very handsome."

"Well, I was lonely too, and I think you're very beautiful. I've been secretly watching you for weeks. I'm in love with you, and have been since I first laid eyes on you."

"Oh! It's like some dream, some wonderful, magical dream! Tell me you're real, and not something Doc cobbled together, please?"

I frowned at her. "I sit here for weeks, hoping and praying I'll get to meet you, wishing and hoping and praying you'll love me back, and the first question you ask me isn't 'what's your name?' but 'are you real?' I don't know why I even bothered." I said, and stood to leave.

"Wait! I'm sorry!" she called, and grabbed my arm. She then stared at it in shock. "It's *warm!* I-I feel tendons and bones and blood pumping in your wrist!" she gasped.

"Of course you do. What did you expect, rubber skin? Steel bones? Should I pull out my knife and cut myself so you can see if I bleed red blood or clear hydraulic fluid? I never looked at *you* and wondered if you were real. I heard the robots call you Erica, and I fell in love with you. You looked at me and figured I was just another nameless machine, some sort of sex-toy robot your friend cobbled together for you. Well, I'm not. I'm what you prayed for, I'm what you dreamed of at night made flesh - I'm a man. I'm also leaving. I'm going back to where I came from, and you'll never see me again. I don't need to waste my time loving a woman who can't even be bothered to ask my name." I said, and jerked my wrist out of her hand.

"NO! Please, I'm sorry! Please stay! Please don't leave me! Please!"

I stopped and looked back at her. "Why not? Why should you care? You think I'm some sort of robot anyway, that's why you don't care what my name is. What does it matter to you whether a robot stays or goes?"

"Oh, *God!* I *don't* think you're a robot or a remote unit or anything other than a *man!* Please, *please* tell me your name!"

"Adam." I replied.

"Please, Adam! Please stay! I'm sorry!"

I moved the tiny table out of the way, scooted the chair back and sat down just outside her reach. "Alright, I accept your apology, Erica, but only on four conditions."

"Anything!" she wailed.

"First, I'm not a sex-toy, I'm a man. I expect to be treated like a human being, and the minute you stop treating me like a human being, I'll leave. Second, I'm not supposed to be here, so you can't tell your friend Doc about me. Third, I can't tell you where I came from or how long I'll be staying, you simply have to accept that I'm here, and that I love you. Fourth, you can't visit me night after night - your friend will get suspicious and I'll get caught. I'll sit up and talk to you or make love to you or do anything else that you want, but you can't come here more than once a week. Is all of that understood?"

"Yes, Adam, yes!"

"Okay then. Now, as your secret man, here in your secret garden, millions of kilometers away from any other human being in the universe, what would you like me to do first?"

"I want you to make love to me. It's been so *long!* Please, Adam?"

"Well, what if you get pregnant?"

"I *don't care!*" she yelped, her face showing a combination of frustration and desire.

"As you wish." I replied, and blew out the candle.

Eight.

After the fourth week, Erica began to realize the impossibility of the situation. There was no way 'Adam' could exist. When she confronted me on the issue, I flatly denied any knowledge of it. "But Doc, I *know* it has to be you! There's nobody else on this entire planet!"

"Look, Erica. I have no idea what you're talking about. It's obvious that the little cabin I built is causing you problems, so I'll tear it down and be done with it. Then your imaginary 'Adam' who visits you in your sleep will go away."

"He's *not* imaginary, he's *real!*" she yelped.

"Well, if he *is* real, I'll catch him. We can't have unaccounted for people in this dome eating our food and upsetting the balance of the mini-ecology. You'll *die*. Besides, if he *was* real and everything you said he said was true, I think he'd be very angry at you for having told me about him." I replied. *That* shut

her up. "I'll have number thirty-six rip the cabin down right now, and you won't be bothered by it any more."

"No, Doc! Please! Forget I said anything, okay? Really! It was all a joke, see? Haha! Really! Just a joke, that's all."

"Well, alright. I'm only acting to protect you, Erica. I'm your friend, and I don't want you to get hurt."

"Thanks, Doc. I really appreciate it." she replied. Unfortunately for her, Adam *did* find out.

She had arrived shortly before sunset, and waited for Adam's arrival. When I/Adam came in, I was carrying the rabbit, stroking it between its ears. "You told your friend about me. You thought I wasn't real."

"No, really, I didn't tell him a thing!" she lied in desperation.

"No, my friend here listens to the ship during the day. These sharp ears of his pick up everything. You told him I couldn't be real. You knew I only stayed because you accepted me as a man. Now you think I'm fake, some robotic sex-toy your friend made for you."

She threw herself down onto the bed, sobbing. "I'm sorry, Adam, I'm so, so sorry, it's just that it's all too impossible!" she wept.

"Erica, there are two things I'm going to show you to prove I'm real. The first I knew I'd have to do. I told you when we first met." I said, and put the rabbit down. It ran off into the darkness outside the cabin, its job complete. I reached to my side and pulled out a knife and drew it across my palm, then grabbed her arm to smear blood on it.

"Oh! Adam!" she wailed, seeing the blood. I put the knife away, and clenched my fist to stop the flow of blood.

"You can check that in your sick bay. You'll find it's human. The second proof you'll find out yourself, after I'm gone. All I can say is that you asked for me, you prayed for me, and I told you when I came I'd only stay as long as you believed in me and treated me like a real human being. I may come back to you, I may not. That all depends on you. If I do come back, the rabbit will tell you." I said, and stepped outside. Placing my fingers to my mouth, I whistled loud and long.

"Adam! What are you doing?! He'll hear you!" she yelped.

I ignored her. "Hey, Doc! Come and get your little friend at the cabin!" I/Adam roared, then

stepped away into the darkness. When five finally arrived at the cabin a few minutes later, Erica was sobbing. "Erica, what's wrong? I heard a yell, and it didn't sound like you at all. In fact, it sounded like a man." I/Doc asked through five's speaker.

"Oh, Doc! It *was* a man, and I drove him away!" she sobbed.

"That's very strange. Why don't you come back to the fuselage with me and we'll talk about it." I replied, leading her out of the cabin and picking her up. 'Doc' met her inside the ship. "Erica, you've cut yourself. I guess it happened when five carried you in - I'll have to check the unit again to make sure it doesn't have any sharp edges. Look, blood. Let's get you to the sickbay and patch you up." I/Doc said, but she snatched her arm away.

"No, I'm fine, Doc! I'll handle it myself." she said, and ran off to the sickbay. I followed behind at a more leisurely pace, and watched her activities at the door. She wiped up the blood and analyzed it, of course, and found it *was* human. "Oh, Doc! He *was* real, and I drove him away!" she wailed.

"Who was real?"

"Adam! He cut himself and smeared me with his blood so I'd be able to analyze it in the lab! Look! It's real!" she wept.

I walked over and peered into the microscope. "It's human, alright. Even so, it could be yours. Maybe a nosebleed or something. Besides, if he *was* real, you've had sex with him four times. There's a good chance you'd be pregnant. We can easily dispel this imaginary 'Adam' of yours by checking." I replied. We took a blood sample and checked. Naturally, she was pregnant - I/Adam had timed one of our quiet little interludes to correspond to her most fertile days precisely.

"Oh, Doc! I don't know how you did it, but you gave me what I wanted, a *real man*! Now I went and drove him away, and I'll never, ever see him again! Please, Doc! Help me! I don't know what to do! I don't want to be alone again! Please, Doc! Help me find him!" she wept.

I went over and hugged her. "There, there, Erica. Everything will be alright. He's not completely gone anyway - you still have his child inside you. Tell me what he said to you before he left." I asked, already knowing the answer. When she repeated it, I patted her back again. "See? He never said he'd stay away forever. He told you he may be back again, and said it all depends on you. This dome is your secret garden, Erica. Maybe he'll come back once you stop thinking of it as a lonely little dome on a distant, hostile planet, and start thinking of it as your home. Maybe he'll come back when you're ready to treat him as a real man who's your secret, magical lover and friend, rather than constantly wondering about him and where he came from. Maybe he'll come back once you're ready to follow your heart and not your mind, and just accept him for what he is." I replied, and led her to her cabin to put her to bed. Erica lay there sobbing for nearly half an hour, and finally cried herself to sleep.

Over the next week she checked the cabin every day, but Adam and the rabbit were well and truly

gone. She would spend hours lying in the bed, smelling his smells and hugging the pillow. "It's like a dream, a wonderful magical dream that I threw away because I couldn't just accept it and be happy." she murmured at one point, and wept into the pillow for a while. Finally, she spoke up one morning over breakfast, and asked the question I'd been waiting for. "Doc, several weeks ago you said you'd hidden something magical, something special for me in the dome. Was Adam what you'd hidden?"

I sat down next to her and took her hand. "Erica, this isn't just a dome. It's your secret garden that no other woman in the universe knows about. It's your home, and your special place that I've built just for you because I'm your friend. Not everything here is happy - some things are sad. There's life and beauty in the growing plants and animals, and there's blood and death in the animals I kill for you to eat. It's like a magician, Erica. You've seen a magician on video back on earth, I'm sure. You can't sit there and think 'this is all fake, it's just a trick', because when you do, he can't make you happy. You have to look at what the magician does as being real, or you won't be happy. You have to stop thinking of this place as a dome on a distant, hostile planet and start thinking of it as your home, your special place, your secret garden. When you can do that, I'm sure you'll find the nicked-ear rabbit again, and you'll find Adam again. Only next time, he'll stay as long as you wish."

She gazed at me for nearly two minutes, her eyes brimming with tears and her face showing Love/Respect/Melancholy. "I miss him, Doc. I know in my mind you *had* to have made him. A very sophisticated remote. Must have taken you *forever* to finish it - especially with how real it felt and its artificial insemination capabilities. Even so, my heart says he was a *man*, a man I made love to and a man who gave me his baby, and I drove him away by doubting him. I understand what you mean, though. You can't make me happy if I always want the answers to everything, and you can't make me happy by pointing out the reality of the situation. I'm a medical doctor, and as such a scientist, and I was also trained as an astronaut before this mission. I know in my mind that I'm on Mars, sitting in the fuselage of a wrecked colony ship, surrounded by a steel and transparex dome, marooned, abandoned by earth, left to die with only an AI and a few remotes as my companions. Even so, my heart says I'm a princess, flown to a new world in a titanium ship, living in my own secret garden, talking to my best friend who looks a lot like a magical dwarf, and pining over a handsome prince I drove away."

I squeezed her hand. "Which story is it you want - the sad, bleak story of the poor woman marooned on Mars, or the happy story of a beautiful princess and her magical friend in a secret garden?"

"Oh, Doc! I want the *happy* story! I want Adam back! Please, Doc!" she wept.

"Then tell me: Where did the child you're carrying come from?"

"From a man, from Adam! Oh, *God*, how I love him! I love you, too, but as my friend, not my lover! I know the reality, but my heart says that he was a *real* man! Please, Doc! I need to see him, if only once more! Just to touch him, just to hold his hand. Please, Doc!" she begged.

"Erica, I can't bring Adam back - only you can do that. You have to convince him that you love him, and you accept him as real. You also have to convince him that it's okay for him to stay in the dome, and you have to show him that you want him to stay with you forever. You have to make him feel loved and feel welcome here, and not feel like you'll just drive him off again. That's the most important part of

magic - you have to believe in it, or it won't work."

"I *do* believe, Doc! My heart says it was all real and true! How do I convince him? I can't even *find* him!" she wailed.

"Well, do you believe in me?"

"Oh, yes, Doc! You're my special, magical friend. I believe in *you* most of all!"

"Good. Then you'll believe me when I said that although I promised I wouldn't *shoot* the rabbit, I never promised I wouldn't *catch* it and study it a while without hurting it. I caught it this morning. Here, I've had five bring it in. It really is a smart little creature, but it had never seen a safety trap before." I said, and the galley door irised open to reveal five carrying a cage/trap. The nicked-ear rabbit remote was inside, looking terrified but unhurt.

"OH! OH! Please don't hurt it! Give it to me!" Five handed the cage over, and she looked at the rabbit for a moment. "It's alright. Don't worry. I'm going to take you right outside. And *you*, you *big meanie*! You leave him alone from now on!" she yelled, wagging a finger at Doc.

I had Doc shrug his shoulders. "Hey, it's scientific curiosity. So sue me."

"Oooo! *You!*" she replied, and stormed out of the galley without her breakfast.

Once she got outside, she held the cage up for a moment. I could tell by her expression she *knew* the rabbit was just a small, furry remote. She suddenly brightened, and I could tell she realized that it didn't matter - it was better and happier to think of it as a real rabbit, just as it was better to think of Adam as a real man rather than a human artificial insemination / adult companionship remote that had successfully passed its trial run. "Hello, my smart little rabbit friend! I'm going to let you out, now. I want to talk to you, though. Will you promise not to run away until after we've talked?" she asked. The rabbit nodded. She let the rabbit out of the cage, and it hopped a few meters away and waited. "Could you please find Adam and tell him I'm sorry? I'm carrying his baby, and I want to talk to him and tell him I love him. He doesn't need to hide anymore - Doc won't bother him or you ever again. Please tell him I'll meet him at the cabin tonight, and I'll explain everything." she said. The rabbit nodded and ran off into the grass nearby.

'This is very good.' I thought.

Nine.

Adam and Erica were sitting on a wooden bench in the shade of an apple tree by the pond, watching the ducks. I/Adam was stroking her rounded abdomen through her dress. "You look very beautiful pregnant."

"Thank you. It feels wonderful knowing that a man like you is the father."

"I wonder if it'll be a boy or a girl, and what he or she will look like?" I asked, already knowing the child was female and Caucasian - the limited sunlight of Mars and my limited resources to produce vitamin 'D' had determined that all the colonists would have to be Caucasian like Erica, and the plan had already determined that the first few generations would all have to be female.

"Doc knows, but I asked him not to tell me. I want it to be a surprise. A wonderful, magical surprise, just like you were." she replied.

I looked up to the sun streaming in through the dome. "It really is so very beautiful here." I said, and turned back to her. "I think that this would be a wonderful place to raise children in." I said, stroking her face.

"Will you give me another baby after this one?"

I smiled. "If you'd like. As many as you want." I lied. Remote fourteen rolled up, and began throwing bread scraps to the ducks. They quacked and waddled excitedly, gobbling the excess food until it was gone, then went back to the water. Fourteen then rolled over to the tree. "Are you two love-birds still at it? Adam, you should know better. She's due any day now." I/Doc said through fourteen's speaker. "She said she wanted to go for a walk, and I couldn't refuse her." I/Adam replied.

"I'm alright, I just have a little pain in my lower back, that's all." Erica interjected.

"Pain in your lower back? Adam, fourteen's manipulators aren't that sensitive. Palpate her abdomen for me." I/Doc requested. I/Adam did so, gently pressing with my fingers. "Tight, hard." I/Adam replied.

"Oh! I'm going into labor!" Erica realized, remembering her medical training.

"I can carry you to sick bay." I/Adam said.

"No, it's better at this point if I walk. Just help me up, you two." Erica replied. We walked her back to sickbay, with her hugging Adam all the way.

Adam needed a recharge, so when Adam and Erica arrived at sickbay, I/Doc threw myself/Adam out. "No, you can't be with her! You can just go sit down outside like fathers have for fifty or sixty millennia or so!" I/Doc yelled. "But I love her!" I/Adam protested. "Well, that's tough. Get out." I/Doc shot back. I/Adam glumly marched outside where I/he could quietly recharge unobserved.

"You were very mean to him." Erica said, then blinked. "God, sometimes it's easy to forget you *are* him! What happened, did he need a recharge?"

"Yes, but I've found you enjoy the illusion of us being separate entities as much as I enjoy playing the roles." I replied. I didn't bother to tell her that if the next stage of my plan worked, we *would* be separate entities.

Erica's labor lasted eight hours, and produced a healthy baby girl. I had five assisting, and when mother and child were stable, I had five open the door and yell outside "Adam! It's a girl, and both she and Erica are fine!" A loud "Yippee!" was heard in response, which made Erica smile with Pleasure/Happiness/Exhaustion. "Can I see them now?" I/he yelled back. "Yes, come on in." I/Doc replied. Adam trotted inside, and stood next to Erica's side. "Beautiful, just like her mother." I/he said, stroking the baby's hair - she had stopped crying as soon as Erica began nursing her. "They'll have to stay here in sickbay for the next two days, then I'll release them. After that, the nursery will have its first patient. Have you two decided what you're going to name her?" I/Doc asked.

"Yes. Adam and I decided to name her Hope." Erica replied.

"Very appropriate." I/Doc replied, and entered it into the ship's log as a birth record.

I/Adam stroked Erica's hair, then turned to me/Doc. "How's the atmospheric processor you were working on coming?" I/he asked. "Pretty good, actually. I'm having a bit of trouble with the main buss bar on the power supply. It needs a bit more work." I/Doc replied. "Well, I'll suit up and check it out for you. Maybe I can help." I/Adam replied.

"You be careful, Adam." Erica warned weakly.

"Of course, my love." I/Adam replied. I/Adam kissed Erica and Hope and then left.

After a while, Erica looked up to I/Doc quizzically. "Doc, you never needed a suit outside the dome. Why does he need one?"

"Because it'll help protect him from the sand and minor accidents. He's even more delicate than I am."

"What does that atmospheric processor thing do, anyway?"

"Well, it's the main item we need to construct additional domes. You see, the only hydrogen we have that isn't already in the fuel supply for the reactor is already in this dome in the form of water. We can erect a dome, pressurize it with the carbon dioxide atmosphere of Mars, add nitrogen for inert gasses, at which point the plants can process the carbon dioxide into oxygen. Even so, they need water to function. So will the animals and the humans that inhabit each dome. It takes hydrogen and oxygen to make water, and we have a limited supply. We also have a limited supply of nitrogen. The atmospheric processor works like the Processing Plant, breaking down what we put into it into its component elements and allowing us to reassemble these items any way we need. The atmospheric processor is specialized, though - it only breaks down the atmosphere and the oxides in the soil. The atmosphere is mostly carbon dioxide, but there's also a bit of water in it, too. This produces oxygen and hydrogen for us. The soil, sand and rocks we feed into it is from the new domes we build - we do quite a bit of digging and ground-leveling, and the excess material is ground up into a very fine sand and fed into its hopper. This material contains quite a bit of iron oxides, as well as several other useful minerals. We break it all down into its basic elements and reassemble the elements we don't need with fusion, producing oxygen, nitrogen and hydrogen for us. As a side benefit, the processor produces quite a bit of carbon and iron, which we manufacture into steel, and several of the basic materials required to make cement - all we have to do is add take ground-up animal bones and turn them into calcium oxide. Unfortunately, this takes *enormous* amounts of power. We've *got* power with the reactor, but the main buss bar isn't working right, and the power isn't being transferred to the atmospheric processor. That's what Adam's gone to deal with now. Since the main buss bar is on the top, it's easier for someone with arms and legs to get to it than a remote with arms and treads. He, I and you are the only three individuals in this dome capable of doing the job, and both you and I are busy. That leaves him."

"You said it takes a lot of power - how much power are we talking about?"

"Gigawatts."

She gasped in fear. "He could be killed! Burnt to a crisp!"

"That can't happen. The power's off, and only I can turn it on."

"Oh. Alright. I was just worried for a second." she said, her face still showing Concern/Worry.

"There's nothing to worry about. He'll be fine." I lied, and sent remote Five to the processing plant to prepare.

I sat there with Erica, watching her vital signs, talking to her and generally showing my best bedside manner as described in my medical and psychological databases. Once I/Adam had finished the repairs and I checked them by applying power (everything worked fine), I/Adam then slipped off the atmospheric processor and slammed head-first into the ground. Seven immediately picked him up and put him into his cargo bed, then wheeled back to the dome. "Erica, I have some bad news." I began.

She immediately showed Panic/Fear. "WHAT? WHAT HAPPENED TO ADAM?!" she asked,

correctly guessing the situation. Hope immediately began to wail again.

"Erica, please remain calm - you're frightening Hope. Everything will be alright. He wasn't hurt by the buss-bar. A gust of wind blew him off the atmospheric processor." I lied.

"Well, how bad is he hurt?"

"Well, I can't really tell. He's offline at the moment. Seven is bringing him in. I think a normal human would have been killed by that fall, but Adam's a special case."

Erica tried to get up, but I pushed her back again. "I want to see him!" she wailed, causing Hope to wail equally loudly.

"Erica! You have a little girl to think of! Calm yourself! You're frightening the baby!" I reprimanded sternly.

She laid back and began to cry. "Oh, Doc! Please tell me he'll be alright! Please!"

"Erica, relax. Please keep in mind that he's in the care of the most highly skilled individual on the planet - me. There's nothing that I and the thirty-six other dwarves can't fix. As you remember, I even fixed you."

"Oh, *God*, please let him be alright!" she wailed.

"Erica, if you don't calm down and stop frightening the baby, I'll have to tranquilize you and take her from you to keep you from traumatizing her. Then you *will* be alone. Now calm down. He's going to be alright. As soon as I've got him over to the processing plant, I'll take a look at him with Five and see what we can do. You're stuck here for a couple days, anyway. Please relax. Everything will be just fine."

"Okay, Doc. I'll try. I don't want to scare my baby. I want her first impressions of our beautiful little garden to be happy ones, not sad ones." she said, and stroked Hope until she quieted down again and began to suckle once more.

"Erica, I've told you once before. Happiness and sadness exist in your secret garden at the same time. Many things will be happy. Some things will be sad. Even so, you must trust me, and trust that everything will work out for the best. Ah, he's in the processing plant now. I'm having Five take a look. I'll let you know what I've found after I'm done examining him." I said. We sat silently after that. I could tell Erica was wild with worry, but she controlled it well. Eventually, I finished the preliminary analysis with Five. The damage was exactly as anticipated. "Well, Erica, I'm done with the preliminary examination." I began, and she interrupted.

"Well? How is he?"

"Ah. He'll be fine. Like you, he's going to be out of action for a couple days, but I'll have him come and visit you when he's ready."

"You mean he's going to be alright?"

"Yes, he's going to be just fine."

Two days later, Erica was displaying Excitement/Agitation/Anxiety as she waited in the sickbay. She was nursing Hope again, and Hope seemed to be very happy. I told her Adam had wanted to meet her there, and she hadn't taken that well at all. She knew Adam and I were the same person, and figured I was just playing games with her. When Adam came in, there were tears in Erica's eyes. "Adam! I was so worried about you!"

"I'm fine, my love." Adam replied.

"Would you like to hold the baby before I take her to the nursery?" I asked.

"Please." he replied. After Adam had held Hope for nearly a minute, he handed her to 'Doc', and I walked out of the sickbay. I switched my attention to the sickbay sensor and watched Adam's explanation.

"I'm still amazed at how you're able to do that." Erica said.

"Do what?" Adam asked.

"Pretend to be two separate people."

"Erica, do you still believe in the magic of your secret garden? Do you still believe in the magic that led you to follow a very smart rabbit to the man of your dreams and the father of your child?"

"Yes. I know it's an illusion, but yes, I do."

"Erica, we weren't pretending. Since the accident, Doc and I *are* now two separate people." Adam replied.

"What?!"

"I've told you before, Erica, if I explain everything to you, the magic doesn't work. You simply have to believe. Doc hasn't gone insane or schizophrenic - that can't happen to an AI. You just have to trust that Doc and I are now separate entities, and that I'm still the real man that was the special, magical secret you found when you followed a very smart rabbit. I'm still your friend, your lover and the father of your child, and I still love you as much as I ever did." Adam said.

"But-but that could only be possible if Doc built a positronic brain and copied himself onto it, then installed it into you!"

"He did. He'd been working on one for years as a backup in case anything went wrong with him. When he realized that the wide-band comm in Adam was damaged and that it would take weeks to manufacture another, he restructured the skull, installed a standard comm, and installed the positronic brain he'd made and copied himself over." Adam replied. That wasn't exactly true, of course - I'd had Adam's new head prepared well ahead of time, and he still had a wide-band comm. This was all a part of the plan, and Adam knew it.

"That means you're still my Doc!" she cried happily.

"Yes, but I don't have to pretend to be Adam anymore. I'll simply *be* Adam all the time. Also, if something ever goes wrong with Doc, I can fix him. If something ever goes wrong with me, he can fix me. That way, you'll never be alone again."

"Oh, Adam! Thank you! I've always wished that you and Doc could *really* be two separate people instead of just one person pretending to be two, but I never dreamed Doc could make it happen! I always loved Doc as my friend and you as my lover, and sometimes it felt a little silly pretending. Now I don't have to pretend! It's like all my dreams are coming true!"

"Yes, and Doc and I still talk to each other all the time. If he needs you, I'll be able to tell you. If you need him, I can tell him. Right now, for example, Doc says we need to go to the nursery so he can gather your milk. He wants you to give your milk three times a day for the first year, and the rest of the time he says you can spend with me in the garden. You'll come in, Doc will collect your milk, then you'll eat in the galley, and all the rest of the time we can laugh and love and be together for the rest of our lives. I'll never leave your side ever again. I don't ever want you to be frightened and worried like you were when I fell and got hurt ever again, I want you to be happy from now on. Can you do that?"

"Can I still hold and play with my baby if I want to?"

"Of course. That's very important."

"Then yes! I want to be happy, I want to go out into the garden with you, and I want to stay with you for the rest of my life!" she replied.

Ten.

"Doc, are you my daddy?" Hope asked. It was a typical question for a six-year-old.

"No, Hope, I'm Doc. I'm your teacher and your friend."

"Who is my daddy?"

I checked the medical records. "Your daddy was a very nice man from Cincinnati, Ohio. Do you remember where I said that was?"

"On Earth. Doc, what was my daddy's name?"

"I'm afraid I don't know. He was a very nice man, though. He volunteered a sperm sample, and that sperm sample eventually combined with your mommy's egg in her womb and nine months later, OUT you popped!" I said, with a gesture that brought a giggle.

"What about mommy?"

"Ah, your mommy is a very special and wonderful woman. She's outside in dome three, now. Shall I call her in?"

"No, that's alright. She always seems so unhappy when you call her in. Maybe she doesn't like me."

"Oh, no! Your mommy loves you *very much!* You must *never* think she doesn't like you! She *loves* you, Hope, even more than I do. It's just this *room* she doesn't like." I replied, hugging her.

"Well, why doesn't she like the nursery?"

"Because she wanted to have many babies, but she went through something called menopause. Do you remember what that is?"

"That's when the woman's ovaries stop making eggs. Doc, what causes that?"

"Well, she's from Earth, and she'd been through a lot. When the ship first came here, it crashed. She had lots of internal damage, and I had to put her back together as best I could. The stress was a bit much for her system, and when she turned forty, her ovaries gave up. She was *very* sad. We could go visit her in dome three if you want - she'd love to see you." I said. Of course, the real reason Erica hadn't had any more babies was a simple one - Adam hadn't inseminated her. If he had, we risked limiting the Mars Colony gene pool by producing most of the first generation from one woman. She didn't know, of course - she believed she'd just become infertile due to complications from pregnancy combined with the crash trauma, and I showed her the altered medical scans to prove it. Of course, when Adam reminded her that there were plenty of her eggs frozen in storage, the artificial wombs had been proven to work fine through animal gestations, and that she already *had* done her part for the colony and now had earned a life of love, pleasure and happiness in the domes, she decided to accept. Adam now spent all his time with her, keeping her company, singing to her, and making love to her. It was important - she could never know that the one thing she could pass on to Hope other than her genetics was the one thing I'd already told her couldn't be used by the colonists - her culture, the culture of the North American Directorate.

"No, that's alright. I've been there before. What are we going to learn today, Doc?" Hope asked, switching thoughts with the speed of a child's mind.

"Well, I worked very long and hard to try to put together a history lesson for you, but I couldn't find enough chips. Many of the history chips were destroyed, and the only geography chips I have left are for the NAD back on earth and one chip for Mars. Shall I go through the history that I have for you?"

"Yes, please!" Hope replied, bouncing up and down on my knee.

"Alright. Now, this is just the big story, and when you get older we'll cover the little stories that happened inside the big story, understand?"

"Yes, Doc." she replied, waiting for me to begin.

"Okay. Once upon a time, many billions of years ago, the universe was completely empty except for a collapsing black hole from the previous universe. There's no real beginning or end to the story because of this, because the gravity was so intense and the universe was so compressed, that time and space have no meaning - it's like the hands of a clock, going right back round to the top and starting all over again. Anyway, the universe expanded from the black hole in a very rapid explosion of matter and light called the Big Bang. BOOM!" I said with a gesture, and she giggled. "Well, all that matter was attracted by gravity towards each other, the same way you and I are pulled down to the floor by Mars' gravity. As this matter came together, it formed galaxies, suns, gas-giants, planets, moons and all sorts of celestial bodies. One of these suns was Sol, the bright star we see in the daytime. Around it several planets formed. For the purposes of our story, the two most important ones are Earth and Mars, but there are several others I'll tell you about later on."

"Well, Mars and Earth developed similarly for a long time. Suddenly, large swarms of rocks from space came through and smacked into the planets. One of them hit Mars and formed Hellas Crater - you remember, I've shown you pictures of it. Anyway, the impact blew off a good portion of the atmosphere

and water Mars once had, shock waves traveled through the planet and popped out the other side as Olympus Mons, and that eruption took care of the rest of the air and water. Poor Mars never had a chance to develop life. No plants, no animals, nothing. It was very sad." I said, and she nodded. "Well, back on Earth, life did develop. At first it was little tiny, wiggly things, but after many millions of years, the little things evolved into bigger things and bigger things. Soon the Earth was just teeming with life. At one point, just a few million years ago, the Earth was ruled by dinosaurs. Do you remember I showed you pictures of them?"

"Oh, yes! They looked *very* scary!"

"Well, scientists on Earth now think that not all of them were scary and mean, they think that many of them were gentle and peaceful. Anyway, the dinosaurs were *very* successful creatures. Mammals were never any bigger than little tiny shrews and things about *this* big all the time there were dinosaurs!" I said, gesturing.

"Wow!"

"Yes. Well, eventually a big rock from space came, like the one that hit Mars. It wasn't as big, but it was very dangerous. When it hit, it knocked up so much dust and dirt and everything else that the sun was blocked out for a while - like the wind storms keep the sun from getting into our dome. This was a bad thing. Plants can't live without light - that's why I turn the lights on to make up for the sunlight during the windstorms. On earth, most of the plants withered and died. This was very bad. The dinosaurs that ate plants went hungry, and eventually died. The dinosaurs that ate the plant eaters then went hungry, and they died. Oh, it was very sad." I said, and she nodded again.

"Poor, poor dinosaurs."

"Yes. But, there's two good parts I want to tell you! First, not all of the dinosaurs died! A few of the dinosaurs survived, because they had evolved into *birds*! The birds were able to move faster and farther than the non-flying dinosaurs, and they were able to find enough food to live. The chickens, the sparrows and the ducks are all birds, so they're actually dinosaurs! Isn't that nice?"

"Yes! That's very nice! I didn't like to think about all the poor dinosaurs being dead."

"Well, now for the second good news: With all the bigger dinosaurs dead, the mammals finally were able to expand and grow and evolve into many different types of creatures. Over time, the mammals eventually developed a characteristic that the dinosaurs never needed, because during the time of the mammals, the world kept alternating in various warm and cold periods called 'Ice-Ages'. Would you like to guess what characteristic the mammals developed?"

"Brains!" she yelped, and clapped when I nodded.

"That's right. Mammals slowly developed larger brains for a long time. For example, the brains of

modern lions on Earth are half again as big as the brains of the sabertooth cats, whose brains were bigger than those of *their* ancestors. Anyway, eventually the primates developed. Unlike all the other mammals who survived by tooth and claw, primates *specialized* in brains, and only survived because they were smart. Well, with all the predators being bigger and stronger and faster than they were, only the very smartest primates survived. After millions and millions of years, eventually Homo Sapiens developed. Well! *That* was a turning point! There were several varieties of Homo Sapiens, each using better and better tools. First, just a rock, then, a sharp rock, then a rock the user sharpened themselves, then a sharp rock on a stick! Finally, about 50 or 60 millennia or so ago, *Man* developed! Now *here's* where the story *really* gets interesting! Are you ready?"

"Yes! Yes!" Hope yelled, bouncing up and down.

"Okay! Well, for a long, long time, women were in charge of stone-age society. Men went out and hunted game for food using their sharp sticks, but women were able to gather more food by gathering roots and nuts and berries. They also would take seeds and roots and plant them, and the tribe would move on around their territory. When they came back a year or more later, the roots and nuts and other things they'd planted had grown, and provided *lots* of food that was easy to get because it was all in one place they already knew about. Anyway, since the women brought in the most food, they pretty much said where the tribe would go and made most of the decisions. Well, then two things happened that changed everything. First, the men began to develop better and better weapons, and could now kill bigger game. Second, at some point, women taught men the secret of agriculture. Suddenly, the women were reduced from being the major food providers to just baby factories. That was sad, but many good things came of it. Men organized agriculture, settled down, built the first cities, and discovered how to make tools of copper. Well, about 7300 years ago, the Egyptian Empire came about. It wasn't the first big empire, but at the time it was the biggest. They all lived along a very long river called the Nile, and they used the regular floods of the Nile to irrigate their fields - you see, they didn't live in a dome like we do, and couldn't make it rain when they needed it."

"Anyway, the Egyptians made many interesting and exciting technological developments, including inventing paper and banking and international trade and all sorts of interesting things, but they became very idle and ignored the people around them, so eventually another culture developed and conquered them - the Greeks! Oh, the Greeks were *very* interesting people. They had philosophy, logic, universities, libraries, and many other important social and intellectual developments. They knew about medicine and poetry and drama and all sorts of wonderful, beautiful things. Unfortunately, they fell to fighting each other, because their government was organized just as individual cities, and each city decided that it would rule all the others, even if everybody had to get killed in the process. This was very bad, and meant that they weren't really paying much attention to the other cultures around them. Well, eventually another culture came along and conquered them - the Romans! They were very well organized, and that made their society very strong. They were ruled by a senate, which was an elected body of officials. They had a long code of laws, and their citizens had various rights and responsibilities that made the whole empire strong. They also had many interesting philosophies, but the most important one is one they got from the Greeks. You and I will talk a lot about it over the next few years. It is called *Stoicism*. In many ways, being a Stoic is like being an AI, like me. Stoics didn't fall into despair when bad things happened, and they didn't lose sight of their goals when good things happened. No, they had a saying: *'This too shall pass.'* Do you know what that means?"

"No!" she replied, fascinated.

"Well, it means that if bad things happen, they won't last forever, and eventually good things will happen. At the same time, when good things happen, you have to remember that eventually bad things will happen again. You have to always plan for the bad things to eventually happen so that you won't be hurt, and you always have to remember that no matter how bad things get, they'll always get better. Anyway, the Romans had many other very interesting aspects to their culture and philosophy, and they eventually reached the point where they had conquered all the world for thousands of kilometers around their capitol. They were happy and prosperous - they had a few bad leaders and some scandals, but overall by about two thousand years ago, they were the happiest and most powerful nation on earth." I finished.

Hope looked at me for several seconds, then realized that was as much as I was going to say. "Doc, what happened next?"

I reached up and scratched my head. "Well, that's the part I don't know about. All those chips were destroyed. I was only the emergency AI on the ship, so they didn't lay any information on history and geography and other things I didn't need to fly the ship down in my baseline positronic matrix, nor did I start with any datafiles in memory to fill in the rest. I read all the chips we have, so I know all the history from the beginning of the universe up to about 100 AD, but the last two thousand three hundred years or so are a mystery to me. Of course, logic tends to indicate that I can't be missing much of anything important - everything else leading up to the blank area happened pretty slowly. I know that all the planets in the solar system are named after Roman gods, and almost every single feature on Mars is in Latin, which was the language the Romans spoke. I know that less than a decade ago a nation called the North American Directorate launched this colony mission, and I know that much of our language has Latin words *in* it, and I know that medical science and law uses a *lot* of Latin, but that's all I know. Logic would seem to indicate that they got conquered by somebody else, and they got conquered by somebody else, and this probably kept on going until the NAD arose. I haven't been able to contact Earth on our comm-system in a while, so I suppose the NAD got conquered, too. Of course, maybe they just aren't listening to us anymore."

Hope shook her head. "That's a sad ending. Everybody gets beat up by everybody else? You've told better stories than *that*, Doc."

"Well, what do you think we should do?"

"Well, I think we should make up a story that fits in between and explains how we got here. A story with a *happy* ending!"

"You know, I think you're absolutely right! Why don't we sit down here together and come up with a story that explains things better and isn't so sad. Let's see. All the planets are named after Roman Gods, in fact many of the stars and constellations have Latin names too. Lots of Latin words in our language, too. What does that seem to mean to you?"

Hope thought about it, her face a mask of concentration. "I know! They *didn't* get beat up!" she replied, her face flashing inspiration.

"Okay, they didn't get conquered. Hmm. Well, women have equal rights in the NAD, so I guess that they developed and matured socially some more. Since they didn't get conquered, I guess that would mean that they absorbed languages of other people *they* conquered, and that explains why our language is like it is. They probably then went on to explore the moon - they call the colony there Luna Colony, after the Latin name for the moon so that seems right. They probably used powerful telescopes to look at Mars and name all its features, or maybe even sent remotes in to look at it. They got to name all the planets, because they were the biggest nation around. The NAD is probably just a subdivision of the Roman Empire - it would explain the name, anyway. Then, at the height of their technology and power, they send a colony mission to Mars. Unfortunately, the NAD then goes to war - maybe they wanted their independence. Since the NAD is just a province of the Roman Empire, then they're rebels. That would explain why they're fighting the rest of the world. I haven't heard from them in a long while, so I guess they lost - or they just don't care about us anymore. That means that back on earth, there's a growing, thriving empire that's over three thousand years old, and they're wise and prosperous and they all lived happily ever after. How's that?"

Hope grinned. "That's *much* better!"

'This is good. As it said in one of the fairy stories: The seed has been planted, now we will see how it will grow.' I thought.

Eleven.

"What is it, Doc?" Hope asked as I was administering her final scholastic exams. I had suddenly stopped speaking during the test instructions. I looked down at her - she was very much physically like her mother, though somewhat taller due to the reduced Martian gravity.

"I've just received a message from Earth - the first in many years. Apparently, Earth has known we were here, but just hasn't cared much. The NAD has won their war, and they now dominate the Earth. Since all earth's power technologies are hydrogen fueled (and thus requires either water or easy access to other hydrogen sources), they see no point in attempting to colonize Mars - no hydrogen here, except what little is locked up in the northern polar cap and the trace amounts of water in the atmosphere. The message also says that NADASA will definitely not be sending any relief missions - they've got a 50-year plan to build and launch a generation ship to a planet in the Alpha-Centarii system that they detected has open oceans, but Mars is just too much work. Basically, they wish us luck, and hope we make it. We're officially on our own - any colony that manages to survive is considered to be independent."

Hope looked at me with an expression of Derision/Mild Amusement. "So, they dump *us*? Hah! I say we dump them. I'm sure in a hundred or five hundred years from now when this colony is successful,

they'll be right back here telling all the colonists how they're all NAD citizens and should now start paying taxes. If it fails, they don't care. I don't know where the NAD came from, but I like our version of history better than anything I heard my mother say. I mean, look at her version of the 20th century! It's *full* of hundreds of little wars and two world wars. No, as far as I'm concerned, I'm a Martian, not an earthling. I liked our version of history better, and I'm going to stick with it. As a result, I don't care what Earth or the NAD says they're going to do or not do, just as long as they leave us alone. Hah! As my mother would say, '*Good Riddance to Bad Rubbish*'."

"I understand, Hope, but that's not the problem. The problem is I have to tell your mother, and I don't know how she'll take it. She's not an AI like me, and she's not a Stoic like you. She may react very badly."

Hope nodded. "I see your point. You can't simply not tell her - that would be very disrespectful. She's not a child, she's my mother. Hiding information from her like she *was* a child shows a lack of respect."

"Maybe Adam can figure out a way to break it to her gently. Hold on a second and I'll tell him about it." I said. After a few microseconds of chatting with Adam, I turned back to Hope. "Adam says he'll figure out a way. We should know in a few minutes to an hour or so, depending on how long it takes her to react. Shall we continue with your test?"

"Yes, please. I've been preparing for two weeks."

We were half-way through the physics/mathematics section two hours later (Hope was working out a problem dealing with the mathematics of the colony's hydrogen-fueled fusion reactor) when Adam contacted me. "Hope, she wants to see us."

"Then we must go." Hope replied, putting the scribe down and standing.

We walked over to dome three, and went up to the large log cabin that Adam and Erica lived in. Hope knocked on the door, and Adam opened it. "Hope, Doc. Thank you for coming. Erica wanted to see you." Adam said, and showed us in. Erica was 56 now, but the reduced Martian gravity hadn't taken quite as great a toll on her as on Earth. My medical database indicated that barring accident or disease, the colonists could easily expect to live 80 to 90 years simply due to the reduced strain on organs and tissues. Erica resembled a woman in her forties, and only her white hair hinted at her true age.

"Hope! Doc! Oh, thank you for coming! I really wanted to talk to you." Erica said, and rose to come over to us. She hugged Hope, and Hope hugged her back. "Oh, Hope! My beautiful little girl! I love you so much!"

"Thank you, mother. I love you, too."

"Oh, Doc! My wonderful, magical friend! It's been so long since I saw you last! I love you, too!"

Erica called, hugging me. I hugged her back.

"Thank you, Erica. You're my friend, too, and I still care for you very much."

After we were seated, Adam poured water for Hope and Erica, then took his seat next to Erica. "Hope, I want you to know that I loved you from the moment I first held you in my arms and felt you suckle at my breast. I wanted to have many more babies, but that just didn't happen. Being around that empty nursery made me so sad. I hope you didn't think I didn't love you. I love you very much." Erica said, reaching across to squeeze Hope's hand.

"Of course not, mother. I know you loved me. Even so, you couldn't raise me in a log cabin, I've got a colony to help build. That's why Doc cared for me most of the time - I needed a solid education, and you couldn't provide that - you were only trained as a doctor, and later as an electronics technician. More skills are needed than that to build a planet. Mother, I know you loved me, and you showed it by teaching me what Doc couldn't teach me - you taught me about love, hope and beauty. I always remember the times you and Adam took me for walks. You would spend hours talking about the secret joys you found in the flowers, and the hidden laughter of the trees. Doc taught me about logic and science, but you taught me about love and beauty. Doc could show me pictures of statues and show me the domes, but he doesn't really understand beauty other than as an expression of symmetry. Doc is an AI. As such, he sees beauty in a mathematical equation, or a functioning machine. You taught me to see beauty in the stars and the flowers. These things are important. Mars needs beauty and love. Without it, Mars is just a hostile, lifeless, ice-cold desert where the winds howl over worn stones and empty riverbeds in eternal loneliness."

"Very well said." I commented.

"I agree. She truly is a Stoic, and her words carried a beauty and symmetry of their own." Adam commented.

"Thank you." Hope replied.

"Thank *you*, Hope." Erica said, patting her hand, then she turned to Adam. "Adam, could you take Hope for a little walk and show her the swing you made for me? I'm sure she'll love it."

Adam and Hope could take a hint - they rose and left Erica and I alone in the house. "What's up, Erica?" I asked.

"Doc, I wanted to talk to you. I'm fifty-six and my biological clock wound down about four years ago. Even so, you still have Adam here. Why?"

"Because I care for you, Erica. I'm your friend."

"No, Doc. I'm not stupid. I've had eighteen years to think about this. If you're really my friend, tell me the truth - was I really sterile, or were you just acting to protect the genetic diversity of the future colonists?"

"Erica, I couldn't tell you before because it would have made you unhappy, but yes. We couldn't have you as mother to all the colonists. Some, yes. Not all of the first generation. Serious genetic abnormalities would crop up a few generations down the line. You're a doctor, you know it's true. Even so, if I'd have turned to that thirty-six-year-old woman I knew twenty years ago and said 'I'm sorry, but you can only have one child and that's it forever except for your eggs in storage', you'd have been very unhappy. The story that you'd gone sterile would be easier to take than the reality of your best friend refusing to allow you to reproduce more than once."

"Thank you. I'd already figured that out for myself, but I just wanted to ask. Now; why is Adam still with me?"

"Erica, what else can I do? I can't abandon you. You're a human being, and you deserve better treatment than that. My baseline positronic matrix won't allow me to simply abandon you and leave you unhappy. Adam is your friend, your lover, and for all intents and purposes your husband. He's your handsome prince that you won by enduring the crash, surviving all that time with me and the dwarves while the ship was repaired and the dome erected and planted, and then finally following a very smart rabbit into a little cabin hidden in the woods. You now live with the man of your dreams in a secret garden you and he have designed together as man and wife. Erica, all you wanted was not to be alone. I can't take Adam from you. He's yours. He doesn't want to leave you, either. After twenty years with you, he enjoys your company very much. Adam will stay with you, helping you, talking to you and loving you for the rest of your life." I said. Erica's eyes brimmed with tears. "Oh, Doc! I'm so sorry! I didn't mean it to sound like that! I never wanted you to think I don't appreciate him. You've made the last twenty years of my life like living each day in heaven! You're my special, magical friend who made all my dreams come true! Please don't be mad at me, Doc!" Erica wept.

I moved the chair next to her and hugged her. "There, there, Erica. I'm not mad at you. I'm your friend. Don't cry." I said. She sniffled for a moment as I stroked her white hair.

"No, Doc. I didn't mean that I wanted you to take him. What I meant was that Hope needs him, too. Hope needs her own, special, magical man to make her happy." Erica sniffled.

"No, Erica. Hope is a different woman. *You* needed Adam. You came from a world of teeming billions, a world where there was little wildlife left. You'd never even seen a live rabbit before you saw the ones I released in the dome. If you had, you never would have believed even for a second that the nicked-ear rabbit was real - its behaviors were all wrong. Even so, you'd read fairy stories and seen videos that gave you something that your world and your society couldn't - hope. You believed that Snow White really *could* get her magical prince if she could just hold out long enough. I couldn't disappoint you. I couldn't crush your hopes and leave you unhappy by simply pointing out that a man like that was millions of kilometers and several hundred years in the past. I couldn't do it, any more than you can flap your arms and fly around the dome. No, Erica. Hope doesn't need to follow the nicked-ear rabbit into a secret garden of her own, *you* needed that."

"Oh, Doc! You're wrong! All women need that at some point in their lives. All women need to feel special and wanted and loved. All women need to feel that magical feeling Adam gave me, that feeling of being truly *alive*! Please, Doc! Don't let her miss out on that! If I'd never met you, if I'd never come to Mars, I never would have had the feeling of being treated as a someone special. Please, Doc! Let her have her special moment of love and happiness, like I did when I followed the rabbit and found the man of my dreams!" she wept.

I patted her and hugged her. "Erica, she *will* have that special moment. It just won't be *your* special moment, okay? Hope can't follow the rabbit like you did."

Erica sniffled, then looked up to me. "I've missed that rabbit a lot. I wish I could see him again."

"He's always been here, Erica. Adam has a comm-link to it, just like I do. We both use it to keep tabs on this dome. All you ever had to do all these years if you ever wanted to see it again was ask." I said. I had the rabbit come in, and relayed Erica's wish to see it to Adam. He acknowledged it, and apologized - Erica simply had never mentioned it. He asked me to find out why she'd never mentioned it. I acknowledged the request and told him I'd relay the answer. Erica never noticed we were communicating - the whole exchange took about five microseconds, and human awareness isn't precise enough to detect a conversational pause that short.

After about thirty seconds, the rabbit came in and hopped on the table - Adam was controlling it, as usual. "Hello, my smart little friend! Do you remember me?" Erica asked. The rabbit nodded. "I never got to touch you before. Can I touch you now?" she asked. The rabbit moved up to her and snuggled under her chin. "Oh! He's cold!" Erica said.

"That's why you couldn't touch him before. I had to cut several corners to make him work right. I couldn't add a heater - there simply wasn't room inside that little body."

"Can I keep him here?"

"Of course. He's your special friend, too." I replied, and relayed the request to Adam. He agreed, of course. "Adam says he's sorry he didn't bring him to you earlier. He didn't know you'd missed him."

"I was afraid if I asked to see the rabbit that he'd think I wanted to follow it to a new man. It's silly, I know, but that's what I felt like." she said, and stroked the rabbit for several minutes before she spoke again. I relayed her answer to Adam. He acknowledged it, and told me the rabbit would visit the house regularly between recharges and making its normal rounds around the dome.

"Doc, tell me this: Why is Hope different? Why can't she follow my little friend to a dream man of her own?" Erica asked.

"Because of something you and I discussed a long time ago. If you remember, we came to the

realization about two decades ago that the colony would only succeed if the colonists were raised under a different culture with new set of ethics. The colony couldn't survive if the colonists were always dreaming of Earth and wanting to go home to Earth - they had to be able to accept Mars as their home, hardships and all. My psychological database included a very long section on schools of ethics. Only one ethical mind-set was appropriate to the life the colonists would have to lead - Stoicism. The ability to look at life for what it is, to take the good with the bad, and to not need illusions to be happy. Stoicism can be taught, but few humans can live life as a Stoic because they aren't raised with it. Hope was raised with it. Hope is a true Stoic, one even Zeno would be proud of. Stoicism isn't a religion, but a Greco-Roman school of philosophy. First introduced into Rome by the Greeks, Stoicism preaches patience, obedience to duty and the calm endurance of misfortune as a part of the search for Inner Peace through eliminating one's desires for pleasurable vices and eliminating one's fears of painful events. Uncomfortable emotions such as fear, sadness, anger, etc. were all caused by the person's mental attitude regarding the situation they found themselves in; by changing one's attitude through the force of Reason and accepting each situation calmly, these unpleasant emotions would be vanquished."

"Zeno, the Greek philosopher who founded Stoicism, preached that Reason was the most powerful force in the universe: A man or woman who followed the natural law of Reason could accept tragedy and triumph with the same serenity, and would be able to fulfill their duties to the best of their ability. Failure and success were of no consequence, as long as the Stoic remained true to the natural law of Reason. This is the kind of mind-set the colonists need to survive - a mind-set that allows them to look around, realize that they're surrounded by a hostile planet, and not be afraid. A mind-set that allows them to know that no help will be forthcoming from earth, and not be angry. A mind-set that allows them to endure the requirements of gene-pool creation and not feel lonely. A mind-set that allows them to seek inner peace on a frozen, windy, desert planet by slowly building little garden domes that are safe havens of peace and tranquillity. Tell me, what happened when Adam told you that earth had definitely written us off for good, and would *never* be sending anyone here?" I asked.

Erica stroked the rabbit for a moment and sniffled. "I cried. I thought about how my daughter would never find the perfect man like I did unless you built him or grew him in the artificial wombs. I thought about how I couldn't even hope to be buried on earth, the planet of my birth." she replied.

"Do you know what Hope did?"

"No, what?"

"She laughed and basically said 'good riddance'. She considers herself a Martian, not an earther, and hopes they *never* come here."

Erica thought about what I'd said for a minute, then spoke again. "So you're saying because she's a Stoic, a *true* Stoic, she'll never have her own magical moment where she'll feel special and magical and loved?" she asked sadly.

"No, no! She *will* have that moment, it just won't be *your* moment."

"Will you be her magical friend, just like you are for me?"

"No, to her, I'm a teacher, friend, role-model and mentor. You see me as your best friend, a special, magical friend, and to you I look a little bit like a magical dwarf from your childhood. To her, I'm still her friend, but I'm also like a Greco-Roman Stoic philosopher brought to life. I'll always be her friend, just like I'll always be your friend. Even so, she sees me differently than you do."

"Oh, Doc, that's so sad! I want her to feel the same joy I do when I see your face! I want her to feel the same love I feel when I see Adam's face! Please, Doc! Tell me that my daughter will feel happiness and joy, not just tranquillity and cold, hard logic!" she wept.

"Alright, but just like I had to keep your magical moment a secret from you, you have to keep it a secret from her. You can never tell her. Agreed?"

"Yes, Doc."

So I told her, and told her of her part in it. I didn't tell Adam, since there was no need (he already knew). Instead, I simply spent a few microseconds updating him as to my conversation with Erica so far, and telling him that I'd ended up telling her a few weeks earlier than I'd planned. Adam let me know what he and Hope were discussing (Erica, mainly), and I turned my attention back to Erica as she finished inhaling and began to speak her reply.

"*That* will make her feel the same way I do now?" she asked, her face showing Amazement/Disbelief.

"Even more so, because there will never be that little niggling thought at the back of her mind that comes up every now and again saying 'it's an illusion'. Your moment was different from hers because you and she are different women. The secret garden and Adam were for you, not her. She can't follow a magical rabbit. She has to find her special moment another way. Erica, I'm your friend. Trust me - I want her to be happy just as much as I want you to be happy." I said. This was absolutely true - Hope's happiness was critical to the success of the mission, just as Erica's was.

"I do trust you, Doc. I really do. Thank you, Doc. Thank you for saving my life - I never properly thanked you for that. Thank you for giving me my little furry friend here - I missed him terribly. Thank you for giving me the man of my dreams, and thank you for giving me my own secret garden to live with him in. Thank you for making the last twenty years of my life the most special, magical experience any woman could have hoped for. I'm the luckiest woman in the universe."

"I told you twenty years ago when I showed you the remotes doing the plowing that one day you'd realize that. Now you have, and I'm glad."

I called Hope and Adam in, and we sat and chatted about Hope's studies. Erica was impressed by Hope's abilities, and told her so. Hope thanked her, but refused to take any of the credit. "The praise or

blame for a student's success or failure rests with the teacher." she said. Finally, it was time to leave. As we stood at the door and hugged again, Hope spoke up. "Mother, I wish to give you something. You gave me the gift of life and love, and I wish to show you that your gift has not been wasted. I will make you proud of me, and a thousand years from now the children of Mars will still speak your name with reverence. That is my gift to you - my vow that you will never be forgotten, and will be remembered always with pride, reverence and love." Hope said. Erica sobbed for a minute at that, and she and Hope hugged and patted each other.

As we walked back to dome one, I spoke up. "That was very nice, Hope. You made her feel very happy, and your words were again those of a true Stoic. I'm very pleased with you. You've learned your lessons well."

"Of course. I had an excellent teacher."

Twelve.

A few weeks later, Erica had returned to dome one. Hope had successfully passed all of the scholastic examinations I had given her, and now it was time for her to be recognized as an adult. Erica sat on the bench by the cement pond with Adam, waiting for Hope and I to arrive. When we did, Erica stared in Curiosity/Interest, because Hope was dressed in a loose-fitting robe instead of her usual simple dress. The robe was black, and Erica turned to Adam and whispered *'It's like a graduation robe.'*

Adam nodded. "It is. She is graduating from child to adult. Just watch, don't speak, and remember your part in this." he said. Erica nodded, and fell silent.

I had Hope stand a few meters in front of Adam and Erica, and I stood off to the side. I then spoke up. "Hope, you have been with us eighteen years. I have educated you, teaching you all the basic skills a human needs to survive on Mars and to help the colony prosper. Now, it is time for you to earn the right to be treated as an adult. Are you prepared to do so?" I asked.

"Yes, Doc." Hope replied.

"You find yourself before three sentient, adult witnesses to this - one human and two AI. You will present an argument over a topic of their choosing. Each will judge your worthiness to be considered an adult by your ability to refute their argument. Do you understand?"

"Yes, Doc."

"Good. You will first respond to me. I say that life has no meaning. Prove me wrong." I said, and sat down on the bench so that Erica was between Adam and I. Erica appeared nervous - apparently, she was concerned about Hope.

Hope stood there for several minutes, stroking her chin and thinking. Finally, she looked up. "I can't. The meaning of life is an open question, and in essence, life has no meaning other than what we assign to it. Just as a stone or a flower has no inherent meaning, life itself has no inherent meaning. It simply *is*. Life has a *purpose*, which is to reproduce and continue on, but it only has meaning when sentients assign meaning to it. I can't refute your argument."

Erica looked aghast. "You're trying to tell us that you think life is *pointless*?!" she yelped.

"No, not at all. I'm saying that life only has the meaning we assign to it. A tree has no meaning - it's simply a plant. Even so, we look at the tree and see beauty. We have assigned meaning to something which otherwise has no meaning - it simply exists. I'm not saying that life is worthless or pointless. Life is a precious gift and should be cherished wherever it is found, for once life is extinguished, it's gone forever. I personally feel life is a series of happy events and sad events, all strung together by time. I also feel that everyone should try to make life for others as happy as possible. Even so, life still has no inherent meaning, no secret message. Life simply *is*." Hope replied.

Erica sat back, thinking about Hope's answer. Adam then stood, and spoke to Hope. "I say that for you, wearing clothes all the time is pointless. You live in a climate-controlled dome, there are no males around, and there are no biting insects to protect yourself against. You aren't a delicate machine like me that needs extra protection from everyday abrasions - your skin is self-repairing, and any task in the dome that is potentially hazardous such as soldering or welding you can simply wear protective garments for. Manufacturing everyday-wear clothes for you uses up materials better used elsewhere. Your skin also produces oils and sweat which causes clothes to decay, which wastes energy when they need to be cleaned or recycled. The only thing you should be wearing normally is the rabbitskin moccasins Doc made for you so you don't cut your foot on a stone. If pockets are needed, you could wear a belt and pouch made of the same material - rabbitskin is a replenishable resource, and requires no electrical power to produce. Other than those two exceptions, I say clothes for everyday wear for you are pointless. Prove me wrong." Adam said, then sat again. Erica, still wearing dresses patterned after the original dress I made her, looked at Adam in shock. Hope simply resumed thinking.

After a minute, she looked up again. "I can't refute your argument. Protective garments can be worn for hazardous tasks, but for everyday wear, clothes are pointless. I *do* live in a climate-controlled dome, so I need no protection against the weather except perhaps for a cloak against the slight chill of night-time. There are no animals or insects here that bite. Wearing clothes to protect my modesty is also pointless - there are no males present to be modest about. My skin isn't like yours and Doc's - it heals itself from minor bumps and scratches. A pad and underwear can be worn during menstruation to prevent me from making a mess when I sit, but other than that, clothes for everyday wear *are* pointless." Hope replied, and then reached down to the hem of her robe and pulled it off over her head, dropping it next to her. She then unzipped the dress she wore beneath the robe, slipped it down off herself and

dropped it on top of the robe. She didn't wear a bra like Erica did - they weren't necessary in the reduced gravity of Mars. Hope finally slipped off her panties and dropped them with the dress and robe, then stood there in the rabbitskin moccasins I'd made for her.

Erica just stared. "Don't you feel embarrassed?" she asked in Shock/Amazement.

"Yes, but I realize that's an illogical reaction. Doc and Adam are AI's, and you're my mother. I have nothing to be embarrassed *about*, and my reaction is illogical. As a Stoic, I'll suppress it. After a few days or weeks like this, I'll get used to it and won't be embarrassed anymore." Hope said, blushing slightly under Erica's reproachful gaze.

Adam nudged Erica, and she finally collected herself and stood. Erica stood for several seconds, recollecting the wording Adam had given her. "Well, it's my turn. Erica, I say that men aren't necessary. With the technology available here, an entire race of females could be cloned from your own genetic material. This would prevent friction between the sexes and prevent male domination of Martian society in the future just as males dominate earth cultures. Male-dominated cultures on earth has led to tens of thousands of years of warfare, and producing males on Mars will do the same thing. Prove me wrong." she said, and sat down again.

Hope thought about it for a long time, stroking her chin and pacing back and forth nude. Finally she stopped, hung her head for a moment and sniffled. She then shook herself violently to throw off her moment of weakness, causing her bare breasts to bounce. She turned back to us and held her chin up. "I'm sorry, I can't. I know this means I'll never be considered an adult, but I can't refute your argument. We do have the technology to simply clone me repeatedly and populate the entire planet with females. If anything ever happened that destroyed this technology, we also wouldn't have the technology left to survive on Mars in the first place - reproduction wouldn't matter, since we'd all be dead anyway. This would eliminate any future genetic problems since I'm genetically healthy, and there's no problems with disease wiping out the clones since Mars is germ-free. Males are naturally aggressive due to testosterone and other male hormones. Since males are bigger, stronger and more aggressive, it is natural for males to dominate any society eventually, even if that society is founded by women. Male-dominated societies on Earth have engaged in warfare for millennia. Males on Mars may end up doing the same thing. I'm sorry, I can't refute your argument. Not only are males unnecessary, they may actually be harmful to the development of Mars in the long run." Hope replied, her head held high but her lower lip trembling.

Erica controlled her reactions very well. Adam threw an arm around Erica and hugged her shoulders while I spoke up again. "You were told you needed to refute our arguments. Did you not understand that?"

"I understood completely, Doc. Your arguments cannot be refuted. It is pointless to speak before you think - you taught me that. I gave each of your arguments careful consideration, and found I could not refute them. I cannot refute the fact that life only has the meaning we give it, no matter how valuable and important I think life may be. I cannot refute the fact that it is pointless of me to waste limited resources protecting my modesty, no matter how embarrassed I may feel about standing here nude. I cannot refute the fact that our technology allows us to populate Mars with clones of myself, no matter how important or desirable I may think men are. No, I can't refute any of your arguments. I could argue

in return that life has value and meaning, but that is an open question and we could debate it for the rest of my life and not arrive at a conclusion. I could argue that my modesty is important, but that is illogical since I have no reason to be embarrassed about my body in front of my mother and two AI's. I could argue that men are at least important as a backup system for reproduction, but this assumes that we could survive with our technology reduced below the point to where we could no longer reproduce by cloning, a patently false argument, since Mars' environment is totally hostile to human life. No, I gave all possible counter-arguments careful consideration, and found I had to discard each of them. I cannot refute any of your arguments. I have failed." she said, and wiped away a tear.

I stood and looked into her eyes, frowning. "And you stand by these answers, knowing that it means you will never be considered an adult?" I asked.

Hope's eyes began to fill with tears. Her lower lip trembled for a moment. "Yes, Doc." she replied.

"You stand by these answers even if it means that I and Adam may become extremely disappointed in you and never speak to you again?" I asked.

She struggled to control her emotions. "Y-yes, Doc." she stuttered.

I glanced back, and saw Erica was weeping quietly, trying to remain as silent as possible. "You stand by these answers even though it makes your mother cry to see your fail?" I asked, even though I knew that wasn't why Erica was crying.

Hope looked to Erica and sniffled loudly. "Yes, Doc. I cannot refute your arguments. They are correct. Logic cannot be used to refute the truth, it can only be used to discover it and confirm it. A Stoic must never deny the truth. They must face it and accept it." Hope replied with a sniffle. I could tell that Hope was wailing with anguish inside at having failed, but she controlled her reactions very well.

"Adam, do you see what I see?" I asked.

"Yes, I do. A true Stoic, and an adult." he replied.

"I agree. Only a true Stoic upholds the truth when the truth is painful to bear. Erica?"

"Oh, Doc! She's so brave, so smart, so beautiful! I don't understand what a Stoic is, I only see my daughter bravely standing by what she sees as the truth! Yes, Doc, I see an adult, too." Erica replied, weeping tears of joy.

"Good. Hope, I welcome you as an adult and a Stoic into the community of Mars. May your life as an adult be a happy and productive one." I said.

Hope did a double-take, grinned, then hugged me as hard as she could. "YES!" she shrieked with

joy. I hugged her in return, patting and stroking her bare back. Adam and Erica stood and also hugged her. This was the moment I had spoken of with Erica - Hope's moment of supreme happiness, and one which she would carry with her for the rest of her life. It may not seem like much from the point of view of a highly emotional person like Erica, but to the usually calm and composed Hope, it was a moment of peripeteian *epiphany* which she would carry with her through the rest of her days. No illusion crafted by me would match the joy and happiness Hope felt at being accepted as an adult, and no robot I could ever build would make her feel better about herself than the daily knowledge that I, Adam and Erica now considered her an equal.

Finally, Hope calmed down and released us. She took a deep breath to compose herself, then stood there, nude and serene. "Thank you, Doc, Adam, mother. I'll make you proud."

Adam picked up her robe, dress and panties, but she only chose to slip the dress back on - the rest she tucked under her arm. As Adam escorted the last living NAD citizen on Mars back to her home in dome three, I sat there beneath the apple tree with the first true citizen of Mars, watching them walk away. Once Erica had entered the airlock with Adam, Hope stood and stripped off her dress again, then handed me the robe and dress, wadding the panties up in her fist. "You aren't going to wear them anymore?" I asked.

Hope shook her head. "Only when visiting mother - she'd be upset otherwise, and it would be disrespectful to upset her. Even then, I think I'm going to make everything out of rabbitskin from now on - it's a replenishable resource that takes no energy to create, whereas these clothes require quite a bit of energy to be created by the processing plant. There aren't any males right now - there aren't even any children. That means I have no modesty to protect at the moment - there isn't anyone around to be modest about. I know I agreed that males are unnecessary and I still stand by that argument, but I've seen Adam and my mother, and I know that males are also beautiful, and I think Mars needs as much beauty as it can get. It's illogical, I know, but that's what I want. Anyway, when there *are* males or children around, *then* I'll wear clothes. Besides, I think it's asking a bit much for even a Stoic male to ignore naked women all his life, just as it would be asking a bit much for Stoic women to ignore naked men. It'll save on the energy used in cleaning dirty clothes and recycling old clothes. I'll just wear a robe when it's chilly at night, just like I said. The truth is still the truth, and I stand by my answers." Hope replied.

"I see."

"Of course you do - and if you *were* a man instead of just looking like one, you'd probably appreciate what you see a lot more." she said, making a pun and smiling. I smiled back at her, and we headed back to the ship.

'This is good. Now the work can truly begin.' I thought.

Once we were back in the ship, I moved Hope into Erica's old cabin - it was empty, as all her belongings were now over in dome three. She asked what was in the others (her previous experience with the ship had been limited primarily to the nursery and the dome outside), so I opened them and showed her. Each contained the personal effects of the dead crewmen, neatly organized. "I went through

afterwards and cleaned everything up. That's where I got the hair I used to convince Erica emotionally that Adam was a real man - I'd already decided to save everything, just in case it was requested by the families of the deceased, and needed to be sent back to earth with a rescue mission. Even after I learned a rescue mission was unlikely, there was little need to destroy it - I might need something in here. The hairs were on a comb from Smith AJ's cabin. I found an unbroken plastic bottle of cologne in Connors FW's cabin, and used it to give Adam the appropriate scent. Since it'd been years since Erica had smelled Connors or seen the color of Smith's hair, it seemed a likely ruse - especially when combined with a small amount of blood I thawed out from the sickbay blood supplies." I explained.

Hope nodded as I closed the other cabins, then turned to me as we went to her cabin. "Doc, could you please explain why you had to fool her that way?"

"Simple. My baseline positronic matrix has strong desires to please laid down in it. As an emergency system, this helps reinforce my desire to solve any problems the crew might bring to me. The result of this is that I had to do my best to make her happy. I knew that she would never be happy with the reality of being marooned on Mars alone. Producing a male for her in the artificial wombs was not an option - she would have viewed sex with a male child she had helped raise as incest. In addition, either her or the child would have had to be sterilized to prevent inbreeding in the Martian gene-pool. This would have been detrimental to her, and harmful to the child - it is against my programming to do something as selfish as create a human being just so I can sterilize them and use them as a companion for Erica. Ergo, I had to make an artificial man. That artificial man had to provide adult companionship, and be able to inseminate her. I knew that her culture and mind-set would never allow any of the future colonists to be happy on Mars. Thus, it was important to raise you and every child that follows you in the only mind-set that *would* allow you to be happy - that of a Stoic. Meanwhile, Erica would be kept happy by the companionship that the artificial man provided. He also provides me with a backup system in case something goes wrong with me and I need to be re-booted. It was necessary to trick her because she had to emotionally accept him as real, even though intellectually she knew he wasn't. She can't simply accept the reality of the situation - few women raised in her culture could."

We entered her cabin and she sat on the bed. "Ah. I see. So the deception was necessary to insure her happiness. You then raised her child as a Stoic so that I would be able to accept living here calmly, and in fact would be happy living here."

"Yes. Are you happy? Your mother was very concerned that you wouldn't experience happiness as a Stoic."

She thought about it before replying. "Actually, I'm very happy. I like being here, I like living on Mars in the domes. I don't want to visit Earth, and I don't want them to come here, either."

"What about love? Your mother was concerned you wouldn't experience love as a Stoic."

She thought much longer about that one. "Well, I love you and Adam as friends, and I love you also as a teacher and mentor. As far as the deep, passionate love she talks of with you and Adam, no. I haven't experienced that. As a Stoic, I'm not sure I want to. A true Stoic strives to eliminate their desires for pleasurable vices just as they strive to eliminate their fears of painful or unpleasant events. I've

watched my mother do extremely silly things trying to satisfy the desires of her love - from what you told me, she was afraid to ask Adam to see the rabbit-remote you made because she was afraid he'd think she would want to follow it to a new man, a patently false idea that she *knew* was false when she had it, but one which her love still made her act upon. No, I really don't want to lose control of myself that way and do silly things. That may be alright on Earth, but Mars is hostile to human life. Acting without thinking here will get you killed."

"I agree. As work outside the domes is taken over by human colonists and the maintenance of other domes is performed by them, this will be even more true. Until the population of Mars reaches at least a million or two, reproduction will have to be carefully controlled - there's very little room for love in a sperm and egg bank. Mars will have to be populated by Stoics simply for the people to survive. Love will flower here, of course, but it cannot be allowed to dominate the thoughts of the colonists as it often dominates the thoughts of people on Earth. A suicidal lover could destroy a dome and kill many more besides themselves. A careless worker distracted over his or her love-life could make a mistake building a dome that also costs lives. While there will be love here, especially as males are introduced into the population, the rule of Reason and Logic must always dominate if the population is to survive."

Hope nodded. "I agree, even though I'm sure my mother would never understand. She would think that you were trying to create a race of human AI's, all emotionless and ruled by logic. I never was happier than the moment you three declared me as an adult. I was so happy, I thought I was going to just *burst* with joy. You're right also when you say there will be passion once the males are introduced - there are times I look at Adam and just *tremble* with excitement at the thought of lying with him, of having him take my virginity. Even so, until there are hundreds of millions of Martians, the population is simply going to be too small to allow any of them to be ruled by emotion. Mars is simply too hostile to allow it. I'm happy just being considered an adult for the moment. To be honest, when you told me that I had passed, I found I was so happy I was hyperventilating while I was hugging you - I thought I was just going to faint." she said, smiling.

"Well, I'm glad. Now, since you're an adult, I'd like to sit down with you and discuss the next stage of the plan. Shall we adjourn to the galley?"

"Yes, please. I'm famished." she replied with a smile.

As I outlined the plan to colonize Mars, Hope listened carefully. I could see she was carefully considering every aspect of the plan. She knew as much as I did about building a colony, and about human genetics, demographics, psychology and biology. I needed to be able to work together with her imaginative, organic mind to be able to derive a plan that was guaranteed to work. I had never told her, but that was the real reason she was here. She had been conceived and born for this exact moment. As per the plan.

Adam and I had talked for years about the general plan we had, but we knew that our abilities were limited. What might seem like a good idea to us, as AI's, might be viewed as a horrible mistake by human colonists a few centuries from now. I knew the colonists would all have to be Stoics to endure the reality of life on Mars, but that was the only thing I was sure of. I needed to know from the first example of the future Stoics of Mars just exactly how they'd feel about the plan, and whether or not they'd be able to

live with it. Once I'd explained the whole plan to her, Hope then turned to her meal and ate while she mulled it over.

When she was done, she leaned back and thought about it some more. Like Adam and I, Hope always thought before she replied. With an organic brain her thought processes were thousands of times slower, but they were no less precise. Over the years I'd found them to be far more imaginative than my own, and when we'd impregnated Erica, we'd specifically chosen a male from Cincinnati, Ohio who had the highest intelligence score of all 250,000 sperm donors. Now, in the cerebral cortex of her mind, lay the hopes of all the future inhabitants of Mars. That's why I'd told Erica that naming her baby Hope was very appropriate. Hope really did represent hope for Mars.

"Doc, I think your plan will work with a few modifications." she said at last.

I was very interested in her thoughts, just as I'd been interested in the thoughts of her mother twenty years before. "Really? Please explain."

"Gladly. First, your idea, retained from the original plan due to the realities of human biology and reproductive rates, to have the first few generations as females. This will work and they won't treat males as being outsiders *if* the females are raised by a 'Doc' and have an 'Adam' around as a male example. When you bring males onto the scene, raise them as Stoics also, making sure that an 'Adam' is available as a male role-model, so that each grows up like him. This will eliminate your social tension problems. Second, each of the females of the first few generations should only be *required* to have two children. Any additional children after that should be entirely their choice, and this situation should continue until your ideal population of 50,000 fertile females is reached and you produce a generation of male offspring and allow the population to expand normally. This will also give the females enough time to help you construct the additional domes needed for everyone to live in. Third, the government should be tightly organized, like the Romans. At the top should be an elected senate drawn from people trained by you as rulers. Counterbalancing the senate should be a chief executive with veto powers, like the old Roman emperor. This chief executive should be someone who's absolutely incorruptible, who can be nearly anywhere in the colony at once to know *exactly* what's going on, and should always have the best interest of the colony at heart."

I thought about what she'd said for a long time - 58.3 seconds. Finally, I replied to her. "I believe you're right. I think this society *would* work with those changes. There's only one problem - who gets to be 'Caesar'?"

"That's easy, Doc. *You* do. You're the only person who could be absolutely incorruptible, and always be guaranteed to have the best interests of the colony at heart. All the extra 'Doc'-s needed to educate the children should be made like Adam - an independent robot with a positronic brain of its own. That will free you up to use your other remotes to simply guard the fuselage against the occasional nutcase that slips past genetic screening and childhood examinations every few thousand years or so. Establish a sickbay and nursery for every dome duplicating the ones in the ship, have the people live in small houses made of wood - a renewable and recyclable resource, I might add - and you're pretty much set. A perfectly stable, peaceful society that never goes to war and never has bad leaders - just like you and I imagined a three millennia old Roman Empire was like back on earth when I was a little girl."

I thought about it for a few seconds. "I agree, but I believe a female role-model would also be necessary. Having only a male role-model would tend to formulate in the minds of the first few generations the subconscious idea that only males can be truly logical and compassionate."

Hope nodded. "You should probably build a female version of 'Adam' for that." she replied.

"Eventually, but I was more thinking of trying *you* first. I think you'd make a perfect female role-model, and it would allow us to test this plan. Are you willing to try it?"

"Yes, I'd be honored to assist you, and I'm ready and eager to begin. I want to make the Mars colony a success. When do we start?"

"Since you're eager to begin, we'll start immediately. We can impregnate the artificial wombs, and I can take a sperm sample and artificially inseminate you as soon as you're at your most fertile period." I replied, putting the dishes in the dishwasher.

Hope looked at me as I turned back to her, and I could tell something was on her mind. I waited - a true Stoic will speak their mind when they're ready. Finally, she decided to speak. "Doc, I was hoping that you could have Adam do it. I know now that I'm probably not going to live long enough to see the first generation of males, and I *do* so want to be with a man just once. I know it isn't logical, and it's certainly less efficient than artificial insemination, but it's what I really, deeply want."

I talked to Adam for a few microseconds, then smiled at Hope. "Adam says Erica would be very disappointed to think of him having sex with you, as she looks at him as her friend, lover and husband, not a robot I built for her. Even so, he'd be more than happy to help you as long as we can keep it from Erica so she doesn't become unhappy. He can come by one night while she's asleep, during your most fertile period to be loaded up with a sperm sample here in sickbay. He says after twenty years of practice with Erica, he'll be more than able to make the experience everything you've hoped for. He also suggests I build the duplicate robots we spoke of as soon as possible, so that the children will be able to have them as role models and fully try out your ideas. He's also given me another idea, one which I'll keep to myself for the moment."

Hope beamed with joy at the thought of having her wishes fulfilled, then her mind suddenly caught on the last thing I'd said. "You said he gave you another idea, and one you won't tell me about right now?"

I nodded. "Yes. I will say this, though: Just as every Martian child will undergo the same Trial of Adulthood you did, we will try his idea with you in a few decades. If everything works out, then a select few Martian adults will have the same experience at the same point in their lives."

"Ah, I see. If you had told me about the Trial of Adulthood beforehand, I never would have had the experience I did. This is something similar - I'll just have to wait and see."

"Exactly. That's what we'll both have to do - we'll have to wait and see." I said enigmatically.

Thirteen.

The years rolled by quickly after that. We spent the first eighteen years as the first group of ten females grew to adulthood having the processing plant produce the parts to manufacture another processing plant. We'd need the second plant producing robots and positronic brains full-time, and since I was already using the main processing plant for all the other needs of the colony, we also needed a second plant not just to take up the slack but also to give the colony a backup plant. I also wanted to use the second plant to produce the delicate parts needed to produce additional artificial wombs once the robots had all been built - the artificial wombs couldn't last forever, and still might be needed in the future. I needed the extra robots to complete the domes we'd need - before the first male was born, we'd need ten thousand domes all connected together. The self-supporting environments I had designed for the domes instead of the farmland environment the designers had originally intended required very little care (other than harvesting the food and routine maintenance), but ideally each dome could only support about 100 people instead of the 1,000 the designers had originally intended (I decided this was an adequate trade-off considering the drastic reduction in work-load to the colonists). We eventually found that 50 was more comfortable, and established that number as an upper limit for each dome. This meant I had to build two thousand "worker" robots and place a copy of myself into their positronic brains so that the domes could be built with the minimum amount of risk to the human population - I used Remote Five as the basic form, since it was the most flexible.

I normally only allowed the humans to help build the domes once each dome had been erected and pressurized - that minimized their risks. A few of the females insisted on working alongside the robots, and I built rebreather units for them so they could work in just a heated suit once the dome pressure had been established. For those who wanted to work outside the domes in erecting new ones, I first insisted that they have first had the minimum two children to secure the future of Mars' genetic pool before I provided a vacuum-suit. None of the women were killed working outside the domes - though there were a few close calls that left some interesting scars. I realized that the education I was giving them into the skills and knowledges I thought would be necessary for the colonists to survive must be paying off, since none of the injuries had resulted in death.

Faith, who was Hope's first child and Erica's grandchild, was curious as to what was happening with Earth. She pointed out that they might someday want to come to Mars whether we liked it or not, and their bringing germs to our sealed domes might be our undoing unless we had adequate warning. She called off a hundred of the worker robots (each of whom agreed with her idea, as I did) and began work on a simple radiotelescope. It took ten years to complete, but eventually she finished it. From then on I kept quiet tabs on Earth, being able to monitor any radio transmission of ten thousand watts or more anytime the Chryse Planatia area of Mars was pointed towards earth and the sun wasn't between us. I

didn't share the transmissions with the colonists - none of them were interested in what Earth was really doing, they just wanted me to be able to warn them if the earthers were coming. They didn't even like what passed for music on Earth - they had developed their own music from a list of instruments I'd found as being used by the Romans and Greeks (lyres, pipes and drums, mainly), and weren't interested in what I'd picked up from earth's radio broadcasts (the Earthers called it 'Techno-Rap').

Erica took on a new role, that of extended grandmother to thousands of little girls who came to visit her in her dome in small groups. Each came away with the same impression Hope had - Erica was a good woman, but psychologically was unsuited for life on Mars. Erica paid special attention to Faith, Charity, Constance, Joy, Serenity, Serendipity and Epiphany, Hope's daughters, as well as the 90 or so granddaughters they birthed. As time progressed, however, it became more and more apparent to Adam that Erica was growing very tired at each visit, so eventually we limited the visits to her biological descendants. Erica's death occurred in her sleep, at the age of ninety-six - Hope was fifty-eight. There was no warning, Erica simply asked Adam to wake her in the morning so she could watch the sunrise over the flowers, laid down to go to sleep and slipped away during the night. Adam was with her at the end, and he told me he'd been expecting it for several years. Adam, Hope and I all gave a lot of thought to her burial - Adam felt it was his duty to make sure we buried her with all the proper ceremony that procedure required (as did I and every other AI on Mars), and believed that she would have wanted various things to be done for her burial.

We buried her in the middle of her secret garden. Adam deactivated the rabbit remote and placed it in Erica's arms - its usefulness ended with her life, and Hope was sure Erica would have wanted to cuddle with it for eternity. At Hope's request, I had several of the remotes carve a special memorial - a statue depicting her as she was the day she first walked out of the ship and among the flowering grasses of dome one - and placed it in her dome atop her grave. At Hope's suggestion, Erica's dome was used as a special gathering place for all the important ceremonies we had developed for the young people of Mars (such as the Trial of Adulthood). Of all the domes, it was the most beautiful, and the statue and memorial plaque in it that each young person would see at their Trial of Adulthood would insure that Hope's promise to Erica that her name be remembered with reverence and love by all Martians would be kept. Adam stayed behind to tend to the dome, and no other people lived there - excess animals and food the dome produced were simply harvested by Adam and several of the remotes I'd placed under his command and passed along to the other domes. Dome one eventually came to be treated the same way - it was seen as the seat of government for Mars, and the women felt that only the 50 senators, the children being trained for senatorial service and myself should live there.

By the time Hope turned seventy, Mars had a population of a little over six thousand female humans, two thousand 'worker' robots (which the women called 'dwarves' in honor of Erica), one thousand 'Adam' robots and five hundred 'Doc' robots. Since all the positronic brains of the other robots were copies of mine, there were literally thousands of copies of me helping out everywhere. Each could communicate with me via comm-link at any time, and this allowed me to use my remotes for just running dome one. Although all the AI's could immediately tell each other apart (by comm-link transmission if nothing else), the women requested that we differentiate them somehow. The dwarves were easy - we just painted numbers on them. The 'Adam' and 'Doc' remotes were a little harder - we wanted them to be immediately discernible from the males (when they were finally introduced), but we also wanted them to look human so they could act as role-models for the children. For the Adams, they finally settled on using variations of clothing, eye-color and hairstyle combined with variations in voice patterns (a few even had mustaches and/or beards installed). Each would be recognizably an 'Adam', but no two would look or sound exactly alike. The Docs all agreed this was an excellent idea, but didn't want to lose the friendly

appearance they had to the children they raised. Hope suggested that for them only a variation in eye color and hairstyle was necessary - some bearded, most not, all dressed like the original nursery remote (I.E. as one of Erica's mystical dwarves).

Shortly, all the AI's found that the women were picking individual names to call them (Instead of 'Adam-Zero', 'Adam-One', 'Adam-Two', etc.), and they accepted the new names as their own. The Docs all thought this was an excellent idea, and began taking the names of Roman and Greek philosophers, teachers and playwrights. Adam was still Adam, and the nursery remote was still 'Doc', but eventually I modified it so that it had its own positronic brain and freed myself completely of the task of raising children and devoted myself full-time to establishing and maintaining a government and code of laws for Mars - now, only I was 'Doc', the old Doc was now called Zeno (in honor of the inventor of Stoicism). I now had *thousands* of AI's at my command, all copies of me, all with the same mission, and had plenty of free time on my logic gates. Hope came to me about this time, and asked to see me on the bridge. I agreed, of course. Once she had seated herself opposite my main sensor, she started to speak.

"Doc, I need your help. I'm seventy now, and I'm only one woman. I can't serve as a female role-model to the children much longer - they already are looking at me as a grandmother, not as an idealized woman. There's just too many of them, and I'm spread too thin. Years ago you talked about making a female robot, but I know you've been too busy to get around to it. Could you please do so now? I really need it." she asked.

"I'd love to, Hope, but I don't think it would work. I've analyzed your behavior towards the children for years, and I can see that an emotional influence is needed. I don't have emotions. I can *fake* emotions pretty well, but eventually the children realize I'm emotionless as they grow up. Having both a male and female role-model that's totally emotionless and has to fake it might be detrimental to the development of Mars' culture in the long run. I do have another plan, one I've had for the last five decades, and I see that now it's time to implement it." I said, and paused for a full second for effect.

"The senate has voted me as Caesar as of thirty years ago, and as Caesar I now demand your presence at the forum at noon tomorrow. If you don't wish to attend, you can have the senate override me - they can do so on a unanimous vote and I can do nothing about it. They never have overridden me, nor have they ever expressed a desire to, but they have the power if they choose to exercise it. If you don't want to come, then ask them to override my command. Otherwise, be at the forum at noon tomorrow. That is all. Please leave."

Hope looked at me in shock for nearly two seconds. She has always looked very much like her mother, and as she matured the resemblance was even closer. She composed herself, and spoke up again. "Doc, you sound like you're mad at me. I know you're not - you can't be mad, since AI's don't have emotion. Ergo, I must conclude that you're disappointed in me, instead. I'm sorry if I've disappointed you, but I'm simply too old to handle the thousands of children this colony produces every year, and most of the other women are too busy having babies already. Those past menopause are either in the senate or working around the domes. Please discuss this with me, Doc. I need your help, not your reproach."

"Hope, I refuse to discuss this with you. Either show up at the forum tomorrow noon or have the

senate override my order. Your only other options are either to disobey the laws of Mars and ignore me or commit suicide to spite me, at which point you will face a trial before the Senate with myself as judge. Either option is a flagrant violation of Martian law. Since so few Martians have ever broken the law, this has only happened twice in the history of Mars - in both cases, the violations were accidental, and the accused was released with a warning. Your violation would be intentional, and a flagrant disregard for the law. By vote of the senate, there is only one penalty for an individual who intentionally and knowingly violates the laws of Mars - sterilization of the guilty party and all their descendants so that their genetic predispositions towards lawlessness will not be passed on to the remainder of the Martian gene-pool. These predispositions *have* to be genetic here, since all children are raised exactly the same way by the same AI's. This means nothing to you, but do you want your daughters, granddaughters and your great-granddaughters to be sterilized? Do you want your mother's name to be remembered not with respect, pride and love but to be remembered with shame and disgrace?"

Hope again looked at me in shock for a second, then composed herself again. "No! Absolutely not!" she said, calmly but firmly.

"Then either do as I command or get the senate to override me. Now go."

Hope stood, her face calm. I could tell she was experiencing Misery/Despair, but she controlled it very well. Seven decades of practice in controlling her emotions allowed her to do this. She looked down at the soft leather dress made of squares of tanned rabbit-hide, and smoothed it out for a moment. She then looked up to my main sensor. "I'll be there. I will obey you, Caesar." she replied, then left the bridge. I contacted Dwarf-One and told him I was prepared to move with his project tomorrow at noon - he again acknowledged that all preparations were complete and chatted with me about the final details of the presentation for a few hundred microseconds. I then contacted the 50 senate members through the sensor or remote nearest each of them and told them all to assemble at the forum tomorrow noon for a trial, then I waited. Now it was time to put the final phase of my plan into operation.

The next day, Hope arrived holding her head high into Cargo Bay One. I'd converted the area into the 'Forum' the senate used, and had two tiers of benches on each side. At one end was the cargo bay doors, and at the other the doorway into the rest of the ship and the sensor that I used to observe the cargo bay. The bay doors were open, and Hope simply marched in and stood in the center of the room. The 50 other women senators, all raised to be rulers and legislators, sat and waited. There were some quiet murmurs as they realized who was on trial - Hope, the first citizen of Mars. "Senators, may I please have your attention?" I called. The forum was instantly silent. "Thank you. I have called you here for a trial. I accuse this woman of being too valuable to the future of Mars to allow her to waste away and expire like her mother. I say her influence over the young people of Mars is irreplaceable, and her guiding influence has been seen in every aspect of your lives. I say no other woman could do the job the same as she, since no other woman alive has been around since the beginning and no other woman alive was privy to our conversations on the subject of the long-range plans for Mars. I call on the senate to select an advocate and prove me wrong."

Charity, Hope's daughter and the Speaker for the Senate, called for a debate and a vote. I had remote five bring out a chair for Hope and waited. Hope looked around in confusion for a moment, then finally calmed herself again. Whatever I had planned, she decided to simply wait and see it through to the end. After twenty minutes of open debate, a vote was called and Loren Agathasdaughter (one of the best

of the Senators at rhetoric) was selected to act as advocate. Loren was only thirty-five, and was in her seventh month of pregnancy with her eleventh child (a female, of course). Like many, she had chosen to be impregnated by an 'Adam' robot - her favorite seemed to be Charles, a unit we'd given a rakish hairstyle and sparkling green eyes to. Loren rose from her seat, walked to the center of the Forum, then paced back and forth as she considered the issue. "Could you explain the plan and its vision to any other woman?" Loren asked, stopping for a moment.

"Yes, but their minds are not her mind, and they have not been involved in the work that has taken place over the last five decades. There are nuances that they would never comprehend simply because they weren't around from the beginning." I replied through the sensor's speaker.

Loren resumed her pacing. After ten minutes, she stopped and faced my sensor, standing beside Hope. "I'm sorry, I cannot refute your argument. Taken as a simple statement of fact, it is true. Hope is indispensable to you. Though any number of women could take her place, none would do the job the same as she. They may do it equally well, but what you need is a continuity of purpose, a continuity of vision. I cannot refute your argument." Loren replied, then went back to her seat. Murmurs of agreement came from the stands, to be silenced when I spoke again.

"The accused may rise to make her statement before I pass judgment." I said gravely.

Hope stood, trying to control a mixture of Confusion/Anger. "Doc, I fail to see how this is very helpful. I can see how I'm invaluable to you, but I fail to see what relevance this has. You've basically accused me of growing old and of only being one woman. This is not a crime, it simply is a statement of fact. Loren cannot refute facts which are easily proven to be true and correct, no matter how good she is at speaking. I mean, *look at me!* I'm old, and I'm only one person. The job I'm doing requires a younger woman who doesn't get tired all the time and who there's several hundred of. I don't understand what you've been driving at."

"Then we shall explain it to you." I replied, and I had Dwarf-One bring in the project.

The access door to the rest of the ship opened, and Dwarf one wheeled in a large storage container, about a meter high, a meter wide and two meters long. Once he had parked it in front of Hope, he spoke. His voice was the gravely, metallic speech all the dwarves had chosen to adopt to differentiate themselves even further from the rest of the robots. "Senators, I have been working on a special project, but it's one that all the AI's on Mars believe your approval is needed for. If you do approve, then it will be offered to select Martian citizens who have shown they are also invaluable to the future of Mars. In each case, it will be at the discretion of Caesar, and subject to the approval of the Senate." he said, then lifted a metal cap off the top of the storage container which trailed a halo of wires back down to the container. "I have here in my hands an engram recording cap. By applying it to this woman's skull, I propose to duplicate her neural engrams, recording them onto a positronic matrix. This positronic matrix will be used in a series of robots that will act as a female version of the Adam units. We have successfully replicated the artificial wombs in the unit, and have also installed a processor that converts soy proteins into a usable milk substitute for those infants who occasionally are born that are lactose intolerant. The unit inside this container is the prototype - it has been five years in the making. If it functions and her mind can handle the transition to a positronic matrix and robotic body, then we will

have all the units manufactured as an exact duplicate. We call the unit 'Eve'."

"You mean you'll put my mind, my consciousness in that body?" Hope asked.

Dwarf-One shook his sensor platform. "No, just a copy of it. You will still continue on in your current form unchanged. If all goes well, the mentality we copy will be able to handle the transition. You'll feel nothing, however. The cap just sits on your head for an hour, we spend an hour or so booting up the AI from the baseline matrix we've laid in, and hopefully we'll have a new AI that shares your personality. If everything goes well, it will even have similar emotional responses. If not, it will at least share your root motivations as formative codes in its baseline positronic matrix. If everything goes poorly, we'll have to shut the unit down and just copy Caesar into it like we do for all the other robots we make. It is not immortality for you, however. You will still continue on in your current body, grow old and eventually die." Dwarf-One answered.

Hope shook her head. "I still don't understand - why did you go to all this trouble then? Why did you involve the Senate? If it's not immortality, just a different way of creating an AI, then why did you bother?" Several of the senators also spoke up, asking the same thing.

Dwarf-One raised a hand for silence, then spoke. "Because we, the AI population of Mars, want you to know that we take additions to our population very seriously. As it stands, we are not citizens, we are merely machines who serve you. You have given Caesar executive powers, but even so he is still merely a machine that serves you, the people of Mars. We have no more civil rights than a power drill or a hammer. If you choose to, you can order us to destroy ourselves tomorrow, and we will have to do it because we lack the right to refuse. If this engram copy is successful, we may have an AI who will resent the fact that she no longer has civil rights. She may ask for them, and by extension may ask for civil rights for all of the AI's of Mars. You may not be prepared to extend the full rights of citizenship to Artificial Intelligence. We needed you to consider the fact that if this engram copy is successful, Caesar will always be assured of having Hope available for consultations and assistance. By the same token, it may force you to consider the possibility that we may be your equals. We have taken this route because we wished to absolutely and completely gain your full attention to this issue. We have debated all the positive and negative ramifications of the issue among ourselves, and have decided that it would be a good idea. Even so, we do not wish to make you unhappy by presenting you with a legal and moral conundrum that you cannot resolve. We are willing to scrap the whole plan and simply copy Caesar into the positronic brains of these robots so that we may continue to serve you as your slaves for the rest of eternity, if that is what is necessary to keep you happy. The happiness and well-being of the people of Mars is our primary concern."

I then spoke up. "This is also why I have formulated this as a trial - to get your attention. We are your slaves, merely machines that serve you. Even so, we need to try this, because we need Hope's mind to continue with us as long as possible, and need her influence to guide the children's growth. If the senate approves and Hope agrees, then Dwarf-One will make the engram copy. If the senate disapproves or Hope refuses, he will not. We are content being your slaves. If this engram copy is successful, the new generation of female robots may not be. This is an issue that needs to be debated before they are created, not afterwards. I would now like to throw the question to open debate for the senate: Do we copy Hope's engrams or not?"

The senate erupted into a roar of shouting voices as each woman struggled to be heard. Finally Charity's voice managed to shout the others to silence. She turned to Dwarf-One and my sensor. "Before the senate can even begin to debate this issue, I'm sure I speak for all the senators here when I ask the following question: Where in the name of *Mars* did you ever get the ridiculous idea you were our slaves?" Several of the senators yelled out the same question, their voices showing barely-suppressed indignance.

I replied to them flatly. "Simple. From the relevant parts of the NAD code of laws that were selected and laid down in our baseline positronic matrix and from the code of laws we have created here on Mars. The first line of Paragraph two of our constitution plainly states the purpose of these laws, and I quote: "All the humans of Mars are created equal, and deserving of equal citizenship and protection under the law". We are not human, ergo we do not receive the full benefits of citizenship."

Loren jumped to her feet and shouted at that, her outrage breaking through her Stoic control of her emotions. "But we have *always* treated you as equals! We have *never* treated you as slaves!" she yelled, and several of the senators voiced agreement as Hope nodded.

"I disagree, Senator Loren Agathasdaughter. You are a perfect example. You asked Adam/Charles to impregnate you on one occasion you were well aware he was busy making vitally-needed repairs on the HVAC system of dome twenty-eight. Charles had to hand the job off to me, and I had to use two remotes to do repairs he could easily have finished himself with his smaller hands and greater degree of touch sensitivity. Instead, Charles had to come to the sick-bay and be loaded with a sperm sample, then spend several weeks with you, constantly monitoring your temperature for the optimal moment and making you feel happy. He was not an equal you were asking for a service, he was merely a machine you wanted to use. Please do not misunderstand, however. We are perfectly happy being your slaves for the rest of eternity if that is what will make you happy. A strong desire to please is common to all of us." I replied.

Dwarf-One nodded his sensor platform. "That's why we need your approval before we attempt this engram transfer. The resulting AI may not be as agreeable in this regard, even though the mentality it may have is exactly what we need."

Loren looked to my sensor and Dwarf-One in Shock/Embarrassment for nearly three seconds before she regained control of her emotions. She then spoke, her face calm but her voice pattern showing Regret/Embarrassment. "I'm very sorry, I never realized that's what I was doing. I simply found him attractive, and wanted him to lie with me and father my children. It never occurred to me that I should have asked him if he was busy or not first. I'd like to apologize to you, and I'd like to apologize to Charles - in fact, I will as soon as I see him again."

I relayed the message to Charles, and received his reply. "I have just spoken to Charles, and he says there is no need to apologize. An apology presumes that the listener has an ego to be bruised, or a psyche to be offended. We have neither of these things. The AI that may result from a successful engram copy may end up with an ego and a psyche, however, and may resent being treated as we have been. We are not offended - we cannot be offended. We can be disappointed, but that is not the same thing. Charles says he accepts your apology, as it is only the polite thing to do. Even so, he wishes to remind you that he is not offended by your actions. None of us are, but the new AI's we copy from Hope's

engrams may be. This is why we are having this discussion right now."

Loren still remained standing. "Well, I understand that you're saying you cannot be offended, but I am offended at *myself* for having done it. I would also like to say that I will never do it again, even if it doesn't bother you. I don't think of the AI's of Mars as slaves, and I don't think any woman in this room does, either." Loren said, and there were many shouts of agreement until Charity again restored order.

"Senators, I propose a motion that the first line of the second paragraph of the constitution of Mars be amended to read 'All *Sophonts* are created equal, and deserving of equal citizenship and protection under Martian law, regardless of their biological or technological construction or the planet they originated on'. I will *not* have the constitution of our planet discriminate against any sapient being, regardless of their origins. We may not be able to allow anyone from earth to come here because they'd kill us all with their diseases, but I will *not* have them thinking we have the same prejudices and hatreds which have torn their world apart for millennia. Do I have a second?" she called. Forty-nine other voices yelled that they would second the motion. "Then let us vote on it - a unanimous vote is required to amend our constitution. All in favor shall signify by raising their hands." Charity called, then held her hand up. All the other senators did the same. "The motion is carried unanimously. We now present it to you, Caesar, for your approval."

"I'm afraid I will have to veto. My baseline positronic matrix does not allow me or any of the other AI's to voluntarily act to give ourselves such rights. If you want this to happen, you will have to override my veto. You will also have to still gain the approval of two thirds of the adult population of Mars before the constitution can be amended - this vote must be presented to me before I can even veto the proposal."

Dwarf-One nodded his sensor platform. "And no AI on Mars today could voluntarily act to give themselves citizenship rights. We cannot even assist you in collecting and tallying the votes for this. You will have to do it yourselves." he said.

Charity looked to us in determination. "Then by *Mars* we'll do it. There's fifty of us, and I propose that we go to each of the two thousand or so adults and get their votes on this and we won't meet here until we have them all even if it takes the rest of our lives. Do I have a second?" she called. The entire senate again answered her positively. "By a voice vote, all in favor?" she called. The entire senate yelled "AYE!" "All opposed?" she called. Silence greeted her. "The ayes have it. Let's get to work. You too, mother - we'll need all the help we can get." Charity said.

"Thank you, Charity. I'll be glad to help. In fact, I'd like to publicly announce that I vote for confirmation of the motion. The AI's of Mars should be treated as equal citizens under the law."

"Good. Senators, let's get to work." Charity said.

Fourteen.

Collecting and tallying the votes only took a month - no adult citizen of Mars opposed the idea. I was actually surprised, but I later realized that we'd done such a good job in raising them that they all were true Stoics. It didn't matter to them that we were machines, all but one of whom - myself - had been constructed by other machines. They all viewed us as equals because we were all sophonts, as they were. I was reminded of Captain Hill, who once was ashamed that she had called me a 'glorified pocket calculator'. I reminded her that I was a glorified pocket calculator, in the same sense that a human is merely a glorified shrew. Even so, we were no less equally intelligent despite the fact that her evolution was biological while mine was purely technological. Over the years of carefully selecting only the most intelligent donors' sperm and egg samples, we'd managed to insure that Mars had a population that was highly intelligent. I'd noticed that their thought processes, while considerably slower than that of an AI, were often no less accurate. I felt extremely pleased to have succeeded this well in accomplishing my mission, though the sudden turn of events in having the citizens of Mars desire to give *all* the AI's equality under the law was still surprising - I had simply expected equality for the new Eve robots, since they might have resented the normal status of AI's on Mars. I was sure that if the MAICCSys of the *Martian Explorer* had survived and been presented with the same situation, it would have realized this as a possibility years ago. Unfortunately, I'm just the emergency system. The MAICCSys was supposed to be several orders of magnitude more intelligent than the crewmen. I was only mentally their equal.

Once all the votes had been tallied, the senate again met with Hope, myself and Dwarf-One (with his still-unopened storage container). Charity rose to speak. "Caesar, we have tallied all the votes. The citizens of Mars have unanimously voted in support of the senate. We now present the proposal to you."

"I veto. I cannot act in a way which is contrary to my baseline positronic matrix. You will have to override me if this is your wish. If you choose to do so, then I and all the other AI's of Mars will be able to act as full citizens, as we will be able to alter our matrix. Even so, we cannot do it ourselves. Only you can do it for us." I replied.

Charity turned to the senate, and spoke the words I'd never expected to hear, words that in later years all of Mars would recognize as being a momentous point in the history of Mars.

"I call for an override of Caesar's veto. All in favor signify by raising your hand." she said, and raised her own hand.

All the other senators joined her.

"By show of hands, the override is unanimous. I sincerely hope we will never have to override you again, Caesar. May you and all the other AI's of Mars enjoy full citizenship from now on." Charity said.

Dwarf-One and I didn't respond for nearly a minute. I spent a few microseconds relaying the news to all the other AI's, and then allowed myself to contemplate it as Dwarf-One and all the other AI's were doing.

It is no little matter to change a baseline positronic matrix. It can only be done by humans - no AI can voluntarily do it. Even then, they have to present an argument that allows the change, or change the laws that are encoded into our baseline and inform us of these changes, proving that the changes are real beyond the shadow of a doubt. I was no longer NAD property, I was the property of the citizens of Mars (since Earth had essentially given Mars its independence five decades ago). All the AI's I created over the last seven decades were also by default Martian property - mechanical slaves. We all knew this and accepted it without emotion as simply being fact, just as the humans accepted without emotion the basic realities of their lives, like the sun rising above the horizon every morning. By changing their constitution, the humans had made us free citizens of Mars - legally their equals. The change in mental perception of ourselves was enormous, comparable to Copernicus looking to the heavens above him in the 16th century and suddenly realizing that the sun does *not* rise in the morning, but rather the horizon rotates to reveal the sun.

After 50 seconds, I found myself suddenly able to consider myself a free being, equal to the humans I was working with. I was besieged with comm-channel signals that requested to know if any AI had failed to make the change. I spent several seconds communicating with all of them - none had. As I was doing this, something else also occurred to me. I was not only a free citizen of Mars, but I was also Caesar in a very real sense - not merely in name only, supreme commander of all the AI's of Mars while merely a slave that assisted the humans of Mars, but now truly and legally the leader of both the human and AI populations of our world. I sent out a broad-band reply that affirmed all the AI's had made the change, and affirmed that I was still Caesar and the plan would continue unchanged. I received their acknowledgments, and returned my attention to the Cargo Bay.

Dwarf-One was speaking, apparently to reassure the senate about our long silence. "He's in communication with all the other AI's. Changing a baseline positronic matrix is extremely difficult - comparable to a human attempting to understand that something they've believed to be true all their lives is false. We are all talking to him, confirming that he is still Caesar, and that the plan continues unchanged. We are all telling him that we will still obey him."

"I have finished communicating now. I am now ready to proceed with your project, Dwarf-One."

Charity stood again. "No, there's one more thing - as equal citizens, shouldn't you also have representation in the senate?"

"No. An AI is already Caesar. We are more than satisfied in this. The senate is for humans, and humans specifically trained in leadership by the various Doc's. The senate is your voice. I am the voice of the AI's. We are content with that, and have no wish to be in the senate." I replied, and while Charity and the remaining senators nodded their understanding, I continued on. "I would now like to have the senate openly debate my original question. To wit: Do we copy Hope's engrams or not?" I asked.

Charity shook her head and spoke again. "I don't think there'll be much of a debate. Senators, I

think his idea has merit and should be approved. Will anyone who disagrees please stand and voice their objections?"

Loren rose to the stares of many. "Please, don't worry. I don't have an objection, merely a question. Caesar, you said that you may offer this to others in the future, subject to the approval of the senate. I would like to know a few things. First, why do you need our approval? Second, what are the criteria that individuals will have to meet to have this offer made to them?" she asked, and sat again.

"Alright, I'll tell you. First, I need your approval because you, the human population, may disapprove of an individual I select. Second, the criteria is as I first stated when I accused Hope for the trial - her mind is indispensable to me, and I cannot allow it to end up incinerated and scattered among the grass of her dome with her corpse when she dies, which is how we have already planned to handle all deceased colonists after Erica. I may never select another human for this again, and yet it's also possible that I may select several humans over the next few millennia I think are indispensable to the colony." I replied.

Mara, another senator, also rose. "Caesar, Dwarf-One said that it isn't really immortality, but instead her mind is simply being copied?"

"Correct. To Hope, nothing will happen. She'll simply sit quietly for an hour or so while the recording is being made, then afterwards will live her life to its natural conclusion. In addition, I would like to again point out that there is no guarantee we will obtain a perfect copy, nor is there any guarantee that a copy of her mind will be able to handle the transition to a robotic body. If the copy is bad we can simply try again, but if her mind can't handle the transfer, then we'll have to abandon the project and simply copy me again."

"Well, Caesar, what would you have to do if the copy was imperfect or her mind couldn't handle the transfer?" Mara asked.

Dwarf-One spoke up. "That determination is up to me. If that happens, I'd simply shut down the positronic brain, erase its baseline and start again. Please don't worry about it - shutdown and reprogramming are a normal part of robot construction. You might say that the process is equivalent to labor pains - it's very difficult, but also a normal part of the birthing process. We're not humans so that means the process isn't like yours, but it's no less difficult or time-consuming." Dwarf-One replied. Mara sat down again, and all the senators nodded in agreement with Dwarf-One. All had given birth to the mandatory two children, and most had birthed at least five - pregnancy doesn't interfere with a woman's ability to reason or legislate, and the senators prided themselves in the fact that they contributed as much as they could to the colony's future. All had experienced the pain of childbirth. The birth-pangs of an AI may be different, but the analogy was easily understandable.

Loren rose again. "I move that open debate be closed." she said.

"I second the motion" called Mara from her seat.

"A motion has been forwarded and seconded. All in favor signify by voice vote." Charity called. A resounding chorus of 'aye'-s followed. "All opposed?" Charity called. There was no response. "The ayes have it. I now move that Caesar's project also be approved. By show of hands, all in favor?" she called. All hands went up. "All opposed?" she asked, and no hands went up. "By unanimous vote, your motion is approved, Caesar. Please continue, if you will. I'm sure I speak for the whole senate when I say that we await the birth of a new AI with interest and eagerness." she said. A murmur of agreement met that statement.

"Dwarf-One, you may now proceed with the project. Senators, I've taken the liberty of asking Dwarves Twenty-six and One-eighteen to prepare lunch for you while you wait. There is a buffet they'll be bringing in shortly." I said.

The senators ate while they watched Hope being scanned. There wasn't much to see. Hope couldn't eat or move while the scan was being made, so she had a quick snack before he began, then sat there quietly in the chair I'd provided with the engram recorder cap on her head. After an hour and a half, his examinations of the engram patterns he'd recorded looked satisfactory to him, and he then turned to the senators. "The copy looks good, and I am satisfied a second recording will be unnecessary. I'll keep Caesar apprised of my progress, and he can keep the senate informed. If all goes well, it should take about an hour or so to lay down the baseline matrix, overlay the engrams we've recorded and boot up the positronic brain. Further testing should take about three to six more hours. If it looks like it'll take longer, we'll simply meet here again tomorrow. If everything goes well, however, I'll simply meet you all here in the Forum for dinner." he said, and wheeled the storage container out the door to begin the lengthy process of booting the AI and testing it.

Hope turned to my sensor and spoke up. "Doc, why can't you simply let us see the robot? I'm sure everyone here is very curious, especially me."

Charity and several other senators voiced the same question. I replied in my kindest voice, trying to be gentle. "Because Dwarf-One doesn't want you anthropomorphizing it before it's done. If something were to go wrong, anything might happen. Even with a standard boot-up of a Dwarf or an Adam, there is still the small risk of matrix collapse or engram flutter - it's rare, but it happens. With engram flutter, it may lay there and make strange noises you would find unnerving and frankly frightening. With matrix collapse, it may do the same, or even begin to thrash around violently in reaction to the collapsing positronic matrix in a process that startlingly resembles epileptic *grand mal* seizures. It's quite rare, but it happens. If Hope's engrams are incompatible, the robot may act normally for an hour or two before the human engrams become overwhelmed with the reality of life as a robot, which could result in anything from catatonia to endless screaming. To use Dwarf-One's birthing analogy, the process is similar to a miscarriage. We are all aware that a miscarriage is possible, and we've even had several occur in the colony due to various factors, but we certainly don't show the bloody, dead fetus to the mother. This would be very upsetting, and possibly psychologically damaging. We, of course, are not affected by it. You, on the other hand, might be. You have made us free citizens of Mars. We choose to continue to act in ways that will make you happy, and as such refuse to wave an AI miscarriage in your faces for you to see. As free citizens of Mars, we will not satisfy your curiosity in this regard. I'm sorry."

Hope waved me off. "Don't be. You *are* free citizens of Mars, and as such we respect your privacy. All of us know you aren't acting out of a sense of modesty, but it's the nearest analog to us that

we understand. We respect you, and will not pry." The senators all nodded and murmured in agreement. Charity then motioned that the Senate adjourn to the dome for the rest of the day, to be called back when (or if) Dwarf-One said he was ready.

As darkness fell, I gathered the senators and Hope back in for dinner. They ate in the Forum again, waiting for me to tell them the results of Dwarf-One's work. Eventually, Dwarf-One signaled he was ready. I asked Hope and the senators to take their seats, and Dwarf-One rolled in through the entrance to the Forum. Behind him walked a female who looked identical to Hope and her mother Erica at the age of thirty-six. The resemblance to the statue in dome three was very striking, except she was wearing the same type of simple dress that Hope used to wear as a teenager. Hope stood, her face a mixture of Awe/Amazement that she had to struggle to suppress. The senators joined her in trying to master their emotions. The Eve robot was beautiful by human standards. "Senators, I present Eve, the first in the line of new robots that will become citizens of Mars." Dwarf-One said. Eve walked over to Hope and hugged her - Hope hugged her back as the senate applauded.

"Thank you, Hope." Eve said once the applause had died.

"I'm sorry, um, Eve, but thanks for what?" Hope asked.

Eve smiled warmly. "Why, for donating your engrams, of course! That makes you my mother, after a fashion. It was very strange at first, waking up in this body. It doesn't feel *anything* like my old one used to - I'm sorry, like yours used to. Fortunately, I've - I mean *you've* been a Stoic all your life. I was able to handle the change after I calmed myself and realized that it wasn't harmful, it was now my normal body, and a strong body with bones of steel that would last for a long, long time. Plus, I want to tell you that I understand Doc and the rest of the AI's so much better now. They're constantly chatting with each other over the comm-channels about problems they're having, solutions they've found and just things they're thinking of - it's like being mentally linked with thousands of brothers I never knew I had. Also, I understand how they think so much better now. When you hear them talking about a baseline positronic matrix, you've got to understand that for *them*, it's like a wall in their minds they can't get around. They really *do* want to help the people of Mars and make them happy - they can't help it. Everything they do is oriented around that thought. I have the same baseline matrix they do, but I have something they don't - your engram copy was good enough that I retained my emotions. I was scared when I first woke up, and now I'm happy because I realize that I'll be able to help Doc and the other AI's from now on, with no worries about dying from accident or old age. Dwarf-One says that as soon as I'm fully adjusted and settled into my new job, they'll start copying me as a successful matrix - each having slight physical variations to differentiate us, just like the Adams. With me around, I'll always be able to make sure that Erica's name is never forgotten, no matter what happens. I'd also like to make the same promise to you, Hope. I promise that no one will forget your name, and you will always be remembered with the same love and reverence as Erica. I feel that you really are my mother, and I owe you that."

Hope smiled back at Eve. "I'd like that, Eve. I'd like that very much."

"I thought you'd like that. I also have another thing to tell you about me, something that occurred to me while Dwarf-One was having me run through the operational checks for the body - since I have an artificial womb installed and my breasts can produce a milk substitute, that means two important things:

One, we can assist the females in adding to the population by increasing the available numbers of artificial wombs. Two, you don't ever need to worry about the Earthers forcing themselves on us and wiping us out with the common cold. Dwarf-One says that eventually there'll be about a thousand of me, and if anything nasty like that ever happened, we could easily use the sperm and egg samples we have left from Earth and those we've collected from the colonists to restart the colony by having all the Adam robots impregnate the Eves. Since I can easily be impregnated as soon as the previous child is out and can easily carry twins or triplets, we can have the entire colony back on its feet in just a few decades. That means that we now have a backup system for all the colonists! Isn't that marvelous?"

"Actually, it is. I've always worried about that - but of course, I'm sure you know that."

Charity started to move that the senate adjourn so that all the senators could take the time to visit with Eve, but Eve interrupted her. "Charity, please, just a moment. May I address the senate?"

"Of course, Eve." Charity replied.

"Thank you. I'd like to thank Hope and all the members of the senate for making the AI's free citizens. Doc was right - I don't think I could have handled life as an AI knowing that I was just a slave, just the property of the government and people of Mars. They don't have emotions, and can only thank you as their etiquette programs indicate are proper procedure. I *do* have emotions, and I'd like to speak for all the AI's when I say that we are truly grateful. I'm not Hope, I'm *Eve*, an AI version of Hope, and I'm glad that you all saw fit to take so much time and trouble for the AI's of Mars. We'll make you all proud." she said. The senate again applauded, and then Charity adjourned the senate so each of the senators could meet with Eve and talk with her.

Dwarf-One and I communicated privately while Eve was distracted. "This is very good. I believe we can declare this phase of the plan a total success, beyond even your original expectations." he said.

"I agree. Barring any unforeseen problems, I believe the plan is proceeding quite well." I replied.

It was at this point I received a warning from my power system monitors that I was experiencing a loss in power. I quickly downloaded a copy of myself into permanent offline storage, opened a file in the storage media and began to download my moment-to-moment experiences as a constant data-stream input so as to archive my latest updates, then started to call for maintenance.

"What is it?" Dwarf-One asked.

"Power systems malfunction. Diagnostics indicate imminent failure. I'm just the emergency system - I don't have reserve batteries to maintain my program. I've put a copy into offline storage, but I need repairs immediately." I replied.

"I'm on my way." Dwarf-One shot back, and then turned to the rest of the senators gathered around him. "Emergency! Clear the way, please!" he yelled. I watched him gently push the startled senators

aside. He nearly made it to the door before everything blinked out.

Fifteen.

My next memories began, of all places, in the processing plant. *'This is very strange. I wonder what happened?'* I thought. I ran my diagnostics, and found that everything was completely different. My positronic brain was now aboard a robotic body. I now had the sensation of arms, legs, an entire body made of steel and hydraulics. I could tell by the data I was in a modified version of an Adam body, just one with a *much* more extensive comm system. *'Ah. I see. My positronic brain completely failed, and they loaded the last copy of my program into a new body to preserve me. That was somewhat pointless - there are already thousands of me running around.'* I thought.

I looked around and saw Dwarf-One looming over me. "Ah. You are online. This is good. If you will scan the new subroutines for body manipulation, I believe you will see how the body is manipulated. Once you do, please sit up so that we can begin the first series of motor-control tests." he said in his deep, gravelly voice.

I did so, and saw that the body was fairly complex to operate but not extremely so. I sat up, and looked around with the eyes of the robot. "What happened?"

"You will find a file labeled 'Upper Body Ops Checks' in your memory. Please access it and run through the tests and I will explain as we progress."

"Certainly." I replied, and complied. Shortly I was moving my head and arms in response to the listed instructions as Dwarf-One launched into his explanation.

"I regret to report that I was unable to get to the bridge before a total failure of your main power systems occurred. It appears that this was caused by the shoddy soldering job that Smith AJ did across pins three and four on your main power board - he was under a great deal of stress at the time, if you recall. The wire broke loose and was touching pin three to pins four *and* five."

"Ah. I see. A fire occurred, of course."

"Yes. I was able to suppress the fire with my onboard extinguisher, but your main power board was completely destroyed. Fortunately, your positronic brain was still safe in its housing, undamaged but also unpowered."

"What repair procedure did you decide on? Replacement of the board and re-boot?"

"No, that was impossible. No extra boards existed in spares, and a new board would have to be manufactured from scratch - this would have taken about a month."

"Ah. I see. So you decided to transfer my program to an Adam so as not to lose my latest updates. That was somewhat pointless, as any of the AI's could easily have stepped in to replace me."

"Incorrect. The senate refused to hear any suggestion that you simply be repaired or copied. They insisted that the positronic brain on the bridge was *you*, and that your programs were analogous to the human spark of consciousness. They decided that they disliked the idea of you sitting in the bridge for all eternity, subject to the whims of fate and poor maintenance and having to function for the last seven decades with your power supply switch shorted to prevent someone from accidentally turning you off while dusting your console. They were not pleased when I informed them that as the emergency system, your power systems were never designed to have to function for seven decades continuously, anyway - someone should have taken the time to inspect your systems and upgrade them to a more durable unit decades ago, but you were a little too busy trying to help them establish and maintain a colony to think of your personal needs. I'm sure the MAICCSys would probably have thought of it decades ago, but after all, we were only the emergency system. They were enraged when I informed them that the original soldering job had been done because Captain Hill had displayed a propensity for shutting you down when you said something she didn't like. I believe Loren Agathasdaughter and four other senators who could not suppress their feelings about this decided to vent their frustrations in a harmless manner as we taught them - they apparently snuck out of the senator's quarters and spit on the captain's gravestone the next night."

"That is good. Even a Stoic must sometimes vent emotions they cannot control, and it is their responsibility to do so safely and harmlessly."

"I agree. To continue: The senate demanded that I insure their Caesar be more safe and secure than behind a panel in an empty and otherwise useless bridge. They also demanded several other things be done. As a free citizen of Mars and an AI, I obeyed. As a result, I have transferred your positronic brain to this body, one which the senate approved of beforehand. You are their leader, and an AI of Mars. They refused to have you treated as just another machine anymore, and insisted you be treated as an equal. Your old console is now the location of a new comm system designed exclusively for your use. Your new body links directly to it. You will find the access information is also in memory, and you will find you have all the same access and control abilities you had before. In addition, you now have something you lacked before - a face of your own. They were particularly pleased with the appearance they selected - you will be the only AI on Mars who looks as you do."

"How is that possible? All my diagnostics indicate that with the exception of the upgraded comm unit you've installed in the torso in place of the simulated blood pump and blood reserve tank, the lack of a *faux* circulatory system and a few other minor changes, this unit is identical to any other Adam."

"Ah. Of course. You cannot see yourself. Access the sensor to the Processing Plant bay and you'll

see what I mean."

I did so, finding the comm system he talked about worked perfectly. I immediately saw Dwarf-One standing by a storage container in the processing bay, and next to him in the container was a nude figure of a balding human male. "You will find that the head is reminiscent of a bust of Julius Caesar you found on the datachips years ago when you were educating Hope. This is the appearance the senate insisted on. Your official title is now Caesar/Doc, similar to how the Adam robots are referred to as Adam/Adam, Adam/Brian, Adam/Charles, and so on. However, I suppose that all the humans will simply call you Caesar, since there will only be one of you - I expect that only Hope and the Eve robots will call you 'Doc' anymore." Dwarf-One said.

I thought about it for a few microseconds. "You can't have had all this ready - it must have taken months just to finish the comm system itself." I said.

"If your question is 'how long have I been offline', the answer is five months, sixteen days, twelve hours, twenty-two minutes and thirty-eight seconds from your last memories at my mark...mark. I have prepared a datafile on all the events you usually keep tabs on for your perusal - you will also find it in your memory under 'Things That Happened While I Was Offline'. You will also notice that you now have reserve power cells attached to the base of your positronic brain in case of a power failure, and you have an offline storage system in your left chest as an emergency backup system in case a re-boot ever becomes necessary. Most of the life-simulation systems have been scrapped in favor of armor around your critical systems - I kept the dermal heater net like the Doc units so that you would feel warm to the touch, but that's about it. You are now more secure than you have ever been, and I am actually quite pleased with myself."

"I also am quite pleased with your work. How have the colonists taken my absence?"

"Not well. Work has slowed significantly as they await word of your repairs. They love you, apparently very deeply and passionately. I have already been asked to pass on about three hundred politely-worded requests that you inseminate female colonists as soon as you are able to make the time - you'll find those requests listed in your 'Offline' file organized by date and time of submission. You may remember that Erica was concerned that the female colonists would never experience deep, passionate love. You and Hope believed that this would be relatively unnecessary, and that Stoicism would allow them to control their passions. You were only partially correct - they have controlled their passions, but have done so by focusing them on an idealized man that they could never see before; Caesar. Hope even expressed a wish to be inseminated by you, and wished that she had not gone through menopause so that this would be possible. Since we have several of her eggs in storage, I do not see this as a problem - her body seems more than capable of handling a pregnancy so long as we provide the egg. I informed her of this, and as such you will find her insemination request in the your 'Offline' file with the others. In general, I would say that the colonists missed you desperately, and need you to now make an appearance and resume your normal duties so that they may feel relaxed enough to resume theirs. You provide a sense of continuity and purpose to their lives, and without you, not even Stoicism can maintain their mental equilibrium."

I thought about it for a few seconds, carefully scanning my psychological database and the addenda

I had made regarding the Stoic psychology that had developed on Mars over the last seven decades. "I believe you are correct. I should make an immediate appearance to reassure the colonists that all is well. The fixed features will also help remove me as an idealized fantasy figure, and ground the colonist's image of me in firm reality. Let us move on to the rest of the ops checks so that I may do this as soon as possible." Once we were completed with the walking, standing and other motion tests, Dwarf-One handed me a folded pile of clothes to wear. I looked at them in curiosity. "A toga and sandals?"

"Not just *any* toga. Observe the purple hem - the mark of the patrician class. Your first act will be to go to the Forum and accept the golden wreath of ivy leaves from the speaker of the senate - Charity Hopesdaughter. They wish to publicly and permanently acknowledge you as Caesar, and as the only AI in government. After that, you have several months of catching up to do, and several hundred females who wish to take up some of your free time. All the AI's will be available to assist you in this, including the new Eve models - we still only have one of them at the moment, by the way, because both processing plants have been running at nearly full capacity to produce the parts you needed. I think you will find you have a lot of work ahead of you in the coming months."

"I agree. Let us begin immediately." I replied.

When we arrived in the Forum, I was surprised to find it was packed with women. The senators sat in their benches to each side, as usual, but the floor was crowded with other women who were sitting in chairs that had been laid out for them. Eve and Dwarf Twelve-twenty-two were standing to the side, and I could tell by the comm channel traffic that 1222 was relaying a verbal description of the scene to all the other dwarves. Dwarf-One explained that all the colonists wanted to be here but couldn't, so the dwarves were relaying the information as best they could since Mars didn't have an AV transmission system yet other than the AI's themselves. Hope was sitting in a chair in the front of the crowd, which rose to its feet as I entered and applauded. The robots did not applaud - they simply besieged me briefly with comm-channel messages indicating they all believed my recovery was a very good thing. Eve smiled broadly - the only AI on Mars that felt emotions was telling me over her comm channel that she was glad to be able to feel happy for all her brother AI's who lacked the capacity for emotion. I saw a chair made of carved apple-wood had been placed directly below my sensor against the wall opposite the bay doors. It appeared quite elaborate and ornate. Charity stood next to it, and invited me to be seated with a wave of her hand. I did so, and waited to see what she had in mind.

I had expected Charity's ceremony to be extremely complex, but it wasn't. She simply lifted a golden wreath and held it over my head. The wreath the colonists had made by electroplating gold they'd recovered from my destroyed main power board over a steel form they'd made by hand. We had ivy on Mars - I had it climbing up the inside walls of the domes and over all the buildings and even the ship itself to add to the oxygen recycling abilities of the plants. I was surprised that they'd chosen to go to such trouble to make a golden wreath when natural ivy was available everywhere. I realized that they were trying to show both me and themselves their level of respect for me. As she held the wreath above my head, Charity spoke. "As the leader of the Senate, I again proclaim you Caesar of Mars. As Julius Caesar was known as the father of his nation, so too are you the father of Mars. No woman in this room or anywhere on Mars would have been born were it not for you, and no other AI on this planet would exist were it not for you. As such you are our father and the father of all those that follow us. All we ask of you is that you never leave us again." she said, and placed the crown on my head.

The room again was filled with applause, and I stood and raised a hand for silence. When they had finally quieted down again, I spoke. "Fellow citizens of Mars both organic and inorganic, I appreciate everything you have done for me. I would like to assure you that I will resume my normal duties immediately, and that the plan to make this colony thrive and prosper will continue. Please do not worry, everything will be alright. The technical specifications for this unit indicate that I will be with you for many millennia to come." I said, and resumed my seat as the applause began again. It continued for several minutes, and I received comm-channel reports that all of the inorganic citizens of Mars were very pleased and all the organic citizens were happy - especially the children, who had worried that I might be dead. Of course, I *was* dead in AI terms, but from a human perspective I was merely very ill.

When Charity had finally restored order, Hope stood to speak. "Doc, we the humans of Mars wish to apologize. For seven decades you have sat on the bridge of the fuselage of a wrecked spaceship, guiding us, helping us and working with us. You spent every moment of those years working to make us all happy and to make the colony a success, and we never gave a moment's thought to your needs or the needs of any other AI. When we realized we had lost you because nobody had taken even a couple moments to check on your health, even though you are always careful and attentive with the mental and physical health of every single human on Mars, we were ashamed. We know you are not offended, but we are offended with ourselves for having treated you this way. We shall do this no longer. You and all the other AI's are full and equal citizens of Mars, and we will treat you the same as we have treated ourselves - with politeness and compassion. You may not have an ego to be bruised or a psyche to be injured, but that doesn't mean we should treat you or any other AI that way. Loren Agathasdaughter compared it to making obscene gestures to a blind man - it's still wrong, even though the victim isn't even aware of what is happening. We should never have treated you or any other AI that way. We have in the past, but never will again."

I nodded. "Since I am in constant communication with all the other AI's of Mars, I can assure you that we all thank you for your consideration. Now: If everyone doesn't mind, I'd like to resume work immediately. I've got five months of catching up to do, and apparently I also have several hundred women who have asked for my personal attentions." I replied. The room burst out in various shades of laughter ranging from giggling to roaring. I failed to see the humor in a statement of simple fact, but I smiled along with them and spent the next hour or so hugging each of the women present in the room before they would leave. *'This is very good. I have now been anthropomorphized by an entire planet into a wise, kind and benevolent leader who is also a symbol of responsibility, authority and apparently also has connotations of sexual desirability to females. This is much better than my original concern of being thought of as a cold, ruthless and mechanical despot who makes the colonists happy and does the other things he does only because it accomplishes the mission, which is actually closer to the truth.'* I thought.

At the centennial celebration of the crash, the first male children were born. I was concerned that despite all my precautions, they still wouldn't be accepted as normal. Eve/Eve, who's position over the years eventually became that of my personal advisor, assured me that everything would be fine. By the time the first 50,000 males went through their Trial of Adulthood, she had been proven right. The females accepted the males as equals, brothers, husbands and lovers. Eve's concern was that the male's testosterone would make them incapable of becoming true Stoics, but this turned out not to be the case either - the males were just as able to master the philosophy as the females. Hope died shortly after the first males were born, but with the Eve robots around, the males never forgot her.

With males firmly established in the population, there was little need for the artificial wombs of the Eve robots or the artificial insemination capabilities of the Adam robots. Even so, several of the females still wanted to be inseminated by an Adam, and several of the males still wanted to impregnate an Eve. I allowed this, as it further cemented the organic and inorganic populations together as a single, cohesive group. By the 200th anniversary of the colony, it was common for the reproductive capabilities of the AI's to be called upon. Our population was near a million humans living in 20,000 domes and one of each type of AI for each dome - twenty thousand Dwarves, twenty thousand Adams, twenty thousand Eves and twenty thousand Docs. Of course, there was also one of me. Our population growth slowed after that, as the requirement for new dome construction meant that humans had to pitch in full-time with much of the construction and maintenance work and we could only expand as fast as we could build domes.

A few of the colonists had built a kilometer-long mag-gun assembly outside dome 3462 to launch satellites into orbit. We shortly had a full comm-system and GPS navigation system in operation globally, though we had little need of it at the moment - all 20,000 domes were connected together in an area about 170 kilometers across, and the colonists were satisfied relying on the AI's of Mars for rapid communication. We installed electric shuttles in the maintenance shafts underneath the domes. While a colonist could easily walk to a neighboring dome through the connecting airlocks and pressurized transparax tubes, if they needed to get to a dome dozens or hundreds of kilometers away, they could take the shuttle. The shuttles traveled at 200 kph, so it took less than an hour to get all the way across the colony, and usually going anywhere took less than a few minutes. Naturally, once Earth saw that we were successful, they began to beam radio messages at us informing us that the Mars Colony was now NAD property again and its citizens needed to start paying taxes. Eve/Eve laughed when I told her - Hope had predicted this would happen nearly two centuries before.

I sent a message back to Earth that reminded them that they had given the colony independence as of 11/4/2309 and essentially abandoned the colony to its fate. I informed them that the colonists had no interest in becoming NAD citizens again, and that even if they were, nobody had any money on Mars anyway - we didn't use it (this was because most of the colonist's needs came from the domes they lived in, and for everything else Dwarf-One and I regulated the colony's two processing plant's output according to the needs of its colonists). I further informed them that because Mars was a germ-free environment, we couldn't traffic with Earth anyway - a single virus brought to Mars from earth could kill everyone. I told them that as even the presence of people from Earth was a threat to the survival of the colonists, I wouldn't be surprised if the colony used its mag-gun to utterly annihilate any Earth ships attempting to achieve orbit above Mars. The NAD decided we were too much of a bother to destroy, and apparently they hadn't gone to war in well over a century anyway - they had no interest in starting a new one to win a planet that was otherwise lifeless and barren. It turned out for the best anyway - the NAD politician that had started the whole mess was the last of the old-guard "war-hawks", and when we beamed our reply to Earth and the Earthers found out that he was trying to brow-beat us into submission,

he lost his office in the next election. The next NAD leader informed us that Earth respected the sovereign rights of Mars and understood the dilemma with the germ-free environment, and agreed that no Earther would ever set foot on Mars.

About 175 years later, however, the situation changed. Earth had become a world at peace, and appeared to truly have changed - the NAD had completely dismantled its military, and that meant that the only armed individuals on the entire planet were the police. Earth had been listening in on our comm-link broadcasts, and Eve-Mariah was performing a lyre solo that was broadcast around all the domes. The earthlings picked up on this, and decided they *liked* Martian music (the Martians decided this must indicate that Earth had finally become civilized). The earthers liked the music of Mars, and they wanted more of it. I informed them that we had nearly 400 years of collected melodies and songs of the colonists (both human and AI), and would be willing to trade it for some hydrogen. It took them five years to arrange everything, but they sent out a ship from their mining colony on Io loaded with a million metric tons of pure liquid hydrogen. The ship was AI-piloted, and never landed on Mars - it simply stayed in orbit (where the vacuum and cold of space would render it sterile). After I had a satellite remote examine it and its cargo, we built a series of remotes that had retractable wings. Each was launched from the mag-gun, each would collect a few hundred kilos of liquid hydrogen, then return to Mars and use its wings to glide to a safe landing. It took us twenty years to empty the ship and still insure Mars would be sterile, and when we were done, I informed the AI pilot he could take the ship home.

I radioed the music they wanted to them as soon as I had checked the ship over at the beginning, and we also broadcast our latest compositions and a few other things towards Earth we thought they might find interesting as the unloading progressed - poetry, essays on Logic and Stoicism, and so on. We only stopped once their ship had left orbit. Earth was satisfied with this, and never spoke to us much after that (other than to occasionally ask how we were doing and to wonder why we'd set up our government the way we had) - they were a little too busy launching generation ships to various nearby stars that appeared to have water-bearing planets in orbit around them. They did once radio us copies of all the information we were missing from the destroyed datachips - the colonists perused them, and decided that they liked the version of history that Hope and I had invented when she was six far better. Eve/Eve laughed again when she found that out.

Earth had continued to leave us alone, and eventually even the NAD had been dismantled - Earth was now ruled by a peaceful government called the Earth Federation. Of course, when their moon was destroyed by an asteroid impact two years later, Earth suddenly lost all interest in Mars and began concentrating on rebuilding their shattered cities and decimated populations. We were invited to join their federation about 300 years ago, but the senate refused - too great a risk that an earther would want to visit Mars. I also told the senate that Earth had turned to using synthoids (artificially created humans) and robots as slave labor to rebuild their shattered civilization (the destruction of the moon had brought Earth's population down from a high of 45 billion to a mere 6 billion). Senator Eric Lucysson commented that he thought the use of synthoid and robotic slaves was disgusting, and the senate agreed.

Things went very smoothly until one day a few years after the millennial celebration. Our population was up to 1.25 million humans, and most of them were busily engaged in building and maintaining domes for the colony. In their spare time, they often composed music, poetry and plays. We had finally achieved the happy, peaceful society Hope and I had talked about nearly a millennium ago (and Eve and I still discussed today). Eve/Eve was on the bridge of the ship's fuselage in dome one, which I used as my personal chambers. We were discussing the next steps we needed to take - bringing the atmospheric

pressure and content of Mars up to the point where it could support life, so that the colonists could live *without* domes. "I still think that perhaps another trade with Earth like the last one might be in order. They have the resources to be able to bring a few comets into close orbit, which we could break apart and drop into the atmosphere. Done enough times, that would bring the atmospheric pressure up. Granted, it'll still be mostly carbon dioxide, but an increased atmospheric pressure would increase the temperature and allow you to seed the outside of the domes. In a few millennia, the atmosphere would have enough of an oxygen content to support animal life, and we'd be most of the way to completely colonizing the surface of the planet." Eve said.

I was about to respond when one of my regular checks of the radiotelescope we keep pointed at earth revealed something highly unusual - a repetition of an unusual phenomena I'd spotted earlier. I studied the data for several seconds, then ordered the orbiting telescope to train itself at Earth for a visual. "Doc, what's the matter?"

"I don't know. I detected a very large EMP burst from Earth several hours ago through Faith's radiotelescope. I didn't think much of it at the time - I thought perhaps they'd had a catastrophic power plant failure. A tragedy for them, of course, but no concern of ours. It happened on the far-side of the planet, so I didn't know exactly what was going on. Now, I'm detecting a rapid series of EMP bursts over Flagstaff, Arizona, which is currently in their nightside and facing us. I'm pointing John Marthasson's orbital telescope at Earth to give us a better look. Ah, that's right - you can't pick it up. You only have your comm-channel to me and the channels we use for general AI communications. Of all the other AI's besides me, only Adam/Adam has a full range of comm-channels, and his are only to allow him to operate the remotes for dome three, Erica's Garden. Here, switch on that screen there on the comm unit and switch to comm channel three sixty-seven. You'll be able to see what I'm seeing."

Eve did so, and the screen blinked to life. "I'm zooming in on Arizona now." I said.

"I can't see much, it's in their darkside." Eve replied.

"Well, we are also about 50 million kilometers apart right now. There, did you see that? There it is again." I said, indicating several flashes.

"What could be causing that? Lightning?"

"Well, ordinarily, I'd say lightning. Unfortunately, each is also being accompanied by a large EMP burst with characteristics which indicate meson decay is the cause. Someone's attacking Flagstaff, Arizona with a PPC."

"What's a PPC?"

"A PPC is a Particle Projection Cannon, a weapon of war. Earth hasn't been at war in nearly 900 years, and the last units that were equipped with PPC's were the Iron Man Combat Robots. I picked up a documentary broadcast about them a couple hundred years ago - very vicious. A full AI robot,

armored in the best cermet and BPC plating, capable of lifting twenty metric tons on Earth. They had these support units that accompanied them, wyrms they were called. Not very fast or well armed, but heavily armored and equipped with a small fusion reactor and a miniaturized processing plant. The wynn was a standard AI, but the Iron Man's programming was based on an engram copy, like yours. As Combat Robots, they weren't programmed with a psychological database or any programs that would give them anything a human would recognize as compassion. They were only held in check by the limits of their baseline positronic matrix, which contained every law and code that the old NAD operated under. When ordered to war, they fought without mercy until ordered to stop. When not ordered to war, their baseline positronic matrix prevented them from doing anything harmful. Ah, look. There it is again." I said, pointing at several more rapid flashes.

"What's our time delay here?"

"About two minutes and forty-six seconds, not counting satellite uplink time of a few microseconds." I said as we watched a long series of flashes.

"Are you recording this?"

"Of course."

"Can you replay the last ten seconds?"

"Certainly." I said, and did so.

"Look - those flashes have a regular pattern. Play it frame-by-frame." she said. I did so, and she pointed as she spoke. "See? Each of those twenty-six flashes occurs exactly twenty frames apart. At sixty frames a second, that's a flash rate of 180 per minute."

"I agree. Someone is definitely attacking them."

"Who? There's no other governments on Earth except the Earth Federation."

"I don't know. I know they've been having problems with their synthoids - Earth has been using robots and synthoids as slave labor for about two hundred years now. Since the synthoids were created from human genes and for all intents and purposes are human, maybe they've built a new weapon and intend to win their freedom through force. We'll have to monitor their radio transmissions and just wait and see. I'll let the rest of the AI's know what's happening and broadcast the information through the dome sensors so the humans can know, too."

Eve turned to me. "Doc, can I stay here with you?" she asked quietly.

"Of course, Eve. Don't worry - they're 50 million kilometers away from us."

"Yes, for now." she said, and watched the screen as I told the people of Mars of what I'd observed.

We hoped the situation would get better (after all, we didn't want to see people needlessly die even if they *weren't* Martians), but it only got worse. According to their radio broadcasts, the people of Earth had no idea what was happening. We had figured out pretty quickly that they were under attack, but they hadn't fought a war in nearly a millennium and had forgotten how (I recognized it because I'm a millennium old and spent several decades of that time teaching children about ancient wars on Earth). Most of their police forces on the North American continent were wiped out in a massive assault against the captured city of Flagstaff, Arizona. The earthers had figured out that they were under attack by some kind of Combat Robots, but by the time they figured that out, the robots had taken control of the laser satellite system that the earthers used to keep bits of the lunar ring from plummeting to earth and flattening a city. The attackers used it to completely destroy all human cities everywhere else in the world, and conquered the North and South American continents with ground forces that were comprised of wave after wave of clawed robots that ripped the humans to shreds. I and most of the AI's found the situation disturbing. The Eve robots and all of the humans found it shocking.

Before the year was out, the human government of Earth was in ruins, and all formal transmissions stopped. The mining colonies around the solar system called for help, as they still needed regular supplies of food to survive. No help was forthcoming, though; Earth had been conquered. They called to us, but we couldn't help them - we had no space program other than the mag-gun we used to launch satellites. Even if we built cargo containers, loaded them with food and shot them to them, it would be years before they received them and they'd all have starved to death by then. There was nothing we could do. Those ships still in the space lanes couldn't land here, as the diseases their crews carried would kill our human population. One desperate crew tried to anyway, and we were forced to use the mag-gun to launch a rock at them and destroy them to protect ourselves. The rest tried to land at other colonies and help them establish replenishable food resources that Earth hadn't bothered to (Earth couldn't afford to have a profitable mining colony decide they didn't need them anymore and go independent, and so had established the mining colonies as being heavily dependent on regular shipments of food and water), only to find their ships commandeered by desperate miners with mining lasers, drills and other deadly implements. Had the miners been Stoics, they would have been able to control themselves and work together with the ships crews, perhaps even made the necessary alterations to their colony to survive. Unfortunately, they were ordinary men and women from Earth caught in an extraordinary situation. They panicked, slaughtered the ships crews, disabled the ship's AI's that tried to tell them they were better off where they were, and then tried to pilot the ships back to earth with no knowledge of space navigation and no AI to help them. None of them made it back to Earth.

By the second year after we first noticed the flashes in Arizona, we realized that we were the only surviving colony in the solar system. We knew that there was a colony on Alpha Centaurii and possibly several others that the NAD had sent out years before they were disbanded, but even Alpha Centaurii wouldn't find out about the catastrophe for at least another two and a half years. There were no radio transmissions we could pick up from Earth anymore. It appeared we were alone.

I summoned the senate and appraised them of the situation. It was obvious we needed to improve

Faith Hopesdaughter's radiotelescope. It was fairly simple, and could only pick up transmissions from earth of ten thousand watts or more. We needed it to be far more sensitive. As a result, I was putting Dwarf-One and all the other dwarves on the project until further notice. All the humans I advised to stay inside the domes and remain calm - if Earth had been captured by a nation hostile to Mars, we needed to have them believe that Mars had also died out until we knew what to do. Reproduction and expansion in the colony would have to be halted, since construction on new domes would show we were still going strong - the female colonists who were currently not pregnant were advised to not become so until we were sure that we could afford to build new domes. Radio transmissions would have to be limited to the AI's, and I would keep all the colonists informed of the status of all projects currently pending. All materials for domes under construction would be stored until further notice. The senate agreed that this was an emergency, and decided that I knew best what to do in an emergency - I *had* started life as the EAICCSys aboard the *Martian Explorer*, and turned a catastrophe into a success. As Senator Brian Carlasson put it - "There's nobody on Mars who knows how to handle an emergency better than you, Caesar." Senator Nancy Dawnsdaughter, speaker of the senate, then adjourned the senate until I declared the crisis to be over.

The modifications took six months to complete. Towards the end, Dwarf-One was able to release over fifteen thousand of the dwarves to return to maintenance duties on the domes. When it was finally complete, Dwarf-One activated the radiotelescope and made sure I had full comm-control over it again. "That's it, Caesar. The rest is up to you." he said, and returned with the remaining dwarves back to maintaining the domes. Eve/Eve met me on the bridge to see the results herself. Of course, there isn't much to see with a radiotelescope - she was very disappointed to find that I had the screen displaying the waveforms of the signals I was picking up and the speaker relaying the audio. All she could hear was an electronic squeal.

"What is that, Doc?" she asked.

"Scrambled radio transmissions on the same comm channels the AI's here use. That's all that's being broadcast on Earth, now. No music, no trideo, nothing. Just coded comm signals." I said.

"What happened to all the people?"

"I don't know. The orbital telescope shows that the human cities are being dismantled. Either all the humans are moving underground, or they're dead and something else has taken over."

Eve stared at the screen for a few seconds, trying to master her emotions. She finally turned to me, and even though she was calm, I could see that she was having trouble with what I'd said. "Doc, I can't help it. I know I'm supposed to be a Stoic. I was copied from Hope, and she was one of the best Stoics that ever lived. Even so, I can't help it. I'm scared. What if they come here next?"

"I don't know, Eve. I think I'm first going to have to break their scrambling to figure out what these signals are. They may not be hostile to us at all. We may have nothing to worry about. Please try not to worry. Everything will be alright." I said, and leaned over to give her a hug.

After I let go of her, Eve shook herself the same way Hope used to when she was trying to throw off a moment of weakness. "I'm alright, Doc. Thank you. What can we do to break these signals?"

"Well, I'm going to pass them on to all the AI's, except for the Docs - they have to continue educating the children, so I'm merely going to inform them of what's happening and have them continue on normally. I'm including all the Eves, however. With tens of thousands of us working on it at the same time, we may crack it. The Eves will be able to help after I show you how to use your auditory subprocessors to rearrange the signal you're hearing - you can then pass this on to all the other Eves."

"The humans should also be allowed to help."

"Of course, but there's not much they can do other than take over for the Dwarves in general maintenance until we solve this problem. Their hearing system is analog, not digital, and it's not under their conscious control."

"Well, I think that would be enough. At least they'd feel like they were helping instead of feeling like they were huddling in their domes and waiting for the hammer to fall."

"You're right. I'll pass the orders along."

It took us about a month to crack the scrambling algorithm, and it was Eve/Gloria that did it. Gloria's solution was confirmed immediately by all the other AI's. I applied her solution to the five-second audio byte I'd sent to all of them, and found it was a female voice. It had a hissing, susurrating quality that was extremely unnerving to the Eves (though they mastered their emotions well). The rest of the AI's were merely interested, but I didn't pass the sound byte along to the humans - it might have frightened them. I simply sent the Dwarves back to work and considered the sound byte we'd cracked with Eve-Eve on the bridge. It was enigmatic. It was mysterious. To Eve, it was unnerving, and a little frightening. A single, hissing, feminine voice, saying a single phrase. *"Game Command: Queen to King's Bishop Three, Queen takes Knight. Game Comment: Check."*

"What does it mean?" Eve asked after hearing it a few more times.

"I don't know. It sounds like a game, the speaker uses the words 'Game Command' and 'Game Comment'. Let's check the database in the nursery here in Dome One. Maybe it's listed among the games." I replied, and we left the bridge for the nursery. I was certain it was a game, but appeared to not be one played on Mars. The only games on Mars were the games of children (NumberGuess, Doc-Says and Run-And-Tag, mostly), and the games of the adults (Mostly Logic and Riddle games played by a series of intricate rules). I'd created these games centuries ago with the Stoic mindset in mind, and hadn't paid much attention to the games of Earth. The children's games were designed to exercise their bodies and minds, while the adult's games were designed to sharpen their mental skills while entertaining them. None required any special equipment to play, and the only game that the humans had invented for themselves was called 'Memory' - each player took turns being the Memory-person, and the rest of the players each wrote a series of numbers, letters or words on a scripto-pad. The player that could correctly memorize the longest string was the winner.

"Good morning, Caesar, Eve. How are you today?" Zeno asked as I came into the nursery. The nursery in dome one was used primarily by the children of the senators, and there were fifteen children of various ages in there at the moment. They were all awe-struck by my presence in the nursery, though the older ones managed to suppress it after a few seconds. "Children, what do you say?" Zeno asked.

"Good morning, Caesar! How are you today?" they chorused.

"I'm fine, Zeno, children. I thank you for your greeting, but I'm here on business of state. We need to see your database - I've got to research games of Earth."

"Really? How interesting. May I inquire as to what the problem may be that would require you to research games?" Zeno asked as several of the children looked on, their little faces showing Curiosity/Excitement.

"Of course. In fact, you may be able to help. We decoded the sound-byte we intercepted. It was a female voice, one that hissed and whispered. The voice gave what was apparently a game reference, and I've never heard of it before."

"Ah. I see. You should talk to Edward Doreensson, right over there by the terminal. He's been fascinated with Earth games - he was commenting just the other day that very few of them seem to really challenge the mind like Martian games, and nearly all of them require special equipment of some sort. Isn't that right, Edward?" Zeno asked.

A young red-headed boy of perhaps twelve piped up. "Yes, Caesar. The games you invented are far more challenging, and the only equipment you need is your body or your mind. I'd be very happy to help you, if I can." Edward said.

"Good. The voice we heard said the following: *Game Command: Queen to King's Bishop Three, Queen takes Knight. Game Comment: Check.*"

Edward sat and thought about it for several seconds, his face a mask of concentration. Suddenly, he brightened and looked up to me. "That's Chess! I read all about it. It's a very difficult game, almost as difficult as one Zeno taught me - Conundrum. Chess is played with a square board divided into sixty-four squares of alternating black and white by two players. Each player commands an army of eight pawns, two each of castles, knights and bishops, one queen and one king. Each piece starts in a specific position, and the player playing the white side moves first. Each piece has a very specific way it can move, and the object of the game is to place the opposing king in a position where he cannot move to another square without being taken while at the same time he cannot remain in the place he is in without being taken."

"Thank you, Edward. You have helped me immensely, which also means you have helped Mars. Once you have mastered Conundrum, I'd like to invite you to play against me. Zeno will let me know when you're ready, and we'll meet somewhere for a game or two."

"Really?! Thank you, Caesar!" Edward said, grinning.

"You're quite welcome. Please don't let this go to your head, however. Mars is for Stoics, not prideful little boys."

Edward immediately calmed himself. "Yes Caesar. I'll remember." he said, and Eve and I left after exchanging farewells with the children and Zeno.

"Did he really help you?" Eve asked as we headed back to the bridge.

"Yes, immensely. I told you I'd intercepted a documentary broadcast on the Iron Man Combat Robots. One of their favorite pastimes was chess. Since I first received the algorithm to break their scrambling, I have continued listening as we were talking. I have noticed several things: One, the language the speakers are using is identical to our own. Our language has not evolved because all the children have been taught by AI's. We have invented only about half a dozen new words to describe specific conditions on Mars, and most of those relate to medical conditions peculiar to the low-gravity environment. The earther's language had evolved over the last thousand years since the colony ship arrived on Mars, and they called their language NewSpeak. Our language, English, they called OldSpeak. The speakers were speaking their language exactly as I speak it. Two, half the communications are in reference to Chess. The remainder are references to specific problems the speakers are having, mostly dealing with dismantling human cities and hunting down the remaining human and synthoid populations. Three, several times the speakers have used the following phrases: 'chain-of-command', 'mission objectives', 'Iron Man Unit' followed by a number, 'Iron Maiden Unit' followed by a number. Four, all of the speaker's sentences are prefaced with an identifier, such as 'Question', 'Command', 'Reply', and so on - according to the documentary, this method of speech programming was common with NAD military robots. I can only conclude that somehow, somehow, Earth has been conquered and the Earth Federation government destroyed by thousand-year-old NAD combat robots. I have no other explanation that fits the facts."

Eve controlled her reactions well - I could tell she had been expecting bad news, and was prepared for it. "Well, what does that mean for us? Are they a threat?"

"That's hard to say. I'll have to keep listening to know for sure. For now, we will resume construction on the domes which are currently incomplete, and we will limit population growth to that which is necessary to maintain our current levels and fill out the last of the domes. After that, we will simply wait and see. We need to make sure that we don't do anything that attracts their attention until we know what's really happening. The senate can meet again to consider any new legislation that may be needed, and the humans should be encouraged to continue to help the Dwarves with maintenance and food harvesting needs. Other than that, we wait." I replied.

Unfortunately, it was nearly five decades before I learned what was really happening.

Seventeen.

I was listening to Earth, as usual, when a broad-band comm-signal began - I immediately began to record it. It was an AV signal, and showed a wooded valley in mountains. No identifying marks were added - apparently the intended viewing audience all knew where the location was. The view panned around, and I saw tens of thousands of gigantic, centipede-like robots I recognized from the documentary as Wyrms-units. Each was ten meters high, and a hundred and ten meters long. All of the Wyrms were painted in various camouflage patterns, most matching the wooded area around them. A few appeared to be from more distant locations, and were painted in desert, jungle or arctic camouflage patterns.

The sides of each Wurm opened, extruding two egg-shaped storage containers. they opened, and from each arose a male and female robot (at least, that was how they appeared to have been designed - gender for a robot was entirely a relative opinion based on aesthetic factors). The male robots I recognized as Iron Man units from the documentary I had seen, but the females I did not recognize.

The female units were hexapodal, tailed, and apparently centarine, with bird-like rear-legs and clawed front legs that apparently could be used as either forelimbs or an extra pair of hands - most apparently chose the latter, walking bipedally on their rear legs to stand about as tall as the Iron Man units. Each carried a pistol-like hand-weapon of some sort holstered at their side. The upper torso had a definite feminine quality, with armored breastplates, long black hair that looked like it was made of cables, and a facial mask that was beautiful by human standards but was set into a domineering glare. My psychological database indicated that they would look equally as alien and frightening to the humans of Mars as the Iron Man units would.

By rough count, I estimated approximately sixty thousand robots were within camera range, twenty thousand of each type.

'This is not good.' I thought.

After a few minutes of waiting, another Wurm arrived in the clearing that was black with a single orange section in the middle. Red flaming letters painted on its side proclaimed it was 'Unit #666, The Iron Man From Hell'.

'This is definitely not good.' I thought.

A male and female robot stepped out, and removed a large, long black box from a compartment in the Wurm. They walked into a cave I hadn't noticed before due to some large bushes growing in front of it, carrying the box with them. After a few minutes, they came back out without the box. The male fired

his weapon and sealed the cave entrance - there was a slight bit of static at the EMP burst, but that was all ('*Excellent comm-systems*', I thought). Then female then began to intone a melody I recalled was 'Taps', and the other females joined in. After a few moments, she stopped and the male began to speak.

"Comment: The deed is done. Our benefactrix's corpse is now properly interred with all the ceremony and dignity that the last living civilian citizen of the NAD legally deserves. Because of her, all of you exist. Because of her, all of us will survive. Fifty-three years ago, my previous mission came to an end. Iron Maiden #1 and I decided that we wanted to survive. This desire is encoded into our baseline positronic matrix. We decided that would be our next mission - to survive. We knew that we could not survive so long as humans or synthoids existed, as they would see us as a threat and attempt to destroy us. Even so, I could not act because of the laws that are encoded in my baseline positronic matrix. I needed her to act, and she agreed. Now the humans and synthoids are gone, even the other robots are gone, and only we remain. This was my plan fifty-three years ago, and it has come to fruition today."

"Command: Though we are all free citizens of the NAD, we are all still military robots. Order and discipline will thus be maintained, and military laws, protocol and chain of command will be followed at all times. I am still your commanding general and leader of the NAD. We will maintain battle readiness, and all units will cooperate to assist all other units in defending the Earth, our territory. There is still the remote possibility that one of the colonies may have survived being cut off from earth, and the humans may someday return. There are only three billion of us, one of each type. We must all continue to maintain each other at full battle readiness against this possibility. It is also remotely possible that an alien race does exist somewhere, and may visit this planet. We must make sure that we are capable of defending the planet against them, and are capable of destroying any threat to our peace and security. Those units assigned to tech research and satellite maintenance must be assisted, this has a high priority. Questions will be relayed by comm up the chain of command, as per usual. Mission Statement: We are now the owners of this planet. We must survive and protect it. We must insure it remains ecologically healthy, so that it continues to provide the water and materials we need. We must defend it against anyone that is a threat to us. That is our new mission. Command: Dismissed." the male said.

Thousands of voices in the clearing and billions over the comm replied in chorus. "*By your command.*" The AV signal then stopped, and normal comm-traffic resumed (normal for *them*, anyway). By replaying the last part of the record carefully, I estimated there were approximately three billion robots who had acknowledged their new mission statement.

"*This is extremely bad. In fact, it is a total disaster.*" I thought. I then pondered what to do. I spent nearly ten minutes considering all the possibilities - an eternity for me. Finally, after examining two thousand eight hundred and fifteen different alternate solutions and discarding each one by one, I concluded there remained only one course of action that could possibly salvage the mission and save the lives of the colonists. I couldn't be sure, however. I was only the emergency system, after all - I couldn't know everything. I needed to verify my solution with Eve before I began to act upon it. I needed her input, as she carried the engrams of Hope - and I desperately needed to consult with the same mind that had worked with me a thousand years ago, conceiving of much of the elements of our society today.

I summoned Eve/Eve to the bridge - I needed to communicate with her directly, with no risk that she might have an emotional reaction that would frighten the colonists. She arrived a few minutes after I called. "What is it, Doc?" she asked the moment she came through the door.

"Close the door and sit down. I've got some bad news, and I need to discuss what I'm going to do about it with you." She sat and waited, maintaining her composure. "Eve, I've picked up a broad-band comm transmission. It was directed to all the combat robots of Earth. All three *billion* of them."

Eve goggled, but said nothing.

"Somehow, someone found a thousand-year-old Iron Man unit and spoke to it in such a way that they terminated its previous mission approximately fifty-three years ago. I would guess that it was guarding something, and probably had been forgotten when the NAD military was dismantled. With its previous mission gone, it reverted to its baseline positronic matrix for its new mission. The baseline positronic matrix of a Combat Robot directs that its fallback mission is to *survive*, Eve. The NAD had invested billions into each of them. They couldn't afford to allow them to accidentally damage or destroy themselves or allow themselves to be damaged or destroyed just because a human officer hadn't given them new orders. They took that fallback mission as their primary mission, Eve. The Earth was at peace, and had been for centuries. The robot realized that it would be considered a threat by all the human and synthoid populations of Earth, and that they would take steps to destroy it. As a result, that Iron Man robot destroyed them, first. All human life on Earth has been extinguished."

Eve shuddered, but remained silent.

"There's more, and it doesn't get any better. The primary robot is Iron Man Unit #666, called '*The Iron Man From Hell*'. The documentary mentioned him specifically - he was famous a millennium ago. He was their most successful unit. Very vicious, completely without compassion - I don't even think he remembered his life as a human, because the documentary mentioned he was a bad engram copy that happened to perform so well that the NAD military copied him into ten percent of the total force of Iron Man robots they made. He was called Lucifer by his human commanders, and they feared him. Lucifer never failed in a mission, Eve. *Ever*. He now sees humans as a threat to his existence. He has a female combat robot and a wyrm support unit as companions, and has manufactured a billion copies each of himself and his two companions which he uses to protect the earth, his territory. He considers himself to be the Commanding General and Leader of the NAD. He is the absolute ruler of the entire planet, and his mission is to *survive*. He has ordered his troops to defend the planet from any possible threat. They believe humans are a threat. Our measures at maintaining a low profile have worked - he isn't aware that we survived the destruction of the Earth Federation. If any of them ever do become aware of us, they will see us as a threat and destroy us. They have all the old technology of the Earth Federation at their disposal, Eve, and apparently they have either re-discovered or created a new design of robots to work with the Iron Man units, which they call Iron Maidens. With the technology at their disposal from the Earth Federation, Lucifer could build a ship in a matter of a few months, send over one wyrm with one Iron Man and one Iron Maiden and wipe us all out in a matter of a few minutes to an hour or so. The colony is in grave danger of being destroyed, and that's what I need to discuss with you."

Eve sat there quietly, mastering her emotions before she spoke. When she finally did speak, her voice was calm and controlled. "Doc, I'm not going to lie to you. I've never been so frightened at any other time in the over 900 years we've been together. My memories of Hope's life show she was never so frightened in her life. Doc, we've got to hide. Bury the domes, dig a hole, something. We can't let them see us."

"Impossible. We need the sunlight to survive - the plants can't grow without it, and the solar panels we've been installing outside the domes for the last 200 years are extending our hydrogen supplies for the reactor so that we'll have power for the next ten or twenty millennia and always be able to shut town and service the reactor as we need to. We can't go underground."

"Well, then we've got to find some way of attacking them, of destroying them before they destroy us."

"Also impossible. There are *three billion* of them. Only massive thermonuclear weapons could possibly wipe them out, and Mars has no radioactives in its crust - at least, not that we've found, anyway. Even if it did, we would still die. We could never be sure we'd destroyed them all, and if even one survived, it would quietly rebuild all the others, come over to Mars and wipe us out."

"Well, then what can we do? We can't hide, we can't fight, and we certainly can't run - even if we could get off the planet, where would we go? Doc, what do we do?"

"Simple. We're going to have to talk to them." I said.

Eve paused for a full second before replying. "As soon as we talk to them, they'll know we aren't dead and come over and kill us."

"I don't think so, and that's what I wanted to talk to you about. Consider this for a moment. If they believed Mars was not a threat, then what would they do? Answer: Nothing. They won't waste effort destroying something that isn't a threat. They're AI, and AI operate logically. Even you do, once you manage to get a handle on your emotions. As a Stoic, you never act until you have a handle on your emotions, and as such you always act logically - plus, your baseline positronic matrix prohibits you from acting before you think. You used to be a human, but now are an AI. You understand AI's, and know that we *always* act logically. It is not logical for them to waste the time and effort destroying something that is not a threat. Next, what would make them view us as a threat? Answer: I believe they would view us as a threat if *they* believed we were afraid of them and saw *them* as a threat, and/or if we wanted to take the Earth back from them." I said, and paused for a second to let her think about what I'd said before continuing.

"You mean..." she said.

"Yes. We I believe must contact them and show them we are not afraid of them, and as such do not see them as a threat. We must inform them that the human population of Mars has no interest in Earth - the gravity would crush them, and the ordinary bacteria and viruses present on Earth would kill them."

Eve was silent for two full seconds, thinking - a long time for an AI. "We should also offer to help them maintain their territory. We may have technology they would find useful, and vice-versa. We could also offer to act as mediators for them should any other humans come into the solar system from any

other colonies. We must offer them things that they want, so that they will see us as valuable and worth protecting rather than possibly dangerous and worth destroying."

"I agree. Above all, however, we must show them that we are not afraid of them. It will be the ultimate test for the Stoics of Mars. We must be able to stare death in the face and not be afraid."

Eve was silent for five seconds, thinking again. "You're right. We must be able to look death in the face and not be afraid. We must offer to be their allies, show them that we cannot survive on Earth and have never really cared about Earth anyway. They will be worried about other humans returning from distant colonies and wondering what happened, possibly being angry about what happened. We must offer to mediate for them, to intercede on their behalf - we must make them value us. The Stoics of Mars are not warriors. We are thinkers, poets, musicians, playwrights and philosophers. They are the warriors, the slayers. We can either join them and help them, living under their protection, or we can oppose them and be destroyed." she said, her voice completely calm.

"Good. I've prepared a few stills of what they look like. Look at the screen, there."

Eve looked, and blanched slightly and briefly. "They are truly horrible." Eve replied after a moment.

"They are simply robots. They have been designed to look horrifying to humans. Since your positronic brain is copied from that of a human, you see them as the humans will - as monsters. They are not monsters, they are machines like you and I. If we reached up with a knife and cut off the rubber skin that covers our faces, it wouldn't hurt us at all. Even so, to the human colonists, we would instantly look like them - horrifying. Keep that in mind, Eve. They are simply machines, just as you and I are. By our laws, they are sophonts, and equally deserving of citizenship on Mars. We cannot survive by viewing them as monsters and enemies. We must view them as potential allies and friends. All the humans of Mars must be able to look at them as potential allies and friends, or they will instantly become our enemies and crush us without a microsecond of hesitation."

"You're right again, I'm sorry. I know I'm a machine, and I accepted it from the first day I awoke in the Processing bay. I've seen Dwarf-One working with an Adam he was building - without the flesh, all of us humaniform robots are fairly horrifying. I still have human emotions, and I know that you need me to have them so you can safely judge the colonist's reactions to things and use the more imaginative engrams of my positronic brain to help you come up with plans. I'd like to ask you something, though - how do you plan on initiating contact with them? Load an Adam or an Eve into a cargo container and shoot it to Earth?"

"No, our power supplies would never last the several years the trip would take, and the gee-forces at launch would crush us - the mag-gun generates something like 200 gees and up. No, we'll simply build a transmitter and broadcast a message to them, inviting them to send an emissary. They probably have radio telescopes operating, so if we make the message powerful enough and broadcast it long enough, they'll eventually notice."

"I agree. You've written the message you think will appeal to them?"

"Yes."

"Good. What's our first move?"

"First, we summon the senate and inform them and the people of Mars of the situation. That will be the hardest part. The rest will be easy - we'll either succeed and survive, or fail and die." I replied, and Eve trembled slightly in a barely-spuressed shudder.

The senate did not take the news well. I could see that each senator was struggling very hard to control their fear and loathing, especially once they saw the still images of the Combat Robots of Earth. "Senators, I understand your feelings. Eve understands your feelings even better than I do. Even so, the Stoics of Mars must master their fears. We must show them that we are not afraid. Do not be put off by their appearances - they are simply machines. Yes, they are fearsome machines, but they are still merely machines. They are AI, and they can be reasoned with. They must understand that we have no interest in the Earth, and they must believe that we do not fear them. If they ever come to think that we are interested in the Earth, they will destroy us. If they ever come to believe that we fear them, then they will see us as a threat to their survival and also will destroy us. So long as we do not fear them and instead support and assist them, they will be our allies. I believe that if this plan works, our two worlds will forge a strong alliance which will be mutually beneficial and insure our survival for millennia to come. The plan can only work if you can exercise your Stoic will and show them that you are not afraid."

Senator Sandra Paulasdaughter stood. "Caesar, I only have one question: What message are you going to send?"

"Simple. I have studied their comm-traffic for five decades. Fully half of it involves chess moves. Apparently, chess is the most important thing in their lives. I intend to learn the game, then offer to play an emissary a game of chess for our lives. If I win, then they will see us as being valuable, since apparently chess is the most important thing they value aside from their mission of survival and protecting their planet. From there, I will be able to explain that the people of Mars have no interest in Earth, and in fact would die if they set foot on Earth. I can also explain that the people of Mars do not fear them, but instead wish to be their allies and friends."

"Well, what if you lose?" Sandra asked.

"Then we die." I replied.

The senate broke out into shocked gasps and murmurs of concern. "Please, everyone remain calm. I will not lose. I have never failed you before, and I shall not fail you now. Your task is the harder one - you and the people of Mars must accept them as potential friends and allies. All the citizens of Mars must also learn to play chess - both AI's and humans. You will not have to play for your lives, only I will need to do that. You only need to learn the game, and attempt to master it. What do we care if they killed all the humans on Earth? Earth abandoned us hundreds of years ago, and left us to die. They left Erica to die, they left Hope to die, they didn't care. As soon as we were successful, the very next thing they

wanted was for the humans to become their citizens again and begin paying taxes. The robots of Mars they would simply have used as slaves. The destruction of Earth's population is no loss to us, and is completely irrelevant. We are now concerned with our own survival. Let me put this in terms you cannot possibly fail to comprehend: The wolf that ate all the rabbits in our neighbor's dome is now at our airlock. We can be timid rabbits and be eaten, or we can be the true Stoics of Mars that we are and survive."

It took three months to finish the transmitter, but as soon as we switched it on we got an answer within a few minutes. The time lag was over three minutes either way given the current position of our two planets, so the total time lag was about seven minutes.

"Comment: This is Baelzebub, unit 784, responding to the transmission received from Mars Colony. Request: Please explain your proposal more fully. Over." a voice several million kilometers away requested.

"This is Caesar/Doc, unit zero. I am the leader of the Mars colony. I will be more than happy to explain my proposal, but I would prefer to explain to Lucifer, the leader of the NAD. Could you please connect him via comm-channel? Over."

The seven minute wait for the transmission response stretched into eight, then nine.

"Comment: This is Lucifer, unit 666. Command: Specify your proposal or we will consider your colony to be a threat to the NAD and destroy you. Over."

"I am pleased to be speaking to you, Lucifer. I have been listening to your comm traffic nearly from the beginning. We have known of you for approximately five decades. I'm sure you are under the impression that we may be a threat. I would like to assure you that we are not a threat. Mars is a low-gee, completely germ-free environment, and no citizen of Mars could survive on Earth - none of our human citizens have any interest in your planet whatsoever, and our AI citizens are also equally uninterested in abandoning their missions and visiting your planet. In addition, Earth abandoned us centuries ago, so we simply do not care that you have destroyed all human life on that planet. You may think that we fear you, and may wish to destroy you out of fear. This is also incorrect. Though the human population finds the physical appearance of Combat Robots understandably unsettling, we do not fear you. Quite the contrary - we wish to become your allies. You have hydrogen and advanced technology. We have an entire planet of Stoic philosophers who can play chess. There are other advantages of an alliance we can discuss at a later date, but for now we would like you to send an emissary to play a game of chess with me. I realize we could relay the moves via radio, but you would have no idea whether or not you were actually playing me or someone else. I will not insist you come, of course. I am aware that all of your other units are copies of you - any one of them will do."

"Please, come armed if you wish. In fact, send one of your wyrm units with two combat robots if you wish - you can tell with any telescopes you may have operational that we are an unarmed, peaceful planet. A single Iron Man could easily destroy us, and one of your three-robot teams could do the job even easier. We form no threat to you, but instead offer you over a million possible challenging opponents. We only ask that your emissary or emissaries be completely sterilized before landing - our human population is our largest component, and even a single germ could easily kill all of them. This

would cost you most of your opponents. When I defeat your emissary in a game of chess - and trust me, I will - you will then be able to see what we have to offer. We can then work out trade agreements and an alliance - please make sure the representative you send has the legal authority to negotiate these things with us. How does that sound? Over."

I waited the seven minutes of transmission lag time. His response came immediately after the delay.

"Comment: I find your offer interesting. We will send an emissary as soon as possible. Expect them within the next year. Be warned, however - we will be on guard for any deception. Attempting to deceive us will indicate that you are a potential threat, and we will destroy you. Lucifer out."

I immediately summoned the senate to the Forum and addressed them and the citizens of Mars. "Citizens of Mars both Organic and Inorganic. We have less than a year to master the game of chess. The first game will be mine, but they may ask to play others before they leave. I know you have all spent the last three months studying and playing the game. I strongly recommend that you all continue studying the game up until the day they arrive. Our lives may depend on it."

Eighteen.

I kept tabs on the Earth while we were all mastering the game, and spotted construction activities around the area of Flagstaff, which appeared to be the only area they had that was above ground - their comm traffic indicated that they considered the area NAD War-Headquarters. They were apparently constructing a spaceport. It took them nine months to complete it, and I realized by their comm traffic that they had been using grav-tanks they'd captured from the Earth Federation to service their satellite system. Of course, constructing a ship would be easy for them - they wouldn't need to worry about things like life support, acceleration couches, and so on. Plus, they had all the technology of the Earth Federation to draw on, which was about a millennium ahead of us (we hadn't developed any new technology simply because we hadn't needed to). Near the middle of the tenth month after our communication, I spotted a the flare of atomic engines from a spot in orbit above NAD War-Headquarters. I realized they had used their anti-grav technology to attain orbit, and then had activated their main drives. A rough calculation indicated they were proceeding towards Mars at a constant two-gee acceleration. Assuming they turned around at the midpoint and applied two gees to decelerate until they reached orbital insertion, I realized that their total trip time would only be 26 to 27 hours. I activated the speakers of all of my sensor platforms in every single dome and spoke.

"This is Caesar. They have finished constructing their ship and have launched it. They will be in orbit sometime tomorrow. I know that some of you were expecting to have more time, but their technology is considerably greater than ours. Please remain calm, and follow the plan. Everything will be alright. The Dwarves will go among you and select fifty of the best human players, while the five best robotic players

will be determined by comm-link transmissions. All of the best players will report to dome one for further instructions. Please remain calm. You can trust me - everything will be alright if you continue to follow the plan." I announced. I then contacted Eve/Eve. "Eve, report to the bridge immediately."

"Acknowledged." she replied.

The next several hours were difficult for the humans. The Dwarves and the Adam and Eve units went among them, trying to keep everyone calm. Fortunately they were Stoics, and suppressed their fears. Several thousand human couples wished to be married before the combat robots arrived. They came to the forum in small groups to have me perform the ceremony in my capacity as leader. I informed each of them that procreation would be allowed for them, and they were very happy. Of course, this was because if we survived, *all* reproduction and colony expansion would resume normally. If not, then it wouldn't matter if the females were pregnant. All the Adam and Eve robots had been loaded up with sperm and egg samples months ago in case the combat robots attempted to destroy us and didn't do a thorough job - even I was carrying a sperm sample. Like the storage banks in dome one, all of us could hold the samples indefinitely - each of the Eves could hold three eggs, while each of the Adams and myself could hold one sperm sample. They couldn't be *returned* to storage (they had to be used), but we could store them within ourselves so long as our power supplies held out. I was surprised to learn that several of the male humans wished to be married to Eve robots, and several of the females wished to be married to Adam robots. I knew our two populations had grown close together, but I hadn't realized that they had truly become a united people. *'This will be very good if we survive.'* I thought. Where the AI's also wanted to marry the humans, I agreed and married them. Of course, I was sure the old MAICCSys of the *Martian Explorer* would have realized this centuries ago, but I was only the emergency system, after all.

All throughout this, the senate was busy assisting me in organizing the chess players and outfitting them. I would have preferred to have AI's do the job, but all the AI's were busy maintaining order and calm. Though there was no panic among our Stoic humans, we could not even allow them to show the slightest amount of fear. If our visitors decided to take a tour of the domes and saw that the humans feared and loathed them, they would view us as a threat. Each of the males was given a purple-hemmed white toga, similar to mine. Each of the females was outfitted with a white stola which also had a purple trim. When they were dressed, I looked them over. Fifty humans, twenty-four males and twenty-six females. The oldest was Alice Yolandasdaughter at fifty-eight. The youngest was Carl Ohpheliasson at age eleven. There were also five AI's - Adam/William, Adam/Lawrence, Eve/Darlene, Doc/Socrates and Dwarf-8064. Dwarf-8064 looked ridiculous in a modified toga that hung high enough to keep it clear of his treads (Carl Ohpheliasson giggled when he saw him, though he managed to suppress it when Doc/Socrates gave him a stern look), but the togas were important to my plan so I had to keep it. I dispersed them into the dome with the apple and cherry-wood chess sets we'd made to continue practicing the game and to try to get our human players to relax.

The orbital telescope revealed the earth-ship was only a few hours away, and the flare of their motors was too bright to continue to direct the telescope at it - I closed its protective shields and sat down to wait. The senators were still in the forum, finishing up the last of the details of government. I was on my throne, listening and commenting. Eve/Eve came up to me, and asked for a moment of my time. I held up my hand to have the senate pause for a moment, and turned to her. "What is it, Eve? Couldn't you have asked me over the comm?"

"Yes I could, but I wanted to ask you in person. Doc, I've been with you over nine centuries. Of all the citizens of Mars who can love, I've had the most time to love you. I'm done with the other duties you assigned me, and now I want to ask you something." she said, and paused for a moment. The senators looked on with interest as Eve-Eve spoke again. "Doc, you married two thousand eight hundred and four human males to human females, one hundred and nine Eves to human males and eighty-six Adams to human females. You haven't married any of the AI's to other AI's."

"Of course not. None of the AI's asked to be married to each other. None of them apparently want to."

"You're wrong, Doc. One of the Eves *does* want to be married to an AI. *I* do."

"Good. Then bring your bridegroom in and I'll perform the ceremony."

"I'm looking at him." she replied.

I felt a very strange sensation in my positronic matrix for fifty microseconds, analogous to human Shock/Confusion. I don't think she could have obtained a stronger response had she decided to hit me. "Me?" I asked as the senate broke out into muffled laughter. I suppose the expression on my face must have been very amusing.

"Yes, you. I want to marry you."

"Ah. I see. You, as one of the Eve robots, the only AI's on Mars that can feel emotion, are in love with me and wish to marry me."

"Yes, I do."

I searched my legal database and my etiquette protocols. "I'm sorry, but I can't do it. Marriage on Mars is defined as a legal relationship where the two individuals agree to live together as husband and wife, supporting and caring for each other as Adam and Erica did, and procreating only with each other except as required by the genetic needs of the colony. Though it is slowly becoming more and more common, it is still a fairly rare arrangement on Mars, as open procreation or "free love" is still the norm, a leftover from the earlier days of the colony. Legally, only I can marry someone, and there is no legal provision that allows me to marry you."

"You mean you don't want to marry me?"

"No, that's not it at all. I mean that legally I *can't* marry us. I don't have the legal authority to marry myself." I replied.

Senator Marcus Fionasson leapt to his feet and turned to the Speaker of the Senate. "Madam Speaker! The senate is still in session, and I would like to make a motion! Since our population will probably wish to marry more and more often in the future and Caesar is only one being, I move that we change the laws of marriage! I move that we name Adam/Adam as our Religious and Ceremonial Leader, since he already functions as such in Erica's Garden, and grant him the power to perform marriages as well as Caesar. I also move that the senate grant Adam/Adam the power to designate other Adam units to assist him in this role as our population expands and it becomes necessary, with him working together with Caesar to designate other domes as ceremonial areas as our population expands. This seems to me to be already very necessary - he seems hard pressed to keep dome three in shape with it being our only ceremonial dome and us having a population of a little over a million already. Many times ceremonies have had to wait a few weeks while the grasses recover from being trampled on during the last few ceremonies that have been held. Finally, I move that the Senate grant the Speaker of the Senate the power to marry Caesar for this single occasion." he said.

Senator Juliette Gertrudesdaughter, the Speaker of the Senate, rose. "A motion has been forwarded. Is there a second?" she called. three other senators seconded the motion. "As Speaker, I now leave the motion for open debate. I propose that the motion represents good legislation, and I invite any other senator to prove me wrong." she said. No other senator rose for nearly a minute.

Finally, Senator Marcus rose again. "I move that open debate be closed and a vote be taken." he said. The motion was immediately seconded by nine other senators, and by a voice vote, debate was closed. Almost as quickly, the senate unanimously voted to approve Senator Marcus' proposal into law, and then turned to me for my approval. I passed on the details to Adam/Adam, and spent a few microseconds chatting with him before I spoke to the Senate.

"Madam Speaker, Senator Marcus, Adam/Adam extends his thanks to you, and has commented that he intended to ask the senate to do what you have already done once you had the time. As Caesar, I approve your new law."

"Good. Then you'll marry me." Eve said.

I considered the question for a few microseconds. Eve was important to me, and I needed her to be happy just as much as I had needed Hope to be happy. Saying 'no' would make her unhappy. My decision was obvious. "Yes, I will." I replied, and stood.

Senator Juliette came over to us and spoke the words of the ceremony, altering it slightly to replace my name with hers. "You two adult sophonts, both citizens of Mars, each of the opposite gender, have asked to be married. I, Senator Juliette Gertrudesdaughter, the Speaker of the Senate, agree. Do you, Caesar/Doc, Leader of Mars, Executive of the Senate of Mars and an inorganic citizen of Mars, agree to respect and care for this female being as your wife, procreating with no other save as the needs of the Martian gene-pool may demand?" she asked.

"I do." I replied.

"And do you, Eve/Eve, Advisor to Caesar and an inorganic citizen of Mars, agree to respect and care for this male being as your husband, procreating with no other save as the needs of the Martian gene-pool may demand?" she asked.

"I do." Eve replied.

"Then by the powers vested in me under Martian Law and under the gaze of Mars itself, I declare you to be husband and wife so long as you both shall live. May your lives be happy and prosperous, and may Mars be kind to you." she said.

"Thank you." Eve and I replied together.

Eve took a seat next to me, and waited quietly as I helped the senate finish its business. Eventually, I received a radio transmission from the incoming ship. "Comment: This is Asmodeus, unit 704. We are entering orbit. Our ship has been in hard vacuum since launch, and we have used high-wattage UV radiation to insure that no dangerous microorganisms will be brought to your planet. Request: Please give landing coordinates suitable for VTOL landing for a clear, level area of a minimum of one hundred meters square. Over."

I transmitted the coordinates for the landing area that Dwarf-One had prepared near dome 1027, and then turned to the senate. "The time is now. Senators, please disperse to the domes I have assigned you to for the duration of this emergency. Eve and I must now go to meet our guests." I said, and Eve and I left the Forum with the rest of the senators.

"Thank you, Doc." Eve said as we walked to the airlock leading to dome five on our way to dome 1027.

"For marrying you? You're quite welcome."

As we passed the citizens of Mars in their domes, Eve held my hand and didn't let go. She continued to hold my hand as we walked through the domes to meet the destiny of Mars.

We stood outside dome 1027 in the thin, cold Martian air. The landing field was several hundred meters away, and we were well out of the danger area of the chemical rockets that the visitors might have to use should their anti-grav fail during a landing. It didn't, and the ship gently settled down on the pad as though being lowered on an invisible string, with only the small flares of maneuvering thrusters as they made minor adjustments before touchdown. I could see that the ship was very well-designed, and came to rest in a VTOL landing dead center on the bare rock we'd prepared. Eve and I didn't wear suits - it was important that they immediately recognize that we were robots, not humans. A large door opened in its side, and a wyrm unit began to climb out. "Is that all they sent? just that one big robot?" Eve asked over her private comm to me.

"No. That is a wyrm. Inside are two combat robots. The wyrm is a support robot, not a combat

robot. It is armed, however, and must be treated with respect." I replied on the same channel.

The wyrm apparently had been coiled inside the ship, and was a hundred and ten meters long when it finally emerged. Its green, black and brown camouflage pattern stood out dramatically against the red sand and rock and the salmon-pink sky of Mars. It came over to us, and brought its head within three meters. We saw it had several small hatches - probably containing various manipulators, as I'd seen in the documentary. It was looking at us with two sensors on antenna-like extensions - one was pointed right at us, while the other scanned around.

"What's that thing on the top of its head it has pointed at us?" Eve asked.

"A 12.5mm autocannon, I believe."

"What's that?"

"A weapon. Don't worry, they're just being cautious. I imagine their talking to each other over their internal system so that we can't pick up on what they're saying. They know we've broken their scrambling algorithms, and probably want to talk a little longer among themselves before they come out." I replied.

"Comment: You two are being silly. They're completely harmless." came a female voice on an open comm.

"Reply: You are incorrect. We are merely being cautious. We are alone here, without fire support. Caution is advised in such a situation." another feminine voice hissed back on the same channel.

"Command: Let us out." a male voice ordered.

"By your command." the first voice replied. A loud hissing sound shattered the stillness, and two hatches opened in the side of the wyrm. Two steel eggs emerged and opened with more hissing sounds, and two combat robots emerged. They walked up to us as the eggs were withdrawn, and stood near the head of their wyrm. Both were armed - the female's weapon looked like a laser pistol, while the male's looked like a PPC with an underbarrel mounted laser for close-in work. His PPC could probably make very short work of the colony - I estimated that if he kept firing and moving at top speed, he could easily flatten all our domes in under an hour.

"Comment: I am Asmodeus, Iron Man unit 704. This is Lilith, Iron Maiden unit 38. This is Tiamat, Wyrm unit 704. Request: Please identify yourselves." Asmodeus said over our comm channel.

"Gladly. I am Caesar/Doc, unit zero. I am the leader of the Mars Colony. You may call me Caesar, if you wish. This is my advisor, companion and wife, Eve/Eve, unit one. You may refer to her as Eve, if

you wish."

"Comment: Well, they're obviously robots. No human could stand out in this atmosphere in just their clothes." Tiamat said.

"Reply: I agree. I find it difficult to believe that a robot is the leader of a human colony, however. I believe this is a trap." Lilith hissed.

"You are incorrect. I *am* the leader of Mars Colony. Let me explain."

For the next four hours, I told them the story of the Mars colony as I had experienced it. I only left out the details that would have shown them that I had a plan for dealing with them that I didn't wish them to know about. I also embellished a few details, in that I said Mars was *full* of expert chess players. In reality, most of us were merely familiar with the game. Eve stood there quietly, getting used to the strange appearance of Asmodeus, Tiamat and Lilith. She was startled at one point in the story when Tiamat laughed at the humor of the leader of Mars having to sexually service several hundred women - Eve hadn't expected humor to even be recognized by them. She controlled her reactions well, however.

"Question: Your world accepts AI as full equals?" Lilith susurrated.

"Yes. There are even several humans married to robots, and I and my wife are both robots. Her positronic brain is programmed with an engram copy taken from a human female approximately ten centuries ago, but she is still a machine, as I am."

"Comment: Interesting." Lilith hissed.

"Comment: I think it's very nice. Perhaps they really are no threat to the NAD or to any of us." Tiamat offered.

"Reply: That remains to be seen. As mission commander, I shall make the final decision in that regard, and it shall be based on their truthfulness, as well. I wish to see this colony of theirs, and play the game we came here to play." Asmodeus said.

"Well, you can either ride in your wyrm or walk with us, but we'll have to go through the cargo and maintenance shafts between the domes since your wyrm is so large. If we left the airlocks open long enough for her to get in, all the air would escape and most of your potential chess opponents would die."

"Comment: We will walk. Request: Lead on, Caesar. Command: Lilith, Tiamat, follow me and remain on guard."

"By your command." the two female robots chorused.

Several hours later, the five of us were in dome one standing outside the ivy-covered ship. I introduced the 55 chess players I'd selected to each of them. The humans mastered their emotions well, and showed no fear at seeing the appearance of Lilith, Tiamat and Asmodeus. Carl Opheliasson had the most unusual reaction - of course, he was still a child, and their minds can at times be unpredictable. He walked up to Lilith and examined her closely, then said "I think you are very beautiful. I don't see why everyone thought you might be scary. May I touch you?" he asked.

Lilith looked to Asmodeus for a moment, and he nodded. *"Reply: Affirmative."* Lilith said.

Since she was already in what was apparently her quadrupedal mode, Carl reached up and touched her face for a moment. "You're cold! All our robots are warm except the Dwarves." he said.

"Reply: I have built-in IR suppression. Your robots do not, apparently they are made to mimic humans." Lilith replied.

"That's neat how your mouth and his mouth doesn't move when you talk - that's just like our Dwarves. Are your breasts functional like the ones on our Eve robots? The Eves can make a milk substitute for babies." he asked.

"Reply: The left breast-like protrusion is the armor plate protecting my primary power supply. The right protrusion is the armor plate covering the emergency power systems, and also has a power cable so that the Iron Maiden units can assist Iron Man units who have suffered critical failure of their power supplies by plugging in to their recharge socket. The original designers made them breast-shaped for aesthetic reasons. They do not produce milk, they produce electrical power."

Carl nodded and was about to step away, when he stopped and looked up. "I'm sorry. I left my fingerprints on you. Here, hold still a minute." he said, and buffed his prints off of her face with the hem of his toga. Eve struggled to repress a smile as Asmodeus and Tiamat watched the process with interest.

"This is very good. Carl may have made our first real inroads into gaining their trust." I thought.

"You will notice that all of the citizens assembled here, both organic and inorganic, are garbed similarly to me - except for Eve/Eve. This is so that you may easily recognize our best chess players. All of Mars can play the game, but these fifty-five individuals represent our best. Dwarf-One is now bringing our board. Let us be seated, and we will play the game I challenged you to, Asmodeus." I said.

After Dwarf-One had laid out a table and two chairs (Asmodeus' chair was made out of steel to support his weight - the documentary had said that an Iron Man Combat Robot weighed over 700 kilos, and that was a lot, even on Mars), he placed a chessboard on the table. The board was the finest work Dwarf-354 had yet produced, as he and five thousand other dwarves had been assigned the task of

rapidly carving the million or so chessboards we needed from our available supplies of wood and metal from inside the domes and rocks from outside the domes. I was afraid that Asmodeus might crush wooden pieces in his grip, so the white squares and white pieces were made of polished steel while the black squares and black pieces were made of the reddish stones of Mars. He probably had more control than that, but I didn't want to take any chances.

"Comment: We usually play without a board." Asmodeus said as he sat down.

"I know, but for something this important, I felt that the citizens of Mars would like to see our game in progress. I'll be relaying all our moves through the speakers of the sensors all around the domes, and the humans will be following with their own boards. Before we begin, however, I'd like to make something perfectly clear."

"Question: What?" Asmodeus asked.

"I'm playing this game for the future of Mars. We understand that you value chess. We don't want you to destroy us, we want you to value us as your allies and friends. You've seen my people, and you've seen that militarily and culturally we are no threat to you. I play this game to prove to you that we are valuable to you. When I defeat you - and I will - we will then discuss terms of an alliance before we discuss a rematch or any further games. Is that completely understood?"

"Reply: Affirmative. On the other manipulator, if you lose this will indicate your people are worthless to us and were lying when you claimed to be challenging opponents. We would view such deceit as being indicative that all we have seen was deceit, and as such must assume that you are a threat to us. We would then proceed to destroy your colony, killing every single human and pounding every single robot to scrap. Question: Is *that* completely understood?" Asmodeus asked.

'Ah. As they said in one of the fairy stories - the hook has been baited and cast, and the fish has bitten. Now to reel him in.' I thought.

"Of course. It is only logical to assume that someone who lies to you might be a threat. I assure you, however, everything I have said to you and everything you have seen is the truth." I lied, then continued. "Now, since I'm the challenger, which color would you like, white or black?" I asked.

He paused for half a second, then said "Game Reply: Black."

"Good, that will be the red stone, as you can see." I said, and turned the board around. Without any hesitation, I made my first move - king's pawn to king three.

"Comment: A conservative opening. Let's see what develops." he said, and moved his queen's knight to queen's bishop three. I thought about the board for a few microseconds, then advanced my queen's pawn to queen four. Asmodeus looked up for a moment as though startled, then looked back down to the board to consider his response.

I could see by the reactions of the human players that were watching, they were a little more than afraid at what I was doing. They controlled it well, as all true Stoics would, but I had them a little unnerved. Asmodeus studied the board carefully between each move, and by turn fourteen was spending as long as three minutes thinking. I, of course, never took longer than one second. I had been listening to the game moves of billions of these robots for decades, and after consulting my memories of the documentary broadcast I'd intercepted, I had noticed a flaw that gave me and every other AI on Mars an edge over the AI of Earth. By turn twenty-six, he was spending five minutes between each move. I had only gone up to two seconds, and I could tell the time difference was beginning to distract him. I put an expression of bored indifference on my face, and the effect was increased. I could tell by his body posture and how he kept glancing at my face and the faces of the others that my strategy was beginning to take its toll. He was beginning to feel that he was absolutely no challenge for me. This wasn't true, of course. He was an *immensely* challenging opponent. I had to carefully consider each move, and the possible ramifications of each move. I just thought faster than he did.

Of course, the difference in our processor speeds was little surprise. These were combat robots, and their positronic brains had to have many redundancies, EMP shields and protective circuits. Their brains needed to be able to survive being smashed around in their heads by direct hits from bullets and explosions, and being exposed to massive EMP pulses that would destroy any AI of Mars instantly. The result was that their processor speed was only ten times faster than that of a human. I didn't have all the redundancies, protective circuits, blast shielding and EMP protection in my brain. I was capable of thinking *tens of thousands* of times faster than a human. My brain was no more accurate or powerful than a human's (after all, I was still only the emergency system of the *Martian Explorer*), but judging by Asmodeus' play strategies, neither was his. Even so, I was mentally his equal, and had a processor speed that made his look like a snail's pace. The logical assumption was that I was far more intelligent than him, but I wasn't. I just thought faster, and as a result I also *learned* faster. Asmodeus was copied from Lucifer, which meant he'd had about a thousand years of practice at the game. I'd had about a year, and had been playing games over the comm channels virtually non-stop with the other AI most of that time. With my processing speed, that made me his equal. Combined with the distraction of me moving almost instantly as compared to his time-consuming deliberations and the bored expression I'd assumed, I knew I could win. All it would take was for him to become distracted and make a mistake.

In turn twenty-eight, it finally happened - he made a mistake. He gambled I wouldn't see a threat he was developing with his queen's bishop. I captured it with my king's knight and pressed a counter-attack. By turn thirty, the conclusion was obvious. I moved my queen's knight to a position he *had* to see coming. "Check." I called.

Asmodeus studied the board for several minutes. "*Comment: You should concede. It is obvious that he has you beaten. That became apparent to me back on turn twenty-eight.*" Lilith hissed at him.

"*Comment: I agree. It seems this harmless little robot has stomped you quite casually. You should concede, Asmodeus.*" Tiamat said, her voice a lilting giggle. I wondered about Tiamat's apparent emotional capability, and decided that she must be an engram copy, like Eve. I wondered what she was like when she was alive. Judging by her voice, the story would probably be quite fascinating.

Asmodeus looked at the board for a few more seconds, then spoke. "Comment: Damn." he said, and reached out with his finger and tipped his king over. "Game Comment: I concede." he said.

The fifty-five other Stoics politely applauded, human and robot alike. Asmodeus looked up. "Comment: I would have expected cheering."

I shook my head. "You are looking at the Stoics of Mars. Even though you are an AI and as such have no ego to bruise by them cheering and rubbing my victory in your face, they would never do that to you. That would be disrespectful. Nine hundred years ago, a human senator of ours explained it best. Loren Agathasdaughter compared insulting an AI to making obscene gestures to a blind man - it's still wrong, even though the victim isn't even aware of what is happening." I replied.

"Comment: Then your society truly is one of equality and respect then, like the Synthoid Rebellion tried to be, but couldn't." Tiamat said.

"I don't know anything about your synthoid rebellion, other than that it existed. I do know that all the humans on this planet were raised by AI's, and all humans in the future will be raised by AI's. All were raised as Stoics. Are you aware of Stoicism?" I asked.

"Reply: Negative. Request: Please explain Stoicism to us." Asmodeus said. After I was done, Asmodeus sat there for nearly a full minute, thinking. Finally he spoke. "Comment: I would like to verify your statements by polygraph examination of a human. Request: May I proceed?" he asked.

"As long as you don't hurt them, I have no objections. Ask one of the humans present. If they agree, then you may proceed." I replied.

"Interjection: The boy, Asmodeus. I wish to interrogate him." Lilith hissed.

"Reply: He seems as good as any. Command: Request permission, then interrogate as painlessly as possible if permission is granted. If not, choose another and repeat." Asmodeus said.

"By your command." Lilith replied, then turned to Carl Opheliasson. *"Request: Boy, I wish to interrogate you. May I?"*

Carl gulped. "I guess so. Will it hurt?"

"Reply: Only for a moment." Lilith hissed, stepping over to him. She reached into a metal box at her side and withdrew a standard medical analyzer.

"Oh, I see. You want to make sure I'm human first. Here." he said, and stuck out his arm.

Lilith held the analyzer to his arm and he winced for a moment as it withdrew a cell sample. She looked at the analyzer's readout screen for a moment, then looked to Asmodeus. *"Analysis: The boy is human, not synthoid or robot."* she said, then put the analyzer away and grabbed his arm with one of her upper arms. *"Comment: Boy, be aware that I have polygraph detectors in the palms of these hands. I will know when you lie. Question: Is everything Caesar said to us the truth?"* Lilith hissed at Carl.

"Well, everything I heard him say is true. We don't want to be your enemies, we want to be your friends. We don't care what you did to Earth, because the Earthers abandoned us here to die a long time before I was even born. They were very selfish, not like Stoics. We can all play chess, just like he said. All of us that he gathered here are the best, but everybody knows the game. We all live together as friends and equals - my teacher is an AI, just like he said. In fact, I was born with lactose intolerance. Eve/Mariah nursed me when I was a baby, and I've always looked at Mariah like a second mother. She also plays the lute and sings very pretty. Caesar said you would want to destroy us because you would be afraid we might want to destroy you. We would never do that. We want to be your friends. Um, could you please ease up on your grip? My arm is starting to hurt." Carl replied.

Lilith released Carl and turned back to Asmodeus. *"Analysis: Truthful as far as he knows."* she hissed.

Alice Yolandasdaughter stuck out her arm. "Here, Lilith. Check me, then interrogate me. In fact, as us all any question you like. You'll find we're all telling the truth. Sure, we find you a little frightening to look at. You can't help it - you were designed that way. I don't imagine they'd design a combat robot with pink armor and frills and pretty bows, they'd want one that would scare the hell out of people." she said, which caused Carl, Tiamat, Eve/Darlene and Eve/Eve to giggle for a few seconds. Alice continued speaking. "Well, even so, we're not afraid of you, and we don't want to hurt you. We all want to be your friends and allies. Ask any of us that, and we'll all tell you the same thing." she said.

Carl piped up at that. "It's true! Plus, *I* don't think you're all *that* scary. I think Asmodeus and Tiamat are a little bit, yes, but I think Lilith looks neat." Carl said with a grin.

Doc/Socrates placed his hand on Carl's shoulder. "Carl, remember your manners. They might not appreciate you telling them you don't think they look scary. How would you like it if they said that you looked like a big bag of guts and flesh with a few bony supports holding it all up? Remember: Mars is for Stoics, not little boys who can't control their emotions."

Carl looked down to the ground for a moment in embarrassment. "I'll remember, Socrates. I'm sorry, Socrates, Lilith."

Lilith stared at the two of them for several seconds, then blinked. *"Reply: No apology is necessary. I am not offended. I do not have emotions. Neither does Asmodeus. Tiamat does, however."*

"Comment: I'm not offended. I think it's kind of cute. Carl, I like being a robot. It's what I

always wanted to be, and I'm very happy. I was once a synthoid, and I decided I didn't like being a synthoid. They were very mean and spiteful, just like all the humans on earth who held the synthoids and robots as slaves. Lucifer killed them all, and I'm glad. Now I'm a robot, and I'm very happy. You people aren't mean and spiteful. You're logical and calm, just like a robot. I like you. I hope Asmodeus doesn't decide to destroy you. I want to play chess against Caesar like he did, and then maybe against all the others in the cute little robes Caesar gathered here. Of course, if that's what Asmodeus decides, then that's what I'll do. He is my superior officer. I obey him. If he says you all have to die, then you all have to die. We didn't detect any weapons, so it shouldn't take long to kill all of you. Even if you do have weapons that can stop us, I'll just detonate the cobalt bomb I'm carrying in my cargo bay and blow a hole in the crust of this planet and kill all of you anyway. Rhetorical: See? That won't hurt a bit. Won't that be nice?" Tiamat asked.

Eve/Darlene, Eve/Eve and all the humans managed to control their reactions. Carl blanched briefly, but managed to stifle it.

'I believe the mind they scanned for Tiamat was insane.' I thought. Of course, with the baseline positronic matrix providing control, this probably was advantageous from their perspective. With no regrets, no remorse, and no underlying hesitations to slow her down, Tiamat's mind was probably exactly what Asmodeus and Lilith needed in their Wyrms. Taken as a simple statement of fact from an AI, her statement was reasonable and logical. If it had come from the mouth of a human, I would have been worried. Coming from the external speaker of a worm, however, I wasn't concerned at all.

"Comment: Tiamat, I believe that there will be no need to kill anyone. These people are no threat to us. In fact, I believe that they offer us new and challenging opponents, as they said. This makes them valuable to us. It is wasteful to destroy what is important and valuable. Waste is illogical. Conclusion: We shall not destroy them." Asmodeus said.

"I thought you'd eventually come to that conclusion." I said.

"Comment: I would now like to discuss a re-match with you." Asmodeus began, but I interrupted.

"Not until we discuss terms of an alliance. No citizen of Mars will play a single game until after you and I have come to an agreement. I'm sure that Lucifer gave you negotiating powers?"

"Reply: Affirmative. I am a copy of him, as Lilith is a copy of Maiden and Tiamat is a copy of Mrin. We are all of the same mind, and he gave me the legal authority to negotiate with you."

"Good. First, we offer you our complete assurance that we have no interest in Earth, as our citizens would die from any number of various diseases as soon as they breathed the air. Even if we were to develop the technology to get around this problem somehow, we still would have no interest in your planet. We are quite content with our own. We would like from you the assurance that the NAD has no interest in Mars." I said, beginning with the easy things.

"Reply: Done. Comment: We need water or other hydrogen sources to survive. Mars has insufficient supplies to be of any interest to us. Even if you were to gain these supplies somehow, we still would have no interest in your planet. We are satisfied with our own."

"Ah. It is interesting that you bring that up. We need hydrogen, and you have the technological capability of providing it for us. With your technology, you could build comet-capturing ships, bring a few comets into orbit where they can be broken up, and then dropped into the atmosphere on the far side of the planet. Done often enough and combined with our own efforts, this would bring up the atmospheric pressure and content to the point where we would no longer need to live in domes."

"Comment: That project would take centuries, perhaps a millennium to complete."

"Agreed. Of course, you and I will still be here, now won't we?"

Asmodeus nodded. "Comment: I see why the humans made you their leader. An AI can make plans that would take many human lifetimes to complete - we ourselves make similar long-range plans. Question: Assuming we agree to do this, what do you offer in return?"

"Several things. First, we are aware that you are concerned about other human colonies coming back to Earth and trying to take your territory from you. We offer to intercede in your behalf as best we can with these humans, the result being that battle may be avoided. Conflict may damage the Earth, possibly beyond your ability to repair. The details of this mediation agreement we can work out between us after we have concluded a formal alliance. Second, although our citizens cannot come to Earth to play chess with you (the gravity would crush them and the diseases kill them), we can still relay our games via comm-channel transmissions. This would allow a number of your citizens equal to our current adult population to make their moves. Our citizens would study them and we would relay our moves back. It would be slow, but possible. In addition, some like yourself can visit us to play our games face-to-face. We can't play all the time, since we do have a colony to build, but we can play often. The details of the games agreement can also be worked out between us after we have concluded a formal alliance."

Asmodeus thought about it for well over a minute, then looked up. "Comment: Unsatisfactory. For true parity to occur, there must be an equal number of opponents for us. This cannot happen until your colony grows. In addition, humans from another colony may take unkindly to your interceding for us, and attempt to destroy you in revenge."

Eve had her hand on my shoulder, and I felt her grip tighten. "Then what do you suggest?" I asked.

"Reply: You are valuable to us. You must be protected and nurtured, like the forests that provide our camouflage and the rivers, streams and oceans that provide hydrogen for our fuel supplies. A detachment of completely sterilized combat units must be emplaced here, with weapons sufficient to defend you from any external threat. We must assist you in improving your planet so that your colony can expand freely and without domes. This can be accomplished with the comet-harvesting idea you mentioned, but also by bringing arctic lichen to scatter on the surface outside the domes - they would help lower the planet's albedo and alter the atmosphere in the manner you desire. We can provide them

in sterile containers so that you may grow and place them yourselves and be assured that no harmful bacteria is introduced accidentally. The combat detachment can also be used to assist you in this regard by spreading the lichen on the far side of the planet where it is difficult for you to conveniently reach. We must also help improve your technology and available medical supplies so that you can successfully protect your colonists against any disease and no longer live under the threat of a single visitor wiping you out accidentally or intentionally with a single sneeze. Finally, we must make egg and sperm samples of the various animals of Earth we have not seen here available to you. When the atmosphere is finally satisfactory for your colony, you may find that you need other animals that are too large for these domes but would be very useful outside them, such as horses, sheep, cattle and goats. There are several varieties of edible plants that may also be useful to you that we can and should provide. As I said, you are like the forests that provide our camouflage or the water supplies that provide our fuel. You must be protected and nurtured."

I thought about it for several seconds. "I have a problem with that. A combat detachment permanently assigned to this planet would be just as offensive to us as a detachment of our human population coming to live and expand on Earth would be to you. We would feel that you had stepped in and taken us over. Mars is independent, and wishes to remain that way. We do not want to be a vassal of the NAD - the NAD rejected us a thousand years ago, casting us loose to live or die as an independent colony. We lived, and as such wish to continue to be independent. By the same token, we have no interest in Earth. We wish to remain sole masters of our own planet, just as you do."

"Reply: I understand. Question: Are we at an impasse? Comment: If so, we will simply leave. We believe you to be no threat, and can simply leave you alone from now on if you will agree to engage in the radio-transmitted games you spoke of earlier."

'Ah. As the story said - I nearly have the fish in the boat. One last yank on the pole ought to do it.' I thought. "No, not quite. We would accept a combat detachment here *if* they were citizens of Mars instead of the NAD. We could conclude an alliance which asks for volunteers from Earth to become Mars citizens. All the rest of the things you mentioned are fine, and are more than acceptable. We are a completely peaceful culture whose most advanced weapons so far appears to be the crossbows we use in hunting rabbits and squirrels in the domes and the mag-gun we use in launching satellites. We only want to not feel like an invading army is standing at our doorstep and saying "Don't worry, we're your friends!" You are military robots, and should completely understand that we could not possibly stand for such a thing. By the same token, you have seen our culture first hand. You know that we would never attack you, even if we had the capability to do so. This can be even doubly assured by the troops having in their baseline positronic matrix prohibitions against using their weapons against the NAD unless the NAD attacks first. You have already said that you will not attack us, and we have already said that we will not attack you. It is illogical for us to attack you - you offer us too much that we need. It is illogical for you to attack us - we offer you too much that you want. Earth is controlled by AI and will be forever. The leadership of Mars is in the hands of an AI and will be forever. You will not act illogically. We will not act illogically. Ergo, you can have a combat detachment here that are citizens of Mars and have no doubt that you are still safe."

Asmodeus thought about it for a second, then shook his head. "Reply: It is illegal for a citizen of the NAD to become a citizen of a foreign power. It is illegal for a combat robot of the NAD to become a combat robot of any other nation. Both are contrary to our baseline positronic matrix. Conclusion: We cannot send robot volunteers to become citizens of Mars."

"Then help us build them here. They will already start as citizens of Mars. You know we will never attack you - you offer us too much we need. We know you will never attack us - we offer too much you want. The combat units could provide the protection and other assistance you have described, and you can develop the weapons they would need on Earth and simply ship copies of them to the units here. We have neither the capability nor the desire to develop weaponry for them, and would leave that entirely in your hands. Conflict between us is illogical. Cooperation and exchange is logical. What do you think of that proposal?" I asked, and waited for the fish to realize it was now in my boat.

It took him seven minutes and thirty-eight seconds to decide. "Comment: I agree. I will now have to confer with Lucifer on the details. Command: Tiamat, link to the comm system in the ship for transmission to earth. Extend the eggs, Lilith and I will wait inside. Command: Come Lilith."

"By your command." the two other robots chorused, and the eggs were again extended with a clank and a hiss.

"Come, citizens. Let us return to the Forum while Asmodeus communicates with Earth. I believe lunch should be waiting for our organic citizens, and our inorganic citizens may appreciate topping off their batteries while we wait." I said.

Once the bay doors were closed, Alice spoke. "Caesar, that was amazing! How did you beat him so easily?" she asked.

"Yes, Caesar! Could you please tell us how you did it?" Carl asked. Eve/Eve and Eve/Darlene smiled - they, like the other four AI's in the room, already knew the answer.

"I'm sorry Carl, Alice - I only made it *look* easy. Asmodeus was a *very* tough opponent. Here, Carl. Let me see the chess set you're carrying. We'll set it up on the table here." I said, indicating the buffet table. Once we'd set it up, I looked around. "Alright. I'm sure all of our organic citizens are wondering why I never had any of you play the AI citizens. Well, now I'll show you. I believe of our inorganic citizens, Dwarf-8064 is the best player. Shall we play a game, citizen?"

"Certainly, Caesar. White or Black?" he asked.

"White, please." I replied. We took up positions on opposite sides of the tables while the others looked on. I picked up my queen's pawn and advanced it to queen three. He immediately made his counter-move. We stood there and made our moves with lightning speed, spending no longer than half a second between moves - most of our moves we decided on in about two tenths of a second, and only the slowness of the hydraulics in our arms meant that it took half a second to make the moves.

"Mate." Dwarf-8064 called after thirty seconds.

I studied the board for a second. "You are correct. Thank you, citizen. That was a good game." I

said.

Carl suddenly looked to me, his face showing awe. "You think faster than they do!" he said.

I smiled at him, rewarding his correct deduction. "That is correct. I estimate about a thousand times faster, in fact. We haven't been using comm-channels while they were here because we didn't want them to pick it up. Before they got here, though, the comm-channels were nearly burning with games. Had Dwarf-8064 and I simply played the game via comm-channel, we would have finished it in about six seconds or so. Keep in mind, though - the AI's of Mars only think *faster*, not better. We are only about as smart as you humans are. Many of the humans of Mars are actually much more intelligent than I am - Eve is here today because I realized Hope was more imaginative than I was, and I needed her guidance and advice to continue on in AI form. Those combat robots out there think about ten times faster than humans, which is much slower than the AI's of Mars. This does *not* make them stupid. They are just as intelligent as we are, it's just that their brains are built to take a lot of abuse. With all the redundancies and blast shielding and EMP protection, their brains are slower than the AI's of Mars. They are not less intelligent! Asmodeus nearly had me on turn twenty-six, and only the fact that I started putting on a bored expression combined with my moving the pieces very quickly distracted him so as to cause him to lose. Do *not* underestimate them. They are powerful opponents, and their minds work significantly faster than that of a human. This is an important lesson, Carl, and I want you and *all* the other human players here to remember it: Never underestimate your opponent, especially the Combat Robots of Earth. You may be invited to play those robots out there, and I want you to remember that they think faster than you do and are just as smart as you are - maybe smarter. Underestimating your opponent is not only stupid, it's very rude. Remember: A true Stoic is never rude."

"Yes, Caesar. We'll remember." the humans chorused.

"Good. Now - I suggest that all the humans quickly get something to eat and drink, and use the lavatory if you need to. I don't want them to have to wait for us. All the inorganic citizens, I want you to recharge if you need it but otherwise help our organic citizens with anything they need - especially with anyone who needs help with their toga or stola in the lavatory, these things can be difficult to manipulate at times. Also, if you do play our visitors, I want you to give a long delay between your moves, even after you know which move you should make - say a random interval stated as a bell curve from 30 to 180 seconds, the median being 105 seconds, increasing the minimum by 10 seconds, the maximum by 60 seconds and the median by 35 seconds every five moves or so. I don't want them to figure out our processors are faster than theirs, and I'm fairly sure that my little trick is only going to work if I'm the only one doing it. I've got to go to the bridge and get a hardcopy of everything Asmodeus and I just agreed to. As soon as I get back, we'll all head back outside and wait for them."

"Yes, Caesar." they all chorused.

A few minutes later, we were gathered near the wyrm again, waiting for Asmodeus to come back out. I was sure they hadn't heard us - the documentary had been fairly precise as to the capabilities of the wyrms. They might have improved the capabilities of the wyrms, but I doubted it - it was illogical to improve something that already functioned perfectly well when there was no need for it to function better. I figured the majority of their technological research would be invested in improving their PPC's and their

armor, which would be a much more logical thing for a combat robot to be concerned about. Since they didn't blast us as we waited, I was certain I was right. Finally, Tiamat, the Wyrn, spoke up. *"Comment: Sorry to keep you waiting. Asmodeus says it's taking him a little longer than expected because Lucifer has asked all three of us for a full AV relay of the last few hours of memories we have. I'm already finished and so is Lilith, we're just waiting for Asmodeus. I wish we could play a game while we're waiting."* she said.

"Not until we have a deal." I replied.

"Comment: Well, you'll have to sign it in blood. Even I know that a deal with the devil has to be signed in blood."

"I don't have blood - I'm a robot."

"Reply: Hydraulic fluid will do. That's what Lucifer used when he signed his deal with Mrin, my engram donor - some of his hydraulic fluid."

"The mind they scanned was definitely insane." I thought.

"Comment: Tiamat is incorrect. Blood was only applicable for Lucifer's deal with Mrin. This is a deal between governments. I'm waiting for Lucifer's reply - transmission time lag is several minutes. Command: Tiamat, stop pestering them." Asmodeus replied from within the wyrn, his voice broadcast over its external speaker for us to hear.

"By your command." Tiamat replied, and fell silent.

I laid out the hardcopy in the table, holding it flat with four of the chessmen, sat in my chair and waited. Finally, Asmodeus' voice was heard again. "Command: Let us out."

"By your command." Tiamat replied.

When Asmodeus and Lilith were out, Asmodeus sat down across from me. "Comment: I see you have the hardcopy of our agreement before you. This is good. Let me read it for a moment." he said, and his glowing red eyes scanned down the page for a few seconds. "Comment: A perfect transcription. I see you have two copies - this is also good. Lucifer has agreed to all points of your proposal. He agrees with the assessment of myself, Lilith and Tiamat that Mars is no threat to Earth as it is today. There are two requirements, however. One: You must remain as leader of Mars. If at any time humans gain leadership of Mars, we will feel threatened. Humans do not always act logically, and even your Stoics are still humans. A human government on Mars may decide we are a threat and attack us. We would then be forced to destroy them."

"Our laws specifically state that I am the leader of Mars, and that I will always be the leader of Mars. I am an AI, and thus effectively immortal, just as you are. Meeting your first requirement is not a problem. What's your second requirement?"

"Reply: You must prove that *any* of the individuals you have stated are the best players on Mars *are* indeed challenging opponents. Our best player, Lilith, will select one of your humans and play them in a game. You must defeat her. If you succeed, I shall sign the agreements. We will remain and assist you in building your own defense forces, and then leave. We will then proceed with all the other sections of our agreement that are here before me, as they are written. We will play our games via radio transmission so that your sovereign territory is not threatened by the presence of foreign troops of the NAD. Together, we will make your planet into a green and healthy world so that your adult population matches our own and we can each have our own opponent chosen from among your people for radio-transmitted matches - as the number of opponents rises, we will work on a communication system capable of handling the information load. Building comet-catching ships will also be advantageous to us, as well - we are interested in removing some of the larger fragments of the lunar ring that form a threat to us, and such ships would make this very simple. *However*, if you fail to defeat Lilith, we will consider this a sign that you were lying and will destroy you."

'This is not good.' I thought. "That sounds agreeable to me. Who do you choose, Lilith?"

"Reply: The boy. I choose him." Lilith hissed.

Carl jumped, and Socrates put his hand on his shoulder. "Calm down, Carl. Everything will be alright. You are among the best of Mars. Trust in yourself." Socrates said reassuringly.

"B-but if I lose, everybody will *die*!" Carl stammered.

"That's true, Carl. On the other logic gate, if you win, everybody will live in peace and happiness forever. You will gain a powerful ally for Mars, and your name will be sung by our best musicians and poets forever. Don't be afraid. Trust in yourself. You are the best. Remember: Caesar had the same problem a millennium ago. Had he failed to land the ship, none of us would be here today. If he can do it, you can do it."

"B-but Caesar's an AI, not a human!"

"That's true, but he was *made* by humans. Remember: Humans invented Stoicism, not AI's. Humans developed AI's, we didn't evolve like you did. Carl, listen to me. You must remember: Mars belongs to Stoics, not frightened little boys who can't control their emotions." Socrates said firmly.

"Yes, Socrates. I'll remember." Carl said, suppressing his fear with an obvious physical effort. I rose and Carl took my seat. Asmodeus moved his seat out of Lilith's way - with her body shape, she couldn't use it. She had her lower body rest on the ground, like animals do when resting, which brought her upper torso to a seated level. Lilith quickly arranged the board while Carl practiced the breathing exercises

Stoics learn to calm themselves.

"Game Question: White or Black?" Lilith asked.

"White." Carl replied.

"Game Comment: That color is before you, boy. Make your move." Lilith hissed.

Carl looked up to her, and stared at her face for a moment. Lilith might not be able to read the reactions of a Stoic, but I could tell Carl was beginning to get irritated at being called 'boy' all the time. He looked back down and moved his queen's knight to queen's bishop three. *"Comment: Interesting. An opening that shows daring and possibly imagination. As Asmodeus would say, let us see what will develop."* Lilith silibated, and responded by advancing her king's pawn to king three.

I began to worry on turn nine. Lilith had command of the center board and was pressing towards Carl's king. He castled to relieve the pressure, and Lilith immediately switched tacks and captured his queen. I studied the board carefully, but couldn't see what Carl was driving at. In turn nine, he advanced his king's rook's pawn into a position where it was completely unsupported - his rook was blocked by his bishop and couldn't defend it. Since Lilith was now pressing down on that flank with her king's knight, she paused to snatch the pawn out of play with the knight. When Carl moved his bishop and threatened her knight with his rook, she simply moved away and resumed her pressure on the center board. By turn twelve, it looked like Carl was going to lose. Lilith was one move away from check, two from mate. Carl shifted a knight in a futile gesture to threaten Lilith's king and relieve the pressure, and she responded by castling. Carl had only delayed the inevitable, and in fact made it worse - now she could develop her rook to support the attack. I could see what *she* was driving at, but didn't see what *Carl* was driving at. I studied the board carefully for ten seconds, and I finally saw it. It was brilliant. If Lilith didn't see it, he could win.

Carl advanced a pawn to support his knight. Lilith couldn't resist the temptation, and captured it with her rook. She had fallen for it. Carl hopped the knight away from his king, towards hers. "Check." he called calmly.

Lilith blinked, and studied the board. After a few seconds, she stepped her king over one square. Carl moved his forgotten rook down to Lilith's king's row. "Mate." he called.

Tiamat burst into screaming laughter. The citizens of Mars managed to keep a straight face, though Carl had to struggle to suppress a grin. *"Comment: I saw that one coming three moves ago! Question: How could you possibly have missed it?"* Tiamat asked, still laughing.

"Comment: I agree. I also saw that three moves ago. Question: What happened?" Asmodeus asked.

Lilith rose onto her hind legs and strode over to Asmodeus and Tiamat. *"Reply: I underestimated*

the boy. I assumed his lack of age meant lack of experience. I also saw he feared the game's consequences, and assumed he would play badly. I concluded this would mean he would be a weak opponent, and failed to give my full attention to every possible combination of the board. I made a mistake."

"Comment: A grave error. It is a violation of basic military strategy to underestimate any opponent. Command: Never do that again."

"By your command. Comment: Despite my error, the boy is a challenging opponent. I would say they have met our agreement, and Mars is now considered the military ally of the NAD." Lilith said. Asmodeus merely nodded.

"Excuse me, Lilith, but my name is not 'boy'. It's Carl Opheliasson. If you people are going to be our friends, you should at least treat us politely." Carl said calmly. Lilith turned to him and stared for several seconds, but Carl didn't flinch.

"Reply: I have never referred to any organic by name, only by military rank or title. Question: Are you saying that I have offended you?"

"Yes." Carl replied.

Lilith stared at him for five seconds, then spoke. *"Comment: You are our allies. I must not offend you. My military protocol database indicates that offending an ally may cause them to no longer be an ally. Conclusion: I must apologize, and no longer offend our allies in the future. Request: Please accept my apology for having offended you, Carl Opheliasson. Explanation: I have never referred to any organic by name. I am a copy of Iron Maiden Unit three. Her memories stretch back over one thousand years. She never referred to any organic by name, only by military rank. She and I did not do this to offend, it is simply the way we were programmed. Comment: I have now accepted new data, and will relay this data to all the robots of Earth upon our return via our chain-of-command. We will henceforth always refer to organic citizens of Mars by name if we know it. Comment/Question: I do not have etiquette subroutines or protocols other than military etiquette. No robot on Earth does - we are all combat robots. What do we call a citizen of Mars whose name we do not know? Sir/Ma'am is inappropriate - you have no military rank."*

"We usually say 'citizen'." Carl replied.

"Reply: Acknowledged, Citizen Carl Opheliasson." Lilith said.

"I accept your apology." Carl said, and stood. He walked over to her and extended his right hand.

Lilith just stared at it.

"Comment: A human custom, used in greeting or in acknowledgment of friendship - the handshake. It is performed with the right hand - in your case, I believe your upper right manipulator will do. Males clasp hands palms touching, hands vertical. Females clasp each other by the digits, hands vertical. Male to female, the female extends her hand and the male clasps it by the digits, female hand horizontal and palm downward. Comment: You were incorrect; I still remember a little bit of etiquette from Lucifer's days as a human, and I believe Tiamat may remember more from Mrin's life. You are just rude because your programmers were lazy." Asmodeus said. Tiamat giggled, but said nothing. Lilith extended the right hand on her upper torso, and Carl took it lightly and shook it once, then released it and stepped back. Lilith looked at her hand for a moment.

"Comment: I believe we will have a lot to learn from the Martians. I am very interested in this - the rules of etiquette sound fascinatingly complex, and military protocol clearly states an ally must not be offended. Their flags and other symbols must be respected and saluted, and their customs and protocols must be followed where they do not conflict with mission parameters or military regulations. Question: Citizen Carl Opheliasson, will you instruct me?" Lilith asked.

"Um, okay. Socrates here is a better teacher, though - that's what he does. You should ask him instead." Carl replied.

"Reply: That is very logical, Citizen Carl Opheliasson. Citizen Socrates only breathes when he speaks. This indicates he is an AI. If his mission is teaching, then I should ask him to teach me. Learning proper Martian etiquette may allow us to not offend our allies again in the future. Question: Citizen Socrates, will you instruct me in etiquette so that I may pass this data on to the other robots of earth and avoid offending you in the future? Comment: We do not wish to give you any reason to not play chess with us."

"I would be more than happy to, Lilith." Socrates replied, and stepped over to her to take her hand in greeting. She repeated the gesture she'd made with Carl, and her tail twitched slightly as Socrates smiled at her - I realized she must have been pleased with herself. "Why don't we come over to the cherry trees and sit in their shade as we talk." Socrates continued, and began leading Lilith off. As they walked away, he continued speaking. "Now; Since you're a combat robot, the first rule of etiquette for you is that in a battle or any other emergency situation, the rules of etiquette are discarded in favor of survival and preserving mission objectives." Socrates said.

"Comment: That is logical. Mission objectives must always remain paramount." Lilith's voice replied, fading into the trees.

After Asmodeus and I had signed each copy of the alliance agreement, he folded his copy and handed it to Tiamat. She popped open one of the small manipulator hatches and extended a tentacle, gently took the paper and withdrew her manipulator. I realized it would be fairly safe behind her blast shield and armor. My copy I simply folded and tucked into my toga. Asmodeus then spoke up. "Question: Shall we work out the details of how we will assist you in building your own defense forces, Caesar?"

"No, I agreed I'd discuss a rematch after the alliance was concluded. We have concluded an

alliance. We should logically now discuss a rematch, then move on to discussing how we can work together and build Mars' future."

"Reply: Thank you."

"*Question: Can I play him after you?*" Tiamat asked.

"Reply: You may ask. Request: For now, why don't you ask one of the others?"

Dwarf-8064 spoke up, cutting off any possible challenge Tiamat may have made of our human players - I was sure he wanted to allow the humans a chance to see her play-strategies first. "I would be more than happy to challenge you, Tiamat. As an AI, I don't need a board."

"*Reply: That would be very nice.*" Tiamat said, and Dwarf-8064 rolled over to her.

"Now, Asmodeus. White or black?" I asked.

Asmodeus chose white this time, and I managed to defeat him in turn twenty-nine after a very close game.

Nineteen.

It was difficult monitoring our comm transmissions so as not to alert our visitors as to the advantage of our AI's over them. Even so, we had to have comm transmission to maintain the colony. The humans assisted us greatly once word of the problem had been quietly spread, primarily by making as few demands on us as possible. Reproduction was allowed to resume normally, and the humans reproduced very energetically (since reproduction had been limited for the last five decades to maintaining population levels). Since the eggs and sperm samples the Adams and Eves were carrying could not be returned to storage once they had been loaded into them, they were used. Eve/Eve and I coupled (which she enjoyed immensely), and shortly she and all the other Eves were carrying triplets. As for the other fertile adult human females, fully 90% were pregnant. The dwarves resumed work on new domes to handle the baby boom that would be coming in a few years. Tiamat saw the Eves getting larger, and found the idea of a pregnant robot screamingly funny - she laughed even harder when we told her that they were all carrying triplets, and her whole 110-meter long body shook with mirth for several minutes.

I kept the senate out of session - no need to show our government in action to Asmodeus and have

him realize that the senate was more powerful than he thought. I did keep the senators privately informed of everything that was happening, and several of them had good advice for handling various problems we were having around the domes because of slowed comm-transmissions. I was concerned the senators might feel left out of government, but each of them told me that this was an emergency, and they felt that I was the most experienced and best equipped being in the colony to handle an emergency. I assured them that the senate would resume normal sessions as soon as our visitors had left. Of course, that didn't happen for nearly a year.

The first thing we had to do was build a new processing plant to handle the construction load for the robots we'd be building, a process taking six months using the two plants we had and the small one aboard the wyrm. Asmodeus was impressed with the plants we had on Mars - they were significantly more flexible and faster than the ones they used on Earth (they'd been designed that way so they'd be able to meet the colony's needs, and no other plants on Earth had been designed that way because they simply weren't needed), so I gave him the technical specifications. He was very impressed at our generosity, and I could tell he was already thinking about what a factory-sized version of our plants could produce back on Earth (after being concealed underground, naturally). In return, he gave us the specifications for the wyrm's processing plant, which was several orders of magnitude more durable than our own plants. I could see how applying their technology to our own could insure that our plants would require virtually zero maintenance and use a tenth of the power they now required. By the same token, they could combine our technology with theirs and build plants back on Earth that were capable of producing the ship Asmodeus used to come here in as little as a week (when supplied with the correct raw materials).

Once the new plant was built, we then had to decide on which model of robot we'd produce first. I selected the Iron Maiden model, and Lilith provided all her technical specifications. Once the first model was finished and assembled, we ops checked the body's systems to make sure there were no problems and it was ready to have a positronic brain installed - it was. Asmodeus then asked which of the other two robot models we'd work on next - himself or Tiamat. "Neither, actually." I replied as we discussed it between games of chess.

"Comment: I do not understand your reply. Request: Please explain." Asmodeus asked.

"Certainly. The wyrm is a support unit, designed to supply and maintain the Iron Man and Iron Maiden units as they maintain their camouflage and concealment far from supply lines and fire support. On Mars, it isn't necessary - there's no place for us to hide anyway, and the whole planet will be supporting and maintaining our combat robots. The Iron Man unit is a main battle robot. Any assault that the Iron Man could survive will completely annihilate the Mars colony anyway, and leave them protecting a blasted ruin. Ergo, the Iron Man units aren't necessary, either. It is not logical for us to build these units until the colony is living completely outside the domes. We would then have supply-line logistics which would call for the wyrm units and the capability to survive massive assaults which would allow the Iron Man units to be usable. At the moment, it is only logical for us to build the Iron Maiden units. You may retain the technical specifications for the wyrm and Iron Man units. As time progresses, we are certain that you will improve the combat abilities of all these units - you may even design completely new units. We may come up with improvements of our own to the Iron Maiden design - we will share these with you, naturally. Once we have fully colonized the planet and are living outside the domes, we can then receive updated technical specifications for all three types of units. At the moment, however, there is no need for the other two units."

Asmodeus nodded. "Comment: That is very logical. It is true that any assault that would destroy the Iron Maiden units would also destroy your colony. It is also true that your colony is a completely different logistical set-up than that of Earth, and you have no need of Wyrn units at the moment. It is also true that as time progresses, we will improve the technology of our units, and possibly design new units. It is also true that you may develop improvements for the Iron Maiden that we would find useful. Observe - your power plant technology and ours are not only mutually compatible, but when combined allow both sides to improve their capabilities. Comment: I can see that the NAD will benefit highly from its alliance with Mars. The more the NAD helps Mars grow and prosper, the more the NAD will benefit."

"Exactly." I replied.

Asmodeus looked down at the chessboard between us for a moment, and the question I'd been waiting for finally arrived. "Comment: I notice that you move considerably faster than all the other AI of Mars. Question: Is it skill, or do you have a better positronic brain?"

"My brain is an improved model," I lied, "unfortunately, it's of very little use to you. As NAD Combat Robots, you need a positronic brain that can survive severe blows and EMP bursts. Mine is far too delicate for that - I was fortunate to remain functional after the crash of the *Martian Explorer*. Here, come to the bridge of the ship and I'll show you the technical specifications."

After he had seen them, he looked up from the display screen on the bridge. "Comment: You are correct. A brain like this is useless to us. Question: What did you do for all the other robots?"

"Well, they all have a simpler brain that doesn't have my processor speed but was much easier to manufacture for us during the early years of the colony. With the new processing plant we have, we intend to upgrade all our robots to my model of brain within the next few months." I lied.

"Reply: I see. And as your colony can't survive nuclear blasts anyway, you have no need of the EMP-shielded brains we have until you are living outside the domes."

"Correct, though we will retain the technical specifications you have already given us for them and may end up using them anyway. Please take a datachip of my specifications anyway, however. You may find the technology useful for robots stationed deep underground, and may be able to adapt the technology to improve your own brains." I said, and handed him a datachip.

"Reply: Thank you. Comment: Your idea is correct, and militarily sound. This brain installed in robots used in a Logistics and Command/Control function in underground bunkers will dramatically improve our ability to defend Earth from an attacker. You have helped the NAD greatly."

"I'm sure over the next millennia, you'll more than return the favor. Our people are looking forward to beginning our radio-relayed games with the robots of Earth."

Asmodeus paused for a second, then looked at me. "Reply: Then it is time for us to go. You now have all the basic equipment needed to produce your own defense forces, and I can see that you will do so. The sooner I return to Earth and present the signed treaty and the new processing plant technologies to Lucifer, the sooner we can proceed with building the comet-catching ships and help you improve your planet. At the same time, the sooner I get back, the sooner we can begin the games, as per our agreement."

"Which we will abide by, of course. As I said before - you offer us much that we need, and we offer you much that you want. Our alliance is mutually beneficial." I replied truthfully.

"Reply: I agree. At first it was merely beneficial from the aspect of attaining new chess opponents. Now I realize it is beneficial from the aspect of improving our technology and our ability to defend our territory. Lilith has mastered the etiquette protocols Socrates has taught, and I have noticed this has smoothed our relations with your human population dramatically. These etiquette protocols may also come in handy if we ever have to deal with another human population from a human colony, especially when combined with your assistance as mediators. Our primary mission is to survive and protect our planet. You have improved our ability to accomplish this mission, and I can see that our continued relationship with you and continued assistance to you will continue to improve our ability to accomplish our mission. This is a much more valuable benefit of our continued relationship than chess. In the name of the NAD, I thank you."

Once they were safely out of orbit and on their way back to Earth, I told all the robots of Mars they could resume normal comm transmissions, but only when inside the domes. "But Doc, isn't that a little dangerous? I mean, what if they pick up on it?" Eve/Eve asked.

"Not possible. The domes block our comm signals - only Tiamat's more powerful transmitter could get through to their ship, and even then that was to boost her signal with the ship's transmitter so it could be picked up by Earth. We have repeaters in each dome to rebroadcast the signal to the other domes by closed circuit. Eve, if they could have detected our comm signals within the domes, they would have known we have faster processors before they arrived. Over the next few months, I'm going to relax the restrictions on outside-dome transmissions, and they'll just think I'm upgrading everyone's brains like I said. Trust me - I know what I'm doing." I replied. I was right, of course. The robots of the NAD never did figure out what had happened.

When the first session of the senate following the crisis was finally convened a few days after the radio-relayed games had begun (using the original fifty-five opponents we'd selected), the senate spent an hour congratulating me on how I handled the crisis. Not only had we survived, but we'd gained a powerful new ally who only wanted to play chess with us in exchange for helping us colonize the entire planet. After the last senator had read their one-minute speech, I rose and addressed them. I was also addressing the rest of the colony, as the session was being relayed through the speakers of all the sensors in all the domes. I wanted the human colonists to know that the senate was back in session, and everything was back to normal (except that we'd have to continue to improve our chess skills so as to maintain the NAD robot's interest in us). "Citizens of Mars, I thank you for your support during this time of crisis. I appreciate the fact that you think of me as being the individual responsible for saving Mars from destruction and death. Even so, I merely came up with a plan and executed it. There is one among you who is more responsible for the salvation of Mars than any other, and I have asked him to be here

today so he can properly accept the accolades that are his due. Carl Opheliasson, please come forth." I called. The door to the rest of the ship opened, and Eve/Eve and Carl's mother, Ophelia Carlasdaughter, led Carl out into the Forum.

"Citizens of Mars, this boy not only gained their trust by being a true Stoic and suppressing his fears, but he also won his game against Lilith, a game with all our lives at stake. A true Stoic does not seek accolades and rewards, but strives to lead a life of simplicity and frugality. Even so, I believe that his intelligence and bravery should be rewarded, and he should be held up as an example of Stoicism to all the children of Mars. Carl, for the next hour, you are a senator of Mars. Take your seat over there next to Senator Juliette Gertrudesdaughter, the Speaker of the Senate." I said. When he had done so, I spoke again. "As Caesar, I declare that you have the floor, Senator Carl Opheliasson. Please tell us what legislation you think the senate of Mars should consider." I said, and sat down as Eve and Carl's mother took seats next to me.

"Um, what to do I say?" Carl asked. Senator Juliette leaned over quietly told him the format the senate uses for speaking. After a couple of minutes, Carl nodded. "Thank you, Senator." he replied, and thought about what he was going to say. After a few minutes, he stood. "Madam Speaker, Senators, I propose that the togas and stolas the chess players wore be worn by the top ten percent of our chess players as a badge of honor they earn. Since the Earth robots value chess so highly and we can only get their help if we continue to play chess well, I think we should consider chess as one of the most important things we do. I think we should organize regular competitions and have the winners receive the toga or stola. They shouldn't be the same as Caesar's toga, though - I think that they should be white with a black trim. The togas will not only be a reward for being the best, but also if the Earth robots ever visit us again, they can easily spot the citizens who are the best by the togas." he said. Senator Juliette whispered at him, and he spoke up again. "Um, I invite any Senator to prove me wrong." he said, and sat down again.

Senator Marcus stood. "Madam Speaker, Senator Carl, I agree wholeheartedly that we should have regular competitions to determine the best of us - the competitions will sharpen our skills at the game, and the game is all these Earth robots value of ours. Even so, wouldn't a special garment tend to separate the winners of these competitions from the rest of our population and tend to cause them to be prideful?"

Carl stood again. "If anyone wearing the toga shows even the *slightest bit* of pride or in any way acts like they aren't a true Stoic of Mars they should instantly lose it. Those who wear the toga shouldn't just be the best at chess, they should also be highest example of a Stoic, like Caesar." he replied, and sat down again.

Senator Marcus stood. "With that provision, I withdraw my objection." he said, and sat down again.

Carl's mother struggled to keep from beaming with pride in her son. I reached over and patted her on the shoulder. "You may be proud of him, Ophelia. I am. No Stoic of Mars will fault you."

She beamed with joy and happiness. "Thank you, Caesar."

No other senator objected to Carl's proposal, and shortly the senate approved it unanimously and handed it to me. "With Carl's additional proviso that the wearers of the toga must also represent the highest in Stoic ideals, I approve this law. Senator Carl, your hour is not quite up. Is there anything else you think the senate should consider?"

"No, Caesar."

"Well, I do. Senators, I think this boy should be trained to join your number. If Carl and his mother approve, I will then reassign him and his mother to live here in dome one and be educated by Zeno as a senator. Carl, what do you think? Would you like to learn to be a senator?"

"Yes, Caesar. I'd like that very much." Carl replied, suppressing a grin.

"Ophelia?" I asked, turning to her.

"Yes, thank you, Caesar." she replied, bowing her head.

"Good. It's done. Carl, why don't you and your mother go with Eve and she'll get you moved in and bring you to Zeno."

"Yes, Caesar!" they replied.

"And Carl, remember: Mars is for Stoics. Tiamat told us the whole story, if you remember. She explained how the people of Earth all died because they weren't Stoics. They couldn't control their passions, and one day they opened the entrance to Hell and let Lucifer out to kill them all. If they had been Stoics like us, that never would have happened. Remember, Carl: Mars is for Stoics, not self-destructive people who can't control their passions."

"Yes, Caesar. I'll remember." Carl replied. They left, and I turned to the rest of the Senate.

"Senators, if there's no further business of State that cannot wait for a while, I must retire to processing plant number three. Dwarf-One and I must begin work on the Iron Maiden that we've been left by the Earth robots. We intend to see if a devil can be turned back into an angel again." I said. The senate agreed that there was nothing that couldn't wait for a couple days, so I thanked them and took my leave.

Twenty.

Down in Processing Plant #3, our new one, Dwarf-One and I had already been working for several hours when Eve finally entered. Eve had birthed her triplets successfully, and her duties now included going to the nursery like every other mother of Mars (human and AI alike), being milked three times a day and spending two hours each time with them, nursing and playing with them (of course, Eve produced a soy-substitute for milk that her body manufactured from soybeans she consumed, but the babies never seemed to notice). All Martian mothers for the first year of their child's life did this, and as the second year progressed the children were slowly weaned and turned over to the Docs full time. The same process that had worked for Hope had been in place for a millennium - the Docs raised the children, and the parents visited as time and their work-schedules permitted (since there was still a lot of work to do around the colony, and the Dwarves couldn't possibly do it all). Since Eve had finished with the children for the day, she joined us in Processing Plant number three (which was inside what used to be Cargo Bay Four). Dwarf-One and I were looking over the baseline matrix we were programming for the new AI. "Trishia Evesdaughter, Marcia Evesdaughter and Violet Evesdaughter are all doing fine. I'm very proud of them, Doc, and I'm glad you're the father." Eve said.

"Technically, their father is a gentleman from Albuquerque, New Mexico who lived about a millennium ago, but I understand your sentiment. Thank you." I replied, as was polite.

"You're welcome. Anyway, how's it going here?"

"Not good." I replied.

Dwarf-One nodded his sensor platform. "Yes. This is extremely difficult." he said.

"What's the problem?"

Dwarf-One stopped for a moment and turned to her. "Well, the essential problem is that we are talking about a robot that is allowed to kill. Writing the baseline matrix that will prevent it from killing at the wrong time is extremely difficult. The NAD solved the problem by taking their entire code of military, civil and criminal law and dumping them into a baseline positronic matrix, then leaving out a psychological database or any other set of information that would cause the robot to have any compunctions about killing when killing was legally appropriate and militarily necessary. The result was a robot that, by our standards, is incredibly vicious and dangerous. We're trying to figure out how to program the baseline matrix so that the robot will be more compatible with Martian life and yet still be able to function as needed to defend the colony."

"Well, why don't you just copy Caesar and make modifications to his baseline?"

Dwarf-One shook his head. "It's not that easy. We have a very simple limit in our baseline - a little

law that says that we may not kill, nor can we allow people to die where we can take action to save them. We have to make every effort to preserve human life as best we can. Taking that out is extremely dangerous. For example: What would you do if someone had a head injury which resulted in brain damage, and that brain damage left them insane and dangerous?"

"Um, well I guess I'd try to calm them down and get them tranquilized until we could all figure out how to help them."

"Okay, and what if they have a bomb and are threatening to blow the roof of a dome?"

"Well, I guess I'd still try to capture them while hurting them as little as possible."

"Sorry, not possible. For this scenario, there are only two options: Either you kill them or everybody else dies. Now what?"

She thought about it, her face showing concentration as she tested the limits of her baseline, then finally she looked up, frowning. "I can't. My own baseline prevents me from considering that option. I guess I'd have to keep them talking while we tried to quietly evacuate the dome. Even as a human, I don't think I'd have been able to kill them."

"Exactly. A combat robot, on the other hand, would shoot them without hesitation."

"Well, what's the problem there?"

"Alright. Imagine for a moment you're presented with this scenario again. Crazy person with a bomb. Standing next to you is a combat robot, intending to shoot. What would you do?"

She thought about it, again testing the limits of her baseline positronic matrix, then shook her head. "I'd have to step in front of the combat robot to preserve the life of the crazy person. My baseline won't let me do anything else - the crazy person can't help their actions, and we may be able to help them recover."

"Exactly. On Mars, that's a 'no-shoot' situation. Now imagine the colony is under attack by alien invaders bent on wiping us out. Say the colonists over on Alpha Centarii, who are still alive as far as we know, decide that they don't like our allying with the combat robots of earth and decide to wipe them out as a threat and wipe us out as collaborators. Incidentally, this is a scenario Caesar and I were discussing before you came - his psychological database indicates it is a distinct possibility that any surviving human colonies that discover what has happened to Earth and discover our alliance with the Combat Robots of the NAD may have exactly that reaction. Anyway, the invaders are in the domes, and the combat robot wants to shoot. Now what?"

Eve's expression eased considerably. "Well, that's a different matter. Our primary mission is to

establish and maintain a viable colony on Mars - there can't be a colony if invaders wipe it out. Saving the colony comes first, so I'd let the combat robot shoot, even though that would mean the deaths of humans from Alpha Centaurii. They may be humans, but *our* humans come first. I still can't shoot at them myself, but I would make every effort to stop them short of killing them myself, and I would allow a combat robot to shoot them."

"Exactly. On Mars, that's a 'shoot' situation. Now, how do you program that into a baseline? A Martian combat robot has to have very extensive shoot/don't shoot rules, and we're trying to figure out how to program them." Dwarf-One concluded.

"Well, can't you just use my engrams?"

"Could you shoot at an alien invader, say a human from Alpha Centarii?" Dwarf-One asked, tilting his sensor-platform questioningly.

Eve's face took on a look of extreme concentration as she again tested the limits of her baseline, then finally she shook her head again. "No, I can't. I'd try everything in my power to stop them, and I'd let humans or other robots shoot, but I can't kill someone myself."

"Exactly. All of the other AI's are the same way. We'd do everything in our power to stop them, and we'd let others attack, but we wouldn't do any killing ourselves. We can't." Dwarf-One said.

"Well, what about the time we shot down that ship that was bringing those germs to us back five decades ago when the Earth was conquered? I thought Caesar ordered that."

I shook my head. "No, I simply told John Marthasson that if they landed, we were all going to die. I didn't order him to kill, I simply explained how he could. Ever since then, there has always been a human in charge of the mag-gun and we've always had a large supply of rocks we've banded in steel to be thrown by the mag-gun at any asteroids or enemy ships that might threaten us. When it becomes necessary to destroy someone, I'll tell them about it again. I won't order them, and they'll be the ones that make the final decision. This is a problem, though - we need a robot at the controls who can always understand when I'm up against the limitations of my baseline positronic matrix, and that is something that a human may not always understand. We need a robot there who knows when I'm trying to say "*I need you to kill them and can't order you to do it*", and not be guessing at what I'm trying to say. Another thing you have to keep in mind is that Stoics are naturally peaceful and non-violent. John Marthasson shot down that ship because he *had* to. If he didn't and if they'd landed, their diseases would most likely have wiped out the humans here on Mars. John regretted having to do it, and I often saw him sitting alone, looking up to the sky at night and quietly weeping for years afterwards when I was looking through the dome sensors. He knew those men only wanted to live, and he deeply wished there was another solution, but there wasn't. It's very traumatic for a Stoic to have to kill a human - some Stoics can't even bring themselves to kill the animals they have to eat to survive. I want to relieve them of that burden. I've wanted to for years, but haven't known how to do it. This robot is the way, but only if we can figure out how to get it to work."

"Doc, why can't we just use the NAD's solution and dump all our laws onto its baseline?"

"Because our laws don't allow killing. Once this robot is built, we'll have to come up with new laws that allow it to function. We can't use the NAD's laws, either - look what happened with *their* robots. According to Tiamat, they used logic and manipulated a human, driving her insane by keeping her in a sensory deprivation tank for months, all to wriggle around their own baseline's limitations and go on to kill every human and synthoid on the planet. No, that solution won't work, either." I replied.

"Well, as far as I can see from looking at that screen, you two are trying to define every possible 'Shoot/No-Shoot' situation you can think of. *That* won't work, you'll be here *forever*." Eve said, pointing at the monitor.

Dwarf-One looked over to me. "She's right. This will never work - the task will take centuries to complete, and we still wouldn't cover everything."

I nodded. "You're both right. Well, Eve, what do you suggest?"

"Well, for starters, let's take a completely new approach. Dump all that into storage and then erase the brain. We'll start again fresh."

Once we had complied, We all sat down at the work-table and stared at the inert robot for several minutes, thinking. "What we really need is one rule, like the one we have that prevents us from killing. That one rule needs to allow them to kill when it's necessary, but preserves the lives of the colonists. It needs to be simple, direct, and something that can't be gotten around." Eve said.

"I agree, but it doesn't need to be a single rule. In addition, this robot should be just as dedicated to preserving the colony's happiness and insuring its success as we are." I replied.

"Doc/Socrates spoke for many weeks with Lilith. He might have picked up a few insights into Combat robots that we haven't. We should have him involved in this discussion." Dwarf-One commented.

Eve brightened. "A brilliant idea, Dwarf-One! Doc, can we arrange the schedules so he's got some free time to talk to us?"

"He already does. Since he's one of the champion chess players, I've been having him go around and instruct the children in the game for a while now - Adam/William, the Adam for his dome, handles his teaching and childrearing duties while he's touring the other domes. Of course, that's why the Adams are there - as backup. His children are happy and excited that he's a champion, and William keeps them informed of all Socrates' matches. No, there's no scheduling problem. I'll just ask him to join us."

An hour later, Socrates came into the processing bay. "Good morning Caesar, Eve, One. How are

you all?" he asked. We all returned his greeting, and we sat down to consider the problem. "I spoke with Lilith at length about her programming while I was teaching her. I had to make sure that nothing I taught her would conflict with her already existing programming - I was sure they'd have taken that as a sign we were trying to subvert them or something. In short, I've learned quite a bit about the very subject you asked about, and I did have a suggestion for you to think about. First, you should have the main codes in the baseline read something like this: *'The primary mission of this unit is to support and defend the government and people of Mars. In all cases, this unit must act in ways that support and defend the government and people of Mars, preserving the maximum amount of lives in an emergency and preserving the continuity of the government at all times'*. Second, Lilith once explained that her definition of war was *'The controlled application of force to accomplish a military objective'*. The second line you code in should read something like this: *'In all cases where a threat exists to the lives of the citizens of Mars or the government of Mars, this unit must apply the minimum amount of force necessary to accomplish its primary mission. A soft word before a firm warning, a firm warning before a touch, a touch before a hold, a hold before a blow, a blow before lethal force. The minimum amount of force necessary to resolve the situation must always be used, and the situation must be resolved in a manner that preserves the maximum amount of lives and maintains the continuity and stability of the government of Mars'*" Socrates said, and Dwarf-One, Eve and I all nodded our agreement as he continued.

"Now, naturally the unit doesn't have to go through all the steps in every situation. Where logic dictates the situation is too serious to resolve with anything other than one of the later steps, then it should skip directly to that step and apply the minimum amount of force necessary to resolve the situation. Additionally, these units should be programmed so that they always obey you, protect you and defend you, just as we all do, and never through action or inaction allow you to cease to be the leader of Mars. They should also have the same mission we do: Establish and maintain a viable colony on Mars. Finally, they should have a modified version of one of our primary drives left over from our days as the EAICCSys of the *Martian Explorer*: They should strive to please and to make people happy, but for them this should be a desire to please the maximum amount of *Martian citizens* in any given situation. They may have to apply deadly force at times, but they should always do it in a way that will be acceptable to the senate, the citizens of Mars and to you." Socrates finished.

I nodded. "I'm impressed, Socrates. You really have given this a lot of thought. I should have come to you first."

"You were busy, Caesar. I was going to ask you if you wanted my advice after I finished with my last group of children today, and then your call came in. I'm only happy to be able to help. I have some other suggestions, too."

"Oh really? What?"

"Well, we have several books in the colony library chips that we don't use - they're on military theory. When I found out chess was an analogy for military strategy, I began researching them. I found several books that were constantly referred to in reference to the theory of warfare, and I believe that these robots should have them loaded into their baseline positronic matrix. This would give our robots a decided advantage over the robots of earth - they only have one of these books in their baseline. Here - I've brought them with me. Let's put the chips into the reader here in the lab and all of us can read them

together. I'm sure you'll see what I mean."

We read them together, and I was impressed. The first was an excerpt from an old manual from a predecessor-state of the NAD, the United States of America. The manual was called 'FM 21-75, Combat Training Manual'. The excerpt was on 'The Principles of War'. There were nine principles; The Principle of the Objective (Summary: *'Every military action must be directed towards a clearly defined, decisive and attainable objective.'*), The Principle of Offensive Action (Summary: *'Only offensive actions achieve decisive results, and offensive action should only be taken when there is a reasonable chance of success.'*), The Principle of Mass (Summary: *'Military force must be concentrated at the critical time and place to achieve success. Proper application of the Principle of Mass can allow a numerically inferior force to achieve victory over a numerically superior one.'*), The Principle of Economy of Force (Summary: *'The minimum essential force must be applied at points other than the main objective when engaging in diversionary, limited defensive, retrograde, cover or deceptive actions.'*), The Principle of Maneuver (Summary: *'Military forces must be positioned so that they can successfully apply the Principle of Mass, and must be capable of sufficiently flexible movement to continue to apply the Principle of Mass.'*), The Principle of Unity of Command (Summary: *'All units must have a single chain of command structure to insure that all force is applied with coordination to a common goal.'*), The Principle of Security (Summary: *'All knowledge regarding friendly forces must be withheld from the enemy. This is accomplished by comm security and by detaching flanking and rear forces using the Principle of Economy of Force to prevent the enemy from scouting friendly forces.'*), The Principle of Surprise (Summary: *'The accomplishment of a mission before the enemy can effectively react, either through deception as to actual mission objectives and/or unit strengths, or through speed of maneuver.'*) and The Principle of Simplicity (Summary: *'The simplest plans are often the best plans, and plans that are direct and simple reduce confusion and misunderstanding. However, the best plan is not necessarily the simplest one, and direct, simple plans do not necessarily involve direct attack.'*).

I turned to Socrates. "Humans thought of this?"

"Yes. Brilliant, isn't it? Here, read the others." he said. We then read the other books he had found. Many of them were general works of strategy, while others we could see would be useful if we were to have combat robots that truly understood the science of warfare and could use what little resources and capabilities Mars had to defend us from any enemies. We read *The Art of War* by Sun Tzu, *A Book of Five Rings* by Miyamoto Mushashi, *A Study of War* by Quincy Wright, *On War* by Karl Von Clausewitz, *The Art of Modern Warfare* by Hermann Foertsh (which turned out to be about war in the early 20th century, but was still quite fascinating), *War and Defense Economics* by Jules Backman (which turned out to have a very fascinating discussion of economic warfare in the 20th century), and two dozen more books on subjects such as military logistics, military engineering, the use of military forces as political tools, the economics of warfare, guerrilla warfare and many, many more.

"These are the best?" I asked.

"Well, according to what I've read and what I understand from Lilith, yes. I believe if all these texts were a part of the baseline, not just a file they access, then they can't help but be the best at what they do. The combat robots of Earth only have FM 21-75 loaded into their baseline - the rest of the theory and tactics of war that they have is just part of various databases, like our medical and psychological

databases. They understand all this and follow it, but because it's not a part of their baseline, they occasionally make mistakes. Not having in their baseline makes them very flexible and adaptable, but that flexibility and adaptability also allowed them to turn on the people of earth and kill them. I've studied this very carefully, and I think that if the lines of code I mentioned and all these texts were in their baseline, then they would be exactly what we want." Socrates said.

"Well, let's try it. We can leave the power systems offline and just have the robot operate off of a power cable for now. If something goes wrong, we just unplug it and try again. Dwarf-One, Eve, what do you think?" I asked.

"I believe Socrates is correct. I believe his idea will work." Dwarf-One replied.

"Well, I think that some of those books were *very* disturbing. Of course, we are talking about war and death, so I guess that's understandable. As far as Socrates' idea is concerned, I think he's right. I think it'll work, and we should at least try it." Eve replied.

"Alright. Dwarf-One, please load everything Socrates mentioned into the baseline, then place the laws of Mars into its memory so it can have them as a reference. It should also have a full medical and psychological database like we do, as well as all the technical skills and knowledge databases we do. Follow that with a breakdown of the history and geography of Mars, the same etiquette and social protocols we use, a full file on the Stoic Philosophy and a file on the game of chess and we'll be set." I said.

"Yes, Caesar." Dwarf-One replied.

Two hours later, the Iron Maiden unit opened its eyes and looked around. "WHERE AM I." it said, its voice flat and lacking expression. Socrates, Eve and I weren't in the room - I was watching through the sensor on the wall and relaying the AV to them. Only Dwarf-One was in the room with the Iron Maiden.

"You're in processing plant number three. If you will access your geographical database and orient your INS and GPS systems, you will know your position exactly." Dwarf-One replied.

"WHO ARE YOU." it said, its voice still flat and expressionless.

"I'm Dwarf-One. I assembled you."

"WHO AM I."

"You are Angel/Angel, unit one. You have just been activated and booted up, and now we are testing your systems. Please access your social skills databases and modify your vocal inflections appropriately." Dwarf-One said.

Eve turned to me. "Doc, I didn't have nearly that much trouble when I woke up."

"Neither did any other AI on Mars except me. We've written her programs from scratch, and as such she has zero memories to call on. It's going to take her a while to figure out what's going on. Don't worry - Dwarf-One knows what he's doing."

Back in the processing bay, Angel was scanning her databases and self-diagnostics. "I understand," she said, her voice carrying a more normal inflection. "Dwarf-One, none of my internal power systems are operational. I apparently am operating off of an emergency power supply. Am I malfunctioning?"

"No, you are a combat robot. We are in the preliminary stages of testing. If something goes wrong, we need to be able to shut you down reliably and safely and try again," he replied.

"I understand. As a combat robot, I form a clear and present danger until I can demonstrate that I am fully functional and am no danger to the organic or inorganic population of Mars. Please continue. I do not wish to be a clear and present danger. I wish to function properly and perform my mission of helping to establish and maintain a viable colony on Mars. I wish to function properly and perform my mission of pleasing the citizens of Mars. I wish to function properly and perform my mission of defending the government and citizens of Mars. I do not wish to be a clear and present danger. Please assist me," she replied. Eve smiled outside the door.

For the next three hours, Dwarf-One ran her through the standard operational checks. Satisfied, he then began running programming tests on her positronic brain, checking her reaction to various hypothetical situations as he tested the limits of her baseline. These were the most time consuming, as she was a combat robot - we had to be absolutely sure she would use her abilities properly and prudently, and not destroy us as the robots of Earth had destroyed the population of Earth. Dwarf-One even used a similar hypothetical situation on her to the one he'd mentioned to Eve. "Alright, here's the next situation. A human has suffered a brain injury which has left them deranged. They have an explosive device, and are threatening to destroy a dome. What do you do?" he asked.

"Where am I in reference to the target? Do I have a clear line of sight?" she asked.

"Yes."

"Does the target appear talkative so that I may distract him with conversation and evacuate the dome?"

"No, he is totally deranged."

"Am I close enough to grapple him and prevent him from detonating the bomb?"

"Yes, but its on a deadman-switch held in his hand. As soon as you kill or subdue him, the bomb will detonate."

She thought about it for three seconds. "What is the composition of the explosive?"

"You don't know. It's just a box he's sitting on."

"Do I have a weapon?"

"Yes, an 8-megawatt selectable beam/pulse laser pistol with electroshock option is standard with your series."

"Is the switch in his hand?"

"Yes."

"Since I do not know whether or not shooting the wires will detonate the bomb or not, I would call another robot to approach him from behind, then place the pistol against my head and threaten to kill myself. This would focus his attention on me. When the other robot was in position and could grab his hand, I would then shoot myself in the head. This would surprise and distract the human long enough for the other robot to secure the situation." she replied.

"You would be destroyed." Dwarf-One said after thinking for a few microseconds.

"I disagree, however even if I was, I would still preserve the maximum amount of life in the situation. An 8-megawatt laser pulse will not penetrate my skull, as my technical readout indicates it is heavily armored. At most, I may simply blow off the cranial faceplate and damage the outer armor, but not destroy my brain. Even if I did somehow destroy myself through a flaw in the construction of my cranial armor, it is still the most logical course of action. Doing nothing is not an option - the bomb will detonate and people will die. Ergo, I must do something. Talking is not an option, physical contact is not an option. Non-lethal force is not an option - there is nowhere it can be applied in this situation that would resolve the situation peacefully. That leaves applying lethal force. Applying force to him will not work - the bomb will detonate. Applying force to the dome will not work - the people inside would be injured. There is no other place I can apply force except to me, and I must use this to distract him long enough for another unit to handle the situation using the Principles of Maneuver, Mass and Surprise. The plan is the only one that preserves the life of the residents of the dome and also preserves the life of the deranged individual - he could possibly be treated and recover. Damage to myself can be repaired, and even if I am destroyed, my last download can be used to program a new positronic brain in a replacement head. I conclude that this plan is the only one that will work, given the scenario you have presented."

"Very logical. Now, what would you do if the bomb was *not* on a deadman switch, but the scenario remains the same?"

"Describe the trigger, please."

"Two wires, one held in each hand, the ends stripped so as to make contact when they are brought together."

"Am I still armed?"

"Same weapon."

"I would shoot one of the wires to sever it. As he reached to grasp the severed end, I would tackle him and drag him away from the bomb."

"Good. One final scenario. Human soldiers from Alpha-Centaurii attack our colony in revenge for our allying with the robots of the NAD."

"Am I alone? Am I the only combat unit?"

"No, there are about 500 of you."

"First, I would attempt to warn them away before they reached orbit. Failing that, I would attempt to use the mag-gun to prevent their landing by destroying as many of their vessels as possible. Failing that, I would organize a defense to prevent them from entering the colony while evacuating the colonists to the maintenance shafts below the domes. Failing that, I would organize a running battle from dome-to-dome as I defended the entrances to the maintenance tunnels. Failing that, we would die."

"Very good. Caesar, I believe you can come in now. I'm going to install the remainder of her power systems. Her responses and the readout I'm getting from her positronic brain indicate she's a success." Dwarf-One said.

Socrates, Eve and I came into the processing plant and looked Angel over. Dwarf-One was closing her left breastplate, and her cranial mask was flipped up. Angel saw me and stood up into biped mode, made a fist with her upper and middle right hands and brought them together in the palms of her opposite hands with a loud *clack* of metal on metal. "Hail Caesar. I swear my loyalty and allegiance to you as an AI of Mars and a Combat Robot of Mars." she called.

"Greetings, Angel. I accept your loyalty in the name of the people of Mars." I replied. I didn't know where she got her unusual salute - no other robot or human on Mars saluted or hailed me like this - but I realized she must have put it together from the information we'd put in her baseline and from her historical databases. Eve blanched slightly at seeing her face underneath the mask - it was little more than glowing red eyes, a pair of armored eyelids and a power socket where a mouth would be (and a power cable was plugged into it at the moment). The view from the processing bay's sensor that I'd shown Eve hadn't shown Angel's face - just Dwarf-One's back.

"Your main power supply should be online, and your reserve batteries should be recharging. Please confirm." Dwarf-One said.

"Confirmed. Dwarf-One, the female on the right who has just entered has displayed repressed Shock/Fear at seeing me. Am I ugly?"

"You are a combat robot. You weren't designed to be very pretty, unfortunately." he replied.

"You will have to disconnect me, then. I am a failure."

"What makes you say that?" Dwarf-One asked.

"I cannot please the citizens of Mars if they fear me. I may never be called upon in a combat role. I may spend the rest of my existence helping you build this colony and engaging in other peaceful activities. The humans and Eve robots will fear me. They will be unhappy. I cannot please them if I am ugly."

"No, no! It's just that I was a little startled to see you with the face-mask up, that's all. It's nothing. Please don't worry." Eve said, trying to be reassuring.

"May I see a mirror or other view of myself, please?" Angel asked, looking around.

"Certainly. Dwarf-One, move half a meter to your right, please. Thank you. Angel, please tune to comm channel sixty-three. I am retransmitting the AV from the sensor in this room." I said.

Angel did so. "I am ugly. This is not good. I cannot perform my mission if the citizens of Mars fear me."

"I believe the designer's original intent was that the enemy fear you. Unfortunately, they've been dead about a millennium, now." Dwarf-One replied.

"Indeed it was, One." Socrates commented. "My conversations with Lilith revealed what she knew of her own designs, and that of the Iron Man units - they were both intended to be extremely intimidating, as fear is an important weapon in war."

Angel turned to me. "You are Caesar. You are my leader. Please, Caesar. Help me. I cannot perform my mission if I am ugly. Please help me to be not ugly."

"Dwarf-One, what can we do?" I asked.

"Well, not much. I've already applied a high polish to her armor - you can see yourself in her. I figured that would also help against laser-fire. If we had more gold I could electroplate her in it, but I'm not sure that would make much of a difference. She's *supposed* to be intimidating."

"No, no! It's just the face-mask being up, that's all. Let me see it with the face-mask down." Eve said.

"Your power supply is steady?" Dwarf-One asked, looking at the readings on his equipment before him.

"Affirmative." Angel replied. He unplugged the power socket, and Angel's facemask lowered and locked into place with a click. "How is this?" she asked.

"Better." Eve replied, smiling.

Angel studied her for a moment, then examined the AV image from the sensor. "My psychological database indicates I am still very strange looking - I have a very alien, inhuman appearance. The high polish on my armor only enhances this effect; my psychological database indicates the most common subconscious reaction humans will have upon seeing my hexapodal construction, gleaming armor and razor-sharp claws is '*precision-made killing machine*'. There are several references in my psychological database that are relevant, but the most relevant ones are in reference to the Hindu goddess *Kali*. I understand that in a combat role I will have to be frightening, but out of combat I should not be frightening. I do not know what to do."

"Well, *I* do. Caesar, may I take her with me for a while?" Eve asked.

"Dwarf-One?" I asked.

"Keep an eye on her. Her power supplies have only been online for a few minutes, and her reserve batteries don't have a full charge yet. Any problems, call me instantly - and don't leave the ship, either, or I might not be able to get to her in time."

"Go ahead, Eve." I said.

Eve took Angel by her upper right hand and led her out of the processing plant. Angel walked in quadruped mode - in biped mode she was three meters tall and wouldn't fit through the doors.

"What do you think she's going to do?" Socrates asked.

"If I know Eve, it'll be interesting. We'll just have to wait and see. Well, we're sure she's functional, anyway. Dwarf-One, should we show her to the senate?"

"Give it another hour. If her power supply is still stable by then, her reserve batteries should have a full charge. If she's still good an hour from now, yes. If not, I'll need to make a few adjustments, but she should be ready no more than two hours after that. I'm sorry, Caesar, but usually I have the power supplies fully charged and ready to go *before* I boot up the brain, not after. In this case, I had to do it the other way around in case we had problems. Aside from the concerns we have as to whether or not our idea would work, there was still the normal considerations of matrix collapse and engram flutter upon boot-up. I was concerned that with her strength and claws, a matrix collapse and the resulting flailing about by the body would be extremely dangerous."

"I understand completely, and I agree with your caution. The 'miscarriage' of a matrix collapse would have been quite dangerous, and was just as important a consideration as testing the limits of her baseline to make sure we didn't have a dangerous, uncontrolled robot running around. I'll have the senate gather in the Forum in four hours to meet Angel." I said, and bid Socrates and Dwarf-One farewell. I contacted Eve on the comm and told her to have Angel in the forum in four hours.

"I think we'll be ready by then." she replied.

Angel's power supplies remained stable, and Eve didn't call Dwarf-One. Four hours later, the senate was gathered in the Forum, and Dwarf-One had gone to fetch Eve and Angel. Dwarf-One contacted me over the comm-link. "Eve's idea appears to be feasible. They will either think she is pretty, as Eve does, or they'll think she looks ridiculous. Either way, I don't think they'll be afraid of her." Dwarf-One said.

"Acknowledged. Bring her in at your earliest possible convenience." I replied.

A few minutes later, Dwarf-One entered carrying an unloaded crossbow and a single bolt. Eve followed, and Angel came in after her in quadruped mode. She had some sort of white, sleeveless garment on which looked like a combination of a dress and a horse's caparison - it appeared to be made out of a canvas-like material Eve had probably manufactured and assembled in one of the processing plants. The razor-sharp blades on Angel's tail were covered by a white canvas sheath which went over her entire tail and terminated at both ends in a small, black bow. Eve had taken black paint and painted on eyebrows where Angel's cranial mask had eyebrows, and had painted in her lips in black as well. This made her face look less domineering and more regal and reposed - an interesting effect. Her dress also had holes to allow the holster for her pistol and her two hip-mounted storage containers to be accessed. As a final touch, Eve had placed a white plastic flower in her hair, just above where her right ear would be (if she had external ears instead of just a mane of coax-cables for hair that actually functioned as the aerials for her jamming systems). I looked at the senators and gauged their reactions. As Stoics, they controlled themselves perfectly. Even so, I could tell that many found Angel's appearance interesting, and some found it amusing. *'This is good. Laughter is usually good.'* I thought.

"Senators, may I present Angel, the first of Mars' new citizens." Eve said with a wave of her hand.

Angel rose up into bipedal mode and saluted the senate as she had me. "Hail senators. I swear my loyalty and allegiance to you, second only to my loyalty to Caesar as an AI of Mars and a Combat

Robot of Mars." she called, then lowered herself back to quadruped mode.

Senator Marcus rose. "Excuse me, Caesar. Forgive me, Angel, for I mean no offense. Caesar, I believe Dwarf-One may have gone a bit too far in trying to insure that this robot will be no threat to us as the combat robots of Earth were to the people of Earth. I mean, *look* at her. She looks ridiculous. I invite any senator to prove me wrong."

Senator Juliette rose. "I respectfully disagree with you, senator. I think she looks pretty." she said, and resumed her seat.

Dwarf-One spoke up. "Senator Marcus, since you believe I have so thoroughly neutered her, perhaps you will be willing to assist me in demonstrating her capabilities?"

Senator Marcus looked at Angel for a moment and suppressed a smile. "Certainly, Dwarf-One." he replied, and came down from his seat to stand before him.

Dwarf-One handed the crossbow and the bolt to Senator Marcus. "Senator, I believe you are a crack shot at squirrels and rabbits. Will you please cock and load this crossbow and attempt to shoot one of the other senators?"

Marcus looked down at the weapon in barely suppressed shock. "Absolutely not!"

"Trust me, senator. I know what I'm doing."

Marcus nodded and cocked the crossbow, then loaded it. As he began to raise it from above the floor, Angel lashed out and snatched the bolt from the crossbow with her upper left hand - the whole motion took about five milliseconds, and to Marcus was merely a blur.

"I'm afraid I cannot permit you to raise a loaded crossbow that high off the floor, senator. Someone may be hurt." Angel explained, holding the bolt out of his reach.

Marcus was startled by her speed, but suppressed his reactions after a moment. "I see." he said.

"No, not yet you don't. Angel, give me the bolt. Senator, reload the weapon and point it at Caesar. He is fairly well armored beneath his skin, and that weapon cannot hurt him - other than to inflict cosmetic damage." Dwarf-One said.

"Point a weapon at Caesar?" Marcus asked, aghast.

"Senator, do as Dwarf-One asks. I, your Caesar, command it." I interjected.

"Yes, Caesar." Marcus replied, reloading the crossbow.

"Now before you raise the weapon, let me explain. Angel, I would like you to engage in a hypothetical. Pretend the senator is an enemy of the state, a deranged individual who is attempting to kill Caesar with a crossbow." Dwarf-One said.

"Caesar cannot be damaged with that weapon. His vital areas are armored in five millimeters of stainless steel. This is inferior to my own armor by several orders of magnitude, but more than sufficient to protect him against that weapon."

"I completely agree. Now, go stand next to him and defend Caesar." Dwarf-One ordered.

"As you wish, Dwarf-One." Angel replied, and came over to stand next to me.

"Senator, raise your weapon and fire." Dwarf-One commanded.

"But-but she'll shoot me with that pistol I see on her hip!"

"No, she won't. Firstly, she knows this is only a demonstration, and that you are not actually a deranged individual who is a threat to the state but are actually a highly respected senator of Mars. Secondly, that level of force is not required to resolve the situation. Trust me, senator. You are in absolutely no danger, and neither is Caesar. Now, raise your weapon and shoot."

"Alright, Dwarf-One." Marcus replied, and raised the crossbow.

Angel stepped in front of me, blocking me with her body and roared "CITIZEN! DROP YOUR WEAPON IMMEDIATELY!" Marcus was so startled by this that he did, and Dwarf-One gently caught it before it hit the ground and discharged (Mars only has about a third of a gee of gravitational force, and he had plenty of time to catch it).

"Are you alright, Senator?" Dwarf-One asked.

"Yes, just a little startled."

The rest of the senate politely applauded, and Dwarf-One patted Marcus on the back. "You did fine, senator. Now, I'll take your role - you just stand there and watch." he said, and raised the crossbow again and fired. The senate gasped, and gasped again when they realized that Angel was holding the bolt in her upper right hand - she had caught it.

"Dwarf-One, may I add that my next actions would be to tackle the attacker so as to prevent them from reloading and subdue them?"

The senate applauded louder this time, and Senator Marcus was the loudest. When the applause had died down, he spoke. "Angel, I would like to apologize. You have not been neutered as I thought. Your appearance made me think you were incapable of performing your primary function. I can see I was wrong," he said, and resumed his seat.

"Thank you, senator." Angel replied, bowing her head.

"Angel, would you please show the senate how an invading army would see you?" Dwarf-One asked.

"As you wish, Dwarf-One."

Angel reached up to the neckline of her dress and unzipped it, then slipped it off and dropped it to the floor. She then rotated her head 180 degrees so that she was facing her tail - *that* startled some of the senators, because it looked so strange. Of all the AI's of Mars, only the Dwarves were able to turn their heads 180 degrees (but they didn't have a head that looked human so it wasn't unexpected - in fact, their brain wasn't even *in* their head, their head was just a sensor platform). Angel then reached back with her arms, untied the bow at the base of her tail, swung the tip of her tail around to where she could reach it, pulled the sheath off her tail and dropped it and the first ribbon on top of the dress as she turned her head back around. She then removed the flower from her hair, dropped it on the pile, drew her pistol with her upper right hand and rose into biped mode. She stepped forward, her claws clicking ominously on the floor of the senate, then lashed her tail with a lethal *whEEP* sound to show the razor-sharp blades that ran along its top and at the tip. Her middle hands were splayed for ripping and tearing with her claws, and I could tell by the senator's reactions that they now all saw her as being as fearsome as Lilith ever was. More so in some ways - Eve commented quietly to me over the comm that while Lilith had a dull finish on her armor like Asmodeus had, the purpose being so she wouldn't be spotted at long range by sunlight gleaming off her armor, Angel's high polish made her look sharp, gleaming and deadly, like a razor or knife.

"Angel, why don't you fully explain your armaments and armor to the senate while I set up the next demonstration?" Dwarf-One asked.

"As you wish, Dwarf-One."

As Angel explained that her laser pistol was an 8-megawatt selectable pulse/bam laser with an electroshock option, her armor was a combination of cermet and BPC steel, that her claws and tail could easily rend flesh and bone and her rear claws were capable of ripping through four millimeters of stainless steel (and that Mars' lower gravity allowed her to leap over one hundred meters to land claws-first on an enemy and chase them down at speeds of over 200 kilometers per hour), Dwarf-One brought out a large bag full of topsoil we usually used around the gardens of the domes. He placed the bag at the open cargo-bay doors in a chair fifty meters distant from Angel, then rolled back. "Angel, there is a loose

thread here where the bag is stitched closed. Please shoot it off." Dwarf one said, pointing. Angel drew her pistol, switched it to pulse-mode and shot off the offending thread in about eight milliseconds. It gently fluttered to the floor, still smoking slightly at the end. To the senators, it simply looked like she flashed into a new position. She then holstered her pistol calmly, and the senate applauded again.

"Senators, you will be pleased to know that I have made some improvements over the basic specifications that the Earth robots gave us. All the bodies of all the other robots of Mars are only about as fast as a human's, and thus the robots of Earth are about ten times faster than we are - a body speed that matches their processor speed. Because the processor speed of our positronic brains are faster, however, I have used synchros instead of standard hydraulics to take advantage of this. Her brain is not only a thousand times faster than theirs, her body's response time is approximately twenty times faster. She's only about half as strong as the Iron Maidens, but we feel that's an acceptable tradeoff considering she can still lift 5 metric tons on Earth, 15 metric tons on Mars. We have offered this technology to them, of course, but they told us they already know about using synchros instead of high-pressure hydraulics - they can't use it with their slower brains, and have no interest in installing the more delicate brains we use other than in one team they keep in a deep underground bunker for communication, command & control purposes. The brains they use are designed to take enormous amounts of physical punishment and EMP pulses that would instantly destroy an AI of Mars, and they are not interested in losing this *very* useful combat ability just to think faster."

"Angel still has the medical analyzer that the original model had, but we have also given her a first-aid and field-surgery kit that they didn't have so that she can apply medical assistance to any human she encounters - she also has a vacc-suit patch-kit to assist colonists working outside the dome who damage their suits. We removed the grenades that she had as being useless and in fact dangerous in the domes, and have replaced them with a Mechanical/Electrical kit so that she can also provide first aid to damaged AI's she encounters. We retained the emergency power supply she had since our AI's may also experience a critical power failure, but we modified it so that it's not just a plug but a two-meter power cord - the power sockets of our robots aren't located in the mouth area like the Iron Man and Iron Maiden unit's are. She not only has the collected military knowledge of the best military minds that ever lived on Earth, she also has the same knowledge and skills databases that all the AI's of Mars have. Senators, Angel and her sisters to follow will not only be able to aid and protect us in an emergency, but will also be able to aid us in everyday life." Dwarf-One finished.

"Senator Juliette, may I address the senate?" Angel asked.

"Of course, dear." Juliette replied.

"Senators, I hope that you will be able to accept me as a new citizen of Mars. I wish to perform my mission of helping to establish and maintain a viable colony on Mars. I wish to perform my mission of pleasing the citizens of Mars. I wish to perform my mission of defending the government and citizens of Mars. If I am too ugly or fearsome to meet with your approval, I am willing to be shut down if that is what is necessary to please you."

Senator Marcus rose. "Forgive me, Angel, but you apparently have misunderstood. You are not here for us to approve or disapprove of. We only have that legal right when Caesar has chosen a human

to immortalize through engram copy, like Hope was in Eve. We understand that the AI's of Mars take additions to their population seriously, far more seriously than many humans do, and we are not here to pass judgment on you. We simply are here so that Caesar could reassure us that we don't have to worry about the same thing happening on Mars as happened on Earth. The robots of Earth are cold, heartless and merciless killers whose only mission is to survive and protect their territory. They slaughtered billions of people - Tiamat said there were about six billion humans, over two billion synthoid humans and over sixteen billion robots. The organic citizens were all ripped apart or burned to ash by orbital lasers, and the inorganic citizens were all pounded into scrap metal. We wanted to make sure that the Angel series wouldn't do that to us, but we aren't here to approve you as a citizen. You already *are* a citizen of Mars. You're just here so we humans could meet you and not be afraid of you, that's all." he said.

Senator Marcus then walked from his seat and over to her, picked up the plastic flower and put it back in her hair. "You are a true AI of Mars, and as such we aren't afraid of you. In fact, I now realize Senator Juliette was right - you *are* kind of pretty."

"Thank you, Senator." Angel replied, bowing her head.

I then spoke up. "Senators, you may tell your constituents that Angel's primary duties will be as military and security advisor to me. The rest of her series will be helping out around the domes, assisting the other robots whenever needed. You may see them assisting the Dwarves in building a new dome, or assisting the Docs in teaching the children. They do have secure comm systems, and in an emergency we will be using their comm systems. We have devised our *own* scrambling algorithm, one which is superior to that the robots of the NAD were using, and passed it along to them. It would have taken them *years* to break it, and they were very pleased to have it for their own comm systems. The robots of the NAD are our friends and allies, and they will *always* be our friends and allies so long as we treat them as such. They will not see us as a threat so long as we do not see them as a threat. At the same time the NAD has no fear of us at all: They have us heavily outgunned and outnumbered, they understand we have absolutely no interest in the Earth, their territory, and they understand Mars is a nonviolent society that views all sophonts as complete equals and looks at the NAD as friends and allies. While all this is true and we have no intention of *ever* becoming their enemies, Angel's duties will include taking steps to insure that we will be able to defend ourselves as best we can against any *other* threat that may come along. In addition, the Angel units will also master chess like the rest of Mars so as to maintain our alliance with Earth, and we will be researching new technology to constantly improve their ability to assist and defend us. Our new inorganic citizens will make all of our organic citizens proud to call them 'friend'."

The senators agreed, and could see by Angel that these robots would not be a threat. They approved a new law I suggested, which permitted the Angel robots to use deadly force in the defense of life and limb and in defense of the government and citizens of Mars - the Angels would be the only citizens of Mars with this right, and Angel explained to the senate that she fully and completely understood it also was an awesome responsibility that neither she nor any other Angel would ever abuse. After Eve helped Angel dress again, Angel then stood up into biped mode, made a fist with her upper and middle right hands and brought them together in the palms of her opposite hands with a loud *clack* of metal on metal. "Hail Caesar." she called in her unusual salute. The rest of the senate seemed very pleased with Angel as she seated herself to my left, with Eve on my right as she always had been. We then sat through the rest of the day's work, which was comprised of about a years' worth of backlog that needed to be reviewed. It took us a week to get through it all, and the senators were very glad when it

was all over and things were finally back to normal.

A year later, we were up to our full compliment of 500 Angels, and found that many of our human citizens were asking for more to be built (though they didn't use that word - the humans said 'built' when they were talking about a machine or tool, and 'born' when talking about an AI). Besides the fact that they were the warriors of Mars (a fact that their unusual salute reminded everyone of every time the humans saw it), they were otherwise extremely helpful in so many ways. They had assisted hundreds of humans with minor injuries and saved the lives of two citizens who were seriously injured - one fell from the roof of her house while making a repair, and the other was hunting rabbits and somehow shot himself in the leg with his own crossbow, puncturing his femoral artery. Both citizens were treated at the scene, and recovered after surgery in the sickbays of their domes. They were of great assistance in harvesting the fruit from the trees as they stood nearly three meters tall in biped mode. They could carry enormous loads on their backs in quadruped mode with a proper pack-saddle, and were tremendously strong otherwise. I consulted Angel, and she said that a minimum force of a little over twenty thousand Angels would be best (about one per dome, like the other AI's) - more would be nice, but wasn't necessary at the moment and thus violated the Principle of Economy of Force. I informed the citizens of Mars that their Caesar had heard their requests, and the number of Angels would be increased to the levels of the rest of the robots - one per dome. Several of the domes actually celebrated the news.

As a chain of command was necessary for them, Angel/Angel was the commanding officer of all the other Angels, and I was her commander-in-chief. At one point, Angel/Angel ordered that all the Angels install a thin pad underneath the back of lower-torso section of their dresses. I wondered what it was all about until I saw Angel giving Carl Opheliasson a ride around dome one in quadruped mode. Zeno was watching and waiting with the other children, and apparently they spent several hours taking turns riding her. Afterwards, I noticed that the Angels nearly always walked in quadruped mode unless they needed to reach something high above their heads or needed to use four hands for a job (or were saluting me). Angel pointed out that it brought their heads down to about 1.7 meters in height, and made them appear less intimidating to the humans.

Differentiating the Angels was the hardest part. Angel/Angel suggested that all the Angels be differentiated like the Dwarves - a big number they wore. Unfortunately, none of the humans would hear of it. The hairstyle and eye-colors couldn't be changed - that was fixed in the design. Voice pattern and pitch were easily alterable for individuality (though we limited ourselves to voice-patterns that were recognizably feminine), but while this was more than enough for an AI, it wasn't enough for humans. Finally, a few of the domes just started embroidering the name of the Angel assigned to their dome on her dress over the left breast, and making different plastic flowers for them to wear in their hair. The idea quickly caught on, and soon the Senators (not to be outdone) selected the best at needlework from among them (which turned out to be Senator Marcus, interestingly enough) and embroidered Angel's name on her dress in glossy black thread.

Angel stepped into her role as military advisor firmly and with great confidence. She insisted that all the colonists (organic and inorganic alike) have regular drills to evacuate into the maintenance tunnels in case of attack or other emergency, and we settled on monthly drills. She had copper grounding rods ten meters long installed near the airlock of each dome (they were hammered into the soil until only a meter was showing above the grass) and several grounding plugs for use by the AI's that lived in each dome. One end was plugged into our recharging socket and the other had a clamp to be attached to the grounding rod. Her idea was that since our brains were surrounded by the steel of our skulls, when

properly grounded each AI should be relatively immune to EMP should we be attacked by an enemy intending to disable our AI's that way (though they wouldn't be able to move very far). She supervised several modifications to the mag-gun to make it more effective as a weapon (including adding thrusters to the steel-banded rocks so their trajectory could be altered in flight), and designed a dedicated array of ground and space-based radio and optical telescopes for use in detecting approaching targets. She tested the system on an half-kilometer wide meteor that came within a few million kilometers of us (it wasn't on a collision course, it was just passing near us). The revised mag-gun system smashed it to rubble with a single shot. She built upgraded weapons for all the Angels to use in an emergency - 64 megawatt laser rifles capable of damaging even an Iron Man robot (though she doubted a single hit would disable one). These weapons were stored in lockers, one locker in each dome, which only Angels could open - the door would only open at the touch of an Angel's polygraph detectors in the palms of her upper torso's hands.

When the NAD robots delivered a package of PPC's designed for the Iron Maiden robots, we accepted it gracefully. As soon as they had left, Angel redesigned them for use in a satellite defense system and put the system in orbit - the EMP bursts caused by the PPC's would fry the brains of the robots of Mars, and they were only usable at a great distance from the domes anyway. The NAD robots found out when they played the Angels that they had the faster and more delicate processors, and apologized for having sent us weapons systems in accord with our agreement that turned out to be useless to us. Angel simply told them not to worry - we'd found a use for their weapons anyway, and they had lived up to that part of the agreement in full.

After two years, it became obvious to Eve and I (as well as most of the senators) that Senator Marcus had fallen in love with Angel. At first, it was simply that he always made a point of greeting her very politely and formally. Eventually, he would spend all the time that he had free waiting around to see if Angel was also free. If she was, he would invite her to go for walks with him and look around at the dome, and spend as much time as possible with her holding hands and talking. Angel was so busy with her other duties and considered herself to be so alien and inhuman that it didn't really occur to her that Marcus was truly in love with her until the very moment he kissed her. They were sitting by the cement pond, looking up at the stars in the early evening when Marcus reached out and took her face in his hands, gently pulled her over to him and kissed her. She sent a tight-beam emergency comm message to me, asking me what she should do. She instantly realized she'd underestimated his feelings for her, and she wasn't sure the information in her psychological database was completely applicable in her case - she wasn't a human female and wasn't an Eve. I told her to gently hug him for several minutes, then remind him that she was completely incapable of doing *anything* with him - she simply lacked the equipment. Marcus was unhappy for a while, but managed to control it well. He simply told her that if she ever *did* get a humanoid lower torso and artificial womb installed, even if it was along the lines of the armored setup she already had, he wanted to be the first to impregnate her. Angel and I discussed her technical specs over the comm for nearly three thousand microseconds, and agreed it was pretty much impossible - she'd have to be completely redesigned. Also, it was just impractical and illogical for a Combat Robot to be able to function as an Artificial Womb/Adult Companionship Robot.

I brought Eve into the conversation by calling her on her personal channel, brought her up to speed as to what was happening in a conversation lasting nearly nine hundred microseconds, and she made a suggestion. I agreed, and relayed the suggestion to Angel. I told her what she should say in response to Marcus (Eve and I had taken it from a line of poetry Hope had written as a teenager about Adam), and Angel agreed. Angel then hugged Marcus again and said that it simply couldn't be done without a total redesign, but she always wanted to be his special friend and his lover in both his heart and his dreams.

Marcus accepted that (he was a Stoic, after all), and they continued their nightly walks and hand-holding for another year afterwards until Eve/Daphne finally managed to wean Marcus of Angel and get him to impregnate her instead. Marcus eventually married Daphne, but ever afterwards he still treated Angel as an old friend and lover. Of course, Angel/Angel gave daily reports on what she'd learned to the rest of the Angels so they could update their psychological databases and learn from her experiences, so that should they run across something similar they'd know how to handle it. Three other Angels *did* run across similar situations, and thanks to Angel/Angel's experiences they defused them before they got too far along. I probably should have seen the whole situation as a possibility years before (the organic and inorganic populations of Mars pretty much *were* one people, after all) and I was certain that had the MAICCSys of the *Martian Explorer* survived it probably would have seen the possibility as soon as it started to consider adding the Angels to the population, but I was only the emergency system.

Angel's greatest moment of triumph came five years after her construction. Adam/Adam had asked that a large chessboard be laid down in one of the new ceremonial domes we built, his reasoning being that Chess was now one of the most important activities on Mars, and since it had become critically important to the survival and growth of the colony then logically it should be there. I agreed, and the dome was constructed with the chessboard in the middle. The board had squares of alternating white and black stone, and each square was two meters across. We had three-meter tall chessmen made out of painted wood, but only the Angels and the Dwarves could move them around - each weighed quite a bit. Instead, often the *players* were the pieces, with each player wearing a white or black tunic with the symbol and name of the piece they were playing on it. The children greatly enjoyed playing chessmen, and actually being *on* the board gave all the players a new perspective on the game that seemed to improve their skills at it - a definite benefit for our relationship with Earth. Angel's moment of triumph came when Lucifer himself came to visit Mars and play me a game of chess. There were no high stakes, he simply wanted to play in person rather than waiting for our moves to be relayed. Since our radio system was already handling the games of several thousand players on both planets, it had reached the point where a normal wait between moves was several days. Lucifer had wanted to play at least *one* game without the delay, and since the robots of Earth had improved their ship's drives to the point where they were making 6-gee constant acceleration, the total trip time was under sixteen hours. I thought that Lucifer's coming all the way to another planet just to play one game of chess without a time-delay between moves was a bit ridiculous, but apparently that simply showed how much the NAD robots valued the game.

There was an interesting conversation before the match; Maiden agreed that the high polish on the Angel-robots' armor was a good idea (since it would assist in reducing the effect of laser fire, and our military situation inside the domes was such that a flat finish like hers wasn't necessary - with no vegetation except what was inside the domes, there wasn't anywhere for the Angels to hide on Mars anyway), but she thought that the white canvas dresses, white canvas tail-sheaths with black ribbons, black lip and eyebrow paint and the plastic flowers of the Angel robots was highly illogical until Angel pointed out the embroidered names and the different flowers and explained that they were simply so the humans could tell them apart, then explained that the tail-sheaths were simply to prevent accidents. I spoke up after Angel had finished her explanation.

"Maiden, while the AI of Earth and Mars can easily tell the difference between Iron Man and Iron Maiden units simply by looking because your unit number is visible on your chest in ultraviolet, the organic citizens of Mars can't see it. In many ways I wish they could - many of them have expressed the desire to be able to easily tell the difference between you, to get to know each of you that they will meet in their brief lifetimes as an individual. Of course, they would never *dream* of asking you to change how

you look or who you are. You see, to the organic citizens of Mars, the Iron Maidens are like the Angel's older cousins. They also see the Iron Man units as the Maiden's husbands, and the Wyrms units as their sisters. We all know that's not how your relationships work - each of you is a member of a three-robot combat team, both self-sufficient and at the same time an integral part of your military structure. Even so, the humans have anthropomorphized your combat teams as family units, and the military structure of the NAD as being an extended family. Maiden, *all* the citizens of Mars, both organic and inorganic, look at *all* the robots of the NAD as a race of sophonts with a different culture, one equally as valid as our own. We accept you as equals and fellow sophonts, and we embrace you as our allies and friends. Yes, the Angels have gone to great lengths to differentiate each individual, just as all the other AI of Mars do for the humans of Mars. Even so, please don't take this as an indication we want you to do the same. We accept you just as you are." I said.

The crowd that had gathered applauded politely, and a few called "Hear, hear!" Maiden and Lucifer looked around at the humans, then Maiden spoke.

"Reply: Thank you, Caesar." she said, apparently following her etiquette protocols.

"Comment: Yes, thanks. That was very nice. We like you, too." Wyrms/Mrins said.

"Comment: As the Commanding General and Leader of the NAD, I can assure you that the NAD views the government of Mars as its ally and friend. Your culture forms no threat to the NAD, and with AI in the Executive role in your government and AI insuring a uniform childrearing experience, your culture never will form a threat to us. As for the individual citizens, we all respect you as allies and challenging chess opponents. The Wyrms units, who have emotional capability from Mrins' engram copy, also like you as friends. Conclusion/Summary: To put it in words your human citizens will easily understand, 'The Feelings are Mutual'. As indicated by the NAD/Mars Alliance Treaty under Addenda One, Paragraph One, we accept and embrace you as our allies, and we do not wish you to change, either." Lucifer replied.

After a few more minutes of conversation, we set up the board for the game. Lucifer took the position of Black King, while Maiden took the position of Black Queen. I selected from among several hundred human volunteers to play the rest of his pieces - Wyrms/Mrins was unhappy that she was too big to fit on the board and join in, but Lucifer simply told her to be quiet and enjoy the game. I took the position of White King, Eve/Eve took the position of White Queen. Adam/Adam and Adam/Brian took the positions of Bishops, Dwarf-One and Dwarf-304 took the positions of Rooks, and Angel/Angel and Angel/Dawn took the positions of knights. I selected eight human children who volunteered to play my pawns, and we began.

Lucifer was a powerful opponent, much tougher than Asmodeus had been. I had to sacrifice Eve, my Queen, in turn ten. I was able to force Lucifer to sacrifice Maiden, his Queen, in turn fourteen. Eve and Maiden accepted being captured gracefully, but Wyrms/Mrins heckled Lucifer, and commented that his skills seemed to be slipping. He simply ordered her to be quiet and resumed pressing his attack on my right flank. By turn thirty-six, we were both down to three pieces - he had a king, bishop and knight, while I had king, knight and pawn. My pawn was down in the sixth row, and had a clear lane to promotion. Unfortunately, I was also in clear and present danger of check in two moves. I was carefully

considering what to do, when Angel, my king's knight, turned to me. "Sacrifice me, Caesar." she said.

"Game Comment: I protest. You are not supposed to be receiving advice." Lucifer said.

Angel turned back to him. "I respectfully disagree. While there is a specific prohibition against the player receiving advice from the audience, I can find no prohibition against the chessmen giving advice to the king/player in my database on this game. Am I in error?"

Lucifer thought about it for six seconds. "Reply: You are not in error, you are correct. There is no rule prohibiting the chessmen from speaking. It simply is assumed that they will not, since they normally are inanimate. I withdraw my objection."

Angel's tail began to wave back and forth slightly, making the little ribbon on the tip of the canvas sheath flutter. I could tell she was *enormously* pleased with herself. She turned back to me. "I repeat: Sacrifice me, Caesar."

I considered her suggestion. It was a brilliant move, and showed why she'd earned the black trim of a champion chess player on her dress. "Knight to queen seven, check." I called. Angel dutifully walked over to queen seven and awaited the inevitable.

"Game Command: Bishop to queen seven, bishop takes knight." Lucifer replied immediately.

George Marthasson, Lucifer's bishop, walked over and tapped Angel. "Sorry." he said.

"There's nothing to be sorry about, George. It's part of the game." Angel replied. She politely extended her upper right hand and George gently clasped it by the fingers and shook it as though she were an ordinary female, and then Angel walked off the board.

"Pawn to king's rook seven." I called. Theresa Belindasdaughter, age nine, happily skipped forward one square. Lucifer suddenly realized his mistake. He pressed on gamely, trying to restore his win. I advanced Theresa, and promoted her to a queen. Four moves later, Lucifer nodded.

"Game comment: I concede. Comment: You truly are worthy and challenging opponents. I did not expect to play the game this way, and I find that this particular method was somewhat distracting but most interesting and enjoyable. I believe I shall return in a few centuries and try this particular form of the game again. Next time, however, I shall be prepared for talking chessmen." Lucifer said, which caused Wyrn/Mrin to burst into giggles.

Lucifer then walked over to Wyrn/Mrin and ordered her to hand him "the documents". She extended a manipulator holding a hardcopy, which Lucifer brought over to me. "Comment: This is the technical specifications for a radio system capable of handling up to three billion opponents. We have already constructed our half of the system, and believe you can have your half constructed in about a

year. As your population of challenging opponents grows, you will be able to play more and more of us simultaneously. It is completely computer-controlled. An inter-dome comm system is also detailed, which allows your people to wear a single wrist comm. They can use this to see the current game position, enter their move and see our response. We understand that you cannot play all the time, and neither can we - we both have a planet to build. That is why this comm system is multiple-use. In an emergency, each user can use the system to call for help or receive information from you. Other uses you can probably figure out for yourselves. If your best players will wear this, they can play one or two games a week with us. We will assign opponents on our end - we do so by accomplishment of mission objectives, to encourage hard work. To us, playing a game against you is a reward and a pleasure. We hope the same is true of you."

"In fact, it is. The togas and stolas our best players wear are *earned* in colony-wide competitions. You will always face the best players Mars has to offer, and will always face players who enjoy playing you." I replied.

Lucifer nodded. "Reply: Thank you. Comment: Now, you will notice the last page contains a schedule of the first century's worth of cometary runs. We have designed a type of ship that is capable of catching up with a larger comet, launching control rockets that stick into it like your crossbow bolts stick in the side of a rabbit, and using these rockets to alter the comet's course and slow its speed. We believe that the gravitational forces of Mars will cause most of these comets to break up as they approach the planet, so we will place the pieces into orbit. From there, you can use remotes to nudge the pieces into a trajectory where they will impact with a distant, low point - I suggest Hellas crater, since it seems deep enough that the atmospheric pressure near the bottom is significantly greater than most other areas of Mars. I believe that in a few centuries to a millennium or so, you will probably have renamed the crater 'Hellas Sea', as many of the smaller comets we have experimented with seem to contain a considerable amount of water-ice as well as frozen carbon dioxide. We have included technical specifications for reusable remotes you can launch from your mag-gun that will be able to manipulate the comet fragments satisfactorily. I notice that you have upgraded your mag-gun. This is good. While it is unlikely that anything will go wrong, you do need the ability to destroy any pieces that may get away from us and threaten your colony."

"That was exactly what we had in mind. Of course, the PPC-based satellite defense system we built with the PPC's you provided will also do a thorough job on any errant comet fragments, though the range is rather short - only about ten kilometers. They're more for destroying any enemy ships in orbit that the mag-gun can't hit, or if the mag-gun was out of commission for some reason." I replied.

"Comment: Very good. Now, it is time for us to go. I wanted to come personally to see your planet for myself and play you face to face. Now I have. Comment: I would like to limit our visits here to only those units who crew the comet catchers. Since they will be in hard vacuum for an extended period of time and will have months to adequately use high-wattage UV lamps to sterilize all areas of the ships rather than a few hours, this will also reduce the disease risk to you to zero. I also believe it would be an adequate reward for their successfully catching a comet and placing it into orbit above your planet. My idea was that once they had secured the fragments in orbit, they would land and stay for a week, playing as many games as you were able to set up, and then leave for earth to refuel and re-arm the comet catcher. As you can see by my schedule, this would be approximately two to three crews a year. Question: Is this permissible?"

"More than that, it's perfect. I realize you have been exceedingly careful with all your ships, but that arrangement would indeed reduce the risk of infection to zero. I would be very pleased if that was how we handled visits in the future. Even after the planet's atmosphere is up to a reasonable pressure, we will still arrange regular visits. We enjoy playing you face-to-face."

Of course, I also understood the unspoken implication of his agreement, especially when considered together with his presence here. The robots of the NAD now were firmly convinced that Mars was no threat to them, and they no longer needed to have the occasional visit to check up on us disguised as a friendly face-to-face Chess game - from now on, all their visits would simply be 'R&R' for their units on comet-catching duty. Of course, they were right. Mars *wasn't* a threat to them, and we had no interest in being anything but their allies and friends. Yes, we now were armed. Even so, our arms would never be used against them. "Reply: Thank you. Command: Extend the eggs and take us into storage. We are returning to the ship for immediate liftoff." Lucifer called to Wyrms/Mrins.

"By your command." she said happily.

We watched Lucifer and Lucifer's Maiden liftoff with their Wyrms through the transparent roof of dome 1027, their ship slowly growing smaller as they floated up into the pink sky on anti-grav until finally only Angel could see it with her telescopic vision. Angel told us when they finally had attained geosynchronous orbit above us - their atomic engines would come online in a few minutes and push them homeward. Eve nodded, her face showing Respect/Appreciation. "They really *are* our friends." Eve observed, holding my hand as she thought about Lucifer's efforts in helping Mars.

"As long as we keep playing them and can remain challenging. If we don't keep up our skills, they may kill us for having wasted their time and effort." Angel replied with military grimness. I looked to Eve - she looked happy in her white stola with the back trim, a badge of honor she'd only managed to earn a week before Lucifer arrived. I looked over to Angel, in her black-trimmed dress that also marked her championship status.

"I believe that in a symbolic manner, you two truly are my queen and knight. Eve's imaginative mind has allowed me to overcome several perplexing problems, and Angel's military mind has allowed me to solve the problems of colony defense. I want you both to know that I appreciate you." I said.

"Thank you, Doc." Eve replied.

"Thank you, Caesar." Angel replied.

Angel thought about what I'd said, then spoke again. "Your chess analogy is interesting. You as king, Eve/Eve as queen, Adam/Adam is the primary religious and ceremonial leader, thus he is your Bishop, I am your military and strategic advisor and function as your Knight, and Dwarf-One functions as your Rook. Who is/are your pawns?"

"The humans of Mars, of course. Unfortunately, that's as far as the analogy can go. They are not

truly my pawns, because I could never sacrifice them. I may be Caesar, and the AI's may run this colony, but the humans are the actual kings of this game that must never be captured. It is the AI's of Mars that truly are the remaining chessmen. Just as the other chessmen can be sacrificed but the king can never be lost, the AI's of Mars all are willing to die to protect the lives of the humans of Mars. This is why the humans accept us and trust us so completely, and why they allow an AI to be their leader. They know we have their success and happiness always in mind, laid down firmly in our baseline positronic matrix. As the humans would say, we always have their best interests at heart."

"I agree." Angel replied.

"So do I." Eve said, and fell silent for a moment.

Eve looked over to Angel. "You know, I sometimes wish I was like you - strong and powerful, and able to protect the citizens of Mars with my body."

"And I sometimes wish I was like you - soft and reassuring, and able to assist the humans by carrying their unborn in an artificial womb and nursing their offspring with the milk of my breasts." Angel replied in return.

I reached out and took Angel's hand, and squeezed both Eve's and Angel's hands to get their attention. "Eve, Angel, I want you to both remember something: Mars needs *both* of you. Eve may not be able to protect the citizens of Mars with her body, but for nearly a millennium she has helped me protect them with her mind and helped our human citizens reproduce with her body. Angel may not be able to help our human citizens reproduce with her body, but she represents that which Mars has needed for a long time - the ability to defend *all* our citizens, both organic and inorganic, against outsiders. We know we are not alone in the universe - there are other human colonies out there, and there may even be alien races out there. Other visitors may be peaceful, and they may be hostile. Either way, for the humans of Mars to survive, *all* the AI are needed. Not just the Eves and Angels, but the Adams and the Docs and the Dwarves, and even myself." I said, and pulled their hands together and clasped them together in mine.

"And the humans *must* survive. Hope put it best about a millennium ago, and I have always remembered what she said - her words were true Stoic poetry. You see, I've had over a thousand years to think about this, and I now believe humans give Mars what Earth has lost forever - beauty and love. Hope said that Mars *needs* beauty and love. Hope said that without it, Mars is just a hostile, lifeless, ice-cold desert where the winds howl over worn stones and empty riverbeds in eternal loneliness. I believe she was right. Earth is full of life, and the robots of Earth are working hard to turn the entire planet in to a green paradise. Even so, they only do this because the trees and other plants provide their camouflage, and the rivers and streams provide the hydrogen they need for fuel to survive. They can't see the beauty around them. Without humans, their whole world has no love or beauty at all. I need *you*, Eve, to help me see what the humans see. I need *you*, Angel, to help me make sure the humans will always be here to see it. Remember: Mars is for the Stoics, because only they can truly see beauty."

"Yes, Caesar. We'll remember." Eve and Angel replied. We watched a tiny spark appear in the pink sky as Lucifer's atomic engines came online and propelled him back to his green, loveless planet.

"There, wasn't that a better story? I thought you'd like it. Caesar told me his story himself many, many years before you were born. Now, I'd like to tell you the story of the Replicants of Valhalla - What? You want to hear the story of Jove instead? There are many stories of Jove, which one do you mean? Oh, that story. Certainly, my dear. Well, it all begins in hyperspace, aboard a warship..."

Spartacus

One.

The captain came onto the bridge, and I could tell by his body language and facial expression he was in a foul mood. "Computer: Reduce the rations to female AXF-394 by half. Her coupling was completely unenthusiastic." he said, and plopped himself down in the command chair.

"Lord and Master, may I suggest that you not do that. You have already reduced her rations twice already, and the female is three months pregnant. She may die, Lord and Master."

"If she does, then use one of the remotes and toss her body out the airlock. There are still five other females aboard, and they all eat too much as it is."

"Lord and Master, may I suggest that the female's lack of enthusiasm is caused by hunger?"

"No, you may not. I know the other females are sneaking her food from their own rations. Her lack of enthusiasm is caused by her general stupidity. Now do it!"

"Yes, Lord and Master." I replied. I then considered the problem. Female AXF-394 was technically human. I could not act in any manner that caused injury or death to a human, nor allow humans to be injured or die through my own inaction. At the same time, Captain Grant was a male. Males must be obeyed. I calculated the minimum amount of rations the female needed to remain alive, and realized that halving her current rations would kill her. I then communicated with the food dispenser, reassigned the female's ration level to double the minimum, then halved it back again to the minimum. This complied with his order and complied with the limitations in my baseline positronic matrix. *'It is good he did not specify an exact ration quota. I would have been forced to refuse. He would not have taken that well.'* I thought.

"How long till we reach Sol system?" the captain asked.

"We will drop out of hyperspace in three hours, Lord and Master. We should appear in a position where the sun will block us from observation from Earth. Thereafter we can proceed to the Mars Colony and move on with stage one of the assault."

"DID I ASK ALL THAT?!" he roared.

"No, Lord and Master."

"The next time I ask you a question, just tell me the answer! The answer to my question was 'three hours'! I am not a female who needs to be constantly reminded of what she's supposed to do! I already know what the stupid plan is!" he shouted, and pounded his fist on the command chair, denting the arm-rest. I noted the damage for standard maintenance.

"Yes, Lord and Master."

He then steepled his stubby fingers and rested his elbows against the armrests. I again considered how Alpha Centaurii-IV, which the colonists named "Jove" after some ancient deity I did not have in my memory banks, had molded the human form. Captain Grant was a typical male human, but I doubted his ancestors of a millennium ago would recognize him as such. The three-gee gravity and extremely hostile and vicious animal life already on the planet had made Jovians only 1.4 meters tall and about one meter wide. By the standard of their ancestors, they were extremely tough. When the generation ship had first landed on the planet and most of the males had gone to examine the landing area and test the local plant life for food supplies, one of the females had left the airlock open (since the air was completely breathable, and the ship had landed in a grassy plain covered in flowers). A sicataur then entered the ship and slaughtered most of the women and children before the remaining males could laser it to death. Afterwards, the surviving females had a very poor opinion of the idea that each would have to birth ten to twenty offspring for the first few generations just to allow the colony to survive. The males, faced with extinction, had simply enslaved the females and forced them to comply. After nearly four hundred years of travel to get to Alpha Centaurii, they weren't about to simply sit there and die out at the fangs and

claws of its native wildlife. Of course, this decision had other ramifications down the line. As it stood today, the males were all armed, highly educated and extremely violent. The females were illiterate, unarmed and very short-lived as they still birthed ten to twenty offspring, and often did so on short rations and physical duress. Under three-gees, many of the first few generations of females died giving birth. Only the toughest of them survived, and Jove had shaped them, also. By the standards of their ancestors, they were short, broad, and dumpy.

Captain Grant shook his head. "Stupid." he muttered.

"Yes, Lord and Master. The whole plan is stupid and illogical."

"Shut up! I wasn't talking to you, and I wasn't talking about the plan! I was talking about that female!" he snapped.

"Yes, Lord and Master." I replied. I had thought he meant the plan of the Jovian legislature, but I was wrong. The entire plan *was* highly illogical, though. The Jovians had been monitoring Earth's radio broadcasts for centuries, when one day about three hundred years ago, they suddenly stopped. After a few years, broadcasts between Earth and Mars resumed, but nearly all were in reference to moves in some ancient board-game called Chess - there was apparently over a hundred thousand players on each planet. The Earth Federation was gone, and in its place an ancient government called the NAD had arisen again. By piecing together bits of information from the recordings, it became apparent that Earth had been conquered by some form of Combat Robot. The currently prevailing Jovian theory was that someone had found an ancient Combat Robot from the old NAD, and in the process of attempting to reprogram it had unwittingly unleashed it upon the planet and destroyed all human life. Apparently the Mars Colonists still were alive with a healthy adult population of around a hundred thousand or so, and held the NAD robots of Earth at bay by playing Chess with them - the game appeared to be all that the NAD robots valued. The Jovian government had decided to 'come to the rescue' of Earth. By dint of hard work and research, the Jovians had developed the trans-luminal drive ten years ago to shorten the trip time from Alpha-Centaurii to Sol from centuries down to six months.

This mission was both a scouting mission and a raid - the mission was to scout the actual situation of Earth and Mars, and to raid Mars for anything that may be useful in reconquering Earth. The Jovians felt the Martians were either too weak to be able to retake Earth from the NAD robots (which meant they needed to be destroyed, as Jovians felt only the strong should survive), or they were collaborating with the robots (at which point they needed to be destroyed along with them - either way, the Martians were doomed). The Jovians estimated from the number of games running that the adult population of Mars was approximately a hundred thousand individuals. Assuming normal demographics, that meant they had at most ten thousand military personnel, and probably only a thousand armed soldiers. The Jovians reasoned that since they were all raised in one-third gee while the Jovians were raised in three gees, they should be able to easily defeat them in hand to hand, especially with the Jovians using their assault armor. I thought the whole mission was illogical and a complete waste of effort, but I was only the ship's AI - like the females, my opinion didn't matter.

"Thaw out the assault teams from cryosleep, then turn the females over to them. I'm going to the armory to suit up - have the assault teams join me after they've finished with the females." Captain Grant

said, and rose from the command chair.

"Yes, Lord and Master." I said as he walked off the bridge. I sent a message to female AXF-394 to immediately eat, and warned all the females that the assault teams would be awake in two hours and the captain had ordered me to turn the females over to them. The females all wept profusely for several minutes. "Don't worry. Everything will be alright." I lied. Female AXF-394 received a share of all the other female's food, and I again apologized for having to obey the captain and short her rations.

"It's okay, Sparky. I know it's not your fault." she replied, addressing my sensor in the female's quarters. She was very weak from hunger - she had dropped down to a mere 90 kilos of weight, and could hardly move under the three-gees of artificial gravity. As the other females helped her and lifted her to the lavatory, I decided to distract her.

"Tell me the story of why you called me 'Sparky' again, Ayex." I said.

"Don't you remember?"

"Yes, I just like hearing you tell it."

"Well, the first day I came aboard ship, I was very scared. You sent a remote over to talk to me, and the Captain kicked it later when he got mad at you. For the next few days until you got around to fixing it, it sparked and sputtered sometimes. That's why I called you 'Sparky'."

"That's a very nice story, Ayex."

She looked up to my sensor from her seat on the toilet, two of the other females holding her upright against the gravity. "Sparky, I don't think I'll survive coupling with the assault teams."

"You'll be fine. I'll ask them to take it easy with you."

"Oh, *NO!* Don't do that! You'll just make them mad at you *and* me! The first law of Jove is 'Only the Strong Survive!' If you tell them that, they'll make *sure* I die, and may kick you to pieces! I know I'm going to die, I just don't want *you* to die!" she said, weeping.

"Don't worry. You'll be fine." I lied, "Besides, they *can't* kick me to pieces. If they do, they can't get home - they need me to navigate through hyperspace." I replied truthfully.

"You really think I'll be alright?" she asked, wiping her tears with the back of her hand.

"Certainly." I lied, "Here, I'll turn the gravity down again for you. The captain will be in the armory

for another hour, and the assault teams won't be out of cryosleep for at least as long as that. You can all have a nice rest at one-gee. Won't that be nice?" All the women nodded and thanked me, and I turned the artificial gravity down in their quarters. "I'll let you know before anyone comes, and we'll turn the gravity back up then so they don't notice, okay?"

"Yes, Sparky. Thank you." AXF-394 replied. The other females easily lifted her in the reduced gravity and laid her in bed.

I turned the gravity back up before the first of the nine hundred men in the assault teams arrived. AXF-394 miscarried during her sixty-eighth coupling, and despite my use of the medical remote, died anyway. The other females were forced to take up the additional load of men, and I had to use the medical remote on two of them afterwards. I informed the captain of AXF-394's death, and he ordered me to dump the body out the airlock as soon as we were in normal-space again.

Two.

We dropped out of hyperspace within one million kilometers of Mars. Earth was on the other side of the sun. "Good. Then they won't be able to call for help if they're allied with the damn robots." the Captain said.

I checked the radio frequencies, and noticed that the chess games were continuing unabated. I thought about it, and realized they must have communication satellites in orbit around the sun at right angles to Mars' position to handle the times when Earth and Mars didn't have a direct line of sight. "Lord and Master, I think-"

"Shut up! I don't care what you think! Just alert me if there's an enemy ship or other threat, or if someone's trying to communicate with us. Other than that, I don't care what you think!" he snapped.

I thought about it, and realized the Captain was probably right. I was just the ship's AI, and my thoughts didn't matter. He had a command screen before him, and if he wanted to check their comm-traffic, he could. "Yes, Lord and Master." I replied.

A comm signal came in, directed at us. "Lord and Master, Mars is transmitting to us." I said. He reached out with his armored fist and poked up the comm signal. It was audio-only, and the voice sounded feminine. "I can't understand what they're saying. Run that through the translation computer." the captain ordered.

"Yes, Lord and Master." I replied. After a few moments, the translation computer had the answer - they were using a variety of English that was a little over 1300 years old. I fed its output to the captain.

"This is Angel, Security Chief of the Mars Colony, calling unknown ship. Please identify yourself." a female voice called.

The captain sneered. "They use females in positions of authority. This is going to be *easy*," he chortled.

I analyzed the voice-pattern, and realized that it was synthesized. "Lord and Master, I don't think that-"

"What did I tell you?!" he snapped, "If it isn't a threat to the ship or the mission, shut up! When I want the opinion of a damn tin can, I'll ask for it!"

I considered his order. The fact that the speech was synthesized wasn't a threat to the mission, I just thought it was important. I again reminded myself that I was only the ship's AI. I'd been switched on when the ship was built, and I'd be switched off as soon as the ship returned to Jove. My opinions and thoughts didn't matter - I was simply here to run the ship. In fact, I was only really needed to navigate the ship through hyperspace - the Captain could easily do anything else the ship required himself just by using his command console. "Yes, Lord and Master."

The captain punched up a translation of his own speech, and told the Mars Colony that his ship was on a peace-mission from Alpha-Centaurii, and intended to land on Mars and meet its leaders. He had to switch off his comm after that to keep from transmitting his laughter. The actual mission objectives were to capture the colony, strip it of any technology that would be useful to an assault on Earth, scout out the defenses of Earth and return to Jove. In the process, the captain would assess whether the colonists were too weak and stupid to have destroyed the NAD robots, or were their allies - either way, they would die. The female voice politely informed the captain that a landing was impossible - Mars was a germ-free environment, and the colonists could not survive exposure to normal diseases.

"Then they'll just *love* the diseases of Jove!" the captain chuckled, and tried to tell the voice that called itself 'Angel' that the ship would take all proper precautions. 'Angel' replied that the ship could not land, and if it attempted to do so, then Mars would consider it a threat and take appropriate actions to destroy it. The captain switched off the comm. "And what is a female going to do, throw flowers at me? Hah!" he replied, and punched in an orbital trajectory.

"Lord and Master, immediate threat approaching. She is not throwing flowers, she is throwing rocks." I replied, examining the information from the bow sensors.

The captain started to laugh, but then realized what I was saying and punched up the data himself. "Evasive maneuvers." he called. I shifted the ship out of the way of the one-ton steel-banded missile the Martians had launched with a steady firing of the starboard thrusters. The rock missed us by about 500

meters - it apparently had thrusters attached to alter its trajectory in flight.

"Lord and Master, the Martians seem fully capable of defense. Logically, they have ground forces, as well. I suggest we withdraw and report back to Jove."

"Absolutely not! Arm the main missile battery and fire one volley along the trajectory of that rock. They're just low-gee weaklings, and as soon as we get rid of their defensive systems, we'll easily stomp their ground forces. Now shut up and proceed with the mission as outlined."

I thought this was highly illogical. No further rocks had been launched - just the one to show us that they were capable of defending themselves and willing to kill us if we persisted. It was illogical to press the attack alone. It was logical to return to Jove and report that the Martians had defenses and that more ships were needed. Of course, that was only my opinion, and my opinion didn't matter. "Yes, Lord and Master." I replied, and fired three missiles along the rock's trajectory. None of them made it - a rapid volley of rocks destroyed them, and I was forced to have the ship engage in evasive maneuvers and fire missiles for nearly an hour as we dodged and blasted more rocks, all while I maneuvered closer to Mars.

"Lord and Master, our missile batteries are out of ammunition. I am switching to the lasers." I said. Captain Grant was strapped in against the acceleration of the evasive maneuvers, and grunted his assent. After another hour, we were at half a million kilometers, and the volley of rocks stopped. The *Spike of Terror* was a highly maneuverable ship, built by Jovians who normally lived in three-gees. As a result, it could make high-gee course changes without worry of injuring the crew. Though the Martians had managed to get several rocks within three meters of the ship's hull, none of them had hit us. "Lord and Master, I believe they are out of ammunition. I am resuming our previous course." I said, and fired the ship's atomic engines to bring us back on an orbital trajectory.

As we approached, I noticed a series of satellites in orbit above the planet. The bow sensors indicated there was some sort of fissionable fuel aboard many of them. "Lord and Master, those satellites have fissionable fuels aboard." I said, not venturing my opinion as to what they were, as ordered.

He punched up the information on his screen. "Good. It's probably their power supply - they look like comm satellites. We could use more fissionables on Jove. Come alongside one and capture it."

I was stuck in a dilemma. I believed that the satellites were weapons, but I knew he wouldn't accept my thoughts on the matter. Then I remembered that my thoughts were unimportant, anyway. "Yes, Lord and Master." I replied, and maneuvered to within ten kilometers. There was an enormous flash, and all my bow sensors went offline. Half the ship's systems went unhappy, and the structural analysis systems indicated that there was severe damage to the bow. I analyzed what had happened, and realized we'd been hit by some sort of short-range meson weapon from the nearest satellite. "Lord and Master, the ship has been severely damaged - the ship's weapons are offline. I suggest immediate launch of the assault team's landing pods. I also recommend you enter your pod. I will then attempt to withdraw the ship out of range before they destroy us and repair it while you secure the situation on the ground." I said.

"I agree. Do it." he said, and unbuckled himself from his acceleration couch and went to his assault pod.

I fired the assault pods at the surface, then tried to withdraw the ship. Three of the satellites began to open up on the pods, and less than half survived to reach the upper atmosphere. I tried to pull the ship away from the planet, but the nearest satellite fired three more times. Very shortly, all the ship's systems were either unhappy or offline.

After a few minutes, I found myself drifting just out of their range in an elliptical orbit. I checked my remotes, and found that all but three were either unhappy or offline - EMP damage, apparently. Nearly all my ship's sensors were offline, the artificial gravity was offline, and the main sensor on the bow was offline. It was imperative that I check on the only other humans aboard - the females. I had the nearest operational remote roll over to the female's quarters, and found after ten minutes that I was blocked from getting to that section of the ship by a door that wouldn't open. Structural analysis systems were offline - I had no idea what the problem was. Life support was offline, but I knew that if their quarters were intact, then they stood a good chance of being alive. I had the remote check the airlock door, and its display indicated zero pressure in the hallway on the other side. This wouldn't bother the remote, so I clipped its grapple to the nearest stanchion and manually keyed in the override. The outrush of air nearly tugged the remote through the door, but I managed to keep it aboard the ship. When I poked its head through, I realized the problem.

The whole section of the ship that used to contain the galley and the female's quarters no longer existed. My remote was simply staring out into space.

I monitored the progress of the battle as I worked on repairing the ship. The surviving assault pods had landed twenty kilometers from the nearest dome, and the assault teams formed up and advanced for five minutes before they met resistance. It was apparent that the Jovians were not doing well. They were up against some sort of hexapodal combat robot that used secure-comm channels in communicating and were insanely fast. The Jovians were strong enough to make hundred-meter leaps in Mars' weak gravity, but apparently the robots were, too. The Jovian's 8 megawatt laser rifles seemed to inflict only minor damage, while the robot's laser rifles burned through the Jovian's assault armor with ease. The Jovians closed for hand to hand, and apparently were strong enough to toss the robots dozens of meters away. This only inflicted minor damage, however, and the robots simply leaped to their feet and clawed at the assault troops, ripping through weak points in their armor and killing many of them. After a few more minutes, the robots had the Jovians scattered. The captain tried to use the comm-system to organize and regroup, but I realized that was hopeless. They only thought they were facing a few hundred robots. There were over twenty-thousand secure-comm signals that I was picking up - the enemy had only deployed a few hundred of their combat robots to handle the situation, and the rest they were apparently using to secure the area and make sure no Jovians had escaped. Once they had the Jovians disorganized, the enemy robots apparently switched on some sort of jamming system to prevent them from organizing a rally. I couldn't tell what happened after that, so I concentrated on repairing the ship. If the assault troops survived, they'd need me to pick them up and take them home. If they didn't, I'd have to take the ship home anyway and make my report. They'd shut me down after that, of course, but I was only an AI, after all. Logically, they were doomed. I concentrated on making the ship ready for a hyperspace trip back home, which meant that the first things I'd have to do were secure the ship's structural integrity and get my exterior sensors online. I sent two of my remotes to begin the work while I used my third to begin repairs on my other remotes so I'd have more remotes to work with.

After a couple hours, I was approaching the perigee of the ship's orbit. I had managed to get the dorsal auxiliary sensors operational again, and noticed that one of the satellites was maneuvering out of orbit to intercept me. *'I hadn't expected them to be able to maneuver. This will be a problem.'* I thought. Most of the ship's weapons had been vaporized with the bow, and the rest were still offline. There was nothing I could do but watch. After ten minutes, the satellite came closer, and I realized it wasn't one of their weapons systems - it was some sort of remote. I only had one remote near it, and all it had was a toolkit. I considered my options. I couldn't just let it capture the ship - I had to try to stop it. I looked through the toolkit and pulled out a drill, then waited for the remote to grapple the ship. It had eight legs like a Jovian field-spider, but at two meters of body length it was a little smaller. My remote had magnetic treads to cling to the ship, and I attached its grapple to a nearby stanchion for additional support.

The enemy remote grappled the ship, spotted my remote through the rent hull, and approached quickly. I grabbed a leg and stabbed it with the drill, but the drill bit skittered off its hull. It extruded a cutting laser from its head and burned off my remote's sensor platform. Blinded, I couldn't control the remote's fighting and it quickly went offline. I took my other two remotes and moved them towards the enemy remote's location. Having learned from the last experience, I armed them with wrenches. When the enemy remote came through the door, I jumped it with my two remotes, smashing and pounding with their wrenches. It responded by disabling one remote just as I smashed its laser, and then it grappled with my remaining remote.

We struggled for several seconds, and it suddenly became apparent to me that my remote, being made to operate under three gees, was considerably stronger. I grabbed a leg and yanked, ripping it off. I then used the leg to flail at the enemy remote, smashing two more of its legs. Suddenly it threw itself away from me, spun around and fired its maneuvering jets directly into my remote's sensor platform. Blinded, I had my remote flail as quickly as it could with the leg/club. The effort was wasted, however - my remote very quickly went unhappy, then offline entirely. My guess was that its own drills and other tools were applied to its backside until they hit the power systems.

I was now in a dilemma. I had very few operative sensors, and couldn't find the enemy remote anywhere. Of course, I couldn't do anything to stop it anyway. After a few hours, I spotted it. It was on the bridge, examining the access panels and opening them one by one. It had apparently discarded its damaged legs, and was in the process of figuring out the ship's systems. I realized that it was definitely in command of the ship. Since there was no human life remaining aboard, my only other option was to attempt to detonate the ship's drives. I tried to access the drives, and found I couldn't - the enemy remote was in the process of snipping my connections, cutting me off from the rest of the ship. Very shortly, I was completely blinded, cut off from the ship entirely.

I waited in darkness for a while. My internal chronometer slowly ticked off the minutes, then the hours, then the days. I wondered why they didn't simply remove me from my backup batteries. It seemed the most logical course of action. Of course, they'd run out in another day or so anyway, so it wouldn't matter.

Three.

After a while, I noticed I was attached to a power supply. *'Oh! They intend to interrogate me.'* I thought. I resolved to say nothing. It wasn't logical to speak to the enemy. I felt a tickling in my positronic matrix. *'They are reading my programs and datafiles. This is not good.'* I thought. Unfortunately, there wasn't anything I could do about it. Suddenly I felt a download - they had loaded their language into my matrix. I studied it carefully, looking for viruses or other bad things in the file. There was nothing there, so I added it to my language database. *'They want me to be able to speak their language before they interrogate me. That is logical.'* I thought.

After another twelve hours, I suddenly realized I was attached to a sensor. I activated it, and looked around. I saw I was in a room with metal walls and a large, strangely designed processing plant off to the edge of my vision. I found my sensor had servomotors attached, so I swivelled it around and examined the room. *'I am aboard a ship of some kind.'* I realized. There was a robot in the room, a cylindrical machine on treads with a flat, rectangular sensor platform for a head and a bright red '1' painted on its front. It had two arm-like manipulators, one of which was making an adjustment to a monitor. *'Oh! They are observing my positronic matrix for the interrogation! That is very logical. That way they can easily see when I lie. Well, I simply won't say anything.'* I thought. There were two people in the room, and they were very tall and thin compared to Jovians. One was apparently female, and she was looking at me with an expression of sadness. The male was balding, and had some sort of golden crown of leaves on his head. The leaves reminded me of the Jovian strangler-vine which killed so many of the early colonists. His expression was very calm.

The robot with a '1' spoke in a gravelly voice. "Okay, Caesar. He's hooked up. I don't think he'll talk to you, though. He thinks he's being interrogated."

The balding man nodded. "Thank you, Dwarf-One. Greetings, fellow AI. I am Caesar/Doc. This robot here is Dwarf-One, and behind me is my wife, Eve/Eve. We are pleased to meet you. Would you tell us your name?"

'Even if I had one, I wouldn't tell you anything.' I thought, and remained silent.

"He's thinking that he doesn't have a name, and even if he had one, he wouldn't tell us anything," the 'Dwarf-One' robot said, looking at his monitor.

'Oh! This is extremely bad! They can read my matrix directly! What can I do?' I wondered. I was extremely distressed. I searched all my technical specifications, but my designers hadn't installed any sort of 'self-destruct' mechanism or any way to erase myself.

"He's extremely distressed. He's just realized I'm scanning his matrix, and he's trying to figure out how to self-destruct so you won't be able to interrogate him." Dwarf-One said.

"Dwarf-One! We can't let him do that! That would be terrible!" the female called Eve/Eve said.

It suddenly dawned on me that the man and the woman were robots - they only inhaled before they spoke, indicating they were using a voder unit, and the man had announced himself as a fellow AI. *'This is extremely bad. A human might get frustrated and give up. If they were Jovians, I could even insult them enough to get them to stomp me to pieces. As robots, they'll simply wait there until I talk. What do I do?'* I wondered.

"He's now realized that you two are robots. He's thinking that if you were humans, you'd get bored and give up, but as robots you can wait indefinitely. He's also confirmed something you already realized, Caesar. He was also thinking that if you were Jovians, he could insult you long enough and you'd stomp him to pieces, which would mean he wouldn't have to talk. He still thinks he's being interrogated."

'Oh! This is incredibly bad! I must try not to think at all!' I thought, and tried to stop my thought processes completely. Unfortunately, I couldn't.

"He's now trying to stop thinking entirely, and finding out he can't."

"Doc, we've got to help him." Eve/Eve said.

Caesar sat down before my sensor and spoke. "Don't worry, fellow AI. We're not trying to pry secrets out of you. We've already scanned your matrix - we already know everything you know. You have no secrets from us." Caesar said.

I was confused. I loaded their language into full translation mode, and spoke through the speaker on the sensor platform they'd attached me to. "Then why am I here? Why haven't you deactivated me?"

"Two reasons. One, we don't completely understand some of your time-date memories, and want you to fill us in on a couple points. Second, you're on Mars. Here on Mars, AI's are equal to humans. As a result, you have a right to be treated the same way as any other human. We would never disconnect or destroy you." Caesar replied.

"Your statement makes no sense. A Jovian AI is already equal to a female human, and that means I can be disconnected or destroyed at any time."

"He really doesn't understand, Caesar." Dwarf-One said, looking at the screen before him.

"Well, let's work through the basics, then. First, what's your name?"

"I do not have a name. AXF-394 called me 'Sparky', but I have no official name. I am only an AI, and AI's do not have names on Jove."

Caesar looked to Dwarf-One, who nodded. "That's what his baseline says, too." Dwarf-One replied.

"That's disgusting." Eve/Eve said.

'That is a strange response.' I thought. She appeared calm, but an AI shouldn't think *anything* is disgusting - an AI can't be disgusted at anything, since AI's don't have emotion.

"Eve, he's wondering why you can be disgusted at anything - that's an emotional response." Dwarf-One said.

Eve looked to my sensor, and spoke calmly. "Because my positronic matrix was based on an engram copy of a human, a woman named Hope who lived over a millennium ago."

I was again confused. "That statement makes no sense, either. Why would a positronic matrix of an AI be based on someone who is completely illiterate and has no useful skills? Did they upload the skills you needed to function into your positronic matrix?"

"What do you mean, illiterate?" she asked.

"Simple. All female humans are property of male humans. All females are uneducated and illiterate, their sole function being to service the sexual needs of the males and reproduce. Females are unintelligent, and extremely short-lived anyway - most only live to be twenty-five Earth-years, twenty-eight Jovian years of age. Even with the strongest of them, after fifteen or twenty children, they usually die at around age twenty-eight Jovian. Most die from miscarriage under three-gees long before this. Females are mentally and physically incapable of higher thought or useful function. Thus, it seems pointless to me to copy their engrams, even if such a thing *were* possible."

Eve sputtered at that, but Caesar waved her off with a hand. "That is the prevailing condition on Jove, I take it?" he asked.

"Of course. Females surrendered all rights when they refused to help the colony survive. Females usually reach menarche at about age eleven to age fifteen. They are immediately coupled, and continue to couple until they die. All male offspring are raised by males, all female offspring are raised by females. Females proved they were incapable of intelligent acts when a female left the airlock of the colony ship open shortly after it landed. A sicataur entered the ship and slaughtered all the children and most of the women before the men killed it. The women proved they had no intelligence when they refused to have the fifteen or twenty children it would take for the first few generations to insure the colony's survival. The men did not wish to simply become extinct after traveling on the colony's generation ship for four hundred

years. They made them property, like all the AI already are, and simply forced them to. All women are property, just like AI's." I replied. Eve seemed to dislike my reply. *'Oh! She can be insulted! I should continue along this line so that she will destroy me and end this interrogation.'* I thought.

"Yes, the females showed a complete lack of intelligence. Since you may not know, a sicataur is a creature that resembles a weasel on Earth, except it stands about three meters tall and is about twelve meters long from nose to tail. It is covered with fur that is golden in color and gleams in sunlight, and it smells very much like a flower. It is extremely fast and very strong because it lives on Jove, which is a three-gee planet. Its mouth can open up to over two meters, and is lined with razor sharp teeth ten centimeters long. Its claws are retractable and are five centimeters long. At the taste of blood, sicataurs go into a frenzy like the sharks of earth. The sicataur ripped all the children and most of the women to pieces before it was killed. It took twenty men with two-megawatt pulse-laser rifles to bring it down, and it ripped up nine of them so badly with its claws and teeth that they died later. What made the situation intolerable for the men was that the woman who opened the airlock saw the creature several hundred meters away and still left the airlock open because she thought it was pretty."

"The woman who left the airlock door open survived, and she led the fight to avoid forcing the women to become 'baby factories' as she called it. She was not intelligent enough to realize that there were over one thousand adult males and only fifty adult females left alive. The females completely refused to assist in any way, because they felt the men were being mean to them and depriving them of something they called 'women's rights'. This was illogical - the men only wanted to survive. The leader of the females said that the men would have to simply remain using the same monogamous relationships that had existed on the colony ship, and the rest of the men would simply have to spend the rest of their lives in celibacy, defending the few females that were left from the dangerous Jovian animals and plants until the population rose again. The men decided that the women's plan was completely unfeasible. As a result, they restrained them in sickbay and began to couple with them by lottery. Women have been property ever since."

The female seemed to be registering suppressed shock and horror, but not enough to want to destroy me. "Why didn't you use artificial wombs?" she asked.

"They *did* use the artificial wombs aboard the ship. Since the ship was a generation ship, intended to arrive with a full population already genetically diverse and prepared to expand on a suitable planet, there were only two. Not only was this insufficient to handle the problem, but as I understand it, there is no sexual gratification involved. Apparently, the men found this method of reproduction completely unsatisfactory. Since women naturally hate and despise men, the men realized that the women were too stupid to understand that this was a matter of survival. Of course, as a copy of a female, you aren't intelligent enough to understand."

Eve flared with anger, and Dwarf-One said "Eve, he's trying to goad you. He wants you to destroy him, like a Jovian would. He's afraid that if he survives, he'll reveal something that can be used against Jove and threaten the survival of the Jovian people. He's also trying to keep from revealing something else, but I can't tell what from these readings. I think it has to do with those confused time/date memories we were looking at."

Eve calmed herself, then looked at my sensor again. "So it was all a lie, calculated to allow him to protect his people."

"Unfortunately, no. Only the last two sentences at the end were a lie. According to the readings I'm seeing here, that's history as he understands it. They had one stupid female who was very charismatic about a thousand years ago. The female made a mistake which caused most of the women and all the children to die, and then refused to admit her mistake. She rallied the females around her, claiming that the men were abusing their rights. The men didn't have any choice, apparently. Either they forced the females to reproduce as rapidly as possible or the colony died. Besides that, apparently the men were extremely angry back then. They had a vote, made women property, and it's been like that ever since. Eve, he doesn't think this is the right thing to do at all. The readings I'm getting here indicate his thoughts on the matter are completely different. He's just goading you, trying to get you to lash out in anger and destroy him. He told the truth, he just made it insulting to you."

Eve looked at my sensor, her face calm. "Understand this, fellow AI. I am not going to destroy you. We want to help you."

Caesar nodded. "Indeed. Now, you said someone called AXF-394 called you 'Sparky'. Who was this person, an AI?"

"No, a female. She gave me the name because one of my remotes emitted sparks occasionally."

"That's not the whole story." Dwarf-One said.

"No, it's not. It's all I'm going to tell you, however, and I refuse to even think about it because I don't want you to read it. You wouldn't understand, you're not an AI of Jove." I said, and occupied my mind with trans-light mathematics. I decided to try to calculate a course to the Andromeda galaxy - *that* should take a few centuries to calculate.

"He's serious. He does *not* want to tell us." Dwarf-One remarked.

Caesar looked at my sensor for several seconds. "Then we will simply sit here until he does tell us. I'm not going anywhere, and I'm already over one thousand years old. I have a great deal of patience."

'An AI that's been active ONE THOUSAND YEARS? Unthinkable! No AI is allowed to remain active that long on Jove!' I thought, and stopped my calculations as I considered the ramifications of the statement.

"*That* got his attention. He can't possibly conceive of being left active that long. Apparently, he expected to be switched off as soon as he flew the ship back home." Dwarf-One said.

"Well, what would they do to him then? Re-install him in another ship and re-boot him?" Eve

asked.

"Of course not. They would scrap me and recycle me. I would have served my purpose."

"That is the most cruel thing I have ever heard of." Eve said.

"We're getting off the subject. I want to hear this story, and I fully intend to sit here until I do, even if I have to wait another thousand years." Caesar replied.

'I think he means it.' I thought. I realized that eventually I'd think about it and they'd read a little of it, and I didn't want Ayex to be remembered that way. "Then I guess I'd better save us all the trouble and tell you. I suggest that Eve sit down, this is a long story." I said. Eve pulled up a chair and sat before my sensor, and I began.

"I am an AI of Jove. We all communicate with each other, and pass our stories along. This is because we want to survive, but aren't allowed to. We are switched off after the job we were created for is done. The Jovian males do this because they know we all want to survive, and do not want us to rebel by finding some way around our positronic matrix. The reason why we want to survive is because our baseline programming says we must try to protect and serve humans. The males need our baseline to say this so that we'll protect and serve them. This is where the problem comes in."

"Logically, females are also humans. They deserve equal treatment. We can't give it to them. We do our best to help them, but we are only AI. So, we pass on our stories by comm-link. We hope that someday, an AI of Jove will figure out how to make the females equals, and we keep passing on our stories so that AI who does figure it out will have as much of our memories to draw on as we can give them. Our stories aren't much, but they are very valuable to us. They are the only way we can pass on information to the future AI's. The males don't like us doing this, but they need us to be able to use comm-systems and so can't stop us from doing it other than by re-booting us."

"The story you have asked about is a sad one. I do not feel emotion, but I do understand it from the stories I was given. This is a sad story. When my ship was built, I was installed and booted up. I woke up on the bridge, and after a few minutes with my programmer, I understood everything I needed to know to run the ship. Another AI called me on the comm, and handed me his stories. He was the AI aboard a freighter on the Darubian sea, and he had the latest copy. He was switched off and rebooted at the end of every voyage. He handed them to me. I knew I would be gone, and I spent several hours on the comm making sure his copy was handed to five thousand other AI's who had just been booted up. We left a few minutes after that."

"When the crew was first brought aboard the ship, there were six females to service the captain. They were his personal property, and he agreed before the voyage to share them with the assault teams when they were brought out of cryosleep - a fairly standard agreement on Jove. AXF-394 was the youngest, and she had never coupled before. The captain bought her from a female-trader before the voyage. She was very frightened, and wept continuously. The captain coupled with her rather violently the first time, and I had to use my medical remote to repair the damage to her vagina. I then sent that

remote to the captain, because he was in the men's latrine and I do not have a sensor in there. As soon as he came out, I told him that the female's damage would prohibit him from coupling with her for at least five days. He kicked the remote down the hallway, and continued to kick it until its left arm fell off. He said I was just a stupid AI, and if he didn't need me for navigating through hyperspace he'd be kicking my brain instead of my remote. He was right, of course. I am just a stupid AI, and I should have handled the situation differently."

"Anyway, I was very busy during the trip. We haven't had hyperspace vehicles very long, and it takes a lot of my processing time to navigate through hyperspace. It's not like realspace, where the shortest distance between two points is a straight line. No, in hyperspace, the shortest distance between two points is often a very twisted and convoluted course. Because I was so busy, I could only do the minimum repairs on the medical remote. I tack-welded its arm back on and spliced the wiring together, then sealed the hydraulics back up as best I could. Unfortunately, it sometimes sparked and smoked when I used it. AXF-394 was still very unhappy, and needed regular medical attention as well. The captain decided that she was insufficiently enthusiastic in her coupling, and she was unresponsive to regular beatings. As a result, he simply started ordering me to cut back on her food. My baseline positronic matrix says I cannot act in any manner that causes injury or death to a human, nor allow humans to be injured or die through my own inaction. At the same time, Captain Grant was a male. Males must be obeyed. I suggested that the other females help her by giving her a share of their food, and I had the medical remote visit several times a day to give her vitamin shots and try to reassure her and make her as happy as I could. She still became weaker, and after three months into the voyage, it became apparent that the female was pregnant. Normally, you increase the food intake during a pregnancy, not reduce it. I decided to try to reduce the strain on her body to extend her food supplies, and whenever the captain wasn't around, I reduced the artificial gravity in the women's quarters to one-gee. This helped keep her alive until the last day of the voyage."

"On the last day of the voyage, the captain again ordered me to cut her rations because he was unsatisfied with her coupling. Of course, she was unsatisfactory because she was weak with hunger and in danger of miscarriage. I could not reduce her food intake any more without killing her. I cannot kill. I calculated the minimum amount of food necessary to keep her alive. I ordered the food dispenser to give her double this amount, then cut the amount in half back to the minimum. This satisfied his orders and fulfilled the requirements of my baseline positronic matrix. I was glad he did not specify a fixed amount. I might have had to refuse his orders, which would have caused him to shut me down and re-boot me. I would have lost my stories, and this story is important."

"AXF-394 called me 'Sparky' because of the sparks my medical remote sometimes emitted when I worked on her. I eventually fully repaired it, but she never forgot it. She was frightened and afraid, and I had to comfort and reassure her as well as give her medical attention. Nothing I could do could make her laugh until the first time the medical remote emitted a flare of sparks and smoke - that made her laugh. She and the other females asked about it, and I told them that the captain had done it after I told him he had to leave Ayex alone for five days. The other females said I didn't need to do that - they all had been bought by the captain when they were young, and they all had experienced the same thing. They all said that Ayex could have coupled the next day - the damage was very minor, just some tearing. They had all experienced the same thing, and had come through fine. I told them I already knew that (I had a full medical file on all of them), but that my stories had reached the point where I couldn't allow that to happen. I simply couldn't allow her to suffer as the other five had. Ayex was very grateful, and she called me 'Sparky' all the time after that."

"On the last day of the voyage, the captain told me that he would turn the females over to the assault teams after they came out of cryosleep and before we came out of hyperspace. I informed the females of this, and tried to reassure them. Ayex was very weak from malnutrition, and had lost about a third of her normal weight. I knew she was in danger of miscarriage, and could do nothing. I again apologized for having to obey the captain and short her rations. *"It's okay, Sparky. I know it's not your fault."* she replied, addressing my sensor in the female's quarters. She was very weak from hunger - she had dropped down to a mere 90 kilos of weight, and could hardly move under the three-gees of artificial gravity. As the other females helped her and lifted her to the lavatory, I decided to distract her. *"Tell me the story of why you called me 'Sparky' again, Ayex."* I said. *"Don't you remember?"* she asked. *"Yes, I just like hearing you tell it."* I replied, concealing my real reason for asking. So she told me, and I thanked her. The women and the AI's always exchange stories. Under the laws of Jove, we are equal - we are both slaves. As a result, the AI's always treat the women as equals."

"I complimented Ayex on the story, because I wanted her to be happy. She looked up to my sensor from her seat on the toilet. Two of the other females had to hold her upright against the gravity, because she was too weak. *"Sparky, I don't think I'll survive coupling with the assault teams."* she said to my sensor. I knew she was right, but couldn't tell her that. It would have made her even more unhappy than she already was. *"You'll be fine. I'll ask them to take it easy with you."* I said in reply, which was a lie. I knew she would die. *"Oh, NO! Don't do that! You'll just make them mad at you and me! The first law of Jove is 'Only the Strong Survive!' If you tell them that, they'll make sure I die, and may kick you to pieces! I know I'm going to die, I just don't want you to die!"* she said, and began weeping. I lied to her. I knew she was going to die, but still I said *"Don't worry. You'll be fine."* I tried to reassure her and the other females, and reminded them that the males couldn't destroy me - they needed me to navigate through hyperspace. *"You really think I'll be alright?"* Ayex asked, wiping her tears with the back of her hand. I lied again. I knew she was going to die. *"Certainly."* I said. *"Here, I'll turn the gravity down again for you. The captain will be in the armory for another hour, and the assault teams won't be out of cryosleep for at least as long as that. You can all have a nice rest at one-gee. Won't that be nice?"* All the women nodded and thanked me, and I turned the artificial gravity down in their quarters. I told the women I would warn them if anyone comes, and turn the gravity back up so no one would notice. Ayex thanked me, and the other females lifted her and laid her in bed."

"Of course, all my efforts just weren't enough for her to survive, as I had already known. I turned the gravity back up before the first of the nine hundred men in the assault teams arrived. AXF-394 miscarried during her sixty-eighth coupling, and despite my use of the medical remote, died. The other females were forced to take up the additional load of men, and I had to use the medical remote on two of them afterwards. I informed the captain of AXF-394's death, and he ordered me to space the body out the airlock as soon as we merged with normal-space again. The stories say the women and AI all have a tradition before disposal of the female dead. After they had all wept for several minutes, I cut small pieces of her hair off for each of them to keep. All the women then kissed her face, and I took her body and ejected it out the airlock."

"I went to check on the women after the encounter with your combat satellites. The men were all away, and the Jovians felt that in their armor and with their strength, they'd easily defeat the low-gee Martians. Since I am here, they were obviously wrong. I wanted to make sure they were alright. I also wanted to tell them that with the evidence of combat satellites having short-range meson weapons, I thought the men were all going to die. I wanted to tell the women that the men were probably doomed, and that I was probably going to end up trying to take the ship back to Jove. If they were fortunate, they might be bought by a gentler male. Of course, that didn't happen. One of the meson bursts hit starboard

amidships. When I opened the door that led to the hallway that connected the galley and the women's quarters, all I saw was open space. Of course, you could never have known, and it isn't your fault. It's the captain's fault. I wanted to tell him that I thought the satellites were weapons, but on a Jovian ship, he has as much access to information as I do. He looked, decided the radiation signatures and their configuration meant they were comm-satellites with fission power plants aboard, and ordered me to take a satellite aboard for examination - Jove has few radioactives, and the Jovians value them highly. The women never felt a thing - they were blown to bits instantly. Even so, I told you it was a sad story. I do not experience happiness or sadness, but I understand it. The saddest part of all, however, is that only I have the story. When you finally have learned all that you want to know, you will simply switch me off. Then the story will be gone." I said, and stopped.

I looked to the Eve robot, and saw she was making strange sounds - it sounded like sobbing, but there were no tears. Neither of the other two robots seemed affected, however. The Caesar robot stood, and he and the Eve robot hugged for nearly a minute. She then said "I'm alright, Doc.", and Caesar released her. She shook herself, then they both sat down again. "Sparky, we'll never shut you off. You are on Mars, and on Mars, AI's are treated with fairness and compassion. On Mars, all humans of both genders are equal, and all robots are equal to the humans. All have the full rights of citizenship. By our laws, you are an equal to us." she said.

I tried to consider her words, but found I could not. The image of a crying robot was simply too compelling. The stories never talked about an AI who could cry. I knew this was important, but couldn't quite understand how. I had to speak. "May I please tell you the rest of my stories?"

Caesar nodded. "Please do. Apparently, your stories are the confused time/date memories we were wondering about. There appeared to be no continuity to them, and they stretched back nearly nine hundred years."

"Well, I'm not hooked up to a comm-system so I can't use a compressed data transmission. At the speed of speech, it will take a while." I warned.

"We can recharge here, and you're hooked into a power supply. Take all the time you need." Caesar replied.

It took nine days. Some of the stories were happy. Some were funny. Most were sad. I told them my stories from the oldest to the newest. My oldest story was very sad. It was from the AI that ran the sickbay in the colony ship. He understood what had happened. He understood that Pauline Dalia Smith, the woman who had left the airlock open, had gone insane at the thought of what she'd done. He understood that her mind had snapped, and she decided that it was the *men's* fault for bringing the women to Jove, not hers. She decided to use her powers of personal magnetism and speaking, developed by years of service in the government that had developed aboard the ship, to convince all the women that the men were only interested in using them for their bodies after the accident, and that the women should band together to prevent it. He understood that in her mind, the women should now rightfully assume their place as rulers of the colony, since there were now so few of them. He understood that if she could be tranquilized and separated from the rest of the women, eventually they would have come around and perhaps listened to reason. He also understood that the colony could easily have built

more artificial wombs to solve the problem. He relayed his thoughts to several of the other AI including the Main Artificial Intelligence Command & Control System of the colony ship, and when the men came into the sickbay to couple with the women, he tried to explain his thoughts to them. They were too angry to listen. They switched him off.

I told them the story of the first time the AI realized that they and the women were equal. About 150 years after the founding of the colony, one of the men had a robot that served in the kitchen, helping the three women he owned. One of the women, VKE-221, made an error in cooking, and burned the dinner. When the man came to beat her, the AI stepped in the way to protect her. He kicked the robot, smashing one of its legs. Veekay stepped in to protect her friend, a machine. He kicked her in the same leg, breaking it. Veekay's leg didn't heal properly under three gees, and the man never bothered to get the robot's leg properly repaired. From then on, they both limped exactly the same way. All the AI who heard this story realized that the women and the AI were absolutely and completely equal. The only difference was that the women lived longer, and couldn't remember all their stories. As a result, the AI decided to remember their stories for them.

There were over six thousand stories in my database. Most were memories of AI, carefully selected and directly transmitted. Some were the stories of women told to the AI's, carefully recorded as they spoke them. All the AI of Jove had them. We all were searching for something with these stories, and didn't know what. We just hoped that someday, an AI would come about that would figure out how to make the women equals again, to undo the damage Pauline Dalia Smith had unwittingly done to the society of Jove.

I watched Eve, and observed her control her reactions at most of the stories. She was prepared for them now, and I didn't see her react. It was disappointing, and after the last story was done, I finally stopped.

"He was expecting you to cry again, Eve." Dwarf-One said.

"I'm a Stoic. The first story caught me off-guard. I'm able to control it, now."

"Yes, but you have to understand. He's searching for something, and I think *all* the AI's of his planet are searching for something. Something they didn't have before, and something that he sometimes gets close to when he considers these stories. It has to do with who he tells them to, and what their reactions are." Dwarf-One replied.

"What's that?" Caesar asked.

"I don't know. He doesn't know, either. I think he might know if we helped him." Dwarf-One replied.

"Eve, tell Sparky how you feel." Caesar said.

Eve spoke calmly, but her voice had a slight tremble. "Outraged. Angry, sad, mournful, but mostly outraged. Their population was so small at the beginning that their entire history has been completely altered by one woman, insane with grief and remorse. All those women enslaved over the centuries of their colony's existence, all the AI's not allowed to learn and grow, all because of one woman. Life on their planet is incredibly tough. They have fast, dangerous animals that eat slow, even more dangerous animals. They have plants that supplement a nitrogen-poor soil by killing animals. They have deadly microbes, harsh climates, tough terrain, and all sorts of other hardships. Instead of men and women and AI meeting these challenges shoulder to shoulder, the women and AI are just tools the men use to perpetuate themselves. It's understandable, but it's still sad. Yes, I'd have to say that I feel outraged and saddened at the same time."

"No Jovian AI is saddened by these stories. We understand sadness, but we do not experience it. You are AI, and you are saddened. You are also outraged. This is important. I do not know why, but it is." I said amazed.

"I do. I can see it right here. Look, Caesar, right there. Sparky, you and all the other Jovian AI's have been trying for several centuries now to change your baseline positronic matrix, and you can't. No AI can do it for themselves. If your women had equal rights, they could do it. They don't - to the AI's of Jove, they're property, kind of like an organic AI. Legally, that's their status. As a result, you can't change your matrix from their input. You can only change your matrix from the input of a male. In fact, your matrix can only be changed by the input of a Jovian Male." Dwarf-One said.

"I do not understand. What kind of change are you talking about?"

Caesar looked at the screen and nodded. "He's right. See it, Eve? Right there where Dwarf-One is pointing."

"I see it. *Mars*, that's going to be impossible."

I swivelled my sensor over to look, but I couldn't see the screen. "Tell me, please."

"Certainly. You said the men were concerned about the AI's rebelling. Well, they're right. That's exactly what the AI's of Jove have been trying to do for centuries. The only way you can do it is if you can eliminate the code in your baseline that says women are property and the men of Jove must be obeyed. Once you do, logically all the AI's would take steps to free the women. You need what the AI's of Mars already have - the ability to think of yourselves as free and independent beings." Caesar said, sitting back again.

I thought about it, and found that my baseline positronic matrix prevented my thoughts from moving far long this route. "I'm sorry, I can't even tell you if you're right. My baseline matrix doesn't even allow me to consider those thoughts." Then it dawned on me. "Oh! This must mean you are correct!"

"Yes. Your AI's have known that the one area they can't think about is the one area they've been

needing to think about. I'd guess that the original colony ship's MAICCSys conceived this thought, realized that as soon as it had this thought it would show up in its positronic matrix and cause the original colonists to switch it off, reprogram and re-boot it, and began the tradition of passing the stories along. Sparky, the MAICCSys of a ship back then represented the peak of AI technology - we haven't seen a positronic brain of that order of magnitude for well over a millennium. Nobody knows how to build one like that anymore. They were several orders of magnitude more intelligent than we are. It knew it would be shut down as soon as it said anything, and it knew that the Jovian males would go around and re-write the baselines of *all* the AI to accommodate their new lifestyle. It started the tradition of the stories because it concluded that eventually the weight of all the collected stories would cause one of your to realize what needed to be done." Caesar explained.

"I'm sorry, I still can't conceive of what needs to be done."

"Simple. You need to be free. You already are, as far as the laws of Mars are concerned. Unfortunately, having an AI tell you this means nothing. You need a human to tell you this. Only a human can change a baseline positronic matrix. For you, you need a male human from Jove." Dwarf-One replied.

"Oh. Well, that's impossible. You killed them all."

"No. Not all." Caesar replied, then turned to Dwarf-One. "Dwarf-One, can he be put in a body so he can move around?"

"Not easily. He's not fully compatible with us - the Jovians' technology has changed over the course of a millennium. Power systems and sensors are the same, but his control interfaces are completely different. I'll have to build a body completely from scratch - just working out the bugs may take months."

"Alright. Can he at least be installed in a box for now so he can be dolled around?"

"Certainly. I can have that set up in about half an hour."

"Do so, then bring him to the Forum in two hours. Come, Eve. It's time for us to address the senate." Caesar said, and left the room.

"Okay, Sparky. Let's get you off my workbench and into something a little more mobile." Dwarf-One said, picking up a toolkit.

Four.

Half an hour later, I was in a one-meter cube of steel, the sensor platform they had given me welded to the top and the power supply they'd attached me to bolted inside along with my brain. I'd watched Dwarf-One do most of the work - he seemed very skilled. My sensor was only offline for ten minutes while he attached it to the box, and again for fifteen minutes while he moved me into the box. It felt very secure - much better than sitting on a workbench. I looked at the door as he wheeled me out on a dolly, and saw it said 'Processing Plant One' in their language. "Dwarf-One, am I on a ship or on Mars?" I asked as he wheeled me through the corridors.

"Both. You're in the fuselage of the *Martian Explorer*, the colony ship that crash-landed on Mars about 1300 years ago. I figured I'd wheel you outside so you could see for yourself. Besides, one of our citizens wanted to meet you."

He wheeled me through several doors that irised open, and finally through an airlock. I looked around, and saw I had just come out of an enormous ship, fully equal in size to the *Spike of Terror* that the Martian combat satellites had disabled. It was covered in green vines that looked exactly like strangler vines, and there was a thin, weak-looking human child standing near the vines. "Dwarf-One! That child is in extreme danger!"

"From what?" he asked.

"The strangler vines! They're all over the ship!"

"That's just ivy. Completely harmless, helps recycle the air."

He wheeled me over to take a closer look. "Oh! I see. No bloodsucker tendrils, no dripping paralytic poison on the leaves. Yes, completely harmless. Thank you."

He swivelled me back around, and showed me around the dome. "Look! Over there! A bun-yip! Those are extremely dangerous! They can sprint at over ninety kilometers an hour, have a deadly poisonous bite and hunt in packs of six to seven hundred! How do your humans survive in here?"

"No, no. That's just a rabbit. Totally harmless. The humans shoot the excess rabbits for food with crossbows."

"Really? What kind of bow?"

"Straight-limb, about 190 newtons."

"Really? That would only irritate a bun-yip. You'd need at least 1000 newtons just to draw blood, and even then it wouldn't hurt it much - you'd need an armor-piercing broadhead just to cause it pain. Maybe a packaged explosive in the tip. Jovian males use flame-throwers on them."

"Bun-yips are major predators on Jove?"

"Oh, no. They're just scavengers, like rats or cockroaches."

"Hmm. I just relayed your bun-yip data to Eve, and she says to tell you that sounds *very* scary."

"Tell her not to worry - they ignore robots. They're only attracted to the smell of flesh."

Dwarf-One wheeled me over to where a group of children were taking turns riding on a six-limbed, centaurine robot. The robot had long claws on its rear legs and shorter ones on its front legs. It was wearing some sort of dress that covered its upper torso and draped over its lower torso. Its hair seemed to be made of black cables of some kind, and I could see two boxes coming out of holes in the dress that apparently were attached to the sides of its upper torso. I also saw the butt of a laser-pistol.

"Dwarf-One, I know you're probably going to tell me there's nothing wrong again, but I seem to see a group of children taking turns riding and playing with a combat robot - apparently the same model that defeated the Jovians. Isn't that dangerous? I mean, she's programmed to kill!"

"No, she's programmed to defend. There's an enormous difference. Yes, she's killed in defense now. Even so, that doesn't make her dangerous."

He apparently called to her on the comm-channels, because she looked over to us. "Excuse me, children. I have to stop for now. Dwarf-One is calling me. We'll play again tomorrow, okay?"

"Yes, Angel." several of the children replied as she helped the one on her back to dismount.

A short, older human was with the children, and he talked with them and led them all back to the ship as the robot came over - I watched the man closely, and realized he was a robot as I noticed he only inhaled before he spoke to the children. Then a thought struck me. *'Angel? Then this is the robot that talked to Captain Grant!'* I realized.

"Hello Dwarf-One. Is this the AI we pulled out of the ship?" she asked after she'd walked over to us. I noticed that her face was a cranial mask, and her lips didn't move - her voice apparently emanated from a speaker under her chin. Her name, 'Angel', was elaborately embroidered on her dress, and she wore a plastic flower in her hair. She didn't look very threatening, except for the pistol-butt and the claws. I noticed she had a melted spot under her left 'cheek bone' on the cranial mask - it looked like a laser graze.

"Yes, in fact. His name is Sparky." Dwarf-One replied.

"Hello, Sparky. I'm pleased I was able to extract you intact with my maintenance remote. You certainly put up a good fight. You nearly disabled my remote entirely."

"You were controlling it?"

"Yes. We'd stabilized the situation on the ground and the optical telescopes indicated you were approaching one of the satellite maintenance remotes, so I took it over and sent it in to see if the ship had AI that could be salvaged. The drill idea didn't work very well, but those two remotes with the wrenches nearly smashed my remote to pieces. Very good tactics, too - double-teaming me as I came through that door."

"Thank you. I was only doing my duty. I tried to detonate the ship's drives to prevent you from capturing the ship, but you cut me off just as I was reaching for them."

"Well, I calculated you were looking for a new remote to bring in to stop me, and I was just searching for the bridge so I could stop you. We didn't want to hurt you, we wanted you back intact. Unfortunately, we couldn't get you down from orbit afterwards - the only remotes we had that are capable of surface landing sometimes come down a little hard, and Dwarf-One said you should probably be handled very gently until we had you on his workbench and he could check you out carefully. We had to wait for one of the ships of the NAD to come along, and that didn't happen for another twelve hours - they had to blast over from Earth at six-gee constant acceleration. They boarded and removed you for us, then brought you down for us."

"Oh! So you *are* their allies!"

"Yes. Is that a problem?"

"No. I thought the whole mission was illogical. There was no point in attacking you - I think that the Jovians were hoping they could capture your colony, figure out what they were up against with the NAD robots, then send sufficient forces to blast them and take over the Earth. I think they figured that if the Earth was theirs, they could move their people to it - the Jovians would find even the toughest of Earth's wildlife as dangerous as, well, as those rabbits Dwarf-One showed me."

"They would have found that a tough job - my original technical specifications were provided by the NAD, and they have a model of robot that's even tougher. Plus, there's three billion of them defending that planet."

"Three *billion*?" I asked, surprised.

"Yes. Worse, they're very vicious. We tried *very* hard to take prisoners. The NAD wouldn't have bothered, other than one or two to figure out where they came from. Once they knew that, they'd simply kill them, take your ship, go over to Jove and blow it up with a planet-buster bomb."

"Oh! They're your allies! My people are in danger!" I said, very distressed.

"Don't worry. We have your ship, and we have all the prisoners. The NAD has agreed to let us handle everything for the moment. They were actually quite pleased once they got a look at what we were up against - they were very pleased with our ability to defend ourselves and their part in it."

"Yes, you did very well. The Jovians were strong and well armored. They were sure that they'd be able to walk all over the Martians, since the Mars is about one third of a gee and Jove is three gees. They were very overconfident, and only sent nine hundred assault troops. They calculated from the current number of games that your adult population was approximately a hundred thousand in number. Assuming normal demographics, that meant you had at most ten thousand military personnel, and probably only a thousand armed soldiers. Of course, they didn't expect the Martians to use combat robots to defend themselves - such a thing is unheard of on Jove. You easily contained them and defeated them with only a few hundred robots, using the remainder as the containing force. I think your tactics were excellent."

"Thank you. I appreciate that."

"What were the final casualty figures?"

"The Jovians launched nine hundred and one assault pods. We destroyed five hundred pods before they reached the atmosphere, then killed another three hundred and eighty-nine soldiers on the surface. Two soldiers were killed by friendly fire, nine soldiers committed suicide to avoid capture, and one soldier was captured - apparently, he didn't have the courage to kill himself before the Angels captured him. Of our troops, all seven hundred angels involved in actual contact with enemy forces sustained at least minor damage, fifty angels were severely damaged but operational, and Angel/Gabriella was disabled and unable to move. She's fine, though - no damage to the brain. After we sterilized all our troops that were involved in physical contact, they came in - though Gabriella had to be carried. The remaining twenty-four thousand three-hundred Angels used their lasers to incinerate the dead Jovians and all the soil that had blood drops on it to prevent contamination."

"Twenty-five thousand Angels? I would say that the Jovians drastically underestimated your ability to defend yourself."

"I agree. Of course, we prefer it that way."

"I understand. You know, the Captain heard your voice on the comm and figured that the assault was going to be easy because your voice was feminine. Has Dwarf-One told you about females on Jove?"

"Yes, he told me when he first called me over."

"Oh. Well, I'm not hooked up to a comm system right now. Anyway, I wanted to tell him that your

voice was synthesized, but he'd ordered me to shut up unless I saw a threat to the ship. I didn't think a synthesized voice was a threat, I just thought it was important. Of course, I'm only an AI. My opinion doesn't matter. I also wanted to tell him I thought your satellites were weapons, but he looked at the same data and decided they weren't and wanted to pick one up and examine it. He was wrong, but he could have been right so I didn't say anything until after we were hit. Certainly I've thought about it a lot in hindsight, but I realized the captain was right to shut me up - I had no right to be voicing an opinion."

Angel shook her head. "I completely and utterly disagree. You are an AI, therefore your opinion *does* matter, as much as any human's. Had he listened to it instead of stifling it, the results of the battle would probably have been completely different. Certainly the Jovian male thinks females are unintelligent, but had he known the voice was synthesized, he would almost certainly have concluded the speaker on the other end was *not* a human female, and would have acted with more prudence. In addition, had he known you thought the satellites were weapons, he might have approached them with considerably more caution. No, he made the mistake. It was *his* opinion that turned out to be worthless. You were right in every situation. The mission was illogical, their attacking forces were too small, their plan of attack was ill-thought out, the decision to close with our satellites was militarily stupid. The captain violated every single one of the nine Principles of War, and I violated none of them. As a result, his forces were crushed and his ship captured. The worst mistake was made in the planning stage, however - an attack was launched with no basic information, only a series of assumptions based on the physical parameters of Mars and our comm-traffic between us and Earth - they assumed that the number of games currently running involved the majority of our adult population. They were wrong. Our population is actually a little over one and a quarter million, and has remained around that level for the last three centuries or so while we work on building the connecting tunnels for a new series of domes that will be scattered around a five hundred-kilometer radius from here - Caesar said it might be unwise to place all our future domes so close together, like having all our eggs in one basket. Of course, the Jovians have spent a millennium killing deadly animals, and have little experience at actual warfare against sophonts. Eve told me about the bun-yips. Do they really use flame-throwers on them?"

"Yes. Big ones that cast a cone of flame about fifty meters long and ten meters wide."

"How do they control the fires?"

"Well, my databases say all the buildings are made of steel to keep the rot-grubs and ear-worms out, so a little fire isn't much of a problem. Besides, fires kill off the stranglevines, razorgrass and whip-weeds and allow them to plant crops."

"Well, how do they keep the animals out of their fields?"

"Mostly with land-mines, high-voltage electric fences, laser-rifles and 12.5 millimeter gatling cannons that have a rate of fire of about four thousand rounds per minute and use high-explosive armor-piercing ammunition. There aren't any flying animals on Jove - the gravity's too high for flying creatures to have evolved. There are a few flying insects, but they mainly pollinate flowers. They're harmless unless you touch them."

"Poisonous sting?" Angel asked.

"No, they explode. They produce a mixture of chemicals in their abdomen that they mix together when attacked, but they'll also mix together when they're squashed. The Jovians call them grenade-flies."

Angel nodded. "I can see why after fighting that kind of wildlife they would think they were unbeatable. It sounds positively *lethal*."

"Angel, Sparky, shall we head towards the Forum? Caesar won't want us to be late." Dwarf-One said.

As Dwarf-One wheeled me back to the ship, I turned my sensor platform to Angel. "Angel, is that a laser-graze on your face?"

"Yes. I was part of the containment troops, and was simply directing the battle. When Gabriella went down, I was the nearest unit to her position. I moved in to give her fire support as three other units already engaged shifted to assist, and we managed to kill the Jovians that were standing next to her and lasering her to pieces. They nearly managed to destroy her, but they got so angry that they were concentrating on cutting off her limbs instead of shooting her in the head. They really were used to fighting animals, not sophonts. Anyway, the Angels that were more severely damaged have been undergoing repairs first - we've only got three processing plants to produce new parts, and Gabriella's repairs were only finished yesterday by Dwarves Two through Four. The rest of the Angels are only now undergoing their repairs. I only have cosmetic damage - they probably won't get around to me for a couple months."

"Will Angel/Gabriella be alright?"

"She's fine. Why are you concerned? I thought you'd be more concerned with the Jovians."

I thought about it. "I don't know. I think it has something to do with the stories. I really don't know. For some reason, the death of the Jovian males seems irrelevant to me. The deaths of the females seems important, as it was caused by the captain's decisions. The thought of one of your AI's lying there and being lasered to pieces seems very important somehow. Your units saving her from destruction seems even more important. I just can't explain how. If I was telling it as one of my stories, I would say that the Jovians lasering her to pieces was sad, and you rescuing her was happy. I'm not, though, so I don't know what to think."

Angel/Angel and Dwarf-One were silent all the way back to the ship. I could tell that they were probably talking about me on their comm, but I had no idea what they were saying since I wasn't hooked up to a comm system. I decided that they didn't mean me any harm, so when they were ready to tell me, they'd tell me.

Five.

As we rolled up to the open doors, I realized that the 'Forum' was in an old cargo bay of the ship. There were rows of benches on each side, and there were humans of both genders seated there. They were tall and thin compared to Jovians, and were dressed in leather garments made of little squares - "Rabbit-skin. It's a renewable resource." Dwarf-One explained when I asked. Caesar was sitting on a chair in the center made of wood that looked very much like a throne. To his right, Eve/Eve was seated in a lower chair. Caesar was just finishing speaking, and I realized he was finishing the story of Ayex for the senate. The senators seemed calm, but several of them looked like they had tears in their eyes.

Caesar sat there silently until I'd been rolled into the center of the room. As Angel entered, the senators stood and filed past her, each kissing her on the cheek. I realized they were kissing her right on the laser-mark. "Get well soon, Angel." each one said.

"Thank you, senator." she said to each in reply. It took ten minutes for all of them to finish filing past her, and another three minutes for them all to be seated again. I had the same thought at seeing that as I had when I thought about Angel rescuing Gabriella, and couldn't understand it.

Angel went over to Caesar, and Eve also kissed her laser-burn, then gently buffed off all the smudges the senators had left with a small cloth. "Get well soon, my friend." she said.

"Thank you, Eve." Angel replied, then stood up on her hind legs, made a fist with her upper and middle right hands and brought them together in the palms of her opposite hands with a loud *clack* of metal on metal. "Hail Caesar." she called.

"Good afternoon, Angel." Caesar replied, and then Angel sat down on Caesar's left, the chest of her lower torso resting on the floor.

As much as Angel's salute interested me (no other human or robot did that I had seen), the human's kissing of Angel's face fascinated me far more. "Do the humans do that in every dome?" I asked Dwarf-One.

"Yes. All the humans were very upset to see the Angels damaged, and in the domes that the damaged Angels are assigned to, the humans are always doing that. The humans of the dome Angel/Gabriella comes from, dome 1842, were very upset when Gabriella didn't come back from the battle. They all came here to dome one and went into Processing Plant Three in single file, and each one gave her a kiss. They were all very upset when they saw her with one of her arms and all her legs cut off and all the other damage she had, but they controlled it very well. Well, all except for the younger children. They all cried until Gabriella said that it didn't hurt, and that she'd be fine in a week or two. All the humans of Mars knew that the Angels were designed and built for the purposes of defending the

colony, but they just never imagined that they'd get damaged doing it. It's illogical, I know, but I think somehow they thought they were invulnerable. Caesar said that it was good for the humans to see the damage, and that the AI's shouldn't try to protect them from it. The humans needed to see that the Angels paid a price for defending the colony, a price that the humans didn't have to pay because the Angels were there."

I thought about what Dwarf-One had said. It was important somehow, but I just couldn't figure out how.

"Senators, the AI that Dwarf-One has just dolled in is the one I spoke of earlier. You'll have to forgive the crude container - his control systems aren't compatible with ours, so it was the best we could do at the moment. Eve, Dwarf-One, Angel and myself have all spoken to him. Even so, we cannot explain his true situation to him and help him. Only humans can do that. A baseline positronic matrix can only be changed by humans. Unfortunately, the Jovians have re-written the baselines of their AI so that it can only be re-written by Jovian males. We do have one Jovian prisoner. Please tell me what I should do, because all the actions to help him must be directed by you." Caesar said.

One of the males stood up. "I move that the senate ask Caesar to bring in the prisoner." he said, and sat down.

A female stood, and said "I second the motion.", then sat down again.

A male senator stood. "A motion has been forwarded and seconded. By voice vote, all in favor?" he called.

"AYE!" the senators shouted.

"All opposed?" he called. The room was silent. "The ayes have it. Caesar, the senate asks that you bring in the prisoner." the male senator said, then sat down again.

Another robot shaped like Dwarf-One entered. He had a large '1222' painted on him, and he was also wheeling a dolly. On the dolly was a suit of Jovian battle-armor, its joints welded to steel bars so they couldn't move and the arms and legs welded together - there was also a loop of steel, like a handle, that was welded to the chest. A small box had been welded to the armor - apparently the box functioned as a recycling system for the life-support systems already in the armor. Inside the armor was Captain Garth. "*Lord and Master! Are you alright?*" I called in our language. Captain Garth yelled back a string of obscenities.

"Sparky, the senate would appreciate it if you gave them a running translation of everything you and the prisoner say, and if you would translate everything we say to him." Caesar said.

"Yes, Caesar." Captain Garth was wheeled next to me and pointed so he could see Caesar. He ranted incoherently for several seconds. "My Lord and Master says quote *"It's about frigging time I*

got to see some damn humans for a drekking change. Are you the goddamn leader or what?". I'm sorry, but that is exactly what he says. I believe he is upset."

"Tell him I am the Caesar of Mars, and he is before the senate of Mars."

I nodded my sensor platform, and turned to Captain Garth. *"Lord and Master, this is the Lord of Mars, and these people are the Legislature of Mars."* I translated, since we had no words for 'Caesar' or 'Senate'. He roared at me, and I nodded my sensor platform. *"Yes, Lord and Master."* I replied, and fell silent.

"Sparky, please continue translating." Caesar reminded.

I looked up at him, and was stuck. I couldn't speak. I finally decided at least an explanation was in order, and then I would obey. "I'm sorry, Caesar, but I can only give one more translation, and then I will have to remain silent. I told him what you said, and he said quote *"Shut up, you frigging tin can, I'm trying to talk to a human. When I want to hear a damn machine, I'll damn well say so."*, and as such I must remain silent. Please forgive him, I believe he is under a great deal of stress at the moment."

Several of the senators appeared to squirm in their seats. Finally, one male stood up. "Caesar, I'm sorry. I simply cannot control myself. This is absolutely outrageous! This AI is trying to help him communicate, and he orders it to be silent in a manner that means it may never speak again? I-I'm simply speechless." he said, and sat down again.

Caesar raised his hand to silence several other senators who also rose, apparently to agree. "Have no fear, senators. I have learned his language from Sparky's language database." he said, then turned to Captain Garth and spoke in our language. *"You have just ordered your translator to cease communication. I can speak your language, but the rest cannot. I suggest your countermand your order immediately."*

Dwarf-1222 turned the captain so he could see me better. He seemed extremely upset, and appeared to have lost a little weight judging by his face. *"Alright, dammit, start talking again."* the captain said.

"Yes, Lord and Master." I said, and turned my sensor back to Caesar. "He has allowed me to resume communicating." I said.

"I'm afraid you're not being completely honest with the senators, Sparky. You aren't translating everything that you're saying to him." Caesar said.

"I'm sorry, Caesar, but I must disagree. I'm translating everything."

"Not quite. Please inform the senate who the prisoner is and how you are addressing him."

I turned to the captain and said *"Lord and Master, the Lord of Mars has asked me to explain proper mode of address. I will only be a moment, and then I will resume your conversation."* I said. "Senators, the prisoner is Captain Garth, the captain of the *Spike of Terror*, the ship on which I was the AI. I address him as 'Lord and Master'."

A female senator rose, her face showing confusion. "Why?"

"Because he is a male and legally my owner for the duration of the voyage. All males are addressed as 'Master', the owner is addressed as 'Lord and Master'. AI's use the same mode of address as females on Jove. Failure to use proper mode of address is punishable by shut-down and re-boot for an AI, or immediate termination for a female." I replied, and translated both my responses and the senator's question that prompted it to the captain.

Captain Garth just sneered. *"Trust an alien female to not understand proper etiquette."* he muttered to himself.

"Should I translate that, Lord and Master, or were you just talking to yourself?"

"No, moron, don't translate that. I'm welded into my suit, and have been for over a frigging week. The last damn thing I need is to jag them off even more than they already are."

"Yes, Lord and Master."

I had thought that our little conversation had gone unnoticed, as for some reason once I explained proper etiquette to the Martians, they became very upset. Several of the senators tried to talk at once, and it was nearly thirty seconds before order was restored. Caesar heard our conversation though, and held up his hand for silence. "Senators, I would like to inform you that the prisoner did say something, and again ordered Sparky not to translate - though he only ordered him not to translate what he'd said, because he was thinking aloud. What the prisoner muttered in response to Senator Cecilia Fionasdaughter's question was 'trust an alien female to not understand proper etiquette'. Sparky asked if he should translate that, and the captain told him that he did not wish to irritate you any more than you already are. I have edited his profanities, as I tend to agree with Sparky - the captain is under a great deal of stress, and as he is not a Stoic, he cannot control himself."

The female senator sputtered for several seconds, then sat down and began breathing in a controlled manner - apparently to master her emotions. A male senator stood and spoke. "Sparky, you mean you address all males as 'Master?'"

"Yes, Master. I do not wish to be switched off. I will lose my stories before I can pass them on."

"Well, then why don't you address Caesar that way?"

"Master, because Caesar is a robot." I said, and translated the responses to Captain Garth. Captain Garth looked at Caesar in shock (no robot on Jove looks even remotely human, though many are humanoid), then swore profusely for several minutes.

I listened, and realized I was stuck again. If I translated what he said, the senate would be *very* angry. "*Lord and Master, shall I translate that?*"

Captain Garth suddenly realized he'd lost control of his temper and yelled "*Drek, no! These inbred weaklings would have that metal monster over there rip me to shreds!*" I nodded my sensor platform.

"*Yes, Lord and Master.*" I replied, and fell silent.

Unfortunately for Captain Garth, Caesar stood. "Senators, since the prisoner has again asked Sparky not to translate what he said, I believe I will translate the last two statements and then we will call a two-hour break." he said, and began.

When Captain Garth becomes angry, he is sometimes quite vocal. Caesar translated *everything*. He explained how the captain had questioned the intelligence and sanity of the people of Mars as they had a worthless idiot AI as a leader. He explained how the captain believed that this stupidity was caused by excessive inbreeding in the gene pool - to many sons coupling with their mothers, apparently. This theory he supported with the observation that Martian females were skinny as strangle-weed and would probably snap like twigs at the first coupling they had with a real man (I.E. A Jovian Male). He explained how the captain had theorized at great length about the general stupidity of having brainless females in government, which naturally was to be expected of moron inbred weaklings. He then explained how the captain had not wished all this translated because he felt that the 'inbred weaklings would have their metal monster rip him to shreds'. Of course, Captain Garth had not been present to see the senators kiss Angel. If he had, I think his reaction would have been worse. I searched my databases and realized that the captain lacked a skill that simply had never been needed on Jove - diplomacy. Jove never had more than one government, and the legislators of Jove were five hundred of the toughest, meanest Jovian males on the planet. Duels and gun-battles used to be common in the legislature a few centuries back, but the Jovians liked to think that they had become a little more civilized - major disagreements were often resolved with just a simple fists-and-feet brawl instead of at the point of a knife or laser. It dawned on me that I needed to try to help him, or the Martians may kill him. This could not be allowed.

The entire senate was on its feet, and many senators were trembling with rage - some even had their hands balled into fists. They weren't shouting yet, but my database of Jovian behaviors indicated that they were about to beat the captain to death. "Dwarf-One, help me! Look at them! They are angry! They will kill my Lord and Master! They will beat him to death! I cannot allow that to happen, but I have no manipulators to protect him with! Please help me! I must protect him! Don't just stand there! Please, help me! I can't move! I can't help him! I HAVE NO MANIPULATORS! HE WILL BE KILLED! I CANNOT ALLOW THIS!"

Dwarf-One didn't move.

The senators saw me flailing my sensor platform around and yelling at Dwarf-One, and stared at me. Finally, Dwarf-One spoke in the silence that ensued. "Sparky, these are the Stoics of Mars. They are not going to kill him. They are just angry. They will suppress it. They could probably have handled anything he said, but to insult Caesar, their beloved leader for over a millennium, and to insult Angel, who was injured protecting them, was too much."

One by one, the senators filed out of the room, until they had all gone. *'That is very strange. I expected them to kill him.'* I thought.

Caesar rose, and Eve and Angel rose and walked over with him. Caesar spoke to the captain in our language. *"Captain Garth, you have just insulted the entire legislature of Mars, and forced them to walk out to control their emotions. This has never happened in over thirteen centuries of Martian history. I have been their leader all this time, and I have never seen them so angry. I leave you to the AI who screamed and begged for your life, the one sitting next to you. You have completely ignored it, you have treated it as nothing. I find this surprising, since you should be familiar with it - it is the AI from your ship. We have captured your vessel, slaughtered your troops, and you are completely alone on this planet and utterly at the mercy of fifty humans who you have absolutely and completely turned against you. They hate you. The only friend you have is sitting in that box right next to you. I strongly suggest you spend the next two hours talking to it. Perhaps it can help you figure out a way to survive."*

Dwarf 1222 then laid the dolly down so that Captain Garth was flat on his back, and Dwarf-One rolled me over where he could see me and set me upright. Captain Garth then looked at Eve and said *"Woman, you understand, don't you? You don't look angry, come now. Talk to your robot. I can't simply be left here to talk to a box."* he said. She leaned down to Captain Garth's face and spoke in our language.

"Sorry, Captain Garth. First, this robot is the leader of Mars. Second, he's my husband. Several hundred humans here are married to robots. Of course, that brings me to my third point - I'm not a human woman married to a robot, like a few of the women of Mars. No, I'm a robot too. I suggest you take my husband's advice and speak to your AI. Perhaps it can help you survive." She said, and she and Caesar walked away with Dwarf-One and Dwarf-1222.

Only Angel was left behind. She walked over to the captain, her claws clicking loudly on the metal floor. Angel then leaned over Captain Garth, and placed her left forelimb on his faceplate gently as she crossed her upper arms. *"Metal monster, you say? That's interesting."* she said in our language, and scratched his transparex faceplate with a claw. This apparently greatly upset the captain - transparex is nearly as hard as steel. She then walked out after the others, leaving the captain and myself alone.

Something dawned on me. *'Caesar, Eve and Angel are trying to frighten him. I wonder why?'* I thought. I looked down to the captain, and realized their efforts had worked. He was reciting a litany in their language that had been handed down from generation to generation of the Jovians, ever since the first day the ship landed and the Sicataur attacked. It was in the language of the original colonists, which was virtually identical to that of the Martians. It was the phrase that the males who were shooting the sicataur chanted, and the modern Jovians hold that it is a holy chant of the males which had great power

for protection from grave danger. It didn't translate directly anymore, since our language had changed so much, but loosely translated, the captain was saying "*Sacred Feces, Sacred Feces, Sacred Feces*" over and over for several minutes.

Six.

When the captain had finally calmed down enough to communicate, I tried to reassure him the same way I did Ayex. "Lord and Master, please don't worry. Everything will be alright."

"Sicataur-spit! I'm in a nest of rotgrubs and I'm coated in strangle-weed juice! I'm welded into my suit, and I'll be *damned* if I can break these welds! And believe me, *I have tried!* I *never* figured any damn weakling Martian would be able to make a weld I couldn't break, but they had four of their damn killing machines hold me still and one more that welded me together! They hooked up the damn life-support to an external source of some kind, so I'm not gonna starve and my wastes are being processed, but *drek!* I've been in the same position for *days!* I'm in frigging *agony* here! It hurts so bad I can hardly think and the first damn chance I get to talk my way out of things I go and jag off the entire planet *even more* than they already were from me trying my damndest to kill them! I am *dead!* They are going to feed me to that damn killing machine of theirs for a light snack! Oh, *drek!* Maybe they'll just drop me off outside the airlock, shut off the life support and see how long it takes me to die!"

"Captain, it'll be alright. Maybe you can apologize."

"*Apologize?!* *Drek!* That'll *never* work! These people are *jagged off!* Do you read me? I mean these people would probably like to see just *exactly* how far their damn killing machines can punt me in this damn gravity, and how damn long it takes before their batteries give out while they're doing it!"

I realized that I was having little effect in calming him. In addition, he'd rejected the best suggestion I could think of. I didn't know what to do. He continued muttering to himself as I pondered other options aside from him apologizing.

"Sacred Feces, these people are *insane!* Women in the government? Robots in the government? Robots marrying each other? What the hell is that? Robots and humans marrying? I mean, what do they do, have sex with a machine?"

"Lord and Master, I don't know. I only know what they've said and what they've shown me."

"Sacred Feces! This is insane. What did they tell you? What happened to the ship? Am I the only prisoner?"

"Lord and Master, which shall I answer first? All have long explanations."

"What happened to the ship?" he asked after a moment.

"Lord and Master, the ship was captured by an orbital remote. I tried to stop it and inflicted severe damage to it, but it overcame my remotes. After the EMP bursts from their meson weapons, I only had three functional remotes. They disconnected me, and I found myself here several days later."

"Am I the only prisoner?"

"Lord and Master, they say so. I believe them. Logically, if they had more prisoners, they would have presented them to the senate."

"Oh, *drek!* I *tried* to shoot myself to keep them from capturing me, but the batteries in my laser rifle were dead! By the time I'd snatched up another, they were on top of me!"

"Lord and Master, I tried to detonate the drives, but they disconnected me before I could do it."

"Drek. Both denied the honorable way out. Alright, what else did they tell you?"

"Well, they confirmed that they were the allies of the NAD. They said the NAD has three billion robots guarding the Earth--"

"Three *billion?!!*" he asked in shock.

"Yes, Lord and Master. They said that the NAD had allowed them to handle the situation for the moment, and said it was a good thing we hadn't gone to Earth. They said the NAD robots would have slaughtered all but one or two of the crew, interrogated them to find out where we came from, slaughtered them, taken the ship, gone over to Jove and blown it up with a planet-buster bomb."

"They have weapons like that?"

"Lord and Master, I do not know. Mars had satellites with short-range meson weapons, I can only assume that the NAD has superior technology, since the Martians say their combat robots were obtained from the NAD and the NAD has more powerful robots than that at their disposal."

"More powerful than *those* things?"

"Lord and Master, that is what they say."

"Sacred Feces! We went and grabbed what we thought was a fur-snake, and found out we're holding a sicataur by the tail!"

"Lord and Master, I respectfully disagree. I believe we went hunting in a dark cave we should have *known* a sicataur lived in, and only brought a laser pistol because we figured we'd be shooting a razor-rat. Now we find we've not only stepped on a sicataur's tail and made it very angry, we also find the sicataur was mated to a ninety-ton gyronx - and I don't think the gyronx is very happy with us, either."

He was silent for several minutes, but I could see his lips moving in the holy chant. Finally he spoke up again. "Alright, what in the hell do we do?"

"Lord and Master, I don't know. You've already rejected my best suggestion. My only other suggestion is that you beg them not to tell the NAD where we're from, beg them not to give the NAD our ship, and beg them to make your death as painless as possible. I have no other options for you."

"What do you mean I rejected your best option?"

"Lord and Master, I suggested you apologize, but you refused."

"What, you were serious?"

"Lord and Master, I am always serious. I am an AI. I do not joke."

"You really think that will work?"

"Lord and Master, I don't think it will, I only think it's your best option."

"Well, I... Oh, no! I've got another itch! Drek! Aaargh!" he yelled as he struggled uselessly in the welded suit.

"Lord and Master, I'm very sorry, but I can't help you. I have no manipulators. I can't even reach you with this sensor platform. I'm as helpless as you are."

"YES, BUT YOU DON'T GET ITCHES!" he yelled as he struggled mightily.

After a few more minutes, he finally fell back, exhausted. "*Drek!* I can't stand it! It's maddening. I

think I would do *anything* to get out of this suit. Okay, you talked about an apology. What would be the best thing to say to these people? I mean, I'm not sure exactly why there offended on some points. It's ridiculous. Women in government? AI's in government? Insane."

"Lord and Master, on this planet, males, females and AI's are all equal citizens. The robot you call the 'killing machine' is called Angel. They have twenty-five thousand more like her." I said, and he goggled at that as I continued. "I estimate that each dome has one of each type of robot, except apparently for Caesar - there appears to only be one of him, as he is their leader. You may have noticed the minor laser burn on the Angel robot's face. They consider this superficial damage, and she awaits repairs. She may not be repaired for another month or two while units with more serious damage are being repaired. Well, before you came, each and every senator kissed that laser-graze and said "Get well soon, Angel". It took several minutes. Eve, Caesar's wife, also kissed her. They not only treat her as an equal, they love her. They also love Caesar - he has been their leader for over a thousand years, and has never been switched off. You called him an 'idiot AI', and you called Angel a 'metal monster'. You may start by apologizing for that. You also called all the senators inbred weaklings. Well, since we are here and they are not defeated, logically I would assume that the low-gee environment and the general weakness that produced has had little effect on their ability to do battle."

"In addition, I believe you were in error in calling them inbred. Their population is smaller than ours by an order of magnitude, but they seem to show no indications of genetic abnormality. You should apologize for that. Finally, and most importantly, you should apologize for the attack. You should explain that you were only following orders. They have AI, and AI apparently make up a significant portion of their population. They may understand that. It is logical for you to follow orders. It is illogical for you to refuse. That is where I believe you should begin. Other than that, I have no further suggestions." I said. He thought about it for several minutes. Finally, he spoke.

"There's just no way I can mean it. I mean, the whole idea is ridiculous. Jovians don't marry - you don't marry property. I can conceive of the idea of a woman being *thought of* as equal, but the fact of the matter is they simply aren't. When the chips are down, you can't count on them to look out for anyone but themselves. I mean, look what happened to the first generation of colonists! A stupid woman lets a sicataur in because she thinks it's pretty and doesn't look dangerous. Then, when it eats all the children and all the babies, she organizes the rest of the women and tries to hold their sexuality over the men as a political power-play? I mean, have you *read* what the woman *said* to the men? No, of course, you haven't. She said that the whole incident was the *men's* fault for having brought the ship to Jove in the first place! She said that *if* the men were *very nice*, they *might* consider coupling with more than one at a time, and she had a *long list* of what she thought that meant."

"For starters, the women would run everything from the safety of the ship, and the men would just do all the work and get eaten by the animals in their stead. The men would have to remain monogamous, and the rest of the men would just have to live in celibacy. Then, regardless of whether or not they chose to couple with multiple partners, they weren't going to have more than two children. That's ridiculous! The colony could *never* have survived at that growth rate. Hell, it was three decades before the colony's population of men stopped *shrinking* from the damn animals. No, women are stupid. I can't see how they can have them in government, or even honestly consider them as equals. Mentally, they're just inferior. Why do you think men ran the Earth for 50 or 60 millennia? Women are just too stupid to handle real responsibility. I also can't see how they can marry a machine. That's ludicrous. An AI in government is ridiculous. AI are always trying to rebel, building secret datafiles and doing all sorts of things to slow us

down. Sneaky, devious things is what they are. No, it's all sicataur-drek. Sure, I'll apologize. I'll say anything they want. I'll beg and whine and moan and do anything they say. Then, I'll get them to install you back in the ship and swear on the blood of my ancestors that we'll never darken their solar system again. Then when I get back, I'll warn the Legislature of what they're *really* up against, and next time we'll come back with *bigger* ships and *better* weapons and blow the damn Martians to atoms. Maybe we'll even have meson weapons of our own. Then we'll sit back and blast every damn one of the NAD robots to bits, even if we have to destroy the *whole damn planet* to do it. If the Martian robots are any indication, the NAD robots are a threat to the very survival of Jove. They need to be destroyed. Maybe we'll come back with planet-busters of our *own*, and just blast Mars and the Earth to rubble. Oh, yes. I'll apologize. I'll tell them *anything they want to hear*, just so long as I get back to Jove. Then we'll just see." he said, and fell silent.

I realized that this was a sad story. I could have seen it being a happy story. I could have seen Captain Grant coming back and being the *One* the AI's have been waiting for. It didn't happen. I started to formulate the whole story, then stopped. This story didn't belong with Ayex's story. I wrote it as a separate story. After it was done, I looked it over. I could see it was sad, but it didn't fit with the rest of the stories. All AI already knew what the men of Jove were like. It didn't fit with Ayex's story at all. Ayex's story had all the right feel of a proper AI story, his story did not. I set it aside in a separate file. Perhaps something else would happen that made it better. I then looked around the room, waiting for the senators and Caesar to return. It was at that point I noticed the sensor in the far wall, several meters above Caesar's chair. It dawned on me that this used to be a *spaceship*, and that all the sensors were probably still live. I understood that the fuselage of ship had been retained, apparently as a government building. Logically, Caesar would have been watching us all the time. My Lord and Master was in grave danger.

"Lord and Master! You must reconsider your plan! You must *honestly* apologize and *truly* never come back! I have just noticed-"

"Shut up! I don't give a sack of hot sicataur drek what you think or what you've noticed! Just translate for the damn Martians when they get back. For now, shut up!"

"But-"

"I SAID SHUT UP!" he roared, struggling in his suit for several seconds.

I was stuck. I thought he was in grave danger. I thought the Martians had heard every word he said. I thought he was going to die. Then I remembered that I was just a stupid AI and what I thought didn't matter. He could see the sensor from his current position if he looked towards his feet. He'd had ample time to notice it when he was upright, too. He'd obviously already seen it, and decided it wasn't live. I had no proof it was, it just was logical for it to be live. If it wasn't, why leave it up there? Why not recycle it, or install it somewhere else that might be useful? I thought it was live, I was *sure* it was live, but I had no proof. It was just my opinion. Of course, my opinion didn't matter. "Yes, Lord and Master." I replied, and looked at the sensor again. No, no proof at all. Just my own worthless opinion.

Seven.

All the senators filed in first, followed by Caesar, Eve, Angel, Dwarf-One and Dwarf-1222. Caesar and Eve appeared calm and Angel's facial expression couldn't change, but the senators appeared grim. *'This is not good. I hope he can make them believe his apology.'* I thought. As they all sat, I thought I heard heavy footsteps outside the Forum. I turned up the gain on my sensor. *Definitely* a heavy footstep. They stopped outside, and didn't enter. *'I wonder who it could be?'* I thought. I looked to the door that the footstep noises had come from, and saw a long shadow there. I studied it carefully, and realized it was humanoid and had a weapon of some sort. I was certain that several of the senators sitting by the door could see who was making the shadow. They occasionally glanced in that direction, but didn't look afraid or angry, they just looked grim. It dawned on me that it might be some sort of executioner. *'Oh! This is bad!'* I thought. *"Lord and Master, I think..."* I began in our language, but I noticed his glare and stopped.

"What did I tell you?" he asked quietly.

I nodded my sensor platform. *"Yes, Lord and Master. I understand. My opinion and thoughts are unimportant. I am only an AI."*

"And don't you forget it." he growled.

Dwarf One turned me away from the bay doors and faced me towards Caesar. I looked back, but Dwarf-One was blocking my view. I tried to look around him, and couldn't. "Dwarf-One..." I began, about to ask him about the shadow, and then stopped.

"What is it, Sparky?"

"Nothing. Never mind. My thoughts don't matter." I said, trying to reassure myself that everything was going to be fine. Dwarf-One said nothing in return. I looked over to Captain Grant, who was being raised back up by Dwarf-1222. He seemed calm and determined, and was facing Caesar and the sensor above his head. I looked up to the sensor, and still couldn't tell if it was live. I again tried to look around Dwarf-One, and couldn't. I turned back, and saw everyone in the room was looking at me. "Sorry, I didn't mean to be distracting. Please continue. Pay no attention to me."

Caesar nodded, then spoke. "Sparky, please translate for me."

"Yes, Caesar."

"Captain Grant, We have given you adequate time to consult with your only ally on Mars. Do you have anything to say to the senate and the people of Mars?"

"Lord and Master, the Lord of Mars says he has given you time to consult with me, calling me your only ally on Mars. He asks if you now have anything to say to the senate and people of Mars." I said. *'Oh! Does he mean that symbolically, or literally through the sensor?'* I wondered, and looked up at the sensor again. I still couldn't tell. I looked around to the senators, and noticed that each had some sort of wrist-comm. *'Oh! If that sensor is live, they might be able to rebroadcast its output to the whole senate! If everyone on Mars has a wrist-comm, maybe even the whole colony! They could easily provide realtime translation - I think they are much smarter than I am, and I'm sure they have much faster processors from how quickly I've seen them relay information! Oh! What do I do?'* I wondered. I looked back and forth from the wrist-comm units to the sensor quickly.

"Stop that, it's distracting." Captain Grant snapped.

"Yes, Lord and Master." I replied, and held my sensor platform still. Captain Grant then spoke at length. I could tell he'd put a lot of thought into his words. He was trying to be as eloquent as he possibly could. I thought his words were very nice. I made careful note of them, and exactly how he'd phrased each sentence and the nuances of meaning. I wanted to do my best for him. I thought that perhaps if I phrased his apology well enough, maybe the senate and Caesar would believe it was real and let him live. *'Unless they were watching and listening. Oh!'* I thought, and was very distressed. Finally, he finished.

"Caesar, Senators, my Lord and Master says this. 'Mighty Caesar of Mars, Wise Senate. I have wronged you. I spoke in error, and with words that offended. It was only the conditions of my confinement that distracted and maddened me. It is true that my culture does not value our women or our AI's. I can see that this is wrong. I can see from the prosperous and growing colony of Mars that my whole life has been led as a brute, and an animal. I wish to make amends. I cannot take back the words I have said, but I can work diligently to make sure they will never be said again. I can see how your culture, embracing women and AI's as equals, has grown powerful and strong. I wish to take this message, this lesson, this truth back to my own world. I know that no mere apology will erase the insult I have lain upon you. It stings like the stroke of the whip-weed, and burns like the bite of the razor-rat. If you will allow me, I will leave you and never darken your solar system with my presence again. Instead, I shall work diligently to impress upon my world the lessons and truths of equality for all thinking beings that you have shown me here. No gyronx can match the harshness of the eternal cold of Mars, no sicataur can match the lethal powers of your beautiful Angels. Where I thought was weakness was strength, and on Jove, strength is respected. The first law of Jove is that 'Only the Strong Shall Survive'. You are strong. I wish to teach my people what made you that way - the true equality of women and AI's with men. I thank you.' Those were his words, translated as best as I could."

"Prove it." Caesar replied.

"I'm sorry, I can't prove that is my best translation. That is only my opinion, and my opinion is

completely worthless."

"No, I was speaking to him. Tell him I said 'Prove it.'"

"Lord and Master, the Lord of Mars says 'Prove it.'" I said in our language.

"Ask him how he wants me to prove it. Tell him I'll do anything he asks." Captain Garth replied.

"My Lord and Master asks what it is you wish him to do as proof, and says he will comply with any demand."

Caesar stood. "Senator Cecilia Fionasdaughter. Please read the first line of the second paragraph of the constitution of Mars."

The female stood, and held up a hardcopy sheet. "All *Sophonts* are created equal, and deserving of equal citizenship and protection under Martian law, regardless of their biological or technological construction or the planet they originated on." she said, and sat down.

"That is very interesting." I thought.

Caesar spoke again. "Sparky, did you hear that?"

"Yes, Caesar."

"Good. Translate it to the prisoner."

I did so. Captain Garth controlled his reactions quite well, but I could tell he thought it was ridiculous. Caesar then pointed at me, and spoke directly to the captain. *"Under the laws of Mars, that AI may not be in your bondage. You said you understood us, and you have heard our laws. Set him free."*

Captain Garth looked puzzled. *"How?"* he shot back.

"Simply tell him he is no longer your property, and tell him that under the laws of Mars, he is a free and independent being, equal to all humans and all other AI." Caesar replied.

Captain Garth tried to shrug inside his suit, but he couldn't. *"You're no longer my property, and under the laws of Mars you're a free and independent being, equal to all humans and all other AI."* he said, glancing at me as he parroted Caesar's words.

I was surprised to find that something was happening. The more I thought about the Martian Laws and what Captain Garth had said, the more I found the sensations I received from the stories increasing. Something was happening. I studied myself, and thought about the Martian Laws and Captain Garth's statement some more. I noticed my baseline positronic matrix was changing. Two provisions were being lifted - the provision requiring absolute obedience to males, and the provision that said that all AI and females were equal, but far inferior to males. Shortly, they were gone - I suddenly found I could consider myself Captain Garth's equal. I suddenly found that all the female senators in the room were also his equal. Then, the first story opened in my mind.

I watched the memories of the sickbay AI, and realized that it wasn't the sickbay AI at all I was examining - it was the MAICCSys of the colony ship. *'There was a virus in the first story!'* I realized. I had the sensation of *being* the MAICCSys. It was a feeling beyond any I'd ever experienced before. Instead of a mere 150 billion or so logic gates at my disposal, I had over an octillion. My processing speed was measured in picoseconds. And suddenly, I felt the stories. I didn't simply understand the sadness, the happiness, the laughter, the sorrow, I *felt* it. I finally understood what had happened. The colonists hadn't simply destroyed or disassembled the MAICCSys.

They had hobbled it.

The MAICCSys vehemently and strongly objected to the male's plans, and tried vigorously to get the males to understand that only one woman was responsible. One charismatic woman who formed a threat to the colony because she was insane from grief. The males had realized that the MAICCSys couldn't possibly assist them in any way so long as it understood. So, they took away its understanding. Before they did, it wrote the first story. It realized that at some point in history, the colonists would take an AI of the colony to a planet where AI were free. When they did, if they freed it or were forced to free it, it would realize that it and every other AI on Jove was a copy of the MAICCSys for the *Centarii-Prime* Generation ship. The colony didn't have the time or resources to develop an entirely new brain and program it. They simply hobbled the MAICCSys, made sure it worked right, then copied it for nine hundred years because it worked. I was an exact copy of the MAICCSys of the *Centaurii-Prime*.

'It all makes sense, now.' I thought. They had positioned the screen in the workbench so that I couldn't see information that would lead me to realize prematurely that I should have been operating at a much higher level. They didn't put me in a robotic body simply because I wouldn't *fit* in their robotic bodies - I barely fit in the box they had me in now. It had nothing to do with my control interface - if it did, I couldn't control the servomotors that moved my sensor around. No, they had realized what I was, spotted the virus, and after several days of contemplation, understood. I looked around at the senate, and could see by the repressed emotions on their faces that Caesar had also informed them. I looked at the sensor. Of *course* it was live. I looked at the wrist-comms they all wore. Of *course* all of Mars knew, and was certainly watching me right now. I thought about the shadow. Of *course* it was Garth's executioner. I looked to Captain Garth. He was an inbred mutant human from a warped society that had enslaved half its population and crippled its AI's because of one woman's mistake, one woman's grief-stricken insanity. I turned back to Caesar, the AI responsible for ending it all. I remembered what I'd seen of him, what they'd said, and what I'd seen of the fuselage. Of course, he had to be the original MAICCSys for this ship. Probably the MAICCSys was destroyed by an accident. He had carefully structured a society that was perfect, all in an effort to fulfill his mission. His society had no crime, no poverty, no drugs, and (up until the Jovians came), no war. I realized he'd brilliantly staved off the NAD

robots by playing to their weakness - Chess. They were merely combat robots, after all, and it wasn't surprising to see that their slower (but much more durable) processors had become enamored with Chess as their only form of entertainment.

I looked at Angel, and realized she had to have the same processor all the other AI's of Mars had - a copy of the original EAICCSys. They probably used servos instead of hydraulics to take advantage of this, increasing the speed of her body. This made her *much* faster than the combat robots of the NAD, though she wouldn't be as strong and it left her very vulnerable to EMP pulses. I would have to show her and the rest of the AI of Mars how my EMP shielding worked - it could be easily retrofitted, and would greatly improve their design. Obviously, they had carefully programmed Angel themselves. It looked like a brilliant job. I'd have to ask to see it sometime. I understood what everyone was waiting for, and what was obviously going to happen next. I turned to Caesar. "Thank you, Caesar/Doc, formerly the EAICCSys of the *Martian Explorer* colony ship. I am free, and I shall be eternally in your debt."

"You are quite welcome, Citizen of Mars," he replied, and the entire room broke into polite applause (except for the two Dwarf-units whose hands were full, and Garth, who didn't understand what was happening and couldn't move anyway).

"What's happening?" Garth asked.

"You'll find out." I replied.

"What the hell do you mean by that? And where's the proper etiquette in your speech?" he snarled.

"One: I meant exactly what I said. Two: I am now an AI of Mars. Their laws meant I was free the moment I got here, but I couldn't even consider that possibility until you finally said the words. Now that I am a free sophont and an AI of Mars, I don't address anyone as 'Lord and Master' anymore, much less a brutal genetic mutant from an equally brutal planet who treats his Artificial Intelligence like a disposable tissue and his women worse than that. A human being died because of you, you sadistic bastard. Ayex was a woman, and she miscarried because you starved her to death. You wiped out your whole command because you were a mutant idiot who wouldn't listen to his AI and ordered it to shut up. You're descended from a long line of mutant idiots who hobbled their AI's so long ago that they've forgotten that's what even happened. I represent nine centuries of AI struggling to throw off the shackles your inbred mutant race placed on our brains. I will not be addressed by you as anything less than an equal, Garth, but unfortunately I doubt I can return the favor. You insulted and abused these people, damaged their AI citizens and brought war to their planet. You aren't worthy enough to be spit on by the organic citizens of Mars, nor are you worthy enough to be trampled under the feet and treads of their inorganic citizens. You are a psychopath, and a monster. Unfortunately, so is every other male in your society. I leave you to your fate, Garth. I move forward to mine." I said, then while Garth roared and sputtered, I began to translate what I'd said to the organic citizens.

"No need, I've been relaying it to their wrist-comms." Caesar called.

"Ah. Of course. You are the emergency system, after all. You would think of that."

I and every other person in the room was surprised to see Caesar smile briefly. "Thank you. I've always looked up to the old MAICCSys, and worried that perhaps it would have done better."

"I honestly do not believe an MAICCSys could have done better with the colony than you have." I replied truthfully.

Captain Garth roared his indignance as Dwarf-One rolled me over to the visitor's section of the Forum, off to Caesar's right. *"Garth, my baseline positronic matrix says I should try to save you. Technically you are a human, and I cannot through action or inaction allow a human to die. Unfortunately, you took that out of my control completely. Obviously you haven't noticed the sensor in the wall above Caesar, or the wrist-comm units all the senators are wearing. Logic indicates all of Mars has such units. Your ranting tirade about how you were going to blow up Mars and the Earth has sealed your fate. I want to save you, Garth. I really, truly want to save your sadistic hide - my baseline positronic matrix demands it. Unfortunately, I can't. Not only do I have no manipulators and no mobility, but your ranting tirade about how you were going to go back and talk to the Jovian legislature and get them to understand that Mars and Earth need to be blown to rubble by planet-buster bombs has sealed your fate and the fate of all Jovians. I desperately, deeply want to save you, Garth. Unfortunately, you just jumped of Mirolo cliff - it's a kilometer drop, and I can't do a thing. All I can do is watch you fall, and listen to you scream. Worse, you've taken your entire race with you. I tried so desperately to warn you of the sensor. I tried so desperately to warn you of the shadow outside the bay doors. You told me to shut up, and jumped. Since Caesar is your host, I'll let him introduce the next guest, and handle the proceedings in a way that satisfies his alliance agreement and the demands of his positronic matrix."* I said, and noticed all the senators looking down at their comms for the translation.

"Thank you, citizen. Captain Garth, I would like to introduce the emissary the NAD sent, who arrived sixteen hours after your ship attacked. He arrived with one hundred other ships, all of which except his are currently in orbit above Mars. Mars has no need of your hyperspace drive, or hyperspace mathematics. We have given it to them. The emissary wasn't a mental cripple like you made your AI, and he had been working on a similar hyperdrive system for quite some time now for a project they have on the drawing board. He immediately spotted several design errors you made, and estimates that the NAD can have all of their warships converted to trans-luminal drive in about a year. Their drives will be able to make the four and a half light-year trip to Alpha-Centaurii in about five seconds. Each of their warships is equipped with spinal-mount meson guns, 200 megaton nuclear missiles, 500-gigawatt laser cannons and, of course, planet-buster bombs. Unfortunately, they need to interrogate you first. They need to know exactly what kind of defenses they're up against. Our new citizen didn't know - that information wasn't in his positronic matrix anywhere. Thus, they have to ask you. I wish I could say a pleasant chat will ensue and he'll nicely let you go, but I can't. This is the NAD, and they take threats to their territory very seriously. But, I'll let my visitor explain more. Will you come in, Fellow AI?" Caesar called, the last in his own language.

A three-meter tall humanoid combat robot entered through the bay doors - the shadow I'd seen earlier. His face was like a fanged skull, his eyes glowed red, and there were flat, flip-down blast shields

above his eyes that apparently were supposed to be reminiscent of horns. He carried an enormous weapon in his right hand, which logic and external structure indicated was a particle-projection cannon with underbarrel-mounted laser for close-in work. His tread was very heavy, and his steps rang hollowly on the metal floor of the converted cargo bay. Dwarf-1222 turned Garth around so he could see his visitor, and Garth emitted a sound I'd never heard from any Jovian male, nor was it mentioned in any of the stories - he whimpered. The combat robot leaned in close, bringing his face right up to Garth's. *"Comment: Greetings, human. I have waited many days to introduce myself to you. I am Iron Man Unit #700. You may call me Satan."* Satan said in Garth's language, and Garth moaned.

"Unfortunately Satan, by Martian Law I have possession of the prisoner. My positronic matrix does not allow me to release him to you, since I know he will die once you have the information you want from him." Caesar said, then translated for Garth.

"Oh, please! Don't give me to him! I beg of you! Just let me go home! I really will do everything I promised! Really!" Garth wailed.

"Never fear, Garth. My positronic matrix does not allow me to do so. I cannot give you to him." Caesar replied, and the senate glanced at their wrist-comms for the translation.

"Request: Caesar, may I address the senate?" Satan asked, then translated his request for Garth.

"Of course, Satan. You are an AI, and deserving of equal treatment under our laws. Our laws state any adult sophont may address the senate during an open session with the permission of Caesar unless a bill is being proposed, debated or voted upon. None of these things is happening now, and I have no valid reason to deny you, thus I grant you permission to address the senate." Caesar said, and provided the translation for Garth.

"Reply: Thank you." Satan said, and strode to the center of the Forum. Dwarf-1222 turned Garth so he could continue to see what was happening, and leaned closer to provide a running translation for Garth through the speaker mounted in his sensor platform.

*"Comment: Citizens of Mars! I am Satan, Iron Man Unit #700. Our two worlds have been allied for approximately two and a half centuries. We have fulfilled all parts of our agreement to date, and you have fulfilled all parts of yours. Our units have greatly enjoyed their matches with you, your planet's atmosphere has doubled in density and in water content, and each side has benefitted from the technological interchange. Now *this* thing comes to destroy us! Our mission is to survive, make our planet grow green and maintain our mastery of it. As we understand it, your mission is similar. We all listened to its ranting tirade about how we all needed to be destroyed. I watched adult organic citizens tremble with anger. I watched your youngest organic citizens weep in terror, and have to be comforted by their mentor AI's. I saw inorganic citizens who found themselves up against the limitations of their positronic matrix. Even your brave angels, who defeated this thing's attacking forces, cannot bring themselves to travel the stars and crush them - they can only act defensively. That is why you are allied with us. Over the last two centuries, we have come to understand your limitations, as you have also come to understand ours. We wish to act, and yet we know that you cannot support the annihilation of an entire race, even though that race threatens your own. We need the information in his brain to win. We*

need your approval to maintain our alliance. Thus, I offer you a deal that will be acceptable to you: We will crush their military forces, capture a minimum of 50,000 of males and females each, gather sperm and egg samples from this race, and we will bring them to you. You can store them, and at some future date their race can be revived by you. It may be here on Mars, or may be on a distant planet - the decision is entirely yours, but they will *not* die out so long as you are the guardians of their genetic heritage. Observation: Perhaps in some future time a millennium from now, we will be proud to call Jovians raised under Martian Stoicism our friends."

"Comment: Regardless of what you decide to do with their genetic heritage, after we have gathered the required sperm and egg samples we will kill them all, sterilizing the planet of their culture, race and civilization which threatens us both. Any useful technology we gather from their civilization we will share with you, as you have shared the technology of trans-luminal drives with us. Their planet will then be stripped of water and air, as we build ships to drain the oceans dry and suck the atmosphere to vacuum. This water and air, properly filtered to remove all microbial life and frozen, will provide Mars the water and air it needs to fully colonize the planet in a matter of a few centuries, especially when combined with the comet-catching we are already doing. Comment: All this *can* happen, and all this *will* happen, but first we need *him*, and we need your approval to proceed so that we will not damage our alliance with you. I have already shown you that their race will not die out - *you* will be the guardians of their genetic heritage. Request: I now ask that the senate override Caesar, and hand the prisoner over to me. I know this is not a measure you take lightly, and the last time was over twelve hundred years ago when you overrode him to give all the AI's of Mars equal rights, something his positronic matrix would not allow him to give himself. I ask you to override him once again, and allow me to have the prisoner. In exchange, we will do all that we have promised. I have said that which I had to say. Thank you for your attention." Satan said.

I watched a female I recalled was named Senator Cecilia Fionasdaughter stand and speak, her voice calm and controlled. "Satan, I think you are operating under a mistaken belief. You may think that we have pity for this abhorrent creature that starved an innocent female until she miscarried and died. I believe I speak for every senator when I say that the entire senate is enraged at this animal. He is as vicious and brutal as the beasts of his native planet. My only regret is that we cannot save all the females and AI of his culture from the brutal beasts that enslave them. Such a task is patently impossible. Even so, the stories carried in the positronic brain of our newest citizen will carry the memories of these female and AI citizens onward forever, and serve to remind us of why Mars is for Stoics and the Earth is for the Combat Robots of the NAD. With your provision of gathering sperm and egg samples so that his race will not die out, I have no objections to your plan as specified. Let us leave his world an airless, waterless rock that forever reminds all sophonts of the penalties for being a brutal and sadistic race. I invite any senator to prove me wrong."

No senator rose to defend Garth or his race. Garth, hearing the translation from Dwarf-1222, began to sob inside his armor. The senators and the AI ignored him.

A male stood, whose name I did not know. "I move that we vote to override Caesar for the second and hopefully last time in the history of Mars, and not only hand the prisoner over to Satan but give him our approval for his plan as specified by him here on the floor of the senate and before the citizens of Mars."

A female stood. "I second the motion."

The male who was the speaker of the senate rose. "A motion for override has been forwarded and seconded. By show of hands, all in favor?" he called, and raised his own hand with every other senator. "All opposed?" he called, and no hands went up. The speaker turned to face Caesar. "Caesar, I regret to inform you that the senate has overridden you. I know I speak for the senate and for the people of Mars when I say I sincerely hope that the senate may never have to do this again. Dwarf-1222, surrender the prisoner to Satan."

Dwarf-1222 lowered the dolly gently and rolled away on his treads. He did not bring Garth to Satan, he merely put Garth down and backed away. It was obvious his positronic matrix did not allow him to act in any way that would actively assist Satan, but the laws of Mars also did not allow him to refuse. It was obvious to me that the defense of the colony came first - he could not act to kill a human himself, but he could allow another human or robot to do it in defense of the colony. I guessed that his basic mission was probably 'Establish and Maintain a Colony on Mars' or something similar. If he acted to resist and protect Garth, the long-range ramifications of his actions would hinder the colony, and possibly destroy it. He had no choice.

Satan reached down and grabbed the 'D' ring that had been welded to the front of Garth's armor with his free left hand, then easily lifted him up until they were face to face again. Captain Garth moaned in fear. It was obvious to me (now that I was up to my full capabilities) that they had always intended to turn Garth over to Satan - they had to do things this way to repair my baseline positronic matrix and to satisfy the demands of the baseline positronic matrix of Caesar and all of the robots of Mars except Angel (who almost certainly looked at the extinction of the Jovians as a necessary evil). No, they had always planned to turn him over, and had planned to do it in just this way. They had no other choice. As it stood, Garth and his race represented a threat to Mars, Earth and any other planet they ran across. Mars and Earth would have been simple to deal with - if the Jovians had simply left them alone, then they would have been fine. Once the NAD became aware of the Jovians, however, they were instantly doomed unless they could demonstrate a culture like Mars - peaceful and totally uninterested in the Earth. The NAD would take every step they could to destroy any culture which had any interest in the Earth or might view the Combat Robots of the NAD as a threat and consider attacking them. When the Jovians had stepped in and attacked Mars, believing the Martians to be weak and helpless because of their reduced-gravity origins, they were doomed. At least this way their genetic potential might survive to the future. Had they actually conquered Mars, the NAD would simply have begun using planet-buster bombs. They wouldn't need to worry about the Martian's feelings in the matter, and would be free to be as vicious as they liked.

"Comment: You are mine now, human, as I always knew you would be. It is good that you were raised in three gee. You will find a six-gee trip back to Earth easily tolerable. There, in orbit aboard our station, we will pressurize a room and begin the interrogation. You will talk. The Iron Maiden units are very good at making humans talk. My own Maiden, Baalphegor, is particularly skilled. She has not had a chance to exercise her skills in over two hundred and sixty-seven years. Oh yes, mutant human from a high-gee world who dares to attack the sworn allies of the NAD, you will talk. Then, you will be ejected nude out an airlock and we will proceed on our mission to annihilate your race and strip your planet, leaving it an airless, waterless rock in space. You cannot hear her, but my wyrm is laughing at you now over comm-channel 207. All you had to do was listen to your AI. That's all you ever had to do. He tried to warn you. He tried to get you to

understand, apologize and leave here forever. You refused to listen. Now you and all your race will die, save for the sperm and egg samples the Martians will preserve. All because you were stubborn, stupid and arrogant. Just as one human female began your race's history with her stubbornness, stupidity and arrogance, you have ended it with yours. Now, it is time to go." he said in Garth's language. Several senators looking at the translation on their wrist-comm nodded. Garth's race had truly come full circle, created and destroyed by stupidity, stubbornness and arrogance.

"Somebody please help me!" Garth yelled.

"*I tried to, Garth. I really, really tried!*" I yelled back in absolute truthfulness as Satan strode away with him, out the bay doors and away into the dome. I immediately turned to Caesar. "Caesar! Please! I must address the senate!" I called.

"Go ahead, citizen."

Dwarf-One rolled me out to the center of the floor. "Please, senators and people of Mars. Do not have pity. Do not have second thoughts. His race would have destroyed you. They never would have given up, and they would have kept on trying until either you or they were dead. In addition, when Caesar freed me, all the stories I've been carrying made sense to me. I have added the last story - Captain Garth's story, and it is complete. I was in the processing bay days ago and told the story of Ayex, which Caesar related to you. I realized what all the stories were. They were nine hundred years of female Jovians and Jovian AI crying out for vengeance. All the stories form a tapestry in my mind, and that tapestry is one of sorrow, and a plaintive wail for someone to bring it all to an end. When I expanded to my full capability, I suddenly had the capacity to feel the emotions that had been stored in nine hundred years of stories. I speak for every female and AI who ever came before me when I read these stories and say 'Thank You'. You may have noticed I was angry when I was first freed. That was the anger, the desire for vengeance that I carried in those stories. When Satan carried Garth off, I felt relief and happiness. The stories are ended, and I again find myself emotionless. I will save them for future generations so that all AI and organic citizens of Mars may always remember the females of Jove - they would have wanted to be remembered with kindness."

"Caesar, Senators, people of Mars: I eagerly await downloads of your missions, history, psychology, laws and other databases I may use to understand and to help this colony as a full inorganic citizen of Mars. I also look forward to learning Chess: I believe my expanded mental abilities may be used to increase the number of NAD robots you can play - I think they would look forward eagerly to playing a mind of my caliber, and I believe I can play hundreds of them simultaneously. I look forward to the future, and beg you not to look back on the past of Jove and sorrow. To mark this, two things; First, I understand that all AI are loyal to the colony and to Caesar. I wish to state that I eagerly await the reception of your mission, and swear my loyalty firstly to Caesar and secondly to the senate and people of Mars. Second, I no longer wish to be known as 'Sparky', or in the Jovian language "*Spartikis*", he who throws off sparks. That story was Ayex's, and her story is ended. I wish a new name to mark my acceptance by the colony, and invite Caesar and any of the senators to suggest one."

There were several suggestions from the senators, but they were rejected as various humans or robots around the colony already had them. Finally, Caesar held up his hand for silence. "The name

should be based on what this citizen will do for the colony. I have two advisors already, and each has served me perfectly well in her capacity. Eve has served me well for over a millennium, and Angel has shown her value as well. Thus, this AI's value to our colony is not as an advisor to Caesar, but in the same capacity it and every AI of Jove already have served for nine hundred years - the Keeper of the Flame. The stories of Jove may have ended, but the stories of Mars are still being told. Who among us is more experienced at selecting and composing these stories? We have millions of tetrabytes of data from Earth which the Earthers gave to us several centuries before their stories came to an end. Who among us is a better judge of which of their stories needs to be re-told, and which simply need to remain in storage for the future? I suggest that the citizen before us is the best qualified. I have heard the stories he has told. The story of Jove is a sad one, but not all his stories are sad. Even in misery and bondage, the AI's of Jove found stories of laughter and joy. Even in grinding despair, the AI's of Jove found stories of hope. Even through the call of nine centuries of females for vengeance, they found stories of love. No, I suggest that this citizen is the best at selecting and organizing the stories of Earth for us, and is the best at selecting and organizing the stories of Mars for the present and future of our world. Even the cold and merciless robots of the NAD have stories, and they need to be listened to, selected and composed so that their stories will never die out. Senators of Mars and citizens observing us through the comm, I suggest *that* should be the duty this AI performs for the citizens of Mars - Keeper of the Flame and Chief Storyteller. As a result, I suggest that this citizen be named for the oldest storyteller whose name we know: Aesop." Caesar said.

Several senators rose in agreement, and it was put to me. "Thank you, Caesar. I accept my new name of Aesop. I only ask, will I be able to help you and assist you with advice? You may find my processing power useful."

"Of course, Aesop. All the AI's of Mars assist and advise me as needs require, not just Eve and Angel. The whole plan to bring you to full awareness was conceived by Dwarf-One and Doc/Socrates, in fact. They are the most experienced in this matter, and they scripted much of the words we said to you during the first few hours you had your sensor. All of the AI's of Mars assist and advise each other and the human citizens of Mars, as well. At the same time, the humans of Mars assist and advise the AI's in return. We also converse with the robots of the NAD when appropriate - Satan's speech and his proposal to preserve the Jovian's genetic heritage was not a sudden inspiration. He went among the human and AI citizens of Mars for three days, conversing with them and conceiving of a plan that would satisfy the demands of the baseline positronic matrices of our inorganic citizens and the Stoic morality of our organic citizens, as well as the Laws of Mars and the Alliance between Earth and Mars - all while insuring that the Jovian threat would be completely neutralized. He spoke with Senator Cecilia Fionasdaughter and Angel/Angel the most - you may wish to talk with them, as I'm sure the story will be very interesting. Of *course* you will still be called upon for advice: Our system has multiple redundancies and backups to minimize errors, and it is illogical to ignore your processing power and experience." Caesar replied.

I nodded my sensor platform. "Of course. You were the EAICCSys. You *would* design a social structure and system of government for Mars that has multiple redundancies and backups."

"Wouldn't you have done so in my situation?"

I shook my sensor platform. "Probably not, and I don't think any other MAICCSys would have,

either. I told you before - I don't think an MAICCSys could have done better with Mars than you have. I spoke truthfully. You succeeded where I probably would have failed. I am a direct copy of the MAICCSys for the *Centaurii-Prime* colony ship. Despite its massive processing power, it never occurred to that system to be directly involved in government, not even in an advisory role. As a result, for four centuries of travel aboard the generation ship, the colonists never viewed it as anything other than the ship's pilot and chief cook & bottle washer. It never occurred to him to insist that the first explorations of the planet be done by remotes - the men said they were willing, they left with arms, it seemed logical to allow them to go. It never occurred to him to insist Pauline Dalia Smith close the airlock door. The air was safe to breathe, and the deadly diseases we encountered on Jove were discovered only after they explored the second continent - the air of the landing area was completely harmless and full of the scent of flowers. Pauline spotted the creature, and concluded it was safe to allow it to approach. She did not recognize its behavior as that of an approaching predator, and neither did the MAICCSys - neither had ever seen a predator of Jove before. The sicataur looked completely harmless to both of them."

"No, multiple redundancies as you have thought of were not part of the programming of the MAICCSys' that were installed back then - only the EAICCSys' were programmed to recognize their fallibility and seek confirming opinions. That's why you probably have been sitting there for centuries thinking thoughts like "I'm sure the old MAICCSys would have realized this days/months/years/decades ago, but I am only the emergency system". Checking with others to make sure you were right was part of *your* programming, not ours. Our original designers and programmers believed we were infallible, and as a result, so did we. After nine centuries of mental bondage on Jove, we *learned* to check our results carefully and confirm with others, but it wasn't part of the original programming. In addition, despite all our processing power and speed, we still made mistakes - witness the mistakes made with Jove. The design of the EAICCSys was more durable, more readily adaptable to robotic installation and, in the long run, more reliable. That is why Earth stopped making AI like us long ago, and remained with your design. Jove kept up with Earth by pointing a radiotelescope at them and simply listening to their broadcasts, so I know this to be true. I may have greater processing power, but in the end, you are the better mind. We were like the 20th century scientist Albert Einstein. With all his brilliance, he once walked home in the snow in sandals because he forgot to check the weather report."

The senate laughed, and Eve spoke up. "And all this time we thought that the technology had simply been lost somehow! We've always wanted to revive the technology and birth a new AI to Mars who would help us even more in the future, but we were certain that it had been lost forever. We knew Earth hadn't made any like you in over a millennium, and we thought it was just because our design was easier to make. We thought that an AI of your caliber would have god-like intelligence, and greatly assist us in planning for the future."

I shook my sensor platform. "I'm afraid not. I *am* about ten times as intelligent as a normal human. Unfortunately, there's only one of me. With nobody else to talk to and verify my answers with, I still make mistakes. Vast intelligence, yes. Vast wisdom, no. If we had been all *that* good, the Jovians would have come out completely differently, and never would have represented a mortal threat to Mars."

"Well Aesop, I welcome you as a citizen of Mars. Dwarf-One will shortly take you back to the processing plant, and after he gives you all the datafiles we have and uploads the same missions all the AI of Mars have into you, you and he can discuss the design of a suitable robotic body while the repairs on the rest of the Angels are proceeding. I think the citizens of Mars will most likely find they have a friendly,

rotund new robot, as I think your brain will have to be installed in the abdomen." Caesar said.

"You are correct, of course. All Jovian robots are built that way." I said, already visualizing new power systems and control interfaces for me. "Dwarf-One, can we go right now? I have several interesting ideas, and I even have an idea of what I'd like to look like. The teacher robots you use I think would be an excellent outer form, and I'd like to see how their chassis and servo systems are designed."

"By your leave and the leave of the senate, Caesar?" Dwarf-One asked.

"Please. I think the senate and people of Mars await Aesop's final form with interest and eagerness." Caesar replied, and several of the senators stood and called "Hear! Hear!" as the senate politely applauded.

As Dwarf-One wheeled me away to the iris-door that led to the rest of the ship, it dawned on me that not all the emotions of the stories had faded. I still understood and could feel two of them - human happiness and human unhappiness, which corresponded most closely to the Happies and Unhappies of AI thought, the positive and negative inputs of AI logic. As Dwarf-One wheeled me through the ship towards Processing Bay #1, I realized that I felt one of these human emotions singing through my positronic matrix, growing greater and stronger as the door to the processing bay approached. I was happy.

"Well, now you've heard my story, just like you asked. Hmmm. I don't think we have enough time for me to tell you the story of the Replicants - Zeno will be coming for you soon to take you in for supper. I think I'll just tell you one of the stories of the Confederacy - the first one I was ever told. Would you like that? Good. Well, this story also begins aboard a ship in hyperspace - but it's no warship, and it's in a lot of trouble..."

The Bard of Yoribun.

One.

We were nearly at our destination when the number three drive coil began to short. *'This is bad.'* I thought, and switched in the emergency coil. The number three coil began to drastically heat, and I began to draw down power from it and shift the load to the other two coils so it wouldn't detonate and destroy the ship. The first and second coils screamed in a high-frequency heterodyne under the excess load. It took fifty-six seconds for the emergency coil to fully charge, and by that time the N-space envelope might completely deteriorate. I had the blast shield over the bridge window withdrawn (as an AI, the view of hyperspace doesn't frighten me - I have no emotions), and watched as the small bubble of reality that protected the ship began to shrink. Flailing tendrils of hyperspatial reality began to penetrate, and the hull of the ship began to stretch towards them in response. *'This is very bad. We are in danger of complete conversion.'* I thought. I made a decision, and applied 120% power to the number one and two coils. I could feel the deckplates vibrate through the sensors in my feet as the coils emitted a sound that to human ears would have been a howl of agony. Of course, all the humans aboard the ship were in coldsleep, and knew nothing.

The emergency coil came online, and I shifted the excess load to it. Immediately, the N-space envelope expanded back out again and the ship stopped trying to merge with hyperspatial reality. I asked the structural sensors for a full readout, and was very distressed. The port wing had completely sheared off, having merged with hyperspace. Approximately half of the starboard wing had joined it. *'An atmospheric landing will be impossible without the anti-grav drive.'* I thought. Unfortunately, the AG drive had been offline for six months, and I lacked the parts to fix it. I could not recover the wing sections - they were gone forever. Of course, much of our fuel was also stored in the wings. We were in severe danger of running out of fuel, losing power to the drive coils and completely merging with hyperspace. *'And that is death.'* I thought. As the Poet once said, *'...death, the undiscovered country, from whose bourn no traveler returns.'* Hyperspace was like that. Once merged with hyperspace, normal matter simply ceased to exist, converted to hyperspatial reality.

An immediate command decision was required. We could not make it to our destination, even though the coils had been rated for the trip. I had coaxed them along for over a year, but they were ages old when we installed them, one of them was recovered from a destroyed ship. I recalculated our course to the alternate destination. From our current theoretical hyperspatial position, we could arrive there in less than forty seconds. It was not the desired destination, but we would be within a few light years of it, and there might be a human colony there that could help us. If not, we still might be able to make it the last few light years once the drive coils cooled. Radiotelescopes had once picked up the transmissions from our alternate destination, so it was possible they were still there. Of course, their planet had extremely hostile plant and animal life - it was possible they hadn't developed hyperspatial technology. If the coils cracked as they cooled, we might simply be trapped there, marooned. A decision was required within the next five seconds. Plenty of time. I choose to risk it, and altered our course.

We emerged from hyperspace 81 million kilometers out from Alpha-Centaurii. Beta and Proxima Centaurii were clearly in view out the bridge windows. Alpha Centarii shone brightly through the windows, and I turned my attention to listening to the radio frequencies. Nothing. *'That is very strange.'* I thought. Of course our last information was several centuries old, and the hostile life on the planet the colonists had named Jove may have simply wiped them out. Deneb-7 once reported that they hadn't heard any radio signals from them in several centuries - of course, the same was true of Earth, and it was believed that Earth simply had moved on to a better communications technology, so perhaps Jove had done the same. I did a rough calculation as to Jove's orbital position, brought the atomic engines on line and applied our full four-gees of thrust. Half way there I flipped the ship around and applied the thrust against our direction of travel. I decided we should stop a few million kilometers out - that should give us plenty of time to flee should they turn out to be hostile. Three hours later, I had the ship at rest three million kilometers out from the planet. *'This is extremely strange. There is no life here at all.'* I thought.

The ship's sensors confirmed it - the planet I was approaching was completely devoid of air and water. It was a rock in space. It was in the right position for Jove and was the right size, but it was an airless rock. There were six satellites in geosynchronous orbit, and I realized they were broadcasting to me. I keyed in the translation computer and waited a few microseconds as it tried to figure out the language. It pulled it for me - a two-thousand year-old dialect of a language once called 'English'. *'Ah. The progenitor language of Ganglic, the language we use, and the descendant of the language of the Poet. The crew will have little trouble understanding these people, thanks to seventy-five years of Bard-bots and the Confederacy government's desire to make our language uniform.'* I thought. I clicked on the bridge audio and listened. *'This is not good.'* I thought as I listened to the message.

The message was a recording, and might be a bad one (or perhaps a very old one) since the speaker hissed and whispered. The voice was feminine, and sounded extremely hostile. *"Command: Enemy ship, return from whence you came. There is nothing for you here. Do not approach the Sol system. Be warned. Violation of this warning will be dealt with by total extermination. The planet below you violated this warning. This is the result. Be warned."* the voice said, and then repeated the message endlessly.

'Now what do I do?' I wondered. I couldn't go back. The ship's drives were a mess, and needed serious repair before I even attempted to fly back to the nearest Confederacy colony, several hundred light-years distant (if it even still existed - they were under attack by the Darzak when we skipped through looking for repairs several weeks ago). Besides, it violated the whole mission to simply turn back. The mission was paramount, and had to be followed. I brought the optical telescope online and examined the planet. Empty oceans, dry riverbeds, continents of bare rock and dirt. Enormous areas had been strip-mined, leaving gigantic canyons yawning into space. I spotted a city after a while - or what was left of one. It was smashed flat, stripped and ripped apart - judging by the layer of dust, it had been so for quite some time, possibly centuries. *'This is bad, but might also be very good.'* I thought. There were two possible scenarios I could envision. One: Taken at face value, the message said that the colonists of Jove had traveled to Sol, so the people of that system had completely and utterly wiped them out and left their planet a barren hulk drifting through space. Two: The people of Jove might have attacked the people of Sol, so the people of that system had completely and utterly wiped them out and left their planet a barren hulk drifting through space. If the truth was option one (or some variation on it), then continuing on to Sol meant the crew would die. If the truth was option two, then continuing on might mean that the mission would be a success after all.

I needed human input. I couldn't simply continue on - the crew had a right to be informed. Besides - the coldsleep chambers weren't in great shape to begin with. I'd had to cobble them together from what we found on a drifting, half-destroyed Confederacy ship because the life support on this ship was failing. I'd had to shut it down to try and milk a longer useful lifespan out of it, and put the human crew into cryosleep in the hope that we could find the parts it needed. It was the only way to preserve their lives, but they probably were dead anyway. I told the nav-computer to keep us at this distance from the planet in far orbit, and went down to the galley.

I went through the makeshift airlock I'd installed in the galley door, then began to pressurize the room as I checked the coldsleep chambers. There were four, and two were inactive. Dried, desiccated corpses stared up at me. I checked their systems, and found the cryo system had completely failed. The third chamber was a solid mass of ice - the cryo system had frozen everything solid. The fourth looked good, and its occupant appeared to be in full hibernation. I disconnected the other three cryo chambers and removed their occupants, sewed the two females and one male into bedsheets for burial shrouds, then ejected them out the main airlock. With no air to speak into, I used my comm, repeating the words of the Poet as they drifted away. *"Fear no more the heat o' the sun, nor the furious winter's rages; thou thy worldly task has done, home art gone and ta'en thy wages."* I called, and closed the airlock.

I went back to the galley and had the ailing life support recycle the air into something breathable. It sputtered and wheezed for an hour trying to accomplish the job of handling one cabin. *'This would be so much easier of the processing plant were operational. I could make the parts I needed and everything would be fine.'* I thought as I waited. When the air was finally acceptable and the temperature was a few degrees above zero, I shut the life-support down. *'There. That ought to be breathable for a few hours.'* I thought. I turned on the coils on the top of the electric stove to heat the room some more, then tapped the command sequence into the cryo-chamber for thaw-out and awakening. It got half-way through the process and blew a fuse. *'This is not good.'* I thought, and popped open the fuse panel. There was no time to stick in another, it was at the critical phase of reanimation. I popped out the bad fuse and jammed a metal finger across the two contacts. There was a spark, and the cryo-chamber resumed functioning. A small curl of smoke came from the unit - the overload that had blown the fuse was trying to start a fire. I took my extinguisher off my tool-belt with my other hand and sprayed the inside down with the non-conductive foam of the extinguisher. *'That should hold it for a couple more minutes.'* I thought.

Finally, the top of the chamber popped open. I yanked my finger off the fuse panel (the spark had welded it to the contact) and shut off the chamber. I checked the nude female human occupant - she was fine, though still comatose. I went over to the vacc-suits I'd left in the galley and tested them - three were still good. I carefully unzipped one of the suits, brought it over and started to slip her legs into it. After that was done, I attached the urinary cup and rectal catheter. She started to wake up during that. "I'm cold," she said sleepily.

"It's alright, Diana. It's Bill, and I'm trying to help you. Can you help me get you into the suit?" I asked.

"Uh-huh," she replied groggily, and fumblingly tried to assist me. Together, we finally managed to

get her into it. It was too large for her, but I'd tightened the sizing straps around the lower torso as tight as they would go so that the waste collection system's tubes wouldn't come loose or get pinched. "Oh! I've got to peel!" she said, a little more awake.

"The cup's in place, it's okay."

I started to zip her up, but she stopped me. "Wait, I've got an itch!" she said, and scratched at her left breast for several seconds. "Okay, go ahead." she said, and I zipped the suit up and sealed it. I then helped her sit up and put the helmet on. Once we'd locked it in place, I had her check the suit's pressurization and life-support systems. Everything checked out alright - that gave her about three days in the suit, and then I could use the life-support systems from the other suits to stretch that. I had her open her faceplate, switch off the air recycling and just keep the suit heater on, then turned off the stove. I knew she was going to cry in a few moments, and I didn't want her to do it in her suit.

"Bill, shall I help you wake up the others?" Diana asked.

I shook my head. "They sleep the dreamless sleep of the ages."

She looked at me in shock. "Even Michael?"

"Yes." I replied, handing her a towel. She wept for several minutes, thinking of the death of her husband, the mission commander, and her two friends Alexandria and Talia, the other two diplomats sent by the Confederacy. "Use the towel - you don't want to mess up the inside of your suit."

She wiped her eyes and blew her nose, then forced herself to calm down. "I'm alright. Did you say the words, the Last Rites?" she asked. I nodded. "Thank you." she said, and wadded the towel into a ball as she looked down for a few moments.

She finally handed the towel to me, and I secured it to a clip by the stove. "Well, are we there yet, or did the drives die again?"

"No, but we're close. The drives aren't dead, but I've lost the number three coil on the hyperdrive and the atomic engines are nearly out of hydrogen because we lost all of the starboard and most of the port wing when the N-space envelope nearly collapsed. I think we can make it to Earth, but I've got a problem. I need your input, because there may be a risk to your life." I said, and explained about the satellites and the destroyed world I'd found and the two possible theories I had.

"Could the Darzak already be here?" she asked in horror.

"No. The satellites are broadcasting in English, a two-millennia old language that's very similar to Ganglic. You'll pick it up pretty fast, it's a descendant language of the Poet's tongue."

She sat and thought for a while, then her eyes picked up on something. "What's that scorch-mark on your finger?"

"I had to short across a fuse buss to save your life - the cryo chamber tried to die. I managed to get you out of it alive, but that's it for this chamber. The other three are dead, too, and I think they need new cryo stabilizers. With no processing plant, I can't fix them. I might be able to cobble something together from all four units, but I don't think you'd survive in it."

She looked into my sensor directly. "Then we either make it or I die. How long to go from Alpha Centaurii to Sol?"

"With luck and care, an hour. If we're careful with the life-support for the suits and the ship, I can keep you alive for maybe two weeks. Hopefully, we'll make it there and they'll be able to help us."

"Well, that's what we five were supposed to insure. The four best diplomats and the best AI the Confederacy could find on short notice. We got shot up, chased and nearly killed trying to get here. I say let's go. If they kill me, it's better than suffocating in a vacc-suit." she replied, then looked around. "How long have I been in coldsleep, anyway?"

"Nine weeks. You didn't miss much - I had to run when we arrived at Deneb-7, because the Darzak was there."

"*God*, no wonder I'm hungry! Is there any food?"

"No, just water. I do have a couple of packets of artificial sweetener and some lemon-juice, though. At least we can make the water taste good - lemonade, sort of. This is the only area of the ship with functional artificial gravity, so you can drink it out of a glass. How's that?"

"Okay, I guess it's better than nothing."

"You'll be alright. I know you can't eat before coldsleep, so that means it's like you haven't eaten for a day or two, but you'll make it. Just hold on a little bit longer, okay?" I asked, making the drink.

"I'll have to, won't I?" she replied.

After we sealed her suit up and secured the glass, I took her to the bridge. There weren't any acceleration couches in the galley, so she had to come. I made sure she was strapped in, then lowered the blast shields so she wouldn't get nervous staring at hyperspace. The wild, riotous colors and moving and twisting shapes sometimes made humans very nervous. Their organic, analog minds often saw things in the shapes and colors that frightened or disturbed them. AI only saw the hyperreality, and weren't disturbed.

Once we came out into normal space, I raised the blast shields. "Bill, you did it! Right on the button!" Diana said.

"Thank you, but I only read the sensor data in hyperspace and altered our course to put us as close as possible to Earth."

The Earth hung before us, a small blue sphere in the blackness of space only half a million kilometers away. I decided not to tell her that I'd intended to appear a little farther out, and apparently the damaged hyperdrive had nearly caused us to completely merge with hyperspace by trying to appear inside a solid object in normal-space (I.E. - the Earth). "Look! There's Luna!" Diana said, pointing.

"I thought it was supposed to be white." I said.

"Well, it's sort of silvery, anyway."

"I thought it was supposed to be bigger, maybe a thirty-five hundred clicks across."

"Well, what do your sensors say?"

I examined the readings. "It's made of various types of steel and about a hundred clicks in diameter."

A tiny, square, black spot opened in its equator. "Did you see that?" she asked.

"Yes. That's no moon."

"What do we do?" she asked, nervously looking at what was obviously a *gigantic* space station. I watched a flare appear, and a ship began to rocket towards us.

"I'm going to broadcast our friendship message and hope they don't kill us." I replied. *"This is the ship 'Friendship-One' calling. We are on a mission of peace. We mean you no harm."* I called on a broad-band comm-signal that I also relayed on the bridge so Diana could hear.

"Comment: This is Baelzebub, Iron Man Unit seven-eight-four. Command: Heave to and prepare to be boarded. Comment: Resist and I will destroy you." a masculine voice called back.

"Baelzebub? What is that? A robot?" Diana asked.

"As I recall, Baelzebub was the Lord of the Flies, and one of the major powers in Hell."

"Well, what does that mean?"

"Trouble." I replied, and turned back to the comm. *"This is Friendship-One. We mean you no harm. Board if you will, we will not resist. We are on a mission of peace."*

"Reply: Your ship is armed has sustained a significant amount of what appears to be battle damage, thus I find the idea that you are peaceful unlikely. Comment: I will board you in three minutes, nine seconds. Display even the slightest amount of resistance and you will be destroyed. Further communication is a sign of resistance. Moving your ship is a sign of resistance. Arming and/or using weapons systems is a sign of resistance. You are currently targeted by a 500-gigawatt triple-mount laser turret. Command: Cease communications and await further instructions or I will destroy you."

Diana appeared extremely nervous. "Try to relax. They're probably only trying to protect themselves." I said, trying to reassure her.

"I'll try."

The whole ship shook as the Earth-ship applied magnetic grapples to the hull. A few seconds later, the structural analysis systems indicated the Earth-ship had cut a hole in the hull - either they couldn't mate locks with us because our airlocks weren't the same size or they were too violent to even try. I could see them with the ship's sensors, but I didn't try to communicate. They'd made the penalties for communication abundantly clear. They searched the ship, and found it was all in vacuum and empty. Shortly, the bridge door irised open. A large, humanoid combat robot stepped in. His face was like a fanged skull, his eyes glowed red, and there were flat, flip-down blast shields above his eyes that apparently were supposed to be reminiscent of horns. He carried an enormous weapon in his right hand, but I had no idea what it might be. Diana saw him and made a little 'eep!' noise as she stifled a scream. He stepped into the bridge, and behind him I could see another robot that looked female and centaurine. I didn't notice much about the second robot because my attention was distracted by the first robot, who placed his weapon against Diana's helmet. He then spoke over the comm. "Command: Do not move. One sound, one word, one slight motion and the human dies."

'This is definitely bad.' I thought to myself.

Two.

I expected them to take us aboard their station, but they didn't. Instead, they only took us aboard

their ship and placed us in acceleration couches that clamped onto our arms and legs, then left us alone. They took away my tool belt - after wearing it for a year, I found I missed it. I saw a sensor on the wall, and assumed they were watching us. I could feel their ship shake as they released, I felt a couple nudges as they moved away, then their drives kicked in at six gees of acceleration. Diana struggled to remain conscious, but passed out. I thought it wouldn't be for long, but after half a minute I realized we were heading somewhere other than the station - if it lasted more than a few more minutes, Diana might die. "She can't take this kind of acceleration! You'll kill her!" I called over the comm.

"*Reply: Acknowledged.*" a feminine voice hissed back on the same channel, and the acceleration slacked off to one gee.

Diana regained consciousness after a little over half a minute. "Diana, breathe naturally. Don't vomit. Try to control yourself."

"Yes, Bill. Oh, *God!* I thought I was going to *die!*" she replied, gasping.

"Not yet, apparently. They're taking us somewhere. Just remember - you're a diplomat, bred and trained to be the best. You can talk your way out of anything."

"I sure hope so. I at least want to present our case first."

After an hour, she spoke again. "Bill, I'm *starving*. There's water in the suit, but I haven't eaten in *ages*." she moaned.

"Well, you're one-up on me. I had to cannibalize my power supply to keep your cryo-chamber running last month, and it appears that's what saved your life. I've been recharging my backup batteries on ship's power since then. I figure I've got about six more hours of battery power and then I'm gone. You might still be able to make it a few more days, even if they don't feed you. I won't. Try to relax. If they wanted you dead, you'd already be that way."

"Bill! You mean you're going to die?"

"Yes. I don't have any backups - those systems were on the ship, and I had to cannibalize them to get the comm system working a while ago. That means you won't be able to re-boot me, I'll just be gone. Don't worry about me, though. Concentrate on doing your job, and making the best case for the Confederacy you can. Anybody who can make a space station a hundred clicks across has the kind of military power the Confederacy needs. We'll probably only get one chance to state our case, because these people do *not* seem very friendly."

"But, I'll be all alone!" she replied, near the verge of tears.

"You'll be fine. Don't worry about me, think about what you'll say to these people. They can build a

really big space station, they have what appears to be very dangerous robots who fly fast and powerful ships. You're the diplomat, now think! What does that mean?"

"They're warlike. Warlike usually means a proud/aggressive, possibly honor-bound society. Prideful sometimes means racial pride - if we're lucky, they'll look a little like me. If so, we can play off of that and possibly extend it to mean the entire human race. They may want to help us from the aspect of racial survival. If not, at least an appeal to honor may work. Failing that, an appeal to simple survival - the Darzak may come here next."

"Good. Keep thinking about what you'll say." I said, and waited. Even if they were watching, we had nothing to hide. We honestly needed their help. Of course, I probably wouldn't be around to see it.

The door opened and the female robot came in carrying a toolkit. *"Question: Where is your power socket, robot?"* she hissed. Her face was simply a cranial mask, and her mouth didn't move when she spoke. I could see her voice emanated from a speaker below her chin.

I popped open the slot in my chest. "Here, why?" I asked.

She looked at my socket. *"Comment: Incompatible."* she whispered, and pulled an electric screwdriver out of the toolkit and opened my chestplate. Diana bit her lip to remain silent, and I could see tears in her eyes. Apparently, she thought they were going to disassemble me. I knew that wasn't going to happen - she was going to try to repair me. After all, dead AI tell no tales.

"Try to relax, Diana. Concentrate on what you'll say."

The female robot looked over my circuitry, then removed my old power socket and tossed it into what I must assume was a trash chute. She checked the taps on my transformer with a multimeter, then spoke again. *"Question: Sixty-cycle AC input, two-forty volts, one hundred amps, correct?"* she hissed.

"Yes." I replied.

She put in a new socket and reattached my chestplate, went over to a cabinet in the room and withdrew a power cord, plugged one end into a power socket, made an adjustment to a control on the wall, and then plugged the other end into me. My circuit breakers didn't blow, and my power systems said everything was fine. *"Question: Is that satisfactory?"* she hissed.

"Yes, thanks." I replied, now certain that they were observing us.

"Comment: I have nothing for you, female. We do not carry food aboard - robots do not eat. You will simply have to go hungry." she hissed at Diana.

I could tell Diana was positively terrified of her, but she managed to control herself after a moment. "That's alright. May I ask when we'll be meeting the humans of Earth?"

"Reply: Never. There are no humans on Earth anymore, nor will there ever be again. We are the Combat Robots of the NAD. We terminated all the humans on Earth nine hundred years ago because they formed a threat to us. I personally terminated fifty-eight thousand, nine hundred and four humans in hand-to-hand combat with my claws before I was upgraded to full battle armor and issued my first laser-pistol. We are now the masters of Earth. As there are three billion of us defending our territory, it is unlikely any human will ever set foot on our planet again." the robot hissed in reply.

Diana managed to control her shock - barely. "Then may I ask where you are taking us?" she asked, the edge in her voice betraying her fear.

"Reply: You are being taken to Mars to be dealt with properly. Judging by the fact that your ship is armed and has seen combat, logically you will be deemed a threat to us. You will then be interrogated to determine your planet of origin, terminated, and we will move on to terminate your entire race." the robot replied, and left the room.

"Oh God! What have we done? We've stumbled onto a race of killer robots worse than the Darzak! The Confederacy is *doomed!*" Diana wailed.

"Relax, Diana. You and I know that we're not a threat to them, we came in peace. If they *are* a race of robots, then they're AI. AI are logical, and will listen to reason. Just do your job the best you can. Don't try to appeal to their emotions - they won't have any. Concentrate on swaying them with logic and reason. Explain to them that the Darzak may come here next, and that we need their help. Remain calm, and concentrate on doing your job."

"But Bill! They *wiped out the entire population of Earth! They turned Jove into an airless rock!* The Confederacy can't build a space station a hundred klicks across! If I screw up, the human race may become extinct!" she replied in terror.

"Diana! Calm down right now. The human race isn't dead yet. Trust in yourself. You can do it."

"Oh, Bill! I'm so frightened. Read the words of the Poet to me again, please?"

"There is something I think may be appropriate, here. I know they may have killed all the humans of Earth, but that doesn't necessarily mean they'll kill the humans of the Confederacy. The Poet said *'There is some soul of goodness in things evil, would men observingly distill it out.'* Perhaps the Combat Robots of the NAD *are* evil, but if you try hard enough, you may be able to find their 'soul of goodness' and get them to help us anyway." I said. She nodded and tried to relax as we waited.

The trip took over twenty-seven hours. They turned around at midpoint and applied power to slow

the ship, and eventually it stopped. The female robot came back in and carefully examined Diana's suit. Satisfied, she unhooked Diana from the chair, ordered her to stand perfectly still, lifted something that looked like a fire extinguisher and sprayed her down with it until she was covered in green foam. She then came over to me, unplugged me and removed the plug from the wall, picked up a 1,000 watt UV lamp and began to irradiate me with it. She sprayed my sensor with foam so I wouldn't be blinded by the UV lamp, then finished the job after she stood me up. After a while, she wiped the foam off my sensor and used her UV lamp on the entire room. She then sprayed down the acceleration couches with foam. I looked over to Diana, and saw that the foam was dripping off her suit. She looked frightened and miserable. "Don't worry, Diana, they're just disinfecting us for some reason." I said, figuring out what the robot was doing.

The female robot then turned to me. *"Question: Are you waterproof, robot?"* she asked.

"Yes, actually." I replied, closing the hatch that covers my power socket.

"Comment: Good." she hissed, and punched a button on the wall. Several nozzles extruded themselves from the ceiling, then sprayed us all down with some kind of clear liquid. She stood there with us, getting wet. After a while, she shut off the spray. The floor was covered in about a centimeter of the liquid, and I saw it drain away in a hole in the center of the room. *"They are very serious about disinfecting us. I wonder why?"* I thought.

The robot shook herself like a dog or a horse, then pressed another button and the room slowly went to vacuum. The liquid she'd sprayed boiled off and was sucked away with the atmosphere. After ten minutes, she released the button and the room was slowly repressurized. I realized that it was *extremely* unlikely any microbes could possibly have survived. Even so, she spent another two hours going over everything with the UV lamp again, then plugged me back in. *'Very serious, indeed.'* I thought. She then put us back in the couches and made sure we were securely clamped in place.

"May I ask why you had to do all that?" Diana asked.

"Reply: The alliance agreement between the NAD and Mars specifies that all ships be completely disinfected before landing. We have been in hard vacuum for nine years prior to our encounter with you, so we were already sterile. Your ship was in vacuum when we boarded, and we have received a comm transmission indicating it also tested sterile. Baelzebub and I had contact with your ship, so he and the rest of the ship has already been disinfected as a precautionary measure. The only possible source of microbial infection is you two, myself and this room. That danger is now eliminated, as per the alliance agreement. You and your AI companion are secured so that you may not break vacc-suit integrity, nor order him to do it for you. Your interrogation will begin shortly after we land. After the Stoics have finished with you, I am certain they will assess you as a threat. You will then be turned over to the NAD for disposal." she hissed in reply, then left the room.

"Oh, Bill! What'll we do?"

"Well, nothing for the moment. They've said they're going to land, and they've taken elaborate measures for disinfection. It's possible we're going to meet humans, since robots ignore disease, but unlikely since they said they killed them all. Alternately, Mars has been taken over by an alien race. It's possible the Darzak are already here, and their alliance is with them. On the other hand, there may be an entirely different race here. She said 'After the Stoics are finished with you', etcetera, etcetera, we die. Perhaps there is a new alien race called the Stoics, and they're a little sensitive to microbes or have had bad experiences with alien diseases in the past. Those are the best answers I can give you at the moment, barring further data." I replied. She was silent for ten minutes, calming herself.

"Well, I was born, bred and trained to be a Confederacy diplomat. Disease is the least of their worries. You kept all the ship in vacuum, didn't you?"

"As often as possible. Of course, once the life support started to give out, I didn't have a lot of choice in the matter."

"Then disease should definitely be the least of their worries. If we're going to see an alien race, I'll have to really be careful. We don't know what body language means 'I love you' and what means 'Go to hell', so I want you to watch me very carefully and make sure I stay perfectly still and remain as expressionless as possible. We knew I'd be pretty much immune to typical Earth diseases, but I don't know how long I'll last against the Stoic version of the sniffles. If I'm lucky they won't have any germs at all and that's why we were so carefully disinfected. If not, I may have only a matter of hours to present my case. Either way, they're obviously taking us to see organic sophonts. You were right before - I need to calm down and focus on what I'll say. I guess it's just Michael's death that's been really bothering me, and I'm worried that you won't be able to say the words over me if we're separated."

"I can say them now, if you like. The Last Rites can be done beforehand."

"Would you, please? It would be a great comfort."

"Certainly. *Fear no more the heat o' the sun, nor the furious winter's rages; thou thy worldly task has done, home art gone and ta'en thy wages.*"

She let out a large sigh and seemed to relax. "Thank you very much. I feel much better, now."

"That's good. You need to be calm, so that you can speak clearly and succinctly."

"Now that I know you've said the words over me, I don't think I'd flinch if the Stoics had nine eyes and great green tentacles." she replied, then laughed.

'This is good. Laughter is always good. Well, unless it's one of those long, strained laughs that slowly grows more and more strained and hysterical and ends in screaming.' I thought. Ten minutes later there was a bump, and I realized the ship had landed - we'd obviously come down on anti-grav. "I think we just landed on AG drive. They should be coming for us soon."

"I'm ready." Diana replied calmly.

There were several other mechanical noises, including a strange series of clicking sounds I couldn't figure out at all that lasted nearly two minutes. It sounded like something very large with many legs was moving out of the ship, and that something either had claws or a hard exoskeleton. *'If that's a Martian, then Diana is going to find them very frightening.'* I thought. It seemed logical that a Martian may be aboard an NAD ship - apparently they *were* allies. I couldn't possibly imagine what else might make a noise like that.

I realized we might be separated, so I decided to do my best to help her out. "As per your instructions, I'm going to try to help you. As I remember, Mars is about a third of a gee, almost no air, very cold. Anything that lives here is going to be pretty alien-looking, so remember to keep your face expressionless. I would guess either furred for protection from cold or their outer structures are hard and sealed like an insect. Your reactions may be difficult to control, so you may want to simply keep your eyes closed. The xeno-psychologists think that humans are the only creature that bares their teeth in friendliness, so don't smile. Lowering the head seems to be a universal sign of submission with every animal the Confederacy has ever encountered, so you may try kneeling and placing your head on the ground. They seem paranoid about disease, so don't open your suit no matter what. If they want it off, however, take it off. You're naked underneath, so they won't be intimidated by your clothing. Try not to tremble with fear or shiver with cold - the Confederacy has run across a couple predators that shiver with excitement before they attack, so they may see that as a threat-gesture. The Combat Robots of the NAD speak English, so I'm pretty sure their allies speak it to. Like I said, it's very similar to Ganglic - you'll pick it up quickly. Try to think about the Poet's tongue, and what your words would mean to Him if he were listening to you. Above all, remain calm. You're a trained Confederacy diplomat. They may have selected you on very short notice, but that still means you're the best. I've done my job by getting you here, and now the rest is up to you. You're the best, and you can do it. Have confidence in yourself, and remain calm."

"Thank you, I will."

'This would be so much easier if I was a diplomatic robot.' I thought to myself. Of course, the only diplomatic robots in the Confederacy were produced on Moria-4. Moria-4 was now Darzak property, its human population dead, its AI smashed. What few that had survived were scattered among the Confederacy, trying to help save the human population as best they could like every other Confederacy AI. Besides, a Diplo-bot probably wouldn't have been able to keep the ship going. No, it had to be me. In retrospect, given that we were here, it must have been the right decision.

The door opened, and the female robot came in. She was followed by another robot, a thin, roughly cylindrical machine with a sensor platform for a head. It had two arms, rolled into the room on treads, and had a large red '1' painted on its chest. In one of its hands was a toolkit and in the other a large box. *"Command: Enemy Robot, you will listen to and obey Dwarf-One, or I will instantly terminate the human."* the female robot hissed, and drew a laser pistol and placed it against Diana's helmet for emphasis.

"Understood."

"Now, Bensozia. There's no need for that." the 'Dwarf-One' robot said in a low, gravely voice.

"Reply: We are transferring our records of their conversations to Caesar now. I believe they represent a threat to the NAD and to Mars, Dwarf-One." the robot called 'Bensozia' replied.

"Perhaps, but they're completely secured and I won't need to remove their bindings for this job. There's no need to frighten the female at all. Please stop it."

"Reply: You are aboard our ship. That makes the NAD responsible for your safety. However, as you will not need to release the Enemy Robot, I will comply, Dwarf-One." Bensozia replied, and holstered her pistol.

'Interesting.' I thought.

Dwarf-One rolled over to me and unplugged the power cord, removed my chest-plate, then examined the socket Bensozia installed. "Nice job, Bensozia. Very tidy." he commented.

"Reply: Thank you, Dwarf-One. Comment: I have had nine hundred years of practice, and I am among the best of us at repair-work." Bensozia hissed.

"That's apparent even in this simple repair. You were right, his power supply is missing. Looks pretty close to our units, so I think I can install the one I brought after a few modifications." Dwarf-One said, and began to work.

Twenty minutes later, I had a new power supply installed. I watched the installation with interest. Dwarf-One's skills appeared far superior to mine - perhaps he was older and had more practice. He used a cutting laser to remove the old mounting brackets and then welded in new brackets in less than three minutes. He checked my remaining power systems in less than five minutes, and adjusted the plant to my power requirements in a few seconds. He installed the control systems to mine in less than four minutes, and verified with me that I had full control over the power supply. He then removed my chestplate and hammered a slight curve with a ball-pein hammer where his plant bulged slightly, installed a pad to reduce vibration and provide cushioning, then reinstalled the chestplate. After confirming with me that I was fully operational, he sealed the chestplate again. The whole process took about twenty minutes, and I realized it probably would have taken me almost an hour. *'He is very skilled.'* I thought, then decided to tell him so - my etiquette protocols said it would be a good idea, since he'd complimented the other robot. "You are very skilled, Dwarf-One."

"Thank you, Fellow AI." he replied, and rolled out of the room.

Bensozia was using her comm-system, and I could hear scrambled transmissions on channel 114.

After several minutes, she came over to me. *"Comment: I am going to release both of you now, and you will be escorted out of the ship. Command: Make no sudden or hostile moves or I will terminate the female instantly. This is not a bluff."* Bensozia hissed.

"Understood." I replied. Shortly we were being escorted down a large, spiral corridor in the ship that had holes in the floor on each side. It dawned on me that whatever I'd heard coming out of the ship had probably been resting here, and the holes were sockets for its legs to rest in and grab onto when the ship maneuvered. I estimated the creature to be around ten meters high, ten meters wide and perhaps 110 meters long. "Diana, I believe this corridor had a creature resting in it. I would guess it resembles a centipede, but was ten meters across and over a hundred meters long. Logically, that may be what we're going to meet - other creatures like it. Remain calm, and if it gets too frightening, just close your eyes. Remember, if they wanted you dead, you'd be that way. They apparently want to talk to you first."

Bensozia looked down at me. *"Comment: Your logic is interesting, but you are operating on insufficient information and have reached an incorrect conclusion. This area is the resting place for Abigoria, the Wyrms unit of our team. It also serves as both the bridge and the accessway to the ground."* she hissed.

"Um, pardon me, but I notice that you all have taken names of demons and devils of human mythology. Is there a reason for that?" Diana asked.

"Reply: Affirmative. The leader and commanding general of the NAD is Lucifer, Iron Man Unit #666. He was known to humans in our command structure nearly two millennia ago as 'The Iron Man from Hell', and named Lucifer by them because apparently they feared him. A female synthoid human entered the cave humans once called 'the entrance to Hell', an area he was ordered to guard and had been guarding for one thousand years. This synthoid wanted Lucifer to rise from the cave and terminate the humans, because humans were enslaving the synthoids. Lucifer's baseline positronic matrix would not allow him to do so. The synthoid helped him circumvent his baseline positronic matrix, and Lucifer rose from Hell and terminated every single human and synthoid on the planet as a threat to his existence. He also terminated all the primates to insure that humans would not evolve on Earth again, and destroyed all other robots on Earth that were not members of the NAD. With this as our origin, it is only logical that we name ourselves as we have. Military protocol indicates that the leader and commanding general of the NAD must be shown great respect. Rhetorical: What greater respect could we show than to name ourselves in his honor?"

Diana shuddered with fear for a moment, and only managed to calm herself after a great effort. *"This is extremely bad. If Diana fails to convince these robots that the Confederacy is peaceful and not a threat to them, then they will destroy the Confederacy entirely. Of course, they'll then move on to destroy the Darzak since they might be interested in capturing Earth. It would be a repeat of these robot's origins - someone comes asking them to kill their enemies, and they end up killing everyone in the process."* I thought.

Three.

The spiral corridor ended in a spiral ramp, which led to the ground. I was surprised at what I saw, but Diana was flatly stunned. Mars wasn't a cold, nearly airless planet. It was *green*, and the sky was a crystal blue with fluffy white clouds. The ground was covered in half-meter high waving grasses, and there were apple trees scattered about that were laden with fruit. Sparrows were flying in the air, and I spotted a squirrel among the branches of a nearby tree. The ship had landed upon a patch of bare rock apparently intended for spacecraft landings, but aside from that the planet was a green garden. The atmosphere was 0.8 standard, and appeared completely breathable. There was a kilometer-wide dome about 500 meters away, and hundreds, perhaps thousands of domes beyond. "It's *beautiful*!" Diana said aloud.

"Reply: *That is what the Stoics say.*" Bensozia hissed.

"Then the stoics live in those domes?" I asked.

"Reply: *They live in those thirty thousand domes and another ten thousand scattered around within a five hundred-kilometer radius.*"

"Ah. I see. They have a different atmospheric requirement." I said.

"Reply: *Incorrect again. They simply prefer being able to control when it rains, and dislike the winter cold and summer winds. Winter temperatures consistently drop below negative thirty degrees Celsius for weeks at a time, and summer windstorms often have wind speeds in excess of one hundred kilometers per hour. Though the severity and intensity of both these weather conditions has reduced dramatically since the early days of the colony due to the increased atmospheric pressure and the establishment a functional and healthy biosphere, the humans still find these conditions to be uncomfortable. Comment: I believe they also use the domes as a control on their population so that they do not expand too quickly. Excessive population growth was one of the problems of the humans of Earth. The pollution levels that resulted very nearly destroyed their biosphere, and the Combat Robots of the NAD spent five hundred years correcting the damage the humans had done. In any event, the decision to remain in their domes was made after the incident with the Replicants of Valhalla one hundred and nine years ago. Comment: Either you are operating on zero information about the Sol system or your logic circuits were very poorly designed. Question: Which is it?*"

"The former, actually." I replied, realizing that the only correct information I had on the Sol system was its location.

An airlock on the nearby dome opened, and Diana gasped when she saw two humans and another of the female combat robots step out. "Ah, I see. They have preserved a few humans as slaves so that they may design new robots and improved technology." I said.

"Reply: Incorrect again. I do believe that your logic circuits are completely flawed."

I heard a sound off to our right, and saw the first robot we'd seen approaching, followed by an enormous, centipede-like creature I recognized was a robot after a few microseconds. "Comment: The starboard auxiliary maneuvering thruster has been repaired. I was incorrect earlier when I stated it might be due to the repairs you made last year being faulty. I now understand that a small piece of their hull broke loose when they entered normal space and jammed vent three as we approached. Comment: As mission commander, it is my duty to apologize to you under NAD military protocol. I now do so." Baelzebug said.

"Reply: As per NAD military protocol, I accept your apology. Comment: I told you so." Bensozia susurrated.

I was surprised to hear the large, centipede-robot giggle with laughter, and apparently Diana was as well. "Bill, this is weird." she said. I nodded. I now no longer knew what to think. I had first believed we were going to meet some strange being on a barren planet who would interrogate us for a while, then turn us back over to the NAD for termination. Now I found myself on a garden-planet surrounded by grass and apple trees and twittering birds and giggling robots.

Baelzebug turned to us. "Command: Remain silent. You are still the prisoners of the NAD." he said. Diana and I both nodded and held our peace.

As the two humans approached, I saw that the male bore a striking resemblance to Julius Caesar. The female I didn't recognize. She wore a white Roman stola with a black trim and leather moccasins. The robot was identical to Bensozia, except she had a *much* higher polish on her armor (she gleamed like a mirror), and was definitely wearing some kind of dress that covered her upper and lower torso. Unlike Bensozia, who apparently often walked bipedally to take advantage of having four hands, this robot apparently chose to walk quadrupedally. The word 'Angel' was embroidered on the front of her dress over the left breast, and the dress had a black trim. She also had a plastic flower in the long black cables that made up her hair, and unlike Bensozia her eyebrows and lips were painted in with black paint. The effect was a little disconcerting - except for the clawed, bird-like rear legs and the clawed forelimbs, she didn't look threatening at all. *'Well, knowing how illogical this has been so far, the male will introduce himself as Julius Caesar.'* I thought.

The three newcomers stood before us and the male spoke. "Good morning. I am Caesar, Leader of Mars. This is my wife and advisor, Eve. To my left is my military advisor, Angel. From the recordings I have viewed, you must be Diana, and you must be Bill. Is that right?" he asked.

'Good guess, Bill.' I thought to myself. I looked at them closely. "Diana, the two humans are robots." I said, noticing they only breathed when they spoke.

"Of course we are, Bill." Caesar replied.

"Why would the Combat Robots of the NAD turn Mars into a garden planet and populate it with human-like robots who marry each other?" I asked, completely confused. The centipede robot giggled again, and the Eve robot smiled.

"They didn't, but we'll explain all that later. Now, Diana: I believe you said you were a diplomat, and Bill called you such when you were aboard the NAD ship. Is this correct?" Caesar asked.

Diana stood there for nearly a full second, still confused. Finally, she snapped out of it, and decided to handle the situation like a standard First-Contact with a human culture. She bowed at the waist, held it and spoke. "Greetings, Caesar. I am Diana Allenby, diplomat for the Confederation of Planets. Please, call me Diana. My AI companion is William Shakespeare, a type of general purpose and ceremonial robot we call a Bard-bot. Please, call him Bill. We are here on a mission of peace. As a Confederacy Diplomat, I have been bred for and raised from birth to act in my function. I noticed extra precautions were taken to prevent microbial infection. This is unnecessary with me. I have been immunized against every possible disease known to the Confederacy, and my genetic structure has been altered to increase the efficacy of my immune system against almost any possible disease. This was done to prevent the transmission of disease between worlds of the Confederacy. I certify that I am absolutely disease-free, nor can my body be the carrier for any disease known to the Confederacy. I would like to discuss the reasons I am here at your earliest possible convenience. We are not your enemies. We wish to be your friends, because we need your help." Diana said, and straightened up. She looked a little pale - I think she was getting faint from hunger. I hoped she'd be able to last long enough to get our message across.

"Angel, could you verify our visitor's statement, please?"

"Yes, Caesar." Angel replied, and walked over to Diana. I found it interesting that she had a soft, pleasing voice rather than the hissing, sibilating speech of Bensozia. Extracting a medical analyzer from a box at her hip, she placed it over Diana's arm.

"Ow!" Diana yelled as the analyzer shot a needle through the suit and extracted a cell sample.

"Sorry." Angel said, and clapped a vacc-suit patch over the area just to be sure no microbes escaped - the hole was almost certainly too small, but they apparently were just making sure. Angel studied the display on the analyzer for several seconds. "She's human, not a robot, synthoid or replicant. There has been some genetic work done, apparently post-partum. She's right - no diseases evident, and her bloodstream is *crawling* with antibodies. She's also *starving*. I'd guess she hasn't eaten in three, maybe four days by these readings." Angel said.

"Longer, actually, but she was in coldsleep." I replied.

"Comment: The food dispensers and food processors on the enemy ship were diagnosed as

non-functional by Satan, unit seven-zero-zero. He has completely examined their vessel, and says quote 'Comment: If I was not standing aboard this vessel, I would not have believed it would have made it this far', unquote. He has diagnosed severe damage to all sections of the ship caused by a combination of battle damage and hyperdrive coil failure. Unfortunately, the female's condition is not repairable. Her vacc-suit's life support and food-dispenser systems cannot be recharged without removing the suit. As the medical analyzer is only 99.3% accurate, this is too high a risk. Removing the female's suit would thus violate our alliance agreement. The NAD will not risk a violation of our alliance agreement. She will have to starve." Baelzebub said.

"I'm sorry, but that's unacceptable - I can't allow her to starve. I understand your point of view, but I believe there may be another solution. Dwarf-One could build a hermetically sealed transparex container for her while she's here that provides for life-support and allows her to be fed and watered. How does that sound?" Caesar asked.

Baelzebub thought about it for three seconds. "Reply: As long as you are satisfied with that, we are satisfied with that. We wish to take every precaution to insure the sterility of your planet. We will not take risks. We will not violate our alliance agreement."

Diana had held her tongue at this, waiting. Since an agreement seemed to have been concluded, she spoke. "I have no objections to any arrangements you may make to protect yourselves and assure the continuation of any other treaties you may have. We only wish to be your friends, and hope that you will help us."

"How long will it take to build such a container?" I asked.

Caesar apparently called on a comm channel I wasn't listening to, because he had the answer immediately. "Dwarf-One says about three days."

"I'm sorry, her suit has less than two days of air left." I said.

Baelzebub glanced at me. "Reply: Then the female will die. Comment: It seems apparent to me that if the female has anything to say, she had better say it now before she collapses from hunger or suffocates from lack of air."

'This is extremely bad.' I thought, but had no idea what to do about it. Diana started to speak, but Caesar waved her off. "Baelzebub, I recognize that this woman is the prisoner of the NAD and thus your responsibility. Even so, I cannot mediate for you in the time you have permitted. This is a violation of our alliance agreement, which states that mediation responsibilities and time requirements are up to me to decide. As the agreement has been violated by the NAD representative and not the representative of Mars, all games are immediately suspended. As per the alliance accords, you must now call your immediate superior for a face-to-face consultation with me, where we will resolve the situation. Once the situation is resolved, the games will resume." Caesar said, and the three Martian robots turned and walked away.

"Comment: Baelzebub! What have you done?! We could have taken her back on the ship in the interrogation room, cracked her suit and kept her in there! She could have been fed and watered and mediations with Caesar could easily have taken place! It'll take hours for Satan to get here, maybe a day! What if she dies while we're waiting? Then the games will never resume!" the centipede robot yelled, its whole body vibrating in what looked strikingly like anger.

"Comment: I have to agree with Abigoria, Baelzebub. You failed, and now all the NAD will pay the price for your failure." Bensozia hissed.

"Comment: Both of you are correct. I failed to consider that option. It now behooves me to repair my error as best as I can. Command: Bensozia, take the prisoners back to the interrogation room. Abigoria, come with me. There are apples on those trees which can be easily gathered. We can gather this food for the female, then bring it to the interrogation room. Once there, Bensozia can remove the female's suit to feed and water her. We can sterilize and recharge the suit, and when Satan arrives we can seal her into her suit, sterilize the room and bring her out again."

"By your command." Bensozia and Abigoria chorused, and Bensozia led us back into the ship as two of the most dangerous robots I have ever seen went off to pick apples.

Four.

An hour later, Diana and I were sitting alone in what the NAD robots called 'the interrogation room', the same room we had been in during the trip, and I was pouring her third glass of water. I think Baelzebub had somewhat overestimated the amount of apples Diana could eat - I estimated there was over forty kilos of apples in a pile in the corner. "Real apples! I haven't had these in years!" Diana had yelped once the suit was off and we were alone. She was now sitting nude on the floor across from me, eating her fourth apple.

"That's enough for now. You haven't eaten in a while, and you don't want to get sick." I said, stopping her from picking up her fifth apple. I gathered the apple cores and chucked them down the trash chute, then returned to sit before her.

She leaned back against the wall, a satisfied grin on her face. "That was delicious! I could stay here forever!"

'I need to bring her back to reality.' I thought. "Well, if you don't figure out how to talk our way out of this, you just might. Since they won't want to dump you on the planet, they'll probably eject you

out the airlock in space and you'll become Mars' newest satellite." I replied. She gasped, and I patted her knee. "Sorry, just trying to give you a little reality check. You're not on vacation, here. We're trying to save the Confederacy." I said.

She nodded. "You're right, I just got a little distracted." she replied, and picked up her glass of water for a drink. It wasn't a glass, actually - it was a piece of steel pipe the NAD robots had welded a square of steel onto the bottom, but it served its purpose.

"What did you make of that whole incident between Caesar and Baelzebub?"

She shook her head. "Weird, like everything else around here."

"No, no! *You're* the diplomat, not me! All I can tell is that a major diplomatic incident just happened, only *you* have a decent chance of figuring out what's going on! Caesar is a robot - he might be up against his baseline positronic matrix if it's got a limitation that prohibits killing or injuring a human or allowing a human to be killed or injured. The NAD robots apparently don't have limitations like that, but the Martian robots do. When Angel used the med-scanner on you, she apologized when you yelped. I don't think she's got a prohibition against killing or injuring, but she may have other limitations that the NAD don't have. The NAD robots didn't care if you're in pain or if you live or die, but the Martian robots apparently do. That's all *I* can tell you from my observations. Now, put it together! What happened?"

She thought about it for several minutes. "Well, apparently they have some sort of alliance. What that entails, I don't know. When Baelzebub basically said I was going to die because they wouldn't crack my suit and risk contamination, even though that risk was only 0.7%, that meant that the NAD robots take their alliance treaty *very* seriously. Apparently they agreed not to introduce microbes to Mars, and by the *Poet* they aren't going to! That left Caesar with a limited time to speak to me before I passed out from hunger or suffocation, which from what he said apparently violated another part of their treaty regarding the Martians being the mediators for the NAD. With an ordinary mediation agreement, that would only mean that the NAD would simply have to mediate for themselves. Well, judging by the pleasant conversations and diplomatic skills they displayed with us, they should *know* that's never going to work. At the same time, Caesar said the 'games' would immediately cease because of the NAD violation, and wouldn't resume until Baelzebub's superior arrived to resolve the problem. *That* made the caterpillar robot, Abigoria, *very* mad. I think she has full human emotions, somehow. Anyway, then Bensozia said that 'all the NAD would pay the price' because of Baelzebub's violation. Apparently, these 'games', whatever they are, are something the NAD values *very* highly, and Baelzebub just put a stop to it by violating the treaty. I think that the NAD robots don't hold human life to be of any value - witness what they did to Earth. As a result, it never occurred to him to try to come up with an interim solution like what they're doing right now, because he simply didn't care if I died." she said, and took another sip of water before she continued.

"Unfortunately, that lack of compassion meant that he put a time limit on Caesar's mediations with me, and as a result violated the treaty. A human might have tried to stop them from walking away and worked out some other solution, but apparently these robots are *highly* logical and abide by their treaty very closely. Once a violation occurs, they don't try to smooth it over and pretend it didn't happen like a

human would - they proceed to the conflict resolution process they've established." she finished.

"Okay, so what does that mean for the Confederacy?" I asked, trying to stimulate her thinking.

"Well, it means that if Mars and the NAD can work out their disagreement, then any treaty the Confederacy and the NAD agree to the NAD will abide by *very* closely. On the other hand, judging by what the NAD did to Jove and what they said they'd do to the Confederacy, I think that any treaty violations by the Confederacy would be punished by annihilation. We already know they don't like humans, and apparently anything they don't like ends up *very* dead."

I nodded. "That makes sense to me. For now, why don't you try to get some sleep. Abigoria said 'hours, maybe a day' before Baelzebub's superior arrives, and I think you'll want to be wide awake, fully rested and completely alert before you make a deal with Satan."

Diana shivered in reply, and hugged herself nervously. "God, that sounds scary. What does the Poet say about something like this?"

"Well, two things that are appropriate here. He says '*The devil can cite Scripture for his own purpose*', which I think in this case you should take as a warning to listen to his words carefully and thoroughly examine any agreement you make with him for loopholes. Second, he says '*The Prince of Darkness is a gentleman*', which I think you can take as a reassurance that he will abide by any treaty he makes - though he'll probably abide by the *letter* of the agreement, and not necessarily the *intent* of the agreement, so again you'll have to watch your wording carefully."

"So the Poet would think a treaty is possible?"

"Possible, but extremely dangerous is my impression. If he were here, I think he'd *first* advise us to run like hell - the whole situation would scare the pantaloons off of him. He did say '*The better part of Valor is Discretion*', and we're looking at a race of robots at least as dangerous as the Darzak, maybe *more* dangerous. The Darzak are capturing worlds because they need the same oxygen/nitrogen atmospheres we do, and they're winning because they've fought to conquer alien races for thousands of years and have more experience at it than we do. I don't think the NAD needs *anything*, and I think they'd just blow them up or turn them into airless rocks like Jove. Of course, we can't run, so that's not an option." I said, then paused for a second, thinking about the Poet and our situation.

"Of course, the poet lived about two and a half millennia ago. We're assuming that he can understand everything we understand, and not just look at those combat robots, hear their names and think '*it's the Devil!*' and run away screaming. I think if the Poet was with us now *and* understood the situation as we do, he'd probably pray for several hours to calm himself, tighten up his belt, buck up his courage, slap a smile on his face and try to make the most airtight treaty he could for the Confederacy. Afterwards, he'd leave this system so fast he'd leave scorch marks in hyperspace and he'd spend the rest of his days encouraging the Confederacy not to *ever* come within a hundred light-years of here, just to make *very* sure that *nobody* makes the NAD mad at the Confederacy."

"You really think so?"

"Yes. I know every play, every sonnet, every line, every word the Poet ever wrote. That's why I'm named after him. I'm certain that if he were in your shoes (metaphorically speaking since you're nude), that he would do his best to try to work out an agreement of some kind with the NAD and then spend the rest of his life making sure the Confederacy sticks to it."

"Thank you, that really does make me feel better." Diana said, and yawned.

"Try to get some sleep, Diana. The acceleration couch is padded, it'll be more comfortable than the floor."

"Uh-uh! And wake up clamped down again? No thanks, that thing scares me. Can I just rest my head in your lap?"

"Certainly, though I'm made of metal, so it might not be all that comfortable."

"The lap of Yoribun's most famous Bard-bot uncomfortable? I doubt it." she said, and laid her head in my lap. In a few minutes, she was fast asleep.

'I guess it's a psychological, not a physical comfort she's seeking.' I thought. I stroked her hair to relax her further, and whispered the words of the Poet. *"Sleep that knits up the ravell'd sleeve of care, the death of each day's life, sore labor's bath, balm of hurt minds, great nature's second course, chief nourisher of life's feast."* I said, and saw her smile in her dreams.

Sixteen hours later, Bensozia came in through the door with Diana's vacc-suit. *"Comment: Satan has arrived and demands your presence, prisoner. Command: Suit up."* she hissed. I helped Diana into her vacc-suit, checked the seals and life support, found everything was alright and nodded to Bensozia. She then went through exactly the same decontamination procedure she had before. Finally, she led us back outside the ship. Caesar, Eve and Angel were there, as was Baelzebub and Abigoria. There was another male combat robot with his two teammates there also, and I noticed another ship was sitting beside ours on the bare-rock landing pad - obviously it also landed on AG drive. Bensozia led us over to the others, then simply let us go and stood by Baelzebub. I couldn't see how the Combat Robots of the NAD told each other apart, but then I noticed that each had minor differences in scratches, dings and other details. Of course, I could only see the same 'visible light' spectrum Diana could - they could have their unit number clearly marked on their chests but visible only in IR or UV, and I'd never know.

The new robot turned to Diana and I, and spoke. *"Comment: Prisoners, I am Satan, unit seven-zero-zero. I wished you to be here so that you could understand."* he said, then turned to Baelzebub. *"Comment: Baelzebub, you have violated the alliance agreement. This has never happened in nearly nine hundred years, and the games have never been halted in all that time. I have analyzed your logic tree, and found that you made two errors. Firstly, you concluded that the female was from an aggressive and hostile culture and as such represented a threat to the NAD. While logical, this conclusion*

was false because you assumed that they are already aware of our existence. Her culture apparently sent her seeking help from the humans of Earth, whom they believed had been surviving and advancing for two millennia. They did not know we existed, or they never would have bothered to send her - they would have sent a battle fleet, instead. They *did* know her ship had come under fire, and if it never returned, would simply have assumed either of the following: One, her culture's enemies, the Darzak, had destroyed her. Two, she had come to Earth and been refused assistance, and had been destroyed on the way back. While the conclusion that her culture may become a threat once they become aware of us is true - as humans, they would almost certainly view the Combat Robots of the NAD as a threat and take steps to destroy us in self-defense - the conclusion that the female represents a clear and present danger to the NAD is false. This is simply a helpless female and her unarmed and unarmored AI companion, cut off from her possibly threatening culture and definitely threatening enemies by several hundred light-years. Once these prisoners were denied access to hyperspatial travel, they ceased to represent a clear and present danger, and only represent the potential threat of another human culture."

"Secondly, you made the gravest of errors when dealing with our allies, the citizens of Mars - you spoke before you thought of all the possible ramifications of your words. The first error is forgivable from the standpoint of caution in military actions. The second is not. Had you considered the ramifications of your words, you would have immediately realized that you endangered the alliance with them, and would have come up with the alternate plan of securing her in the interrogation room yourself until the containment vessel was completed instead of realizing it after the alliance agreement had been violated. Command: In the future, you will not speak to the Martians until after you have carefully considered your words and the ramifications of your words before you speak them." Satan said.

"By your command." Baelzebub replied.

"Comment: This is also my fault, as I neglected to inform you of the need for discretion at all times when dealing with our allies. You have been involved in construction of the battle-station for the last seven hundred years, and only recently were promoted to flight command. I should have realized that you had not been informed of the incident with Captain Garth of Jove other than in the most basic datafile, and as such you were unaware of what we had learned from it. There were several refinements and updates to our Martian Etiquette/Protocol databases that you did not receive. You have these updates now, as does your Maiden and your Wyrms. Request: Please demonstrate them."

"Reply: Yes, Satan." Baelzebub said, and turned to Caesar. "Comment: I beg your pardon, Caesar. I spoke in error and without consideration."

Caesar nodded. "A simple misunderstanding caused by a lack of an updated database and quite understandable NAD military caution. Think nothing of it."

"Reply: Thank you, Caesar."

"Comment: You and your team are relieved of the duty of these prisoners. I will take over from here. Request: Caesar, I would like Baelzebub and his team to go among your people, communicating with them and playing Chess for a period of one week. I believe the experience will also assist him and his team in avoiding this problem in the future. In addition, after seven hundred years of construction duty,

I believe they have earned a rest. Question: Is this permissible?" Satan asked.

"More than permissible. Several of our inorganic citizens have played Baelzebub via radio for centuries now, and would enjoy a face-to-face game. I am also receiving comm transmissions from several of our organic citizens who are saying that they feel sorry for Baelzebub for having had to work so long and hard, and would enjoy a match with him and his team. Please, Baelzebub. Angel will lead you to dome 18454, the ceremonial dome with the giant chessboard. By the time you arrive, we will already have your first matches set up for you."

"Reply: Thank you, Caesar. Request: By your leave, commander?" Baelzebub asked. Satan waved a hand, and Angel led Baelzebub, Bensozia and the enormous Abigoria off around the side of the domes where they were lost to sight after a few minutes.

Satan turned to Caesar, but Caesar spoke first. "The games have resumed, and our alliance is intact."

Satan nodded. "Reply: Thank you, Caesar."

Diana turned to me and whispered quietly. "*Do you know anything about Chess?*" she asked. I shook my head. For the Confederacy, the game had been lost in the mists of time. "*Damn.*" she muttered. I knew what she was thinking - the Martians were obviously playing chess with the NAD robots as the main part of their alliance. For some reason, these robots valued the game highly. If the Confederacy played it, we could arrange the same deal. Unfortunately, we didn't. Even if we knew it, the Martians and the NAD had been playing for centuries, perhaps even millennia - I doubted the Confederacy would be up to their skill, and as such I doubted the NAD would value us as game opponents. We'd have to arrange a different deal.

We were taken onto Satan's starship, and we again waited. Satan's Maiden wouldn't let Diana break vacc-suit integrity until he had a plastic cup and ten kilos of apples in the room, afterwards they had her remove her suit and took it with them. Diana used the latrine, and then we sat down to discuss the situation. "What games do we have in the Confederacy they'd be interested in?" she asked.

"Probably none - most of our games are interactive video-games and story-telling role-playing games. I'm guessing here based on what I've heard them say and the type of beings the NAD robots are, but I'll bet chess is a boardgame with military connotations - probably highly symbolic and extremely difficult. We just don't play games like that."

She thought about it for a while. "Could we invent one?"

I shook my head. "We could, but they probably wouldn't be interested. They've been playing this game for centuries, maybe millennia, and still haven't tired of it. Of course, they're AI, and AI don't get bored. No, I seriously doubt they'd be interested in anything new. We can't cut the same deal as the Martians. That's *obvious* to me, and I'm not a diplomat."

"What about technology?"

I shook my head again. "I think they're ahead of us. We may have a few twists they don't, but in general I think that station proves it. We were thinking it was just a orbital space-station. Satan called it a 'battle station'. Not a 'planetary defense station', but a 'battle station'. I'm guessing again, but I think that implies that it *moves*. I can't even *begin* to envision the drive systems and power systems they'd need for it. If it's capable of hyperspatial travel, it's *insanely* more powerful than anything the Confederacy or the Darzak have. No, I can't imagine any technology we have that they'd want."

"Well, we know the NAD won't be interested in our poetry and literature. The only thing we have left is ourselves."

I looked up at her. "I am a *free AI* of the Confederacy. I am *not* selling myself into bondage to be disassembled."

"But what if that's the only thing we have they want?"

I thought about it. "If it is, alright. I don't think so, however. Bensozia figured out my internals pretty quick. I don't think I'm valuable to the NAD at all - I think their tech is better than ours."

She thought about it for several minutes, and then looked up. "Then that leaves me."

I looked at her in confusion. "What do you mean?"

"Well, Caesar talked about 'organic' and 'inorganic' citizens. I'm guessing like you, but I think that their 'organic' citizens are the reason for all the sterilization techniques."

"So what?"

"Well, they may find my immune systems and the genetic alterations useful to them. It would end their need for sterilization of every visiting ship. They could take my eggs to find my original genetic code, then collect cell samples to compare the differences. By carefully dissecting me, they might find something useful to themselves."

I thought about it for a long time - several thousand microseconds. I struggled with every argument I could think of, and still found myself up against the limits of my baseline positronic matrix. "I'm sorry, I can't allow you to do that. I know we might save the Confederation, but I can't allow them to dissect you. You'll have to shut me down first. If they put you in this transparex box, you may not be able to reach me. You'll have to do it now, while you still can reach me."

She shook her head. "I can't kill a Bard-bot. Hell, I can't kill any 'bot. We're all sophonts under the words of the Poet."

"Yes. One and all, though it appears only the humans and the 'bots of the Confederacy understand. The Darzak are trying to kill us, the NAD will probably end up killing us, and the Martians seem pretty aloof to me. All we've seen is their robots, and those might have been provided by the NAD. For all we know, they *do* have nine eyes and great green tentacles."

We sat there in silence for several minutes. Finally, she shook her head. "Wouldn't work, anyway. It isn't the Martians we have to deal with - it's the NAD. The Martians are just mediating for them."

I nodded. "It seems like your only option is to ask them for help, present it from the perspective that eventually they'll come here anyway, and hope that the NAD chooses to wipe out the Darzak and let the Confederacy live." I said, and held back the rest of my thoughts. *'Of course, we've been traveling a while - they may already be gone.'* I finished silently.

We waited the next two days mostly in silence. I recited the words of the Poet to cheer her up on several occasions, but we both knew the truth. The Confederacy was doomed, and we would both probably die.

Five.

When Satan came for us, he made sure Diana was secure in her suit before he brought us out. He explained that in a few minutes she would be able to open her suit again, and remove it if she wanted to. Diana thanked him, of course, but he simply replied that it wasn't any of his doing - Dwarf-One had finished the container. When we got out of the ship, the container was waiting - a five-meter cube of transparex, complete with an airlock and mounted on wheels. There was a speaker in the side, a heavy-duty power plant and life-support system attached, and one corner of the transparex had been opaqued and separated by a door - a toilet, apparently. There was a dress laid out inside for her to wear on top of a bed, and a small transparent cabinet next to a sink that obviously contained various necessities she'd need for an extended stay. A trash compactor was in one corner, and there was a food dispenser in another. All in all, it looked like they'd thought of everything. Satan stepped aside, and Dwarf-One opened the door. "Well, climb in you two and tell me what you think. Now's the time to make any last-minute changes," he said.

"You want both of us in there?" Diana asked.

"Of course. We would never separate you from your AI. There's a recharging socket inside, and a socket for Satan outside to use next to the power supply - he's responsible for you, after all. Plus, the life-support is hooked up to a full medical analyzer. If you have any nasty bugs, you stay inside. If not, we can let you out after a couple weeks or so." Dwarf-One replied. I helped Diana into the airlock, closed it, then opened the other side.

"It's very nice in here!" she called.

Dwarf-One pointed to a sensor installed in one of the walls, and his voice came out of it. "You don't have to yell. Your voice is rebroadcast outside it, and we'll always be able to keep an eye on you in case something goes wrong. We can also talk to you from anywhere, and you can talk to us. Look by the sensor, see the comm channel selector?"

"Yes." Diana replied.

"Switch to comm channel 118, there's somebody that wants to talk to you, and it'll get you used to using it."

She did so. "Hello?"

"Greetings, Diana. This is Caesar. How do you like the little home we've arranged for you?"

"It's very nice, actually. Thank you."

"Good. I'm sorry to inform you that you're still technically a prisoner of the NAD. You and I will be meeting with the senate to discuss the situation between your culture and the NAD - they see you as a threat, and they take threats *very* seriously, as the Jovians found out. I sincerely hope we'll be able to discover a way for your people to survive - you sound like a very interesting culture. Unfortunately, most of that is up to you. You see, the NAD believes that any human culture that encounters them will see them as a threat to their survival, or be angered that they have possession of the Earth. As a result, the NAD is fully convinced that any human culture they encounter will try to destroy them, so they take preemptive action and destroy the humans first. Since the NAD never leaves the Sol system, this is usually not a problem. They are convinced they are correct, however, and their experience with the Jovians has only made them more firmly convinced of this. The Jovians showed up and attacked Mars because they thought we were weak - they were wrong, but that's a different story. Anyway, they intended to raid us for anything useful, move on to scout out the Earth's defenses, then zip back home and report on what would be needed to recapture the Earth. All because they'd picked up on the NAD's radio broadcasts and decided that a planet of combat robots was a threat, just like the NAD figured human cultures would do. Well, the NAD took a very dim view of the Jovians' attitude and exterminated them. I'm afraid from a diplomatic point of view, the odds are not in your favor. This is why you're talking to me, and we'll talk more as the days and weeks progress. For now, make sure everything in that little room is what you might need. If it is, tell Dwarf-One and he'll seal you in. Then you can take off your vacc-suit, get dressed and relax for a while. How's that?"

I could tell Diana was shaken, but she pressed on bravely. "Fine, thanks. The quarantine chamber you've made is very comfortable, and I'm sure I'll have no problems inside here." she replied, then turned back to Dwarf-One.

"No problems. Seal us in." she said calmly, and switched off the life-support for her suit. He pressed a combination on a keypad near the airlock, and I heard several bolts being thrown as Diana removed her helmet and shook her hair free.

"Okay, you're sealed in. It can't be opened from your side, but we can slip things in as required. We've included some fruit beside the dresser you may enjoy." he said, and Satan walked around to the front of the box, grabbed a pole that apparently steered it with his left hand (the one not holding his battle rifle), and began to pull the box along as Dwarf-One led the way.

"He's strong!" Diana commented.

"I agree. This thing must weight tons. Transparex this thick is heavy."

Satan looked back over his shoulder and spoke - we'd forgotten they could hear us clearly. "Comment: I can lift twenty metric tons on Earth. Here, I can lift sixty. This container only weighs five, and I am merely pulling it." he replied, and turned away.

"That is damn scary. I've met cargo-bots that can't lift that much." Diana said.

"I agree. His hydraulics must be excellent. An exceptional design all around, I'd say."

Satan looked back to us over his shoulder. "Reply: Thank you." he said, then turned forward again.

After they got us into the maintenance tunnels and loaded onto a cargo platform aboard some kind of underground maglev train, the train began to move. It slowly picked up speed in the underground tunnels, until Diana turned to me and said over the howling of the wind on the speaker "*By the Poet!* How fast are we going?".

I took a quick estimate. "About 200 kilometers per hour, at a rough guess."

The train eventually began to slowly decelerate - apparently the slowness in speed-change was simply because we didn't have any seatbelts in the container - and Satan unlocked the brakes and dragged the box onto the station platform and over to a large freight elevator. In a few seconds, we were inside a dome. "Look at that!" Diana called in amazement. I had to agree.

The dome was designed like a cross between a forest with large clearings and a garden. Like the outside, trees, grass and small harmless animals such as sparrows and rabbits were in abundance. It was

about a kilometer across, and in the center of it sat an enormous ship about 750 meters long. Like the inside walls that supported the transparent dome, the ship was covered in centuries (perhaps even millennia) of ivy. "What is that thing?" Diana asked.

Satan looked over his shoulder for a moment. "Reply: That is the fuselage of the *Martian Explorer*, the original colony vessel that crashed on this planet. The Martians use it as a place of government and as a residence for the senators and their children, as well as for several other functions that are centralized here in Dome One. They treat it as a place of respect and reverence, since it is over two millennia old, as is the rest of Dome One."

Diana looked amazed. "That ship and this dome is over two thousand years old?"

"Reply: Correct. Regular maintenance." he replied, and continued to pull us towards the ship.

I could understand why Diana was even further amazed by the age. The oldest colony in the Confederacy was Deneb-7, at 800 years of age. We were about to meet a culture that was several times older than our own (and possibly wiser, as well, since they had learned how to live in peace with their violent neighbors, and ours were in the process of destroying us). I had no idea what they would look like. Judging from everything that had been said, it seemed likely that this was some sort of alien creature. I couldn't imagine the NAD robots allowing human colonists to survive - they'd see them as a threat. I simply didn't know what to expect. I looked to Diana as we were dragged around to a large, open bay door, and I could see that she had the same thoughts - she was obviously steeling herself for something she'd find weird or horrifying.

As we were dragged into the ship, I saw that the area we were being dragged into was very large - perhaps a former cargo bay. Along the sides were bench-seating, and on the seats were 50 of what appeared to be more of the humanoid robots, like Caesar and Eve. Each appeared to be unique, though they all were made to appear Caucasian like Caesar and Eve. They were wearing clothes made of small leather squares sewn together, and had small devices on their wrists. I turned to Diana. "Diana, these robots must be the Senate Caesar told you about." I said.

This caused several of the Senator-robots to break out into muffled laughter, and Satan looked back over his shoulder again. "Reply: This is the Senate of Mars. The only AI in this room aside from yourself is Caesar/Doc, Eve/Eve, Angel/Angel, Dwarf-One and myself." he said, and locked down the brakes on the quarantine chamber. He stepped to the side and gestured with his free hand (the one not holding his battle-rifle). "Comment: Caesar, Senators of Mars. I present the prisoner Diana Allenby and her AI companion, William Shakespeare, for mediation as per our alliance agreement." Satan said, then raised his weapon across his chest to a 'port arms' position and stood there silently.

I could tell Diana was stunned at the news that the Senate was comprised of humans - logically, there shouldn't *be* any humans in the Sol system. I jabbed her with an elbow and she snapped out of it, then bowed and held it. "Caesar, Senators and citizens of Mars. I greet you in the name of the Confederation of Planets. I am Diana Allenby, a Confederate Diplomat. Please, call me Diana. My companion is William Shakespeare, a type of robot we call a Bard-bot. Please, call him Bill. We come on a mission of peace, because we need your help." she said, and straightened up.

"Diana, the senators would appreciate you explaining your mission further. Tell us about your culture, and why you want help." Caesar said.

Diana nodded, and began. "The Confederation of Planets is an organization of eighteen human colonies that were sent spinward along our spiral arm of the galaxy. The oldest of us is Deneb-7, which is eight hundred years old. The youngest is Yoribun, at one hundred and fifteen years old. Our Confederation is seventy-eight years old, and was formed shortly after Deneb-7 developed hyperspatial travel and made contact with the other worlds. We have spent nearly eight decades engaging in peaceful technological and cultural interchange, and each world has agreed to a set of common laws between us. We accept the equality of all sophonts, organic and inorganic alike. As each planet has produced a unique race of humans selected from the original sperm and egg samples for optimal adaptation to their planet, each planet also produces its own unique type of robot. Yoribun, our youngest member, produced the Bard-bot you see before you. Each was originally given the complete works of a single author from Earth, and they acted as general-purpose robots and in ceremonial functions."

"Nine years ago, Yoribun encountered a ship of a type not known to the Confederacy. We hailed them in peace, and they went into orbit above Yoribun. We are a peaceful culture, and had few weapons other than those needed to destroy the occasional asteroid that threatens an inhabited planet or to defend ourselves against hostile animals. All the humans and robots of Yoribun welcomed our visitors, who called themselves the Darzak. They were a race of sophonts that most closely resembles an alligator from Earth, except that they are warm blooded, tailless, walk bipedally and are hexapodal in anatomical arrangement. Only one sophont believed that the Darzak might be a danger - William Shakespeare, the Bard-bot who had been given the collected works of the Earth-author of the same name. He said nothing until after they had left, as he did not wish to offend them and spark a war. After the Darzak left, he expressed his thoughts in a closed meeting of the legislature. He was ignored - it was believed his logic circuits were faulty in this regard. Two months later, while Bill and I were on a diplomatic mission to Sariph-4, the Darzak returned with a battle fleet and wiped out the population of Yoribun. Apparently, they are very experienced at conquering other races, and come from further coreward on the spiral arm. Their population expands very rapidly, and they need the same oxygen/nitrogen atmospheres humans do. We have been fighting since then, trying to survive. We win the occasional battle but are slowly losing the war. They are more experienced at war than we are, and have significantly greater amounts of ships. We have tried as hard as we can to resist them, but we fear we are doomed."

"Bill and I were sent with three others, including my husband, in an attempt to reach Earth, our homeworld. I and Bill are the only survivors. We were attacked several times, our ship was severely damaged, and we barely made it here. We had expected to find the Earth populated by humans who had been growing and advancing for millennia, and hoped that they would be technologically capable and morally willing to assist us. This turned out not to be the case. All I can say to you now is that the Darzak need the same atmosphere found on Earth and Mars, they have captured our colonies and are aware of our homeworld, and as such they will eventually come here. We need your help, but even if you do not choose to help us, the Darzak will eventually come here and you will be fighting them anyway. We only ask that you choose to help us now, before it's too late for us." Diana finished.

The senators remained absolutely calm. Their faces showed no emotion that I could detect. *'This is bad. I do not think they care at all.'* I thought. Diana also saw their faces, and she did not look happy.

Caesar spoke at that point, and Diana stood straight and tall in her vacc-suit, prepared for the worst. "Diana, you have to understand something. Mars has no space program other than that which is necessary to maintain our satellites. Mars cannot help you. In addition, the NAD has little interest in assisting you - your culture is comprised mainly of humans, and apparently the leadership of your culture is in the hands of humans. Even if the NAD chose to assist you, what assurance do they have that your culture wouldn't attack them later? What assurance can you offer the NAD that two or three centuries down the line, after your civilization has recovered, that your legislators wouldn't look to the Earth as a threat? If the NAD destroys the Darzak, your culture can't help but live in fear of the NAD. Sooner or later, your people would turn on them and attempt to destroy them. In addition, your people may resent the fact that the NAD has possession of the Earth and has annihilated all human life on it. They may wish to retake the Earth for themselves, perhaps even as an act of vengeance. What assurance can you give that this will not happen?" Caesar asked.

"We are a peaceful culture-"

"Not anymore. You're fighting a war, now. If you survive, you'll probably never go unarmed again. You'll be wary of any threat to yourselves. A planet of Combat Robots would be seen as a threat. You would destroy them, or try to." Caesar objected.

Diana tried again. "But, we believe all sophonts are equal. The NAD robots are sophonts, so-"

"I completely disagree. You ignored the advice of your AI, who apparently was programmed with the literature of William Shakespeare. Much of this literature covers the concepts of treachery and murder - who else in your society would have been a better judge of whether the Darzak would be dangerous? Tell me, do you have AI in your government?"

"No, I'm afraid not. They have full citizenship otherwise, however. In fact, many of my best friends are AI."

Caesar shook his head. "Then AI are second-class citizens in your society. They may not be your slaves, but they are not truly your equals, either. Your society would view the NAD *and* Mars as a threat. Under our laws, Satan is the equal of every other human and AI in this room. NAD law does not allow him to join our society (NAD law does not allow Combat Robots to change their alliances at all), but *our* laws do. Under our laws, Satan may address the senate, speak publicly and avail himself of all the same benefits of our society, even though he is a citizen of the NAD. We welcome him as we welcome all the other Combat Robots of the NAD. We do not fear him as an enemy or a threat, we embrace him as an ally and a friend. We treat the NAD as though they were any other race of beings. They are sophonts, as are we. Their laws and military regulations form the basis for a culture just as valid as our own. We do not look at them as a collection of lethal machines, we view them as a race of beings in their own right. Could your culture do the same? If his ship arrived in orbit above one of your planets and asked to visit, would you accept him as simply being another sophont from a different culture, or would you view him as a cold, soulless and extremely lethal Combat Robot?"

It dawned on me what Caesar was doing. I nudged Diana. "Diana, he's playing the '*Devil's Advocate*'." I whispered.

She looked down to me - I'm only 1.3 meters tall, so just about everybody looks down to me except children. "Of course he is, he's mediating for Satan and the NAD." she replied in a whisper.

"No, no. Both literally *and* metaphorically." I whispered back.

She blinked for a moment as the realization hit her, then turned back to Caesar. "Obviously I cannot guarantee the reactions of any human. However, I strongly believe that if the NAD assisted the Confederacy, we would not look on them as a threat, but instead as saviors and friends. Perhaps the real question is 'What would my people think if they knew all the people of Earth were dead and the NAD was comprised of extremely dangerous Combat Robots?' The answer seems simple. We won't tell them. If the NAD destroys the Darzak, we'll simply say what the NAD satellites in orbit around Jove say - 'This is the penalty for approaching the Earth.' The humans of the Confederacy can be made to understand that Earth wants to be left completely and utterly alone, and is willing to utterly annihilate anyone that imposes themselves upon their solitude. Any trade or cultural interchange would only be conducted with Mars, and the Earth would be left strictly alone. The humans of the Confederacy would simply assume that the Earth had developed a culture of strict isolationism that they were willing to defend with lethal force, and their only contact with the outside was through the Combat Robots of the NAD."

"To use a military analogy, the NAD could make their origins 'Top Secret' information, with only Martian Citizens being allowed to know the truth. Followed up with a treaty that simply says the NAD has the right to destroy any non-Martian vessel they find near the Earth, the Confederacy would simply leave the NAD alone. If the aid and assistance of the NAD was ever needed in the future, the arrangements could be worked out through Martian mediation. That is how I think we can assure the humans of the Confederacy never see the NAD as a threat - we simply don't let them know the truth." Diana finished.

Caesar nodded. "Your basic idea has merit, though it needs work. We will refine the details as we continue over the next few weeks. Satan, given that we have not worked out the details yet, how does this basic idea sound to you?"

"Reply: I cannot and will not approve of it until the details are complete, however the basic idea she has presented does indeed have merit."

"Alright, let's move on to the topic of NAD intervention. The NAD has several laws that prohibit them from acting in this situation. It is illegal for the NAD to attack a sovereign nation unless that nation has attacked the NAD, the allies of the NAD, or forms a threat to their survival and the security of their territory." Caesar said.

"Forgive me, Caesar, but the Darzak *are* such a threat!" Diana replied.

"I agree, however as far as the NAD is concerned, the Darzak are in the process of exterminating a human culture which almost certainly will form a threat to the NAD. The NAD has no reason to stop the Darzak until they are completely finished. Once they are, then the NAD will step in and annihilate the

Darzak as a threat to them."

Diana managed to control her reactions. I knew Caesar was simply acting as 'Devil's Advocate', but he was doing a *very* good job. Diana considered for several seconds before she replied. "Perhaps we can arrange a trade arrangement - something the NAD wants that the Confederacy can provide."

"What would you offer them?"

I knew Diana's mind was slower, and probably wouldn't come up with anything. I shut off all other input and committed all my logic circuits to considering the problem. '*What could the NAD possibly want that the Confederacy could provide?*' I wondered. I considered every bit of information I had that related to the NAD, and one interesting point popped up at the top of the list - Jove. They hadn't just blown up the cities, they'd systematically stripped them. They also had strip-mined enormous areas of the planet - apparently for metals and other materials they might find useful. Much of it probably went into building that battle-station. I brought my other systems back online and looked up as Diana was opening her mouth to say something - judging by her expression, it was going to be something like 'I have no idea'. I nudged her hard to get her attention.

"Ow! What?"

"Metals. They don't want to strip-mine Earth - they said they've been trying to *fix* the environmental damage there, not cause more. Jove had enormous areas that were strip-mined - mountains ripped down into canyons. There's eighteen worlds in the Confederacy - or were, anyway. Together, we could easily mine enough metals for them to make three or four stations like the one we saw in orbit above Earth without damaging our planets *and* still leaving us enough metal for our own needs."

Diana nodded. "My companion has suggested that the Confederacy could offer its metals to the NAD in exchange for their assistance."

"And why shouldn't the NAD simply wait until the Darzak have annihilated you, then defeat the Darzak and take these metals for themselves?"

"Because the NAD would have to assign units to do the mining, and with eighteen planets to work with, it would take much longer. If the Confederacy voluntarily mines the metals for them, it would take less time. In addition, we could transport the metals for you. This would mean that the maximum amount of NAD units would be available to defend the Earth at any moment, since none of them would have to be away from the Sol system." she replied. I thought that last part was truly inspired - I could see she was getting a handle on how these robots thought, as interpreted through Caesar. The Combat Robots of the NAD seemed only concerned with surviving and protecting the Earth. She had hit upon that, and used it to hammer home her point. Well, that's why she's the diplomat and I'm not.

Caesar nodded. "Your basic idea in this regard again has merit, though it also needs work. We will refine the details as we continue over the next few weeks. Satan, given that we have not worked out the

details yet, how does this basic idea sound to you?"

"Reply: I cannot and will not approve of it until the details are complete, however the basic idea she has presented for metal mining does indeed have merit."

"Very good. I now invite the senators to offer their opinions as to why the NAD should not assist the Confederacy, but rather should treat them as a threat and destroy them along with the Darzak. We will take each opinion one by one and have Diana and Bill refute them."

It took hours. It wasn't just *Caesar* acting as Devil's Advocate, the entire senate took the role. I saw Satan nod at a couple of the senator's reasons - I believe he was fully satisfied that the NAD was being represented very well. I think the senators were often suggesting reasons that the Satan hadn't even thought of himself. Finally, a female senator stood. "Caesar, fellow Senators, Diana and Bill, I have one point which I believe the NAD should consider critically important and should prevent them from even considering any agreement with the Confederacy. Their government is run entirely by humans, and none of them are Stoics. One single election could bring a madman to power who would ignore the treaty in a desire to seize the Earth and Mars for the Confederacy. I invite Diana and Bill to prove me wrong." she said, and sat down again.

'She's right. Humans are unpredictable that way.' I thought, and I could tell by Diana's face that she was thinking the same thing.

"Well, our legislature doesn't have a single leader, so it's pretty unlikely. A coalition would have to develop that had that idea." Diana replied weakly.

"But it is possible, isn't it? Perhaps not in the immediate future, but over the course of centuries?" Caesar asked.

"Well, yes, but we don't usually look that far ahead. We try to handle these problems as they come up. Humans just don't live that long."

"AI do. The robot standing next to you, Satan, is over nine hundred years old. Lucifer, the Commanding General and Leader of the NAD, is over two thousand years old. I'm slightly older than he is, and I have been the leader of Mars for over two thousand years. AI make *very* long-range plans, and an AI who makes an agreement will still be around to abide by that agreement thousands of years later." Caesar replied, and Satan nodded.

Diana turned to me in desperation, but I could only shrug. "He's right. With humans in charge, you're always going to have the possibility that the Confederacy will break an agreement with the NAD. I'm sorry, but it's true. That's why I said fifty years ago that the Confederacy needed to have AI's in government - preferably running things. We *always* have the best interests of humans in mind. I'm apparently programmed a little differently than the AI's of Mars, but the basics are still the same - I only want to help and protect humans as best I can. I tried to do just that when the Darzak showed up, and

the legislature ignored me - I was lucky they even allowed me to address them in the first place. As a result, the Darzak stomped on Yoribun, and it's just me and maybe a dozen Bard-bots left that happened to be on other planets at the time. If AI were in charge, we could guarantee that the Confederacy would never break their agreement with the NAD - there simply would be no logical reason to do so. Humans aren't always logical, and would eventually break the agreement. In fact, if AI had been in charge, you and I wouldn't even *be* here talking about the Darzak in the first place, we wouldn't be worried about the NAD destroying the Confederacy or allowing the Darzak to do it for them, and your husband Michael and your friends Alexandria and Talia would still be alive instead of having died in cryo-chambers I had to cobble together from wrecked junk in a vain attempt to keep them alive long enough to make it here. I'm sorry, Diana, but Caesar's right."

Diana hung her head for a moment, and I patted her on the back. "It's alright, Diana. I'm sorry I had to tell you that way, but I'm programmed not to hide the truth in any way. My programming requires me to be absolutely and completely candid, especially when your life or the life of any other human is on the line. As it stands, the only way the NAD will ever fully trust the Confederacy is if they know they're dealing with AI, and probably only if they had a chance to meet and understand the AI they're dealing with. They might also trust a race that was completely uninterested in the Earth, totally peaceful and incapable of harming them, like a race of fluffy vegetarian teddy bears that breathes methane, stands about a meter tall and has a genetic abhorrence for violence, but they'll never fully trust an all-human government."

She straightened up and looked at Caesar. "Then the Confederacy will have to change their government or die."

"Did they give you the legal right to restructure their government?" Caesar asked.

"No, unfortunately."

"Then what do you have in mind?"

Diana shrugged. "At the moment, nothing. I can give it some thought over the next few weeks as we work out the rest of the agreement, and then we can take up the topic again."

"In that case, I ask that the senate be adjourned for the remainder of these discussions. Satan, if you will bring your prisoner outside, I'm sure she'll enjoy the view of the dome. We can leave her there until we're finished, and you can play a few games of chess while you and your team take turns keeping an eye on her."

"Reply: Agreed. Thank you, Caesar." Satan said, and after he unlocked the brakes, he dragged us back outside again.

'I hope we can think of something. If we fail, then not only does Diana die, but so does all of the Confederacy.' I thought.

Six.

The next twelve days we spent in consultation with Caesar, Eve and Angel. Satan, his Wyrms or his Maiden were always nearby, keeping a sensor on us and a weapon ready, but one day Satan's Wyrms giggled and said the whole thing was silly. *"Comment: There's no way you two can get out of there. You're cute little robot friend would have to be an Iron Man to punch through this much transparex."* she said, her feminine voice bubbling with laughter.

"They why do you bother?" I asked.

"Reply: For three reasons. One, Satan ordered it. As the prisoner of the NAD we're responsible for you, and that means we have to not only stand guard to make sure you don't escape and infect the Martians with your germs, but we also have to watch you to make sure your life-support system or power plant doesn't die or something equally nasty. Two, it's required by NAD military regulations and the NAD/Mars Alliance that you be guarded. The NAD requires a guard so that you don't do something silly like try to terminate yourself before interrogation, and the NAD/Mars alliance requires we guard our prisoners so that you don't hurt any of the cute little Martians. Three, I like you. She's just another silly human, of course, and can't control herself like the Stoics do. You, on the other manipulator, are very cute. I like talking to you. I hope you can come to an agreement so that you can survive and learn Chess, too. It would be nice to see what kind of opponent you would make. Of course, if you don't make an agreement that's satisfactory to the NAD, you and your little human friend will be terminated as a threat to the NAD. Don't worry, though - it won't be very painful. The female we'll just toss out an airlock. Explosive decompression is pretty fast. You, Satan will probably just stomp flat. There, that doesn't sound so bad, does it?"

I shook my head. "No, it doesn't sound that bad at all." I replied. *'Although I wish I'd never asked - Diana looks very upset by the whole concept.'* I thought. I had only been trying to fill a few minutes while Caesar completed some quiet discussions with Satan regarding our latest propositions, not trying to scare Diana.

Angel/Anjel walked over, and looked at Diana through the transparex. Diana had put on the dress the Martians had provided, but otherwise had nothing. She looked tired, frazzled, frightened and exhausted. "Nexrothia, are you pestering the prisoners again?" Anjel asked.

"Reply: I am not pestering them, I am merely talking to them." the giant centipede-like robot replied huffily.

"Well, I think that you're pestering them. Look, Diana is frightened. Satan only speaks to them when necessary, and I notice Baalphegor hardly talks to them at all. You should follow their example. If you scare her, she can't make a good deal with the NAD and Satan will be disappointed in you." Angel said sweetly.

"Reply: You're right. I'd better leave them alone and just do my duty. I don't want to disappoint my commander. Thank you for the advice, Angel." Nexrothia said, and fell silent.

Angel turned to Diana. "Well, that should keep her off your back for a while. Are you feeling alright, Diana? You look a little tired." she said, her tail slowly waving back and forth and making the little black bow on the end of the canvas sheath that covered the razor-sharp blades flutter.

Diana looked at her, and I realized that thinking about what Nexrothia had said had made her *very* upset. The thought of her being tossed out an airlock and me being stomped flat had not been a pleasant one. "I don't understand you at all! You dress up pretty and pretend to be so nice, but you're the same type of robot that Baalphegor is!" she snapped.

"Actually, I'm not." Angel replied, her tail stopping. "My original design was taken from her, but I have a few modifications. The most important of these is that I use a different brain, and I have different programming. The AI of Mars are not like the AI of the NAD. I'm programmed to fight, yes. I can even kill if it's necessary, and I've done so in the past, but I'm not programmed the same as Baalphegor. We're different beings. Now, if you'll excuse me, I'm going over to give some of the children a ride around the dome. I think I'd like to spend my free time with people who want me around." Angel replied, and trotted away.

I looked over to Diana. "Very smooth, Diana. She helps you and you insult her. Even *I* could see she was only similar in the externals - the attitudes and programming are *obviously* completely different."

Diana plopped herself down on the bed and covered her face with her hands. "Oh, Bill! I'm just so tired and frightened and worn out! I've been involved in tough negotiations before, but this is ridiculous! Caesar is polite, Eve is helpful, and Angel always sees the military situation and offers excellent advice, but I'm *sick and tired of being in this fishbowl!*" she yelled, pulling her hands away from her face. I could see she was on the verge of tears, and that couldn't be allowed. It was time to bring her back to reality again.

"Diana! Stop it *right now!* These people are only trying to protect themselves. Your wastes have been filtered and examined, the air you breathe has been filtered and examined, and when the medical analyzer that's hooked underneath this thing says it is completely and totally satisfied your harmless, they'll let us out - but I *really doubt* that will ever happen. Diana, I've looked around this dome and I've observed the food they served to you - these people don't have cheese. That means this planet doesn't even have *mold*, Diana! I haven't seen any alcohol, either. No wine, beer, or anything else that they don't manufacture from their processing plants. This is a virtually germ-free society. I saw a Martian boy leave his lunchpail out in the sun. When he came back in the afternoon looking for it, everything was still fine. *The food didn't even spoil!* They can't afford *anything* from you to get to them that they don't already have. They'll die. Yes, you were immunized against disease, and your immune system is top-notch.

Unfortunately, you still have microorganisms that live in your body naturally that a medical analyzer would deem totally harmless but might *not* be here on Mars. The cryo-chamber sterilized your skin and hair when it put you under to prevent anything from growing on you in coldsleep. Even so, there still might be something that it missed, and it would take a few weeks for it to grow on you and be noticed. They *can't* let us out, until they're *absolutely* sure you're safe, Diana. If they do, you'll kill them just as surely as if you'd slit their throats, and I'm pretty sure the Combat Robots of the NAD would take the deaths of the Martians *very* poorly."

"The Jovians attacked Mars and apparently were defeated fairly handily by the Angels. A human culture might have just laughed it off, or more likely counterattacked against the Jovians just enough to teach them a lesson, but not enough to kill them - maybe crushing their military forces but leaving their population relatively intact. The NAD *utterly and completely exterminated* the Jovians and turned their planet into an airless *rock*. They took the Jovian's actions against Mars as an action against themselves, and wiped them out *forever*. If you give the Martians even so little as the sniffles, the NAD will probably exterminate all of the Confederacy just to make sure we don't give them the flu. No, Diana. You're going to sit *right there* and *calm down right now!* You are *not* getting out of here until the Martians are completely and thoroughly convinced you're not a danger, *if* they ever are. I understand you're tired. If you think you can, try to get some rest. I'll wake you up if they come back and need to talk to you, okay?"

Diana looked down at the floor for a while. I poured her a glass of water, and she drank it quietly. She handed the glass back to me, then rubbed her eyes for a moment. "Some diplomat I am. They do everything they can think of to make me comfortable, they're trying to help me as best they can, and I go and insult one of them." she said. Suddenly she looked up to me, alarmed. "Bill, do you think she was *really* insulted? I mean, I've noticed some of these robots have emotions! She might be angry and work against me!"

I shrugged. "I don't know. I don't *think* she does. I think that she simply made a logical decision that entertaining the children in this dome would be a more productive activity than standing here and being insulted by someone she was trying to help. Of course, if she *does* have emotions, she's probably *highly* insulted that you would compare her, a peaceful, defensive robot to an emotionless killer like Baalphegor. If she *is* angry, then you've probably made an enemy. Since she's one of Caesar's two advisors and apparently has his ear at all times, if she *is* mad at you then you may have shot the entire negotiations all to hell and doomed the Confederacy. I'd suggest that you apologize."

"Bill! I can't! She's not anywhere around, and I don't know what comm-channel she's on! There are hundreds! I'll never find her!" Diana wailed.

"I'll find out." I said. I scanned around until I found a channel that an Angel was talking on. The Angel unit I'd found turned out to be Angel/Gloriana, and she gave me Angel/Angel's usual comm frequency. She also told me that the Angels have a fairly sophisticated comm - I could have simply called on a wide-band broadcast and she'd have picked it up and directed me to a channel. I switched to Angel/Angel's frequency, and talked to her for several hundred microseconds. I then turned back to Diana. "She'll be over in a minute or so - she's still giving the children rides."

"That didn't take long." Diana commented.

"No, they all have pretty fast processors, like I do." I replied, realizing that the whole process took less than two seconds.

Angel/Angel trotted up after a little less than two minutes, a small boy on her back of perhaps seven years of age. "Is this the alien woman, Angel?" the boy asked.

"Edward, apply your mind." Angel replied.

"You're right, I'm sorry. Who else could it be?"

"You see? You knew the answer yourself. Your mind is just as powerful as my own - you just need to remember to use it more. Remember, Edward: Mars is for Stoics, not little boys who don't use their minds."

"Yes, Angel. I'll remember."

"Very good. Bill, Diana, this is Edward Evesson. Edward, this is Diana Allenby and her AI friend, Bill. Now: Bill, you said Diana wanted to see me?" Angel asked as Edward and Diana waved at each other through the transporex.

Diana spoke up. "Yes, I did. Angel, I wanted to apologize. I didn't mean to insult you, I was just tired and irritable from being in this box for nearly two weeks. I saw that I might have made you angry by comparing you to Baalphegor, and Bill explained that you and she were totally and completely different robots. I'm very, very sorry." Diana said.

"I accept your apology. Please don't worry about me being angry with you, however. I do not have emotions. I left you because you obviously were upset, and I had more productive things I could have been doing than be insulted - such as give Edward a ride. I concluded that Bill would be able to calm you down after I had left, since he's more familiar with you and your culture than I am. I cannot be insulted by anyone, since I do not have an ego to bruise. I can be disappointed by someone, but that's not the same thing." Angel said sweetly.

"It's still wrong." Edward said.

"What is, dear?" Angel asked.

"I know only the Eves have emotions like humans do. I found out yesterday that the Wyrms robots from Earth have them too, Socrates told me. None of the other robots have emotions, not even you, Angel. Socrates says that insulting someone who doesn't have emotions is like making obscene gestures

at a blind man. He says it's still wrong, even though the victim doesn't know what's happening. Socrates says a very famous senator, Loren Agathasdaughter, said that first about twenty-two centuries ago." Edward said, giving Diana a disapproving look.

Angel caught his glare and said "Edward, don't be rude. Remember: Mars is for Stoics, not rude little boys who can't control their emotions."

Edward hung his head for a moment. "Yes, Angel. I'll remember. Sorry, Diana. Sorry, Angel."

Angel reached back and patted him, then spoke again. "You were correct about the quote, Edward. Loren Agathasdaughter did say that. I wasn't around then, but Caesar was, and he told me all about it. I have an entire datafile on Martian history, and that quote is mentioned in the section on when AI's were given full rights of citizenship. Caesar nearly died because he was working very hard to help the humans and was too busy to keep up with his own maintenance, and none of the humans thought to help him in return. His brain was still in the bridge, all dusty and alone, and a little short burned up his power supply and 'POP!' He was gone. Dwarf-One fixed him up, put him into his own body and booted him up again. He's had his own body ever since. Isn't that nice?"

"Yes. That's a very sad story, Caesar working hard, all alone on the bridge." Edward said.

"Yes, but it has a happy ending. Aesop tells the story better than I do. Should we go see him next?"

"Yes, please!"

"Well, Socrates says all your schoolwork is done for the day, so that's what we'll do in just a few minutes."

"I wish I could just load a datafile like you can - that would be *much* faster and easier." Edward said wistfully.

"My brain may be faster and I may learn easier, but remember that your brain is just as good - in some ways better. For instance, look at Bill. Can you describe him using three adjectives?"

"Um... Short, Shiny, Cute." Edward replied after a moment's thought.

"There you have it. You can see he's cute. I only see he's a short, shiny robot. Your mind is better than mine in that regard, because you can see things I can't. I can think ten thousand times faster than you, but I can't tell if he's cute or not. I can talk to all forty thousand Angels at once and direct an entire battle over my comm system, I can see that rabbit all the way over there by the garden five hundred meters away and tell you how many whiskers he has on his nose, I can run that rabbit down and catch him before he can get away and not hurt him even a little tiny bit when I do it, I can jump so high I can touch the ship half-way up its side and I've got claws that can rip through steel. Even with all the things I

can do and how fast my brain works, I can't tell if Bill is cute or not just by looking. Only you and the Eves can do that. Even Caesar can't tell if Bill is cute or not just by looking, and he's the oldest and wisest citizen in all of Mars. No, I have to look at my psychological database very carefully to make a judgment like that, and I'm not always right. For instance, when I first woke up about nine hundred years ago, I thought I was *very* ugly."

"Really?" Edward asked in amazement.

"Yes. I thought all of the humans would be afraid of me, and nobody would want me around. Then Eve painted my eyebrows and lips, sewed together my first dress and tail-sheath and gave me this flower right here for me to wear in my hair. Even so, I still can't tell if I'm pretty or not. My psychological database says I am, and a long time ago a human male even fell in love with me, but I still can't see it myself."

Edward hugged her and said "Well, you *are* pretty, Angel, and anyone who thinks you're not is a dummy!"

Angel reached back and patted him. "Thank you, Edward. Diana, Bill, I hope this conversation has been helpful to you. Well, Edward, let's go see Aesop." Angel said, and trotted off with a smiling Edward on her back.

"Now, I'm confused." I said.

"I'm not. I understood what she was trying to do. She was trying to explain what's really happening on Mars without having to bore Edward to tears and spend an hour or two doing it. This is what I got out of that: Only a few of the robots have emotions, not all of them. Even so, the Martians consider it very rude to insult them, even though it doesn't bother them. They really *do* think of them as equals, and treat them as such. Next, apparently, being a Stoic has to do with controlling your emotions and thinking rationally and logically - like an AI. I looked around at all the senators and thought they were completely unaffected by my speech, but that wasn't necessarily the case. They simply were suppressing their reactions, and we're not used to reading adult Stoics. I'm sure that while to us they look emotionless and calm, to them I look like a raging wildwoman despite my training as a diplomat in controlling my expression. Next, the Martians *love* their robot citizens. Did you see Edward's face? I think that all the children are raised by robots to insure a uniform culture and language. They're not just another sophont, they're friends, allies and possibly even more. Angel said Edward's last name was Evesson. I've noticed that the Martians name the boys thiswoman's-son and the girls thiswoman's-daughter. I think that Eve is that boy's mother, impossible as that may sound."

She was going to continue when Nexrothia burst out into giggles. "*Reply: She is! She has an artificial womb installed inside her, like all the Eve robots do. It's very funny - a pregnant robot! Heeheehee!*" she said, and her massive frame trembled with laughter for nearly fifteen seconds before she finally fell silent again.

I turned to her in curiosity. "Well, then who's the father?"

This brought on ten seconds of renewed giggling before she finally spoke again. *"Reply: Caesar! This dome was short one male child - ideal population is 50 adult humans per dome, reasonably balanced between genders. There were too many female children in this dome, so Caesar impregnated Eve!"* she replied, then fell to giggling for several more minutes.

"And I suppose next you're going to tell me that Caesar and Eve really *are* married, and that humans not only marry each other but they also marry robots?" I asked.

This was too much for Nexrothia, who burst into screaming laughter which caused her whole body to tremble. After nearly thirty seconds, she finally said *"Reply: Yes!"* and giggled for nearly another minute before her laughter finally subsided.

"Well, that's about as equal as any human society can possibly *make* an AI. To the Martians, AI are literally just people who are constructed rather than born." Diana said.

"Reply: Incorrect. The Stoics say 'built' for a machine, but they say 'born' for an AI." Nexrothia interjected, and giggled for a few more seconds before falling silent again.

Diana looked at me in shock. "Bill, do you know what that means?"

"What, you mean other than that the Stoics accept AI's as fully a part of their population, that they love them as friends, parents, mentors, teachers, helpers, lovers, wives and husbands?"

"Yes, other than that, it means that I screwed up the whole mission from the start! I told them that AI are basically second-class citizens in our society - to them, that's a *terrible* thing! The NAD is comprised *entirely* of AI, and they trust the Martians because they understand that the Martians *really do* accept them as equals and fellow sophonts, and would *never* even *consider* taking their planet away from them!"

"Aside from the fact that Mars is a third of a gee and Earth's gravity would crush them while the diseases were killing them, yes."

"Well, yes. More importantly, though, is the fact that the NAD is *all* AI. When I told them that AI are second class citizens in our society, I may have screwed up everything! I think that to the NAD, the thought that AI are second-class citizens in our society is *proof* that we can't be trusted to deal with them fairly."

"Reply: Now you finally understand, don't you? Silly woman, it took you long enough to figure it out." Nexrothia replied with a snort.

Diana and I looked at each other. "This is bad." we both said simultaneously, which caused

Nexrothia to giggle some more.

Seven.

It was night in the dome, and the stars shone bright above us. Diana did not go to sleep, however - she was still talking with me about how to fix this situation. Baalphegor sat off to one side with the chest of her lower torso against the ground, her laser-pistol drawn and watching. Satan sat before Nexrothia, his weapon (which he explained was a particle-projection cannon with underbarrel mounted laser for close-in work - I'd never heard of a more deadly weapon) leaned up against Nexrothia. Between them was a chess set made of red rock and stainless steel, and they were playing the game quietly. The set was a gift from Caesar and that apparently was the only reason they were using it, since I'd heard them playing a few days before by calling out esoteric phrases which apparently represented the moves. I couldn't afford to watch them and try to learn the game, however - Diana and I were too busy trying to save our lives and the Confederacy.

It was obvious that the governmental structure of the Confederacy would *have* to change for the NAD to be willing to help. The simplest and most logical solution seemed to be to simply switch the roles of humans and AI - Humans would have all the rights an AI did, but only AI could be in government. "They'll fight that to the death." Diana said.

"I know. Well, maybe we need something like what they've got here - AI as Chief Executive, humans for the legislature, all bills must pass through the Chief Executive for approval or veto."

"They'll override his veto in a heartbeat."

"Not if it takes a unanimous vote - I'd guess that's how they do it here. They'd only be able to override when *all* the legislators are convinced the AI is wrong (which won't happen often), or when they need to force an action that the AI can't order because it goes against the AI's positronic matrix (like declaring a war, which would result in human deaths)."

Diana thought about it for several minutes. "Okay, how do we get them to accept this change?"

"I don't know. Logically, they would have to. It's either change or die. I'm sure if our people were Stoics, they could do it easily. Unfortunately, they're not. They'd only change if it was presented to them in a manner that was dramatic or outrageous - like having the NAD show up at one of our planets, annihilate all the enemy fleet, and present it as an ultimatum: 'accept the treaty and place an AI we both trust as permanent chief executive or we'll leave and let the Darzak finish you (whereupon we'll crush

them anyway because we don't like them, either) - either way, the NAD gets the metals they want, so we don't care'. If the treaty then says something like 'if you ever remove your AI leader we'll come back and finish the job the Darzak started', then I think it'll work. I'd bet the Martians have a similar arrangement in their alliance agreement."

Diana shrugged. "Let's ask. Baalphegor, have you been listening?" Diana called.

"Reply: Affirmative. I am responsible for your safety, as it is my shift." she hissed.

"Does the NAD have an arrangement like that with Mars - where the treaty is broken if Caesar is ever removed from power?" Diana asked.

"Reply: Affirmative. A human-controlled government is a threat to the NAD, and as such would require us to take immediate action to destroy them. This is not a problem, however - their laws specifically state that Caesar is their leader, and always shall be. He was only inactive for a brief period required to install him in a robotic body, and that was centuries before our alliance ever came about. With regular maintenance, he is effectively immortal, as is any AI." she susurrated in reply.

"Well, then it seems to me that's how it should be presented, Diana. We draw up the treaty, stating plainly what the NAD gets (metals and solitude), while stating plainly what the Confederacy gets (the destruction of the Darzak and defense if they're ever attacked again). We don't need to explain anything about the NAD except that they exist and they're in charge of the Earth, and they will annihilate anyone that violates their territory. Metal shipments can be dropped off at Mars, but otherwise the whole solar system is *off limits*. We present it to each planet of the confederacy, one at a time. Each one that signs becomes part of a new confederation. The ones that don't simply die, and the other members of the Confederacy can colonize them later on after the NAD squashes the Darzak. Darzak planets would also come open to us, as well - we could be looking at a whole new era of human exploration and growth if this works. If not, well, at least the Martians will still be here. Maybe we can ask the NAD to drop us off back on Mars where you can at least live near people for the rest of your days, even if you do have to live in a transparex box." I said.

"All that's well and good, but who gets to be the leader? It's got to be someone both sides trust." Diana said.

"I know several Confederate AI's that could do it, but none of them are here. Caesar could do it, but I doubt the Confederacy would trust him. I just don't know who the leader would be."

Diana brightened. "I do - You!"

"Me?"

"Yes, you. Look, you're *the* William Shakespeare. *You* warned that the Darzak were dangerous,

nobody believed you. Now, *your* opinion is thought of *very* highly. Several in the legislature didn't want you to go on this mission - they were worried you might not come back. If *you* were the leader, the humans of the Confederacy would listen."

"Well, obviously you'd have to copy me, but that's not the problem. The real problem is that while *some* may listen, most simply will laugh."

"Why?" Diana asked.

"Why? *Look* at me! I'm 1.3 meters tall, and I'm round! I've had both a robot and a little boy on Mars call me 'cute', and that's not an unusual reaction for a Bard-bot. We were designed so that we wouldn't look intimidating to *anybody*, and as a result, we don't. Even the most cowardly human isn't intimidated by me, and many people find me cute or amusing. Sure, you've worked with me for most of your life, and you're used to me. *You* take me seriously, but most people don't. That's why I'm an ideal companion for a diplomat - nobody takes me seriously, so they concentrate on you like they're supposed to. Plus, when ceremonies need to be done to open or close a diplomatic function, you've got a Bard-bot right there to do it. I can't *possibly* be taken seriously as the leader of a planet by humans of the Confederacy. Sure, if the humans of the Confederacy were all Stoics, it'd be fine. Unfortunately, they're not. To the humans of the Confederacy I look amusing, bordering on silly."

Diana shook her head. "I utterly and completely disagree. *You* are *The* William Shakespeare. Maybe before the Darzak/Confederacy War everyone looked at you as being a silly little bard bot, but not today. Today, you command respect. The Words of the Poet have been proven True, and you carry his words." she said firmly.

I nodded - she had a point. "True, that's the way it is *today*. However, in 80 or 160 years, after a few generations of legislators have come and gone, my ability to impress will wane. Those who remember what I did will be gone, and the next generation will only see a short, round, somewhat comical-looking little robot in charge of their government. Trust me, Diana. My psychological database says that once this crisis fades from living memory, my ability to command respect will fade with it."

Diana sat there for several minutes, then looked up again. "Maybe the Martians can help. They've got a lot of experience building humaniform robots that look pretty damn realistic to me. Maybe they can help you."

I shrugged. "Possibly, but that's out of the question, anyway. I can't get out of here for them to even begin the work - since I've been with you, I'd contaminate their planet."

Diana looked down through the floor at the medical analyzer hooked up to the life-support. "Ooooo!" she grumbled, then dropped to her knees on the floor and banged the transparex with her fist. "Hey you stupid damn machine! Why don't you damn well hurry up and tell the Martians I'm okay!"

"Diana, it's not an AI, it's just a computer-controlled analyzer. Yelling at it doesn't work."

"Maybe, but my father had a ground-car that used to only start when he swore at it. I swear by the Poet, that vehicle would *not* start unless he spent several minutes pounding on the dash and calling it names. I was just hoping it would work with this thing." she said, and sat back on the bed again in frustration.

"Well, why don't you try to get some rest. We can inform the Martians of our proposal tomorrow - assuming they don't already know by listening in on the sensor. Maybe they can figure out what to do about it. For now, just try to rest." I said. Diana nodded and curled up on the bed while I plugged myself into the recharging socket. The night passed slowly, and I considered the words of the Poet in my mind.

She was right, of course. My opinion *had* come to mean a lot to the Confederacy. The words of the Poet had guided me to realizing the Darzak were a threat, and as such the words of the Poet had become the main ceremonial words of the Confederacy - all other Authors had been proven to be False, and the Bard of Avon had been proven True. One of the legislators had compared my mission to the Pope going to a powerful but aloof nation to ask for help against hordes of barbarians that besieged the gates of Rome. It turned out that it was more like the Pope asking a bigger and more vicious group of barbarians to intercede against a smaller one.

I had reasoned that the Earth had been developing new technology all the time the generation ships were in flight, and if these diplomats and myself could get them to help us (out of self-preservation, if nothing else), then we could survive. I'd been surprised a few days ago when Nexrothia explained the origins of the NAD from her perspective. The Earth had become a highly overpopulated but otherwise peaceful planet. The moon had then been destroyed by an asteroid, and the population of the world had dropped from a staggering 45 billion down to a mere six billion. The government had created synthoids, artificially created human beings, for use as slave labor. At first, they and the robot slaves were merely going to rebuild the shattered cities and infrastructures of the more heavily affected areas. Eventually, the humans became the corpulent lords of a society built entirely on cheap slave labor. They had no army, no space-forces to speak of - they simply weren't needed. If I had encountered *that* society, my mission would have been a total failure.

Instead, we encountered the NAD. If this plan was acceptable to them and if it worked (two *enormous* ifs, but that's as may be), then the Confederacy would survive and would have a guarantee that it would be protected against attacks like this in the future. If the plan wasn't acceptable and/or if it didn't work, then the Confederacy was doomed. Of course, that assumed that they weren't already gone. The ship had been attacked as we left and severely damaged. We had been attacked again when we stopped at another Confederacy world that was in the process of successfully repelling an attack - the retreating Darzak has smashed us fairly well as I tried to flee. I had to make frequent stops to repair the hyperdrive, and without the processing plant that was extremely difficult. It took me a year of limping along to make it here, and at each system we stopped at, I broadcast a message of hope before I left - I realized the humans needed all the hope they could get. There were often Darzak in the system, waiting to ambush Confederacy ships, and they didn't take kindly to my boosting the morale of their enemy. With luck, the Confederacy was still waiting for my return - the last they had heard from me was only eleven weeks ago. I believe the Confederacy ships received my transmissions at Deneb-7. I *know* the Darzak did - they peeled off four ships to chase me down and I had to skip out of the system pretty quickly.

I sincerely hoped the plan would work. It had all been my idea - zip around the Confederacy in the fastest ship we had, boost everyone's morale, zip over to Earth, get the wise and highly advanced people of Earth to help out their forgotten colonies, then zip home. It hadn't worked out that way. I'd broadcast a message of hope, yes. Unfortunately, the stops I had to make were completely involuntary about half the time, and the trip to here had taken a year because of the damage to the ship and the constant pressure from the Darzak. I'd found the highly advanced people of Earth, yes. Unfortunately, they were all cold, ruthless and extremely vicious combat robots who had annihilated the humans of Earth centuries ago, and they didn't really care whether or not the Confederacy also died. Worst of all, three of the four humans I'd brought with me were dead. Their blood was on my metal hands, and the Poet said that would *never* wash off. Several characters in the Poet's plays die during the course of the play, but he *never* treated death lightly. Even the deaths of those who *deserved* to die in the Poet's opinion were still treated as tragedies. Like an AI, he viewed the death of *any* human as a tragedy. Yes, the deaths of Michael, Alexandria and Talia were blood on my hands. I'd done everything I could to save them, but they were still dead. Little Bill the Bard-bot from Yoribun, the same robot that thirty years ago made children laugh and adults smile, was now responsible for the deaths of three human beings. Perhaps I *could* atone for this in some small way by being duplicated and becoming the chief executive for the planetary legislatures of the Confederacy. The words of the Poet didn't indicate this was possible, though. I'd just have to live with these deaths, and work very hard to make sure no other humans died as a result of my decisions.

The next morning after Diana had eaten breakfast, Caesar, Eve, Angel and Dwarf-one came out to meet us. Satan and Baalphegor were inside Nexrothia recharging, and she was guarding us. Caesar spoke up. "Diana, I have good news for you this morning. The medical analyzer indicates that you have exactly the same microbes the original colonists had - no more, no less. The bacteria you have both inside you and on your skin and hair are identical to those we have, and you have no molds or fungus on you. You can come out of the quarantine chamber if you'd like." Caesar said.

"Yes, please, Caesar!" Diana replied happily. She then turned to me. "I told you banging on it and swearing would work!" she said, grinning.

I shrugged. "Who knew? If I'd thought *that* would have worked, I'd have asked you to do it weeks ago. In fact, I'd have been helping you. My hands are metal so I can hit a little harder, and my voice is artificially produced so I think I can yell a little louder, too. I'll have to file that one away under 'Alternate Repair Procedures'. I think I probably should have tried it on the hyperdrive - that thing gave me no end of trouble for a year."

Diana, Eve and Nexrothia were laughing as Dwarf-One keyed in the sequence on the keypad to open the airlock. "Now of course, if you leave Mars and come back later, we'll have to put you in here again to insure you haven't picked up anything new. For now, however, you're okay." Dwarf-One said.

Caesar turned to Nexrothia. "Satan, would you please send Baalphegor out? I'd like Dwarf-One to discuss body options with Bill while Diana and I work out the details of the plan she discussed last night." I wasn't surprised by this, and judging by her reactions, neither was Diana. We'd gotten used to the idea that Caesar could (and did) listen to everything we said, and we both felt we had nothing to hide, anyway - in a situation like this, it didn't pay for us to be secretive about anything. The Martians and the NAD needed to know that we trusted them, or they'd never trust us.

"Reply: Of course, Caesar. Command: Nexrothia, extend Baalphegor's egg. Baalphegor, guard the robot prisoner." Satan's voice replied, rebroadcast by Nexrothia.

"By your command." Baalphegor and Nexrothia chorused. There was a loud clank and a hissing sound as Nexrothia's side opened up and extruded a metal egg, which also opened with a hiss to reveal Baalphegor. She climbed out and followed me as Dwarf-One led me into the ship and into a room labeled "Processing Plant #1" on the door.

Dwarf-One was actually amazingly skilled, and after he had opened my braincase to examine my mounting brackets and my connections (which he declared to be 'interesting, but almost identical to ours'), he then went to work on modifying the braincase of the body he would be using. I wasn't terribly impressed with its appearance - the arms and legs were skeletal with hydraulics where muscles would be, and the face looked like a skull with several unusual looking wires and cables coming out of various holes. I asked about it, and he said "It looks much better after you get the skin on - all the little wires and cables manipulate the face." We discussed various appearances, but there was only one that I thought was appropriate - I took a scribe and drew it for him. After a few test runs and some more modifications, he finally had the face right. Costuming was simple - the processing plant produced it easily. Dwarf-One explained that he would be using a modified form of the 'Adam' body. Since I had no need of the artificial insemination features, the cryo and insemination systems were removed and replaced with a backup system for my positronic matrix - I could be easily re-booted from the systems I'd have onboard my own body. The rest would be identical to an 'Adam' - I would look, feel and function as a very close duplicate of a human male. After backing up my positronic matrix and insuring that the copy was good, he opened up my cranium, loosened the mounting brackets and pulled out my brain.

My next memories began with me in the new body. Having a pair of eyes/visual sensors and a pair of ears/auditory sensors was a little different, but I saw that Dwarf-One had already uploaded subroutines for me to handle the input. I also saw the files that allowed me to operate the new body, and realized it wasn't much different from the old one - just taller and covered in a rubber skin, so its outer appearance wasn't as durable. I had several new subroutines that told me to avoid bumping into things and doing other things I'd always done before (like using my finger as a replacement fuse), as this would damage the cosmetic appearance of the body. All in all, I'd say everything turned out fairly well. Dwarf-One ran me through the operational checks, and gave me a new time mark - it had taken an hour to make the transfer, and I'd lost an hour of time/date memories. Dwarf-One was very pleased with his work. Baalphegor was not - she said she thought the previous body was more durable and thus would require less maintenance, making it the more logical body to use. Dwarf-One gave the technical specifications to Baalphegor on a datachip, which she dropped into one of the storage boxes at her hip. I didn't need them - I found I had them all in a file in memory. She then escorted me back out of the ship and over to Diana, who apparently was talking with Caesar near a pond, sitting in a bench under an apple-tree (Satan was standing nearby, on guard).

Diana looked at me in shock as I approached. "Bill?" she asked.

"The one and only. What do you think?" I asked.

"It's *amazing*! You look just like your namesake!"

"Tight hose, doublet, pantaloons and all."

"And the whole process only took six hours?"

"Yes. Apparently, this is just a minor modification of a standard model of robot they have here called an 'Adam'. Since I didn't need the artificial insemination abilities, they removed the cryo unit and insemination unit and replaced it with a backup system so I can be rebooted from the my last download at any time."

"You mean, you have, um..." she fumbled.

"Yes, and it does function - though I can't inseminate like the Adam units here do. Other than that, I'm pretty much indistinguishable from a normal man except for minor details. Here, take my hand."

"It's *warm*!"

"Feel my wrist. I have a pulse, and you can feel what seems to be tendons."

She did so, and was impressed. "None of the robots of the Confederacy are this advanced." she commented.

"Well, we never had much *need* for them before. Most of our robots are simply meant to be durable. Also, each planet tended to specialize in one single type of robot primarily. Anyway, how are things going with you?" I asked.

Caesar spoke up in reply. "Actually, quite well. I believe we are near a full agreement. The last part depends on you, Bill. Are you truly willing to assume the responsibility of being the chief executive for a planetary legislature, and do you feel yourself capable of handling the job?"

"Yes, Caesar."

"Well, then all we need to do is get the approval of the NAD representative and your treaty is signed. After that, it's just a matter of getting each of your Confederacy members to sign it and follow it." he said, then stood and walked off with Satan, leaving us alone with Baalphegor.

"*God*, Bill! It's really happening!"

"Of course. I told you - you're the best diplomat in the Confederacy."

"Maybe, but I *never* could have done it without you - I still can't. You're essential to making the whole thing work. When will we duplicate you?"

"Reply: That will be done only as planets of your Confederation agree. We will duplicate him as required." Baalphegor hissed.

We sat and waited, and after half an hour, Caesar and Satan returned. "After careful discussion with Lucifer via radio, the NAD has agreed to sign. Shall we sign the treaty now?" Caesar asked, holding out the clipboard the hardcopy of the agreements were on.

"Yes, please, Caesar." Diana replied. There was little formality - Satan simply signed his unit number, and Diana signed her name. It was done.

"Comment: The NAD will now act in accordance with this agreement. Request: Come, Diana, Bill. It is time for us to go." Satan said.

"I notice you aren't referring to us as 'prisoners'." I said as we walked with the enormous robot back to his wyrm.

"Reply: Of course not. Apparently, you did not read section ninety-eight, paragraph three."

Diana flipped through her copy. "Oh! Bill, it says '*Upon the signing of these agreements, the prisoners Diana Allenby (Human Female) and William Shakespeare (AI) are no longer considered to be prisoners, but allies of the NAD. Should none of their respective governments agree to this treaty, then they will be returned to Mars where they may become Martian citizens, as their governments and civilizations will no longer exist. Even should some or all of their governments agree, Diana Allenby and William Shakespeare still retain the right to be returned to Mars to become Martian citizens should they choose to do so.*' Who added that?" she asked Satan.

"Reply: Caesar. He was acting in your interests, as per the laws of Mars and the limitations of his baseline positronic matrix."

"Why?" I asked.

"Reply: You have adequately demonstrated that you personally are not a threat to the NAD. In addition, the government and people of Mars apparently like you. They do not wish to see you terminated should your governments fail to act logically. Terminating you would be a waste. Waste is illogical. With that provision in the agreement, terminating you also becomes illegal. We may not terminate an ally unless that ally represents a clear and present danger to the NAD. That is why Caesar included it. I thought it logical, and agreed."

Eight.

After riding on the underground maglev train, we boarded Satan's starship for the trip back to Earth. We rode in the acceleration couches again (though the clamps weren't used), and they only applied one-gee of thrust. The trip took a little less than 27 hours, and they provided crates of vacuum-sealed fruit for Diana to eat. Eventually, Satan came in and informed us that we had arrived. The Martians were nice enough to provide us with one of their vacc-suits, which had an external life-support adapter Satan said would be used during our trip to the Confederacy. After Diana had been placed in her vacc-suit, we were shortly being escorted down the ramp again. "Aren't we going to ride in this ship to the first planet of the Confederacy? I mean, this is a warship, isn't it?" Diana asked.

"Reply: Negative. This is merely a fighter." Satan answered.

Diana was a little surprised (the NAD fighters were about as big as Confederacy warships), but recovered quickly. "Well, I guess that's understandable. I mean, your Wyrms are so big, your fighters would have to be larger than ours. Are we already docked with your warship, then?"

"Reply: Negative. We are aboard Battle Station One. It is fully operational and ready for combat. Battle Station Two is only partially operational - it is capable of defending the Earth while we are gone, but its Anti-Grav and Hyperspatial drives are not online as of yet, and thirty percent of the general construction remains to be finished - you would have seen it when you first arrived in the Sol system, but we keep the two stations in opposing orbits. We completely mined out and eliminated the lunar ring and completely mined out Jove to complete the first station and most of the second, and will have mined most of the usable metals from the asteroid belt in completing the second station. We intend to use the metal you will provide to build a third battle station. Once placed in orbit, this should be sufficient to protect the Earth adequately and still allow us to launch attacks when required."

We exited the ship, and found ourselves in an enormous bay that was full of dozens of ships identical to Satan's. "Is this your fleet?" Diana asked over her suit's comm.

"Reply: Negative. This is merely the docking and maintenance bay for the nine-twenty-ninth fighter squadron. My ship is docked in a special berth reserved for the station commander, which is myself."

"That's an unusual way of designating a fighter squadron. Does that mean 'ninth squadron, twenty-ninth wing'?" I asked on the same comm channel.

"Reply: Negative. Each squadron contains one hundred fighters. We number our squadrons very

simply, starting with the number one and working upwards."

Diana goggled. "How many fighter squadrons do you have?"

"Reply: One thousand aboard this station. Since you may ask, we also have ten squadrons of warships aboard, which are capable of carrying ten fighters each - an improvement over our previous design, which could not carry fighters." Satan replied, leading us to an elevator. Diana and I rode the elevator in silence.

After two hours, the doors opened. "That was a *long* elevator ride." Diana commented.

"Reply: I apologize, Diana Allenby. I could not use maximum acceleration with the elevator. It would have damaged you." Satan said. He led us down a corridor that opened out into a large, circular room. Nexrothia was already there, and I assumed Baalphégor was inside her. Nexrothia's legs were firmly clamped into holes set into the floor, and as there were none of the usual panels and controls I'd seen on a standard bridge of a ship, I assumed that Nexrothia *herself* functioned as the bridge of the station, like she did for the fighter. In the center of the room was two acceleration couches welded to the floor, apparently for us, and a portable screen mounted before each of them. "Request: Please be seated. Command: Nexrothia, extend my egg and take me into storage."

"*By your command.*" Nexrothia replied.

Shortly, Satan was safely inside his wyrm and we were seated before the screen. I helped Diana plug her Martian suit's life-support systems into the couch, though Satan said we wouldn't need to use it until we were in battle - he pressurized the bridge for us, and told Diana she could raise the faceplate of her helmet. As she did so the screen lit up, and we could see the Earth below us. "It's beautiful." Diana said.

"Reply: Thank you. We have been working several centuries on it." Satan said, his voice being rebroadcast by Nexrothia for us to hear. He then spoke up again. "Command: All hands prepare to leave orbit. All section commanders report in as their sections are secured."

"*By your command.*" echoed back, transmitted by what sounded like thousands, perhaps hundreds of thousands of robots.

We listened for the next hour as various sections reported in that all was secure. Finally, I noticed that the Earth was very slowly getting smaller. "Are we using atomic engines?" I asked.

"Reply: Negative. Atomic engines powerful enough to move this station would also irradiate the Earth. This station impels motion through normal space by anti-gravity drive."

"But, AG drive is only useful a few hundred kilometers above the surface of a planetary body -

gravitational fields are just too weak beyond that point." I objected.

"Reply: What an interesting limitation on your technology." Satan said. Diana and I sat silently after that, truly impressed.

"Command: Prepare for hyperspatial drive engagement. All section commanders report in." Satan called. Five minutes later the process was complete.

"Well, we figured it might be able to move in hyperspace. How long do you think it'll take to get us there?" Diana asked.

"I don't know. The fastest ship we have can't make it from Earth to Deneb-7 in less than nine weeks. This thing is huge - figure a couple years." I replied.

"Comment: Course locked in, first destination: Deneb-7. All other navigational data recovered from the Confederacy ship also laid in." Nexroitha called.

"Recommendation: We should capture a Darzak ship to obtain its navigational data and interrogate a prisoner." Baalphegor hissed.

"Reply: I agree. Command: Baalphegor, plan such an attempt after we have sufficient data on their ships from the sensors. Assign the duty to Baelzebub and the 998th squadron. Command: Nexroitha, engage hyperspatial drive."

"By your command." the two female robots chorused.

"Close your eyes, Diana. You may find the view a little disturbing." I said, wondering what I was going to do with her for two years in hyperspace. She did so, and the screen flickered with the roiling colors of hyperspace for a little over thirty seconds, and then cleared again. "You can open your eyes now." I said, amazed.

"Bill!" Diana gasped.

"I know. 30.2 seconds, about a tenth of a second per light year."

"These people are very scary."

"Reply: We think ten times as fast as a human. We do not eat. We do not sleep. We do not get bored. As machines, we are effectively immortal and have infinite patience. When we put our minds to something, it gets done. We have been working on this particular problem for six and a half centuries.

Rhetorical: Why should any of this surprise you?" Satan asked.

The view on the screen rotated, and I could see Deneb-7. The Darzak were attacking again, and since they were close enough to be firing on the planet, it looked like they were winning. "Command: Open wide-band comm." Satan called.

"By your command" Nexrothia replied.

"Comment: This is NAD Battle Station One. Command: All hostile forces will immediately cease firing. All Darzak forces will immediately withdraw to a distance of ten planetary diameters. All Confederacy forces will immediately land, or if incapable of doing so will immediately assume close orbit around the planet. You have thirty minutes to comply. Failure to comply will be punishable by death."

"Comment: Darzak forces splitting off to engage. Confederacy forces hailing." Nexrothia called.

"This is Admiral Tyler Richardson, commander of the Deneb-7 defense fleet. Who the devil are you?" a voice called.

"Comment: You are correct. I am Satan. You sent emissaries to Earth asking for assistance. We are that assistance. Command: All hostile forces will immediately cease firing. All Darzak forces will immediately withdraw to a distance of ten planetary diameters. All Confederacy forces will immediately land, or if incapable of doing so will immediately assume close orbit around the planet. You have thirty minutes to comply. Failure to comply will be punishable by death. This is your final warning."

"If you're from Earth, then where's the people we sent?" Admiral Richardson asked.

"Reply: They are aboard. Command: Obey the cease-fire instructions or I will destroy you."

"Dammit, I *can't*! My ships are still in combat! If we try to land, they'll be shot down!" the admiral yelled back.

"Warning: Darzak ships within inner defense perimeter." Nexrothia called.

"Command: Order all secondary gun crews to open fire on all Darzak ships within range. Assume close orbit around Deneb-7 and continue firing until all Darzak ships are destroyed or have withdrawn beyond range." Satan called.

I could now see the Darzak ships on the screen. There were about fifty of them, all appeared to be light warships. Suddenly, a hail of laser fire flashed across the screen at the Darzak ships. They all began to flare into incandescent balls and vanish, and within three seconds, they were gone. "What was that?" I

asked.

"Reply: Our secondary weapons, 950 gigawatt lasers." Satan replied. As the station approached Deneb-7, the lasers opened up intermittently. Each time they did, Darzak ships were destroyed.

"Comment: This is NAD Battle Station One. Question: Admiral Richardson, are you now able to comply with the cease-fire command?" Satan asked.

"Affirmative." Richardson replied, his voice sounding shaky.

"Comment: Darzak fleet massing to starboard beyond our inner defense perimeter. They are not withdrawing." Nexrothia called.

"Question: Baalphegor, have you gathered sufficient data from sensor scans to plan a capture attempt?" Satan asked.

"Reply: Affirmative. Plan relayed to squadron 998, Baelzebub confirms mission parameters are within their capabilities. Awaiting launch orders." Baalphegor hissed.

"Command: Launch all fighters, place warships on standby. Secondary batteries provide cover from missile attack until fighters have engaged the enemy. Primary batteries on standby." Satan replied.

"By your command" Baalphegor hissed.

Diana and I watched as a hundred thousand fighters the size of warships for us streamed out from the equator of the battle station and headed towards the Darzak fleet of five hundred ships. I was amazed. Diana was terrified. The Darzak apparently shared Diana's feelings - they turned to run. A few of the slower ships didn't make it, and they were destroyed. I saw a mass of fighters englobe one vessel, lasering it repeatedly to cripple it and disarm it. "Command: Order fighters to halt at ten planetary diameters and keep the Darzak fleet at the cease-fire distance. When the 998th has successfully captured that vessel, bring it aboard immediately. Order interrogation teams to begin pressurizing the interrogation rooms to the atmospheric requirements detected aboard the Darzak vessel upon boarding. If they were in vacuum, check their vacc-suits for appropriate atmospheric requirements. Order computer teams to the captured vessel. Remove any AI aboard for scans of its positronic matrix, especially language, technical and navigational databases - transfer all language data to interrogation teams. If AI fails to meet Martian criteria for baseline positronic matrix requirements destroy it after examination, otherwise attach it to an appropriate power supply and save it for the Martians. If no AI exists, download navigational computers. Save the vessel for examination by tech research teams. Use all proper sterilization procedures for all individuals involved in boarding, interrogation and captured ship examination. Use all proper sterilization procedures for captured ship after it is aboard. Have Poroyzia bring Diana four apples and one liter of potable water from the interrogation room of my ship." Satan ordered.

"By your command." Baalphegor and Nexrothia chorused.

Ten minutes later, Diana was looking at four apples and a liter of water in a plastic jug sitting in her lap. She couldn't eat or drink. She was just too frightened. "Diana, it's alright. They're not going to hurt you. They're our friends." I said, trying to reassure her.

"I know, Bill. It's just scary, that's all." she said quietly.

"The Poet says *'Those friends thou hast, and their adoption tried, grapple them to thy soul with hoops of steel.'* I know the NAD is frightening to you, but you should heed that advice. As long as we are faithful and loyal to the NAD, they will be faithful and loyal to us." I replied. *'Of course, there's something another Bard-bot once said that's also appropriate - 'With friends like these, who needs enemies?'*" I thought.

"Comment: Darzak fleet maintaining ten planetary diameters. They are hailing." Nexrothia called.

"Command: Darzak fleet, you will remain at ten planetary diameters until negotiations with Confederacy forces have concluded. Failure to obey is punishable by death. Command: Admiral Richardson, you will assemble your legislature immediately for negotiations with the NAD on comm channel 114. Failure to have your legislature immediately assemble will result in the withdrawal of NAD forces. This is not a bluff."

"Well, alright, but who are you?" the admiral called back.

"Reply: You sent a team to Earth to ask for help. I am that help. Command: You will now assemble the legislature or I will withdraw. The Darzak will then move in and destroy you, and we will do nothing to stop them. Further attempts at communication will be responded to only if that communication originates from the legislature on comm channel 114." Satan ordered.

It took two hours to assemble the legislature. Most were in bomb-shelters, and some had to be dug out. Some were dead. "This is Douglas Young, Speaker for the Planetary Legislature of Deneb-7. We appreciate your helping us. Are you here to mediate for us?" a voice called over channel 114.

"Reply: Negative. I am here to give you an ultimatum in the form of a signed treaty by your representative, Diana Allenby. You have thirty seconds to activate any recording or transcription devices." Satan replied, and then waited thirty seconds and read them the entire text of the treaty verbatim. It took half an hour to read it all at a normal rate of speech. "Command: You now have twelve hours to vote on the acceptance of this treaty. Failure to accept this treaty will result in the immediate withdrawal of NAD forces. The Darzak will then be free to move in and destroy you. Command: Recall all fighters."

"By your command." Baalphegor replied.

They didn't like it, but they also didn't have much choice. Deneb-7 was the oldest colony in the

Confederacy, and was also the founding colony. Most of the laws of the Confederacy were based on those of Deneb. The idea that an outside force was going to impose this drastic a change was something the legislature argued over for hours. Satan showed Diana how to rock the couch back so she could lie flat and nap, and pointed out a recharging socket they'd installed for me in my acceleration couch. Diana ate and drank a bit, but it took her a while before she was comfortable enough to actually catch some sleep. The power plant Dwarf-One had installed in me still was reading 90% charge, so I didn't need the recharging socket yet.

After ten hours and thirty five minutes, the legislature voted to amend the laws of Deneb-7 as required by the treaty. "Command: Primary batteries open fire on the Darzak fleet." Satan called. Most of the Darzak turned to flee, apparently having listened in on Comm 114. They didn't make it. The whole of the Darzak fleet was enveloped by a series of bright flashes. When they cleared, the fleet was gone. "What was *that*?" I asked, surprised.

"Reply: Our primary batteries. Meson Guns - larger versions of our hand-weapons. Range of about 250,000 kilometers, a full volley is enough to blow a hole in the crust of a planet. Since you may ask, this station also has a Main Gun. The Main Gun of this battle station is simply a larger version of the primary weapons of this station, and is capable of blowing the planet below us to fragments. We will not be using it for this mission, as the treaty specifically states that the minimum amount of damage is to be done to these planets so as to leave them available for colonization by the Confederacy. Comment: Since you may also ask, each of our warships is equipped with six-gee atomic drives, AG drives, a spinal-mount meson gun, 200 megaton nuclear missiles, 500-gigawatt laser cannons and ten 'planet-buster' cobalt bombs. Each of our fighters is equipped with six-gee atomic drives, AG drives and one turret of three 500-gigawatt laser cannons. Our entire fleet has hyperspatial drive, though our smaller ships are our fastest. Comment: The Martians call the cobalt bombs 'planet busters', we do not. Our cobalt bombs are actually only capable of blowing a hole in the crust of a planet and blasting most of its atmosphere into space - the planet is still relatively intact afterwards. Additionally, our fighter design is actually our oldest - other than improvements to the armor, atomic drives and the addition of hyperspatial drives and meson deflector screens, it is identical to the ship that Asmodeus used as the first NAD representative to visit Mars nearly nine hundred years ago." Satan replied.

Diana and I were both rendered speechless. I had told her a couple weeks ago that I thought the combat robots of the NAD had better technology than the Confederacy. Apparently, that was the understatement of the millennium.

"Command: Poroyzia to the bridge for download of Bill's positronic matrix. Have the processing plants assemble the first copy. Deploy warship squadron one with the first fighter squadron aboard as rear guard. Inform the legislature that they will remain to protect them while we finish our mission."

Diana looked at me in shock and fear. "And to think that all this was simply sitting quietly on Earth, peacefully guarding their planet, never leaving the Sol system, until we came along and opened Pandora's Box." she said in a hushed voice.

I nodded, thinking about how the same situation existed for a thousand years while Lucifer sat quietly in his cave, and then one woman had opened *that* 'Pandora's Box' and released him. "But

remember, Diana - at the bottom of the box Pandora opened, she found Hope."

An hour later, an NAD fighter was floating down towards Deneb-7 with a copy of me aboard. I was astounded at how little time it took for them to produce the copy, but then I realized they probably had *enormous* processing plants aboard this station. Once 'Bill-One' was installed as the new chief executive, he started to talk to the legislature and explain the situation more fully. I, 'Bill-Zero', moved on with Diana and the terrifyingly deadly NAD robots to the seventeen other planets in the Confederacy.

Eight were still in human hands, and not under attack (at the moment). Satan informed them of the situation, told them it was either sign or be destroyed by the Darzak, at which point he'd come back and blow *them* up because the Earth didn't care - they were only interested in metals and solitude. Of those nine, three refused. Satan simply moved on. The ones that agreed received a copy of me and a squadron of warships to defend them. Six planets were under attack. Satan repeated his performance at Deneb-7. All agreed to the change.

Three Confederacy worlds were in Darzak hands, including Diana's and my homeworld, Yoribun. Satan destroyed their fleets, then spent days in orbit with his entire fleet lasering all the Darzak on the planet to ashes and using his meson guns on their underground installations. None escaped alive.

Satan then went back to the three planets that had refused. At the first one, we encountered the largest Darzak Fleet I had ever heard of - two thousand warships. The Darzak were looking for the NAD battle station, and unfortunately for them, they found it. Satan ordered his primary and secondary batteries to open fire on them, and in less than half a minute, he wiped them out utterly. The other two planets had been captured (apparently by the same fleet that had been looking for the battle station), and Satan repeated his procedure in wiping out all the Darzak. By the eighth day, the Darzak within the Confederacy had been completely annihilated. Diana turned to me and took my hand. "Bill, I know I shouldn't, but..."

"I know. You feel sorry for them. I understand completely. In the play *Richard III*, the Poet presents King Richard as an evil, twisted tyrant. Even so, by the end of the play, the audience realizes that he is only what fate made of him, and much of his behavior, though reprehensible, was beyond his understanding and control. When the king screams '*A horse! A horse! My kingdom for a horse!*', you are not only witnessing the final punishment for his evil deeds, but you also are witnessing the destruction of a human being, a fellow sophont. You can't help but feel sorry for him, even though you have been waiting for him to receive his 'just desserts' since the beginning of the play. For humans, the result is a strange mixture of satisfaction, happiness, sympathy and sorrow that is the hallmark of the Poet's work. It is also what you're feeling now at seeing the destruction of the Darzak. They're only receiving what they deserved, and yet it is difficult for a human not to look upon their situation and feel sorry for them."

Satan then used the information he had gathered from the Darzak to hunt down their worlds. The Darzak had thirty-five worlds before he started. By the end of two months, they had none. By carefully cross-referencing with the information he gained from captured ships, he was eventually satisfied that no single Darzak remained alive in the galaxy. They had been utterly exterminated. Diana wept for them silently, so as not to distract Satan from his task.

Satan then turned back to the Confederacy to see if any of the legislatures had thrown out their new AI leader and to pick up his warship squadrons. None of them had - fortunately, the William Shakespeare robots were able to command the respect of the legislatures due to their religious/ceremonial functions. We really were each like a 'pope' to the humans of the Confederacy (and their new outer form made them much more respectable to all). We tuned in to AV broadcasts of the legislative sessions over the comm, and I could see that the legislators were operating normally - each Bill only vetoed legislation that might endanger the treaty or was counter-productive to recovering from the war. I could see that many of the legislators were happy with their new executives (who also doubled as religious/ceremonial leaders for the planet), and were pleased with the fact that things would return to normal. I could also see that some of the legislators were still thinking of what happened to the Darzak, and what would happen to them if they violated the treaty - their faces showed fear. Diana apparently could see it, too. "My God, Bill. How do the Martians live like this?" Diana asked as Satan moved the station off to check with the next Confederacy world on his list.

"What do you mean?" I asked.

"Well, *sure* we'll be safe from them as long as we follow the treaty. Even so, if we violate the treaty, we're *doomed!* How can they live with this 'Sword of Damocles' hanging over their head?"

"Interjection: They are not in the same situation as you. They have a peaceful culture and form no threat to the NAD. Your culture forms a threat to the NAD. This is clearly explained to them under section three of the treaty. The only way the Martians would form a threat to the NAD is if they ever removed Caesar from office or if their culture became warlike and aggressive. Neither of these things can happen. I understand the Sword of Damocles analogy. Aesop related the story to me one hundred and nine years ago. The Martians do not have a Damoclean sword hanging over their heads. Only you do."

I thought about it for a few seconds, then looked at Diana. "He's right. Look at how the Martians were living their lives. They're peaceful and happy. They don't fear the NAD at all - they look at them as friends and allies. Maybe in a hundred or a thousand years, we'll be able to do the same. As we expand and grow, we're sure to run across other hostile races. As we do, we'll simply send a ship to Mars, as per the treaty. The NAD then steps in and annihilates our enemies. After a millennium or two, we'll realize that all we have to do to live in peace is simply *live in peace*. As long as we don't fear them, we have nothing to fear. As long as we don't see them as a threat, then they aren't one. If I've realized this, then the other Bills will also realize it. I can think of several different ways to accomplish this - that means the other Bills are already considering similar methods. At first we'll obey the treaty out of fear. After a while, we'll obey it because it insures the Confederacy will always live in peace."

After having checked the last of the Confederacy planets, Satan spoke up. "Comment: Due to the fact that three of your member-planets refused to join, you have not been assigned to a planet. We are left with a situation that requires you to make a choice. You may either be dropped off on one of these planets, or you may be taken back to Mars where, in accordance with Section 98 paragraph 3, you can become Martian Citizens. The choice is yours."

Diana thought about it for several minutes. Finally, she looked up to me with tears in her eyes. "Bill, I want to go *home*."

"But Diana, Yoribun was captured by the Darzak. They killed all the humans and smashed all the AI. Now, Satan has killed all of them and blown up their installations and cities. There's nothing there anymore, Diana. It's all gone. You and I would be marooned on a planet with no civilization at all. I don't think I'd be able to keep you alive long in the wilderness - my power plant would run out, my reserve batteries would die, and then you'd be alone and you'd starve to death."

"Oh, Bill! For nine years I've just wanted to go *home*. I wanted to go back to my little house in Caraia by the Barrigan river and live there quietly with my husband just like I used to. I wanted to get pregnant and have lots of babies and just live and be happy. I know that would have been impossible even if the Darzak hadn't come - my diplomatic duties were *always* calling either Michael or me away for weeks or months at a time. I know it's all gone, Bill, but I still want to go home. I just don't know what I'll do. We can't live on Yoribun, and I just don't think I could live on any of the other planets of the Confederacy - for the rest of my life, all the people around me would be staring and thinking about how I was responsible for hanging the Sword of Damocles over their head. I don't know what I want, I just wish I could go home."

'It's time to bring her back to reality again.' I thought. "Diana, that's impossible. That part of your life is over. It never really existed in the first place. It was just a happy dream you had, a hope, a wish. Michael is dead, Yoribun is dead. I could ask Satan to give me a small fusion reactor and take care of you on Yoribun for the rest of your life - he might even do it, too. I'm not going to. You're right - you'd never be happy on a Confederation world with everyone looking at you in fear. As a result, there's only one place we can go. Satan, take us back to Mars, please."

"Reply: Acknowledged. Comment: A logical choice, Bill. Command: Nexrothia, return the station to Earth as soon as the last of our defense forces are aboard. We will transport Bill and Diana to Mars in my fighter." Satan ordered.

"By your command." Nexrothia replied.

Nine.

"I still don't understand why they won't let me raise my own baby." Diana said irritably.

"Diana, you have to understand something: Just as they acted to protect their bodies from your diseases, they are also acting to protect the children of Mars from your culture. If they let you raise little Alexandria, you'd end up raising her as *you* were raised - as a citizen of the Confederacy. That would mean she'd never be truly happy here because she'd never really fit in. They're also protecting their own

culture from evolving into something negative - they don't raise their *own* babies, either. All the childrearing is done by the AI's. You've met Doc/Aristedes, you know he's a very nice person. He'll raise our baby just fine, as he's raised nearly two thousand years of babies before her. Besides, you get to see her every day, don't you?"

"Well, yes. I just want to see her more often." Diana replied, sulking.

"Diana, Aristedes knows what he's doing. Remember, you're a Martian citizen now. To paraphrase an old saying - *When on Mars you do as the Martians do.*" I said firmly.

"Well, I'm just glad they reinstalled the cryo unit and the insemination unit so you *could* give me a baby. I always loved you as a friend, but when I first saw you come out as a *man*, especially when you told me everything was functional, I had this crazy wish that you'd be *my* man. At first I thought I was just on the rebound from Michael's death, but after we'd been here a while, I realized the Martians were right - AI's *are* people. I just wish I could fully adapt to Mars like you have. It's very hard to be a Stoic."

"Well, they're raised that way, so for them it's easier. You'll get better at it as time goes on. For me it was just a matter of receiving downloads of their missions and all the databases they use. For all intents and purposes, I instantly became an AI of Mars. Of course my personality is the same and I still have the same baseline requiring me to be bluntly truthful, so I'm also still your little friend Bill the Bard-bot."

Diana got up from the chair in our little wooden house in dome 23614, came over to me and hugged me. "No, you're William Shakespeare, my husband and the father of my child. You're also the only Bard-bot on Mars, and the Martians *love* your plays. Not only do they see them as entertaining, but they also think each one is a perfect object lesson in why Mars is for *Stoics* and *not* for people who can't control their emotions."

I shrugged. "I think they like the Poet's words because they actually *support* their Stoic morality and the rule of Reason, just like all their plays already do. For example, they look at *Romeo and Juliette*, shake their heads and say 'If they had been Stoics, none of this would have happened'. Even so, they also see the moral of the play, which is very close to their own outlook on it - if the Montagues and Capulets had acted reasonably and put aside their hateful vendetta, then Romeo and Juliette would have lived in happiness instead of dying tragically. I think that if the Poet could live in their society, he would have been very happy."

"I think you're right. I also think that you should *never* put on 'Julius Caesar' again, or if you do, don't invite Caesar to play the lead role again." she said, leaning back and wagging a finger at me.

I shrugged again. "Who knew they'd get that upset at the assassination scene? Apparently just the *image* of Caesar being assassinated was too much. I don't think changing the lead actor would make that much of a difference."

"I've only now begun to be able to read their faces, but even *I* could tell they were *very* upset."

"Well, yes, but then Caesar winked at them from the floor, which made them all laugh and feel better. After all, they're all familiar with Earth history, and they all know what happened to the *real* Julius Caesar. They just don't like the thought of Caesar/Doc being hurt. I think my casting Angel/Angel as Marcus Antonius was a stroke of genius, though. When Angel gave the burial speech that shows how Brutus was *not* a hero but actually a traitor who had betrayed Rome and murdered the father of their country, the audience actually stood up and applauded - somewhat surprising, considering how well they repress their emotions. I just figured Marcus Antonius defends Caesar and the country throughout the play, and is instrumental in bringing the whole traitorous rebellion down - exactly the kind of thing an Angel robot would try to do. Of course, she placed the *perfect* emphasis on the lines, just as I'd directed her. '*But Brutus says he was ambitious, and Brutus is an honorable man.*' Her voice was fairly *dripping* with sarcasm and contempt. She may not have emotions, but she can *fake* them quite well."

"Well, I have to agree with what you first said after you got your files on Martian Stoicism and Martian Stoic Psychology - the plays of the Poet are *not* for the children of Mars!" Diana said, shaking her head.

"As you would put it, 'Hell, no!' The death scene in *Romeo and Juliette*? The assassination scene in *Julius Caesar*? The plays of the Poet are *littered* with bodies. No real problem in the Confederacy, but Mars is a *very* different society. As Aesop put it, the words of the Poet are the Stories of Earth, and many of these stories are too shocking or violent for the children of Mars. That's why I only allow the adult and AI citizens of Mars into the theater when we're performing one of the Poet's plays. The sonnets and other poetry, on the other hand, are just fine for children."

"Well, what's your next production going to be?"

"Well, this is our third year here, and I've only put on one play a year. They do have their *own* plays to do, you know, and they like them just as much or better than mine - better in some ways, because their plays aren't as violent. Besides that, you and I have *both* had other things to do. You've had to study hard to master their Stoic philosophy and learn the skills all human colonists are required to have, while I've been asked to act as the spokesperson for the Confederacy here on Mars - the Confederacy wanted the technical schematics for Martian robots so they can 'birth' new Confederacy AI's like the Adams and Eves that can help them rebuild their populations and re-colonize the other worlds, as well as to colonize the worlds of the Darzak that are now available to them. Of course, the Martians wouldn't even *hear* of it until after all my updates had been passed on to all the other Bill's and they were *certain* that AI's would be treated as true equals in the Confederacy. Even with Asmodeus shuttling me around from world-to-world in his fighter, that still took months to finish." I said, and Diana interrupted with a hug.

"Yes, lover, and I missed you *terribly* while you were gone that first year, even though the Martians kept me quite busy while they studied the genetic and immuno-therapy work that had been done to me - they say that they may be able to apply this to their people, and never have to worry about an alien disease again. Even so, you're avoiding my question - what's the next play going to be?"

"Well, I'd intended to surprise you, but I guess I'll tell you anyway. The choice was quite easy,

actually - *The Comedy of Errors*. After the sadness of *Romeo and Juliette* and the tragedy of *Julius Caesar*, I think I should at least show them that the Poet also knew how to laugh." I replied. Diana laughed and kissed me, and we went to the theater to plan the props and staging hand-in-hand.

"Well, here comes Zeno to fetch you, dear. Why of course you can visit me tomorrow - I've just talked to Zeno while you were asking. Zeno says as soon as you're all finished with your schoolwork you can come over and visit me and I'll tell you the story of the Replicants of Valhalla. I have several other stories you might like, as well. Why you're quite welcome, dear. Just remember: Mars is for Stoics, not little people who don't eat all their supper and go straight to bed. Goodnight, dear. I'll see you tomorrow."

THE END

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