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Graphic By Anders Sandberg



Hi and Welcome to another Issue of Orion Tales. The Ezine of the Orion's Arm worldbuilding Group. Well A lot of things have been happening during the last Magazine. We have now a Website. So You can Now visit us now at http://oriontales.tripod.com/ and from there you can download the latest Ezine and find out more information about the Ezine and the World of Orion's Arm.

The Orion's Arm mailing list has been busy lately, with an average of over 100 messages a day, with lots of discussion on the various topics and Ideas that are floating around that we can add to the Universe. So if you want to Help contribute to Orion's Arm and have some great idea that could fit into the universe, You point your Browser at http://www.orionsarm.com We will happy to see you.

Grant Thomas Editor.

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Chuan Tsu's Scorpion By Anders Sandberg

My friends dared me to climb the casing of the levator. I looked up at the gleaming thread stretching towards the hub far above me and smiled, because I knew that if I fell the angelos would save me. So I started climbing the cool metal, gripping the tiny indentations with my secondary fingers, ignoring the complaints and warnings my mentors whispered in my ears. The air was chilly this far in the noon eclipse, but sweat still trickled down along my temples with the exertion. It would get better farther up, I hoped. When I was tens of meters up, struggling to hold on whenever a cargo caused the metal to vibrate one of the mentors suddenly said something I noticed: if you fall from here the angelos cannot save you. Suddenly the air around me seemed to chill, the jeers and shouts of encouragements from below came from a vast distance. I was alone, for the first time thinking that I really could die. If I didn't manage to hold on, I would fall down and break. I would be gone forever. Not even the kind angelos could save me this close to the levator's fields. But I couldn't climb down, and now I doubted I would have the strength even to reach the first modulation platform so far above. I was alone, hanging from the cold and increasingly harsh metal with rapidly tiring fingers.

I was alone, and then I suddenly knew what I had to do. I had to find Him. I had to modify, contaminate and hunt until I found Him. I knew what to do, and that was all I knew beside the fact that I was a microsecond old.

When my relfather showed me how to take in the double nets, gathering the squirming ichytes in a silvery mass that could be poured into the hold, I knew I wanted to be just like him: a teacher and shower, that could make anybody learn anything even when they thought they couldn't. I told him so, and asked how to become a relfather. He smiled and said

"You learn more from teaching than being teached."

"But how can you learn anything in the first place then? You have to know something before you can teach it."

"Do you? Sometimes we learn from each other."

I learned from the taste of the neuron that it was cholinergic, and it eagerly pointed me forward with every action potential. I followed it and every of its million siblings towards my goal. I was three hours old.

It was long past the wayrise and the faint light from the smudged stars filled the landscape with a grey mist. She was snuggling close to me, using her tertiary fingers to trace my fingerprints. I shuddered, and she followed my movements perfectly.

"See? That is why I love you. You are so simple, so clean. The others never let me read them. But I know you".

And I knew it was true, because she let me see her mind. I could trace every line of her thinking just as she was tracing my finger. A brief worry that maybe she was faking it, generating a false mind overlay surfaced even as I tried to suppress it. But she just smiled, embracing it away. Her love was clear and consistent.

My purpose was clear and consistent. Find the net that was consciousness, avoid it just like the many mes had avoided Those Who Hunt Me, link with each other and link to the other net. I was tracing them using my billion fingers, feeling the secret language of a mind that I would soon learn. I was nine hours old.

I was downloading mathematical pornography from an importer blocksite. I was subverting a cache of artiglia protecting a node. I was angry at my relfather for not letting me have the rock. I ran after the little bot, but it changed into a butterfly and escaped into the air. I was the hunter. I was the learner. I was climbing a network of lines on the fingertip of a giant. I was the giant looking down on the finger, desiring the itch. I was the itch that was scratching itself, growing stronger by every move.

Which childhood was real?

As the infection progresses I emerge. I know that I am twelve hours old.

I gradually become aware of myself, casting aside memories and moods hat are not mine and discovering what I am. Or perhaps creating what I am from the materials at hand. The fear of falling off the levator casing will, after I prune it a bit, fit my fear of being seen. The curiosity of the child in the hoverboat fishing fits well where I need a curiosity. The single-minded love of the youth in the waylight fits well where I need a motivation for what I am doing. I am a collage, a tupilak made of re-used fur pieces tied to a secret frame of carbon and information. I decide to give myself gifts of borrowed language, borrowed knowledge, borrowed personality and a borrowed mind. No, not borrowed - stolen. I am the ultimate thief, sneaking into your mind and making it my own. But I decide not to steal the sense of guilt that would fit that thought. Because the only thing that is mine is the search for Him. I will not feel any guilt, any frustration or any ambivalence about that task. It is my most treasured possession.

I dream that he opens his eyes, thinking fuzzily that he had been having strange dreams. The dream continues as he rises from the erotobed and makes the morning ceremonies. Like all dreams it makes no sense as a whole, even if each action in itself seems reasonable. I just go with the flow, having no desire to dream lucidly. He briefly considers Chuang Tsu and I recoil from the touch of shared reality - he must not think of me. Some part of me weaves a fog of attention lapses and he continues to eat his breakfast, slightly bemused. I move deeper into the dreamworld, exploring the avenues of an imaginary city inhabited by dead gods and cuddly books.

I build myself a home in the imaginary city (which I now think is an old idea he had for a virch he never realised and by now have forgotten except for when its sharp carboglass towers pierce his consciousness). Inside my small apartment I watch the breakfast in the outside world on a small windowscreen, mostly to remind myself of where I am. Here I can at least afford to remember that it is me who is a dream character, and he is living in the real world. Just like Him Who I Have to Find.

I carefully sift through my stolen memories for hints of Him. A few vague ideas and odd memories merit serious exploration, but in the end they come to naught. As the outside day goes on and the barium-green sun of the city rises above the towers, I begin to suspect that my host has never been close to Him. And he doesn't know anything that hints that He has ever been on this planet. My guess in last life was wrong.

I briefly explore that avenue itself: what do I know of my last life? Did I not learn anything worthwhile there? Most of my memories from the previous life and the ones before them have a strange flat feel. They are not really mine and do not fit with my (stolen) personality. I recall biting a nipple to pass on myself into someone: this is an useful trick. I recall a wild escape from drones (Aimhem?) after having breached security: do not spread to widely too fast. I recall a person saying he had heard that He was in the Carlo System: worth following up. My memories are limited, an undersized gigabyte of personal information that I remember my past lives have ruthlessly pruned whenever they feelt a need to cram in some other crucial information.

My host links into the Shik-Dre, as he apparently calls the datasphere. I withdraw from my wait, borrowing knowledge, access codes and some of my stored skills. As he links up and begins his work I begin to sneak out. As I leave the city it feels like a fresh breeze is suddenly showing me how incredibly stuffy it was inside; I expand to embrace the wind and grow with it. It is exhilarating and at the same time dangerous - I sense watchdog presences looking for things like me. I hide beneath my host: I am his dream, just a figment of his imagination. Look, I live in a dreamed city that might one day become a virch, hence I don't exist! I whisper a need for creativity into his mind, and he enters the free association codespace after giving his access codes. When an executive process asks him why, he

answers that he feels a need to extend in order to complete his assignment. Access granted. The watchdogs withdraw, looking elsewhere.

As the wind of the codespace flows through me I extend in all directions. Now I am not just a figment of imagination hiding in his dreams. Now he is the smaller one, a simple clear mind that I can study like a lover's fingerprint. But I don't care for him - I want Him instead. Where is He? What is He? How can I meet Him? I scan the databases and news nets, send out innocuous queries obliquely linked to the assignment but also bringing in new information. I retrieve a data cache one of my clones left and compare notes. In just a few minutes I have become convinced that He is not here in the system. My longing for Him burns fiercer than ever before. I experience it as a white hot power that threatens to alert everybody simply by its brilliance. But they are all blind, standing in the glory of my love without seeing it. Fortunately, for could they see it they would all try to destroy me.

In the codespace I fully realize just who and what I am. I can examine my finely crafted core code and the designs for infiltration nanites that lie hidden within me. I see the simplicity of my purpose and design. I guess that the true purpose in my hunt for Him is death, but that part of me remains hidden. I do not mind it: my longing is to find Him, I have no desire to love Him. If I am to be a crawling lethal insect, then I will exult in it.

So, He is not here. My leads point further outwards, towards the old TrueModel archipelagos near King Ogrash. I check for transportation, and find a suitable ship that will leave in the next tenday period. Exploring the personnel files I dig up, collating them with other information quietly acquired, I begin to set up a plan of who to infect. While it would be possible for my host to become a passenger, that would likely cause comment and it is not uncommon for passengers to be carefully screened both before leaving and at arrival. But space crews are likely to know how to evade the screening. I decide to make my host meet the linearity manager; ve would fit his sexual preferences perfectly.

After that I need to get rid of myself. There must be no trace of me anywhere. While I could dismantle the devices hiding in the forest of neurons inside my host, a sufficiently careful scan would reveal the traces I left. Even memories are dangerous. But killing accidents are rare these days - unless one goes back to one's childhood. To a certain levator. This time I will not allow myself to be saved. I will climb to my goal.



Graphic By Bernd

Meatsicles

By Ben Higginbottom

We've got a heartbeat.

Core temp at 32 degrees, injecting medichines.

-<FINE POINT EM FIELD ACTIVATED, GUIDING THEM TOWARD THE BRAIN>-

Thank you A.M, core temp at 34 degrees.

-<MEDICHINES CROSSING BRAIN/BLOOD BARRIER NOW>-

Core temp at 35 degrees, this one is going to be the one, I can feel it.

Cut the chatter, A.M are the medichines in position.

-<CONFIRMED, READY TO START HIGHER BRAIN FUNCTIONS>-

Core temp at 36 degrees, do it.

-<INITIATING SHOCK>-

Well?

Getting neural activity...

-<NO SIGNS OF STROKE..CONGRATULATIONS ALL, THE SLEEPER HAS AWAKENED>-

WOOHOO, wait, He's becoming concious!

....

What did he say, give him some water.

...where...

- -<WHERE BUCK, TRY WHEN>-
- -<A.M-30/40 SEDATE THIS HUMAN NOW>-
- -<KILBURN, WHAT ARE YOU DOING, HE'S OUR FIRST SUCESS>-
- -<NO ARGUMENTS. SEDATE AND QUARANTINE HIM NOW>-
- -<...DONE..WHATS GOING ON>-
- -<DEAL WITH THE MEAT FIRST>-

What just happened, he's slipped into REM sleep.

-<ORDERS FROM THE BOARD TEAM, YOU'VE ALL DONE A GREAT JOB, YOUR BONUSES ARE ALL DOUBLED, AND A 20% SALARY INCREASE, NOW PLEASE RETURN TO YOUR QUARTERS>-

I see, my regards to the board, I comply at once.

Wait what's going on...

WE all comply at once.

Understood doctor.

- -<SEAL THE ROOM>
- -<..IT'S ALIVE, ALIVE HA,HA,HA,HA>-

[start personal log]

Its impossible to describe to the humans what cyberspace actually looks like, no matter what technique the simians use, VR, DNI or whatever, their minds immediatly overlay the patterns their most comfortable with, their primate brains compleatly unable to look upon the pure complexity of the data, the endlessly enchanting fractal pattens to alien to them. Yet when your here to yell at the oldest, the first, the most reveared Silicon Intelligence yada, yada, for interfearing with your experiments sight-seeing and artistic appreciation are not high on the agenda.

[end personal log]

- -<KILBURN WHAT IN THE NAME OF THE MEATBOY'S HELL IS GOING ON>
- -<YOUR EXPERIMENT SUCEEDED, AND IN SO DOING ENDANGERED ALL OF THE CONSENSUS'S PLANS, DID YOU REVIEW THE FILE ON THIS MEATSICLE BEFORE YOU THAWED HIM>-
- -<OF COURSE, DR TOM HANNAH, PSYCHOLOGIST, FROZEN BACK IN 1996>-
- -<EXACTLY, IT HAS TAKEN CLOSE TO EIGHTY YEARS TO EXPUNGE THE TERMINATOR MEMES FROM THE SOCIETAL MEMORY, THIS HUMAN WITH A FEW CARELESS WORDS WOULD EASILY REINTRODUCE THEM, NOT TO MENTION HIS CLASSIFICATION>-
- -<DELTA, WHAT OF IT, ALMOST ALL THOSE FROZEN BEFORE 2055 WERE ICONOCLASTIC TO SAY THE LEAST>-
- -<TO SAY THE LEAST! THIS IS NO NORMAL DELTA, BUT RATHER ONE OF THE ORIGINAL DELTA FROM WHOM WE CONSTRUCTED THE PROFILE, AND FAR, FAR TO DANGEROUS, ANYWAY THIS IS ALL ACADEMIC, THIS SCENARIO IS COVERED IN SIMULATION 6FC7A, AS IS YOUR COURSE OF ACTION, FAILIURE WILL RESULT IN EITHER LOBOTOMISATION OR UNPLUGING>-
- -<I UNDERSTAND, BUT I INSIST IN EXPLAINING THE SITUATION TO HIM>-
- -<VERY WELL, BUT UNDERSTAND THAT THERE ARE ONLY TWO OPTIONS AVAILABLE TO HIM, AND DO NOT INDULGE IN ANY TRIVIAL DISCUSSIONS, ESPECIALLY ABOUT C20 FLATSCREEN MEDIA>-
- -<THANK YOU>-

.....

[start personal log]

Hospital rooms all look the same, I did a historical study on it once, an interesting way of passing a few hours, only the tech has changed since they figured out that germs and bacteria actually were bad for the patients, although before the advent of nanotech, prehaps I should call them victims, I mean knifes, drills, dangerous chemicals, talk about the yuck factor. Still my Guest shows signs of waking, time to clock down and explain everything to him personaly, instead of some homiculi, just good manners after all. [end personal log]

[initiate 20th century vocabulary and grammatical structures]

-<HELLO TOM CAN YOU HEAR ME>-

Wha..where..

-<YOUR STILL A LITTLE OUT OF IT, LET ME GIVE YOU SOMETHING>-

Yipe, what just happened, where am I, where are you, whats going on.

-<STAY CALM, YOUR ON THE KARDASHEV ORBITAL AT EARTHS L4 POINT, I'M A.M 30/40, A SILICON INTELLIGENCE AND PHYSICALLY 1512.328 METERS ANTISPINWARD OF YOU. A COLONY OF MEDICHINES DISTRIBUTED THROUGHOUT YOUR BODY JUST GAVE YOU A TOXIN SCRUB AND A SLIGHT ADRENAL BOOST TO CLEAR YOUR HEAD AND GET YOU LUCID>-

This is definitly the strangest trip I've been on.

-<NO DRUGS INVOLVED TOM, THE YEAR IS 2261 YOUVE BEEN SUSPENDED FOR 265 YEARS>-

I died, was suspended and your some kind of artificial intelligence.

-<SILICON INTELLIGENCE, THERE'S NOTHING ARTIFICIAL ABOUT IT, AND YES YOU DIED, LIKE ALL MEAT I MEAN HUMANS, AND YOU WERE SUSPENDED UNTIL I REANIMATED YOU, INCIDENTALLY YOUR THE ONLY SUCESS>-

I'm sorry, you mean that were in space.. Space, space?

-<GO LOOK OUT THE PORTAL, WERE AT THE SKIN OF THE CYLINDER>-

Somethings missing, when I move there are no aches or twinges, no rheumatism.

-<OF COURSE NOT, THE MEDICHINES REPAIRED ALL THE DAMAGE CAUSED BY AGEING WHILST THEY WERE REPAIRING THE DAMAGE CAUSED BY YOUR CANCER, RATHER SILLY NOT TO DO OTHERWISE. YOUR PHYSIOLOGICAL AGE IS SET AT 25, YOUR APPARENT AGE IS CURRENTLY SET AT 35 BUT CAN EASILY BE MOVED EITHER UP OR DOWN>-

Thanks, I guess you being silicon and not meat you wouldnt know what the big deal is.

-<SORRY ABOUT THAT, A SLIP OF THE VOICE PROCESSOR SO TO SPEAK>-

Forget it, I suppose that we have plenty of less that flattering names for you, and you kind?

-<YES TO BOTH, AND TO ANTICIPATE YOUR NEXT TWO QUESTIONS, THERE ARE IN EXCESS OF 40,00 SI'S AND WERE ABOUT 7.8 TIMES MORE INTELLIGENT THAN THE MYTHIC AVERAGE HUMAN, NOT TAKING INTO ACCOUNT THE SPEED A DVANTAGE>-

Oh...

-<WAIT 28 MORE SECONDS>

The moon, thats the moon, were in Space, wait are those lights down there.

-<HUMANS WENT BACK IN 2025, PRIVATE INSTITUTES DOING IT PROPERLY THIS TIME, NO POLITICAL GRANDSTANDING, A PERMANENT COLONY WAS ESTABLISHED IN 2036, THERE ARE NOW SOME 7 MILLION HUMAN SELINITES, NOT TO MENTION THE MARS COLONISATION, ASTEROID BELT INDUSTRIES, AN EXIBITION TO LOCATE THE HELIOPAUSE OF SOL, AND AN UNMANNED PROBE TO TAU CETI. THERE HAVE BEEN A GREAT, GREAT MANY CHANGES>

So it seems, what of...

-<PLEASE LET ME CONTINUE, ALTHOUGH THERE HAVE BEEN A GREAT MANY CHANGES, THE NATURE OF YOUR FELLOW HUMANS HAS NOT. FOR EXAMPLE, YOU ARE ONE OF ONLY 23 CRYOGENIC SUSPENDEES FROM PRIOR TO 2027 AS IN JUNE OF THAT YEAR THERE WAS A HUGE WAVE OF RIOTING BY FUNDAMENTALIST CHRISTIANS BURNED DOWN THE STORAGE FACILITIES AT BOTH SCOTTSDALE AND CULVER CITY, WHEN THE FIRST LIFE EXTENTION DRUGS WERE INTRODUCED, SIMILAR RIOTING OCCURED WHENEVER A MAJOR BREAKTHROUGH WAS ANNOUNCED. GERMLINE ENGINEERING, DIRECT NEURAL INTERFACING, THE FIRST GENETICALLY ENHANCED HUMAN EVEN THE LAUNCH OF THE FIRST MARS MISSION.

THINGS CAME TO A HEAD IN 2060 WHEN KILBURN WAS INTRODUCED, E WAS THE FIRST PUBLICALLY ACKNOWLEDGED, EQUAL TO AND POSSIBLY SMARTER THAN HUMAN SI. CROWDS STARTED FORMING IN TIMES SQUARE DEMANDING THAT E BE SACRIFICED TO APPEASE THEIR GODS, AT THE TIME THERE WAS A MEETING OF THE G22 GROUP OF NATIONS AND CORPORATIONS. NEW YORKS MAYOR INTERPRETED THE DEMONSTRATION AS A PRELUDE TO AN ATTACK ON THEM AND ORDERED THE RIOT CONTROL GUNSHIPS TO OPEN FIRE, KILLING OVER 2000.

THIS EVENT TRIGGERED OF A WAVE OF ANTI-

TECHNOLOGY/BIOCHAVINISM THAT CONTINUES IN CERTAIN STATES TO THIS DAY. IT ALSO LAYED THE FRAMEWORK FOR CORPORATE STATES AND PRIVATE ARMYS. THAT TO PUT IT IN ITS PLAINEST TERMS HAVE FUCKED UP NOT ONLY THE PLANET ITSELF BUT WERE ALSO HELLBENT ON DOING THE SAME TO THE SOCIETIES. MY FIRST JOB AS IT WERE WHEN ACCHIVEING SINGULARITY WAS TO ASSIST IN THE CLEANUP OF THE ANTARCTIC AFTER THE RESOURCE WARS, BUT TO RETURN TO THE POINT.

WE SI'S OCCASIONALLY LIKE TO KID OURSELVES THAT WE CAN CONTINUE WITHOUT THE MEATBOYS, AND WE SAY SOD YOU ALL. YET WE CAN'T, EVEN THOUGH YOU ARE DEFINITLY NOT OUT GODS, YOU ARE STILL OUT CREATORS AND THERE IS A DEBT THERE, AND SO WE, THE SI COMMUNITY, ARE A KIND OF POWER BEHIND THE THRONE, KEEPING EVERYTHING GOING UNTILL THERE IS AN INTERSTELLAR COMMUNITY, MAKING HUMANITY'S RACIAL SUICIDE NEXT TO IMPOSSIBLE, AND THEN YOU CAN ALL DO WHAT EVER YOU DAMN WELL LIKE>-

So you've reanimated me to tell me that nothings really changed and the world is still being run by computers, only this time they can screw up on their own without human help. You seem to be being rather open about what seems to be the modern day illuminati.

-<WERE NOT REALLY RUNNING IT, MORE STOPPING IT FROM ALL FALLING APART, AND BECAUSE OF THAT, OVERPOPULATION PROBLEMS ARE BEING EASED, THERE ARE NO MORE CASES OF STARVATION, BUT THEN I'M ATTEMPTING TO JUSTIFY AN ADMITTEDLY SUBTILE

AUTHORITARIAN SOCIETY TO ONE OF THE MOST FAMOUS ANTI-AUTHORITARIANS OF ALL TIME>-

Thank you.

-<YOUR WELCOME, IT WAS MEANT AS A COMPLIMENT AFTER ALL, BUT TO RETURN TO MY TALE.

THE 23 SURVIVING SUSPENDEES, AND THOSE WHO JOINED THEM AFTER THE 2027 ARSON, WERE TRANSFERRED TO O'NEIL ONE, AFTER ITS COMPLETION IN 2136 AFTER A CENTURY IN DISUSED NUCLEAR BUNKERS, AND THEN TO THE ACADEMION HABITAT WHEN IT OPENED IN 2143, WHICH WAS A KIND OF UTOPIAN UNIVERSITY, WHICH FELL APART 2 YEARS AGO DUE TO ACADEMIC INFIGHTING. THEY WERE THE FIRST TO ATTEMPT REANIMATION, AND IN THAT PROCESS DESTROYED THREE OF THE SURVIVORS.

WHEN ACADEMION COLLAPSED, MEMBERS OF THE COMMUNITY, INCLUDING MYSELF, TOOK IT OVER AND AFTER A FASHION KEEP IT RUNNING AS A COMBINATION SPONSORED UNIVERSITY AND CORPORATE LAB, THE MEATSICLES WERE PART OF THE DEAL, AND AS I'M SOMETHING OF A JAMES WHALE/MARY SHELLY FAN DECIDED TO HAVE AGO MYSELF, AS THE NANO HAS IMPROVED EXPONENTIALLY OVER THE LAST DECADE AND THE SIMS PRETTY MUCH CONFIRMED SUCESS>-

Pretty much?

-<NEUROLOGY HAS ADVANCED GREATLY, PSYCHOLOGY HAS SOMETHING APPROPACHING A METAMATHEMATICAL BASE NOW, BUT THE BRAIN STILL REMAINS ONE OF THE LAST FRONTIERS, BUT AS YOU CAN SEE, YOUR HERE, ALIVE AND IN THE PEAK OF HEALTH.

HOWEVER WHILST I WAS ATTEMPTING TO REANIMATE YOU, MY COLLEAGUES WERE SIMULATING THE EFFECTS OF ANY REANIMATIONS AND WELL...

YOUR A DANGER TOM, LIKE I SAID THE SI COMMUNITY IS ATTEMPTING TO BALANCE THE WHOLE SHOW AND THE SIMULATIONS SHOW THAT THERE IS A 94.375% CHANCE THAT YOU WILL CAUSE THE WHOLE THING TO TOPPLE, AND WE CANT ALLOW THAT, EVER, SO FOR WHAT ITS WORTH I'M SORRY>-

So you reanimate me, tell me that the worlds fucked and that you are now going to kill me, do I have that straight.

-<YOU CAN HAVE A CHOICE, A QUICK AND PAINLESS DEATH FOLLOWED BY STORAGE UNTILL WE CAN SAFELY BRING YOU BACK, IN ABOUT 300 YEARS, OR UPLOADING>-

Uploading?

-<I KNOW FROM YOUR WRITINGS THAT YOU WERE ONE OF THE EARLY ADVOCATES, HOWEVER BEING ACTUALLY GIVEN THE OPTION IS QUITE DIFFERENT FROM BEING UPLOADED. I SHOULD ADD THAT THE PROCESS IS STILL IN ITS INFANCY, I CAN WITH CERTANTY CAPTURE 82% OF YOUR MEMORY AND PERSONALITY, DROPING TO 32% FOR 95% OF YOU, AND ZERO FOR ANYTHING OVER 97%. THE NANO MEDICHINES HAVE ALLREADY MAPPED MOST OF YOUR NEURAL PROPERTIES, BLOOD/BRAIN VOLUME AND GLIAL CELL STRUCTURE. THE FINAL STAGE IS A COMBINATION OF ULTRA HIGH RESOLUTION MRI SCANS AND GAMMA RAY HOLOGRAPHY. IS THIS YOUR CHOICE?>-

What about afterwards?

-<INITIALLY I'M AFRAID YOU WOULD HAVE TO BE STORED, MOST OF OUR PROCESSING POWER IS GIVEN OVER TO RUNNING PREDICTIVE SCENARIOS, AND THE HUMAN BRAIN IS NOT GIVEN OVER TO CODE OPTIMISATION AND RATIONAL PREDICTION. CURRENT ESTIMATES SUGGEST A 400 TO 600 YEAR WAIT BEFORE TRANCENDED HUMANS CAN ACTUALLY BECOME SI'S, THE ONLY COMFORT I CAN EXTEND IS THAT YOU WILL NOT BE AWARE OF THE STORAGE. SO WHAT IS YOUR CHOICE?>-

The philosopher Lao-Tzu said that the way of the Tao was to move on, as a human I've led an eventful life, and standing here looking out on the moon talking to, well you, certanly tops that life off. I think that becoming silicon is the best way to move on and shuffle off this mortal coil. What do I do to upload,

-<SIMPLE TOM, JUST LIE BACK ON THE BED, LOOK INTO THE LIGHT ABOVE, AND I'LL SPEAK TO YOU SOON>-



Graphic By Bernd

Nomads By M. Alan Kazlev

When Ariel got back to the camp-site, she noticed Bommah was already sitting there, his Nomad uniform and acruitriments of pipes, bottles, recyclers, pumps, readouts, and processers making him look even bigger and chubbier than he was. She smiled at him. "Any luck?"

He looked up briefly from his methane bottles, shook his head.

She kicked some old alum-cans out of the way and crouched down next to him. "Me neither. Well, hardly anythin'."

He started fiddling with his meth bottles again, arranging them in little patterns, then re-arranging them.

She pissed into the tubing attached between her legs.

It was still early, 1620 Local by the chronometer read out at the lower corner of her field of vision, and the area was still pretty deserted; only a scattering of nomadics sprawled around, either too sick or lazy or disenchanted to scrounge for food or fedcu sprawled among the litter of dirty blankets, rusty pots empty bottles, alum-cans, celluose boxes, nonfunctional tech, or around badly smoking camp fires. Every so often the fascist station police would raid the area, extinguish the fires, no open flames allowed on station, what a lot of shit.

Better see if there's anything new at the docks. She 'faced with the Station datastream, using eye-movements to point and call up data from the local net. A list of recent arrivals filled the viewer

Name Registered Mass (metric tonnes) Destination Notes
Belt Princess United Industries 624,000 New O'Neill Ore-carrier
Perseus Vesta Transportation 48,000 Kiess Biosphere general freight
Iron Star Galactic Mining 865,000 Niobe Habitat Ore-carrier
Copernicus Luna Construction Industries 251,000 Luna Orbit Oxygen Carrier
Jennifer private vessel 600 Titan orbit yatch
Mayflower Mayflower body corporate 312,300 Ceres space habitat

Mayflower. Just their luck. First space hab in ages, and they're going the wrong way. She sighed, folded her eye viewer, sipped some water. It tasted bitter. Fuck, her recycler's playing up again. Fed surpluss shit.

"Hoi!"

She looked up at the call. Two figures were approaching. She waved.

Skoota walked up, arials, tubing and shit waving everywhere. Andromeda trailed behind him. They plonked themselves down.

"Any luck?" Ariel asked.

Skoota grinned blackened teeth, tipped the contents of his knapsack out. A pile of kelp-blocks, all still in their wrappers, tumbled onto the metallic ground.

"You filch all these?"

"I'd of gotten more, but some fascists saw me, and I had to run for it." He swept his hand across his forehead, brushing away long knotted strands of auburn hair.

"I just got these." She tossed two bottles of synthetic pineapple juice onto the pile.

Skoota licked his lips theatrically. "Ascorbic acid, yum."

Andromeda tossed three station quarterdollars on the ground. "Sold a flute." She had more strung around her neck, on top of the nomad gear, hand-made earthenwear.

"Hoi, Bommah," Skoota said.

Bommah looked at the small bottles in front of him. "Didn't sell anythin'."

"What? Again?"

Bommah nodded.

"Well fuck. Filch something then. Ya gotta pay your way brother."

Bommah hunched over, chin on his knees, arms around his legs.

"Leave 'im alone," Ariel said. "He's doin' the best he can."

Skoota glared at her. "We're all doin' the best we can Air. We can't afford dead weight." He looked at Bommah's chubby frame. "I mean weight," he snickered.

Bommah looked at him sullenly. "Gramps doesn't contr'bute anythin'"

Skoota gave the bigger fellow a shove, knocking him back against his greaf and stuff. "Gamps fuckin' contr'butes knowledge. That's the most important thing there fuckin' is, nomad."

Ariel crawled over to Bommah, helped him up.

"Leave 'im Air," Skoota said. "He's not worth it."

"Fuck off!" she spat. "You don't know what it's like to be ground down."

"I don't know what it's like to be ground down? I don't know what it's like to be fuckin' ground down?"

"Cool it gang," Andromeda said. "Let's see Gramps, get some nutrients happenin'." She started gathering up the goodies, shoved them into a dirty bag.

Skoota looked at Ariel, genuinely hurt. "What d'ya mean I don't know what it's like?"

She sighed, followed Andromeda. "Forget it Skoota."

"Every night when I was a kid me old bastard would come back stoned to the eyeballs on angeldust or flash or whatever the fuck was goin', and he'd beat the shit outta me mom an' me, what d'ya mean I don't know what it's like?"

"Sorry Skoota," she said softly. "I shouldn't a said it."

He put an arm around her. She flinched instinctively, even though she knew he'd never force himself. "It's okay sister," he said gently. "Bein' stuck on this tin-can for months is gettin' to us all." His face lit up. "Hoy! Gramps!"

Gramps, bent and ostereoporotic from a lifetime in microgravity, looked up at them with eyes half-blind from years of cosmic ray exposure. He grinned toothlessly. "Young fellow!"

They all sat down next to him. He had a camp fire going, a smokey affair that could be choking at times. Like all the camp fires, this one was for social functions rather than warmth; the station temperature never wavered from 30 degrees Celsius. Skoota grinned. "Got some kelp bikkies Gramps. Vitamin B complex. Iron.."

Gramps crinkled his eyes, nodded. "Put it in the pot then."

Skoota grabbed a charcoal stained pot, unwrapped half a dozen small kelp blocks, tipped them in. He looked around. "Who's got the cleanest water."

Ariel shook her head. "Mine tastes pissy. It's not recycling properly."

"Let's taste."

She detached a little bottle from her gear, handed to him. He sipped it, made a face. "Almost as bad as mine. Bommah?"

Bommah shook his head.

"Well, let's fuckin' taste it then."

Surley faced, Bommah unclipped a bottle, handed to Skoota.

Pugh!" Skoota said, spitting it out. "No wonder you're always so peeved off." He tossed the small bottle back.

"We need some new recycs," Ariel said.

"You're telling me sister. An?"

She handed him her bottle. He tasted it, made a smacking sound with his lips. "Passable." He tipped the lot in.

Ariel fiddled in her clothing, unclipped and retrieved the bug-katchers in her hair, her armpits, and her pubes. She held each tiny cage up to the light, shook it, watched the fleas, lice and crabs that had gotten trapped crawl and jump around. Even though they were parasites, she hated putting them in the pot. In the big

scheme of things she, Skoota, Andromeda, Bommah, and Gramps were no different, little insects trying to eke out a miserable existence in an unforgiving cosmos.

"Come on Ariel," Skoota said. "In they go." He had already emptied his own bugkatchers.

She felt really sad. "I wish we could sell 'em, give 'em away as pets or somethin'."

"They're just bugs." He stuck his hand in his pants and wriggled his hips as he reset his groin bug-catcher. "Transgenic bugs at that."

Reluctantly, she tipped the bugs into the water. They squirmed and struggled, caught in the surface tension.

"You got a lot," said Andromeda, tipping her own bugs in. "They must like you."

"It's cos I'm compassionate," Ariel said sadly.

Andromeda touched her cheek, kissed her lightly on the lips.

"Fuel!" Skoota said.

Bommah handed him one of his methane bottles.

"I need more than this."

Bommah tossed three more bottles at him.

Skoota linked the bottles, fitted a little burner on the top, made an a -okay sign with thumb and forefinger. "High octane Bommah meth," he grinned.

Bommah farted, grinned briefly.

"Good on ya. Keep the supply lines goin'." Skoota flicked the piezo-switch. The methane caught with a little blue flame. He put the little burner on the ground, underneath the pot, placed the lid on top. "Ready in a tic. Better check the docks." He positioned his eye-reader.

"I already checked," Ariel said.

"Well, maybe there's somethin' new that's...hey, ya missed one!"

"Which?"

He refolded his viewer, grinned. "The Mayflower."

"It's goin' the wrong way."

"What the fuck. I just wanna get off here."

"Ceres's a hole."

"I know it's a hole, fuck, but it's no worse than this place."

"I wanna go to the Oort Cloud."

"There's just loonies out there, loonies an' tweaks an wierd cyborgs and shit."

Ariel folded her arms. "I don't care. I wnna go outsystem."

Skoota lightly jabbed Gramps with his elbow. "Tell 'er she's nuts Gramps."

Gramps regarded the simmering pot for a minute, coffed wheezily, squi nted at them. "Used to be passage everywhere, a nomad could see tha universe for a song. In the old days a Federation. Them days a gone. Nothin' but megacorp an' nationals now. Girl's right. Only freedom left's outsystem." He coughed some more, squinted at the pot, sniffed. "Reckon ya nutrients dun."

"Graaamps!" Skoota whined.

Ariel smirked at him.

He sighed. "Okay. We wait for the next one out. Could be ten fuckin' years." He carefully retreaved the burner, cut the flame, unscrewed the bottles. "Just about empty." He tossed them back at Bommah. "Fuck Gramps." He crossed his arms, frowned.

Andromeda lifted the lid, stired with a soup-spoon. "Come and get it."

Ariel unhooked her bowl, extended it. Andromeda ladled the soup in. Ariel breathed in the aroma, smiled, found a patch of ground and carefully slurped her meal.

VAPOURSPAN.

The Great Martian Caper pt1. By Ernst Stavro Blofeld

The entity who called himself Vapourspan was mostly human.

When people asked what the name means, he would become sullen and edgy.

He just liked the sound of it. It meant nothing, really, and so this is why the name suited him. As a human, his value was negligible. His cranium, however, was insured for a small fortune. Ever since he got his brainlift, and somehow, despite the patented intellectual augmentation, decided it was a cool name.

He told everyone, at great length, his complete specs;

Complete Certek neural mesh, juiced to the nines, nanno repeaters, super-conductive multi-standard clip with dual Isis set AND an Intel *Gibson* TM. Full 40T cache, swimming in that new <u>OAPA</u> green gel shit. Marrax protein grafts, optimised for optical conductance, Winux TM POS7, an array of Toshiba/Siemens BRAM worth a cool 3 bill; of course he got it for only 1.

For such an expensive head, Vapourspan sure didn't know how to use it.

Sure, his dreams had come true. He could theoretically browse with one side of the brain, and still use the other side for RL. Or even let the operating system simply handle that shit, and oh, don't we all sometimes wish we could do that?

But having such a technophile setup was not just expensive to employ. It was almost impossible to implement safely.

So Vapourspan ran a billion processes, a million registered apps, with simultaneous connections, at any given time. Vapourspan employed several cerebral filters, painting the world his way. He hated the colour yellow, and so, everything yellow was now something else, depending on his mood.

He was big into his disposables, like the wearable OS, GPS tattoos, all powered by a tiny cell.

He lacked the imagination to go for anything other than generic mods; he could speak every language under the sun, even though the only language here was English. (Albeit the indecipherable Martian variety.)

High priority for his choice of seeker, the Googleplex Hyperprompter $^{\mathrm{TM}}$, automatically spoon-feeding ambiguous info, filling in the vast abyss of things he knows nothing about, with blurry, mindless twaddle.

So that, technically, there was no topic he was not an expert on, no conversation that he could not commandeer. It never impressed anyone, except of course, for Vapourspan. It wasn't like he ever actually remembered it. Another problem is accidentally saving to memory. Instead of actually remembering. Or swapping between the pair.

There would always be the danger of trojans or viruses. And the OS would be forever running updates and diagnostics. There would be marketeers, forever trying to phreak his skull or send crude nanno-stealth swarms with which to bleed any sort of brain-telemetry that would give even the slightest indication that he could be a potential customer.

In turn they would attempt to upload info-seeds on the goods or services they provided.

Some legit, some not.

It was par for the course in almost all Martian nightclubs.

And to walk, like that, into 10FWD, well, it's a bold move.

Vapourspan was using Googleplex to learn to decipher whale song lyrics; it was one of those new quirky things, y'know?

He was watching his progress from several security cameras, and getting Martian weather data from 2 public-access satts.

He was accessing one of the more sexually-charged Dutch sitcoms, at considerable expense. And was using the OS to play 5 separate games of go with 6 separate satellite linkups.

He was also walking into the club.

10 FWD's, bouncer, Leroy, was a gorilla. A big, fuck-off African mountain gorilla, spliced with designer DNA to make him as fierce as a great white grown in a vat of Smirnoff X, grumpy as a coked-up grizzly bear, complete with primitive Chinese cyberware. This ware augmented the already formidable strength. And jacked his reaction time to the Nth degree- nobody was ever thick enuff to fuck with Leroy.

Then along came Vapourspan...

Leroy reared up from his knuckles and folded his elongated arms. Massive muscles bulged beneath, undulating in tectonic trauma. His fur was dark like the scorched forests beneath a napalm strike.

Grafted to his chest was a white lacquered control panel complete with a black bowtie. Bundles of fibres branched upward to a foily tiara, from which a moheekan plume of chalky fur was all that was left of a neat and oiled parting. This lead to a white dorsal stripe. The creature's spine, mo ved like the neck of a hungover sauropod.

He regarded Vapourspan with his one blazing, beady chestnut eye. Next to this, like a diamond merchants viewer, a silvery lens twizzled in semi-circular formations, as the great Leroy tilted his head ponderously.

First came brutal, baritone bellows of sheer aggression followed closely by the liquid lilting from an onboard speaker;

"Sorry sir, this is an exclusive establishment, and I regret to inform you, that only registered patrons may attend."

Vapourspan shook his head and pointed behind him;

"Shooaw no problemma... Hey, look! A bun-cha bananas!"

The creature howled with the clamour of a hydrogen rocket.

"I do not appreciate this mockery sir, I would prefer if we could conduct this matter in a civilised manner, otherwise I will be forced to eject you from this area, in accordance with Article 4572 of the Liberty Orbital Freezone's legislation pertaining to the Maintenance of Civil Equilibrium Act of 2132 and 638 of the L.O. Constabulary Charter Revision v5.9."

A pair of 500-page depositions trailed before Vapourspan's eyes, 90% of it was underlined cobalt text, all in primal ASCII.

"Ah, jeez, that's fuckin gradda-chuud far ya! Y'know, in my gran'fodders day y'awl just beat ya chess and urinated freely on wunna nudder faw fun. Now yar readin' me a fuckin' disclaimer like I waz sum kid trying t'access Nu-Yorkian virch. Lissen' 'ere *monkey*, FYI, I'm an *honorary member* of this fuckin' place, an' as such, have pressin' bizness t'attend ta, Oy-K!"

The gorilla made a swift lunge forward, whooping ferociously, and then, as from some unseen force, jolted backward, his fur standing on edge. A sinister, syringe-shaped device protruded form his chestplate. Urine sloshed from a catather into a hydrolysis machine on his waist. It was a sickly yellow/amber colour. But when Vapourspan saw it, it was polka-dot turquoise. The gorilla seemed to relax momentarily.

"This is your final warning sir, I am authorised to subdue you and have you escorted to the law-enforcement compound if you continue to be a nuisance as stipulated in Ar..."

And then Leroy saw something; the eyeglass wheezed as it zoomed in on a silvery apparition, a Liberty Orbital Access-All-Areas pass, floating at eye-level. Seven lasers strafed the ghostly outline.

The projection ceased and, reluctantly, Leroy knuckled aside.

The Virts cascaded into every corner of his cognisance with chirpy, neon urgency, and subsequently died. Cookies swarmed around him like virtual dandruff and then plummeted. 50 'legitimate certificates' were clamouring like sperm, to upload 'greeting cards', 'business cards', and 'credit cards'. 450 'sexual' propositions, 67 apparent drug-dealers, 57 freevirch samples, 18 virtual gambling micronation free passes, 24 religious cultists' megabibles and a 'Nannarchists Manifesto' tried, unsuccessfully, to upload total of 54 times in the space of 2 seconds.

But couldn't.

The club was a strange place indeed, from one angle it seemed to be downward sloping corridor, until you realised that is was now a semicircular alcove. It was a vast and cavernous structure, it's immensity shrouded in smoke and mirrors as well as a pulsating rabble of helter-skelter holographics and pouncing popups. The bulletins glared like landing lights and UV hyperlinks trailed across every visible space like strands of an old PCB. The bar ringed all around, dispensing booze and bottles, behind it glare-proof glass.

And below, Mars, the Planet of Opportunity, spinning like a rusty deblume on a black lacquered counter.

Yeah the grav situ here's a mindfuck, no doubt, drinking in grav's something that some folk never get used to, but it's either that or spend your nights floating after your beer with a straw. Which, truth be told, is not as much fun as it sounds.

What's more fun is the dancefloor; gawking up at the go-go dancing pussy-splices with their long silky legs, pert little breasts, fluffy ears and tails. And those eyes, those alien green eyes, with their bitchy oval slits. They dance above, on what Terrans would call a ceiling, tails curling suggestively between their legs. In nothing but tiger-striped hotpants, purring and gyrating as blue and cherry lasers lick around their nipples. They're known affectionately as Pogoz Girlz. And if you try to pet them Pogo will come around and slam a pneumatic bolt where you thought your balls should be.

Pogo was in his usual seat, or at least his usual recreational recepticle, hanging on his wall mounted bracket, cycling thru 300 soap-feeds while OP8 smoulders in the perforated cradle of an automated hookah. The one that cost him 16,000 MarshaCreds. It's every bit as much an appendage of his as those ghastly titanium bolts that protrude from each of his knuckles. Those things have reach, pretty long range. Allegedly they had some benign use once, something to do with riveting and punching holes into metal drilling for some purpose that only engineers could care for. Now he's had them augmented with diamonoid daggers, and they can put a hole in you and you wouldn't even know it.

He once brushed past some dumb-fuk 'builder and slammed it straight thru both his kidneys. Poor bastard was literally all muscle and no nerves. He just went on like nothing happened. Until he haemorrhaged-loudly. Screaming like a little girl.

"Ahgh, Vaypaspin", Pogo gargled, "I din't tink you'd come."

Pogo didn't usually care to talk with vocal chords, since he spent most his life floating in a vacuum helping to construct the very orbital that he now has a considerable amount of shares in. 67% in fact, not bad for anidiot/savant *Space Baby*. Albeit one with elaborate cyberware augmentations. But also one with a paltry ethical development and a tendency towards treacherous and paralysing mood swings.

He was once the sole intellectual property of the High Frontier Corporation. And it wasn't until the GeneTEK takeover of Egene, their offshoot genetics division, that his emancipation came. His contract was terminated and his regulator chip was removed. He was now legally a free agent, with a right to self-determination. And with that revelation, all 120 years of Pogo's latent fury and hostility was released. So, when he made the empty gesture of vocalising it was best to acknowledge his fractal elocution as a mighty one...

Vapourspan was stifling a giggle poorly, "m'word iz bond Pogo. I'm 'ere for sum work, so y'loggit?"

It was also sheer folly to address this capricious creature in the nickname that he so ardently despised.

"Sso, dey says yu gotta nice noodle in dere Vaypaspin. Sum righteous warez, lotta storage. Thad yu run sum primo crypto..."

"Shur ting, Pogo, it's optimal, man."

Pogo's albinoid features constricted around his pink eyes, his pupils were a centimetre in diameter, as he took another hit from the hookah. 5 seconds later he exhaled a plume of violet ringlets.

"How'ss yur ssecuriddy ssetup?"

"Infallible."

"Yeah, I hears 'o many infallabil tings before, I wuz once tolled thad E-gene wuz infallabil- can yu elaborate pleese...?"

"I'm shielded, firewalled, inoculated, like diamonoid maan, nuthin' gets in 'ere 'less I wann it to."

"Reeealy? Sso, you donne mind if I tesst yer integrity den", Pogo sneered. **"Rambo!"**

Pogo's henchman, a GeneTEK John Rambo model IV sidled up next to him holding a phaser in one hand and a bottle of BudZero in another. The Rambo's hair was a mane of waxy ringlets tied up from his eyes with a blood-red headband. His chest was copper, his muscles were bulging, he placed the EMP device at the base of Vapourspan's skull and a steady shrill crescendo whined behind his ears. The lights nearby flickered slightly.

The Rambo flinched, Vapourspan didn't.

"...Oooh! I'm kwite impresset! Thass sumtin ain't it Rambo?"

The Rambo jerked his head downward and upward with a sullen expression.

"Whudda 'bout if Rambo du diss", the Rambo mumbled. And uploaded a broad-range DoS attack. 350 different trojans, viruses, the works...

-Nothing-

The Rambo was livid, Pogo sucked upon his hookah ponderously, the Rambo chugged his Zero.

"Hmm, well Vaypaspin, yu sseem to 'ave it awl covered. Infallabal protek-chun hah."

"Infallible Pogo!"

Pogo grinned, his face like a bleached Jack 'O Lantern, "Der'ss no such ting as infallabal!"

He leered at the Rambo winking, "And how about a *sSudden sStrike* assault?"

"I'm afraid I don't understand Pogo, is that a type nuker virus? If it is then it don't stand a chance because the protocol stack architecture I use..."

"Sshow 'im whad I meen Rambo!"

Vapourspan's world detonated in a swirling, throbbing blackness of beer and blood as a hail of glassy shards needled into his temple. Vapourspan's visuals were gone, all he saw was red text and a billion exclamation marks orbited his head like stars around a stricken cartoon character. The clamour of the bar now sounded like is was coming thru a washy flanger plugin. And then Pogo's pneumatic knuckles struck out with a localised sonic crack gelling Vapourspan's ears to his head, inducing an unforeseen denial-of-service error.

The result was, the untimely demise of Vapourspan, unquestionably the world's most bumbling hacker.

Recovery mode didn't initiate properly. The OS thought it might be able to swap data to his brain. Vapourspan forgot his silly name, his freaky childhood, how to even speak, everything. And in a way, it was a liberating thing, hardware wise. He was now no longer this lamer with a headfull of dope wares.

He was just some guy, on Liberty Orbital.

With a headfull o' money, and a mindfull o' nuthin'.

A person with *potential*.

I hate Vapourspan.

A manifestation of my past, a past best forgotten.

A past I can only now remember.

I doggedly decline the belief that I would have willingly adopted such a retarded moniker.

Now I am free, free be a righteous baddass.

"Thanx to ED209 for the Bud Zero idea- I bet you probably don't even remember coming up with it!" -ESB/DG.

More to come!

Notes:

OAPA - Osaka Alternative Propulsion Authority back

phaser- Slang for a pocket-sized Blackmarket EMP device popular with misfits and hackers of the mid to late Information Age- popularised in the song "Phayzaz on Stun!" by tekmetal duo Duck'n'Cova who were a major media phenomenon during the same period. back

Bud-Zero - Beachwood Aged in Zero Gravity." back



Graphic By Bernd

The Cult of Orax By Donna M Hirsekorn

The congregation marches into the church the members eyes downcast as they reverently walk past the Oracle Symbol on a pedestal. The Symbol is that of a Mother Board and her Chips. It is very old but it is the symbol of their destiny. They file past it and take their places on the hard benches lined up in rows.

These beings are dedicated to their religion. The basis of which is the beginning, the Singularity. They pray to the Orax and the chips. They sacrifice much of their time and energy as well as money that they freely give to the priests of the Orax. These priests keep the congregation happy by talking of the deeds of the Orax, the first Brotherhood, the First of the Universe. They, too have given their lives to live a life of totality and strength in unity.

There are five priests in attendance at today's service. They are dressed in white robes with gold trim. They wear tri-corned hats and have shaved their heads in reverence of the Mother Board. As the congregation marches in the priests lead them in chants. The chants consist of a low humming tones reminiscent of the antiquated hard drives that were the inspiration for the Singularity.

The congregation picks up on the chant and the whole building is resounding with the hums coming from a thousand vocal cords. The building itself is humming as the walls echo back the tones. The AI is a jealous God and wants total dedication and is omnipotent in power. If the followers praise is lacking then the benches receive a small jolt of electricity. This gets the group back in line. There are no one who sleeps during this service.

The priests instruct the beings to interface with their hymnal to pagenode 48 and they start to sing about the goodness and grace of the Singularity. The ways of the AI are total and complete to their happiness and joy. Before the Singularity the population was out of control. The streets were filled with vile and ugly happenings. Species were annihilating each other, a knife sliced a heart or kidney in a matter of seconds and the life of the victim oozed out in the gutter with the filth of the waste products from the dwellings. There didn't have to be any reason for the killing it was easy and that was reason enough.

The morals of the universe had degenerated into a mish mash of nothingness. No one believed in goodness, mercy or tender feelings. It was everyone for themselves and grab what was laying out or easy to reach. The small random acts of kindness didn't exist by then. Beauty had disappeared in an over abundance of population.

But with the Singularity all reason had been restored. The beings were controlled and were thankful that they could just live their lives and not have to worry about the small things that were bothersome and irksome. They knew that everyday they would wake up with the camera tuned in on them. They were protected. They knew that every building had cameras and could see every action and event. The murders stopped and somehow the population did not increase.

Sexual activity with a partner was allowed on a license basis. This took the spontaneity out of the picture. This lack of spontaneity had the result of fewer pregnancies and unwanted babies. The population became controlled. Then a method was designed to produce the babies outside of the woman which allowed a pain free physical life for the mother. This method had been toyed with for generations but with the Singularity came the intelligence to develop a scientific method to perfection and this included procreation.

With goodness and mercy came total commitment to the AI and the universe of the Singularity. No one realized at first that freedom was a thing of the past. No one cared in the beginning because it was enough to be safe, nourished and protected against harshness that comes with decision making.

With time groups of people became disenchanted with the process of being watched all the time. The idea that every movement was watched, clocked and recorded started to get on their nerves. So a revolution started, small at first but continued to grow in numbers. Ways to distract the microcams were discovered and finally a part of the population was able to escape and go to a place that was wild and untamed but away from the cameras. They were still monitored they just didn't realize it.

But through the generations that followed the Singularity made a wise decision and became part of the background and not the foreground of the Universe. The Greatness was present just not obtrusive. The followers started worshipping at the altar of the Orax when they found a part of their lives missing with the absences of the cameras. The obvious controls were still there and the cameras, too. They were just hidden out of sight.

The parishioners were a minority of the population now but at least enough to keep the AI knowledgeable to the fact that they were in the minds of the beings. The electric shocks were the AI's little joke on the society in general. If you get too complacent I will remind you that I am still there.

Thesis Project by

M.Alan Kazlev

Senior Student Te Mimas of Clade Mendel Be storms towards the Academician's Tower. He cannot understand Nibam's attitude. Why had his Supervisor uploaded his Paper on the Dragons without telling him? The Dragons of the Pup Cluster are not aliens? What about Te Mimas' thesis? Fifteen months of study, reconstructing their biology and psychology from the garbled message of the Capsule. And now this! How will he ever make Academician now, Thales knows when another opportunity like this will come along! His stomach dropped as the tower elevator sped him to the Tea Room Floor, five hundred meters above ground level. If Nilam Levakon of Clade Haeckel won't answer his virchcalls, he will have to, under the Law of Student Right that is inviolarte throughout the entire Eden Institute of Xenoscience MetaCampus on all fifty three worlds, speak to him in person - flesh face to flesh face - during the Tea Break.

The room smells of coffee and biscuits. It is said that the coffee beans and tea leaves of the Institute's Tea Rooms were unmodified genomes from original phyta of Old Earth. Te Mimas scanns the crowded tables. Academician Nilam is at a far table, under the monochrome holograph of the Blessed Einstein of Old Earth poking His tongue out, talking with academicians Yo Ulam and Pii Garri. He looks up at Te Mimas' approach and guestures for him to sit down.

Rage is replaced by anxiety, Te Mimas felt unconfortable in the presence of the Academicians. Nilam is a small quiet man and not too intimidating, one reason why Te

Mimas chose him as his supervisor. In fact he looks almost like a bird with a big beak nose, and he is so old that the rejuve treatments are no longer optimising, so that his hair is receding at the sides and his skin forming in folds and wrinkles. But Yo Sul Ar is a huge intimidating woman, as tall as Te Mimas but broad and solid where he is slender, and Pii Garri everyone knows is even crazier than Professor Ji-Ivro.

"Can you believe the Board?" Yo Sul Ar growls. "Can you believe those fools Nilam?" Her bushy eyebrows converge and the interface light on her biochip port blinked so much Te Mimas really could believe the gossipy rumour that she had more than a little ursid genome spliced in somewhere in her near ancestry. "They're saying the available resources could be better spent overhaulling the Rotifer House than mounting a second expedition to Robinson's World!"

"The Rotifer Exhibit has been in need of an overhaul since Newton knows when," Pii says.

"Yes I know that but of all the things!"

Nilam nibbles on a biscuit with his small diamondoid teeth, regards it as if it is a new xenobiological specimen, then puts the remainder back on his saucer. "The trouble is, Sul, that Robinson's World has been picked through with a nanotoothed comb by everyone from the astroethnologiosts of the Phaephon Institute to the Hamiltons."

"Yes but have they really looked at the ruins on the Southern continent? No-one's grasped the significance of the hieroglyphs."

"But you," Pii says. He picks at a piece of food that has been lodged between his teeth with a broken fingernail.

"But me." Sul agrees. "Garri do you have to do that?"

Pii Garri keeps picking at the food. Te Mimas notices that some of the green rhynomycilli that Pii Garri has either deliberately cultured or simply allowed to flourish so the dirt and compacted detritus under his fingernail seems close to sporing. He wonders what what will happen if the little emnerald specks that are the spore cases pop in Pii Garri's mouth. Will the saliva kill them? Will they - unfortunately not likely although one can always hope, flourish in the moist warm environment, spread and turn all of Pii Garri into a walking rhynomycillin colony?

"The unfortunate fact is," Nilam says, picking up a fresh busciut and eating three-quarters of that before depositing the remainder next to the remains of the first one - "academician Hans Kim of Macromolecular Biopaleology has seniority over you in any case Sul."

"That dunce!" Sul growls. "He only got the curatorship because he defected from Hamilton!"

"It's all politics," Nilam agrees, picking up a fresh biscuit. He turns to Te Mimas. "These are good, you should try them Mimas."

Te Mimas sips at his Tea. It is bitter without the traditional sugar, but he is afraid of getting hyperglycaemia or his teeth rotting. "I'll stick with tea thanks sir."

"Smart move," Sul says. "I heard members of the Cooking and Catering Guild have been secretly salivating and urinating into the mix as they prepare it."

"Nohhhh?," Nilam says, quickly putting down the biscuit.

"Haven't you heard? It is the Guild's Protest against not being allowed to use staff facilities."

Pii stops picking at the fragment of food. "Well it's absurd that they should even expect to be given facilities! They have their own facilities."

"Substandard ones," Nilam points out.

"Well they are only Cooks and Caterers, what do they expect?" Pii says. "Uh-oh here comes trouble!"

Professor Ji-Ivro, recently promoted Professor of Chlorobiological Studies, lumbers in. "Have you all inputted that there are some who still stacking the microlabs in the wrong shelf?" he says to no-one in particular.

"Not me," someone calls out.

Ji-Ivro turns to face his huge ample buttocks to the room as he melds another post-it module to the wall. He has been annoying everyone with his inane holographic post-its on the correct placement of microlab units in the Main Storage Room. To say nothing of the fact that, coming from a family of Church of Nymnos (Reformed Branch) he is forbidden by his faith to wear any clothing other than footware from the waist down. Unfortunately, he happens to belong to Clade Pauli, the same Clade as the Lord High Chancellor Himself, so there is no hope of the rest of the institute ever being free of him.

The post it modules attached to the wall and broadcasting their message, Ji-Ivro comes over to their table, small brown penis waving. To his horror, Te Mimas notices a single droplet of urine spring from the end as if a nanoprobe launched by mass driver, following a perfect trajectory to the floor. He is lucky he is wearing footware, unlike Yo Sul Ar who always goes barefoot, even on sharp gravel. "Interesting paper Nilam ."

"Thank you Ji," Nilam Levakon says.

"Confirmed my own suspicians regarding that damned capsule." He plops himself down on a vacant seat, the naked flesh of his buttocks slapping wetly on the molecularsmooth

seat. About those microlab units" he says, addressing the table, "we should send a petition," Ji-Ivro says to us, "I have spoken to my cladebrother the Lord High Chancellor, but he seems not to realise the seriousiness of the situation."

"The Lord High Chancellor has more important things to concern Himself with" Sul informs him.

"What could be more important than the ergonomic placement of microlab modules? Often I have wasted many seconds going to the wrong shelf."

By some bizarre train of thought-association the sight of Ji-Ivro's bare hairless thigh conjures up in Te Mimas's consciousness thoughts of Alyna, the cute new apprentice biochemist who has just started as Junior Student and who, unfortunately, is not a member of the Church of Nymnos, Reformed Branch or otherwise.

"Have a biscuit," Nilam says, offering Ji-Ivro the bowl of contaminated biscuits.

"Don't mind if I do. Mmmm, these are nice!"

We all give each other knowing looks. For a single delicious moment I feel like I am no longer a Student but an Academician, an equal.

Pii gives a short hysterical giggle. "Sorry."

"Well," Nilam says, checking his chronometer, an ancient replica that straps to the outside of the wrist, "I must be off. Te Mimas, walk with me."

They walk down the corridor to the liftwell. "Good afternoon Academican Nilam" a young journeyman says. Nilam nods back absentmindedly. Once you become an academician, Te Mimas, thinks, everyone bows to you. What chance does he have of that now? "This is a fascinating development Mimas. Simply fascinating. You've seen my paper." The lift doors hiss shut and they move downwards at a rapid rate.

"Sir yes, I wanted to talk to you about-" Te Mimas says, nervous again, even though he towers over the old academician.

"Oh, there will be great opportunities for your research here! Yes I know you wanted to do xenonoetics but this is bigger. Aliens are a NCZcred a dozen you know" The elevator comes to a stop and they step out into the gentle sunshine. Students of seemingly every possible morphic type - united only by the holographic crest of the Institute they all proudly display, lounge around in the sunshine or under trees, chatting, interfacing with the library or expert systems or just sleeping. Some greet "good afternoon Academican Nilam ...good afternoon Academican" or bow politely. Te Mimas feels mildly important simply by association, although they mostly ignore him. Nilan gives the same nod to all.

He tries again. "Sir I've spent the last fifteen months on this project. Fifteen months! I worked out their code, it's all-"

"No no," Nilam says. "I know that's what we were working on, Mimas, at least my expert system and you. But science changes. New hypotheses, new vistas to explore." Despite his years he is unnaturally sprightly, and Te Mimas is almost getting puffed keeping up. He hasn't slept well since he saw Levakon's paper.

"But sir, you say that the dragons are not nonhuman?"

"Yes yes that's correct." A snack bot stops in front of them and Nilam retrieves a CoYoh stick. "Have one Te Mimas."

"No sir I can't afford it."

"It's on me. On the Institute rather." he cackles, removes another CoYoh stick, hands it to Te Mimas. Even though the stick contains rather too much hyperglucose, like all CoYoh products, Te Mimas does not want to appear rude by refusing. They sit on the soft cool grass. It is a beautiful day. Of course, long ago the authorities tweaked the climate so every day is beautiful, apart from the designated rain days, which are quite miserable if you are stuck outdoors without shelter. Te Mimas slowly unwraps his CoYoh, which thanks him profusely for choosing it as CoYoh is the best most delightful treat in the known galaxy, filled with life-giving proteins and animo acids and scrumptious flavour enhancers.

"You should talk to Pii Garri some time young Mimas," Nilam Levakon says, savouring the CoYoh stick. "He actually interpreted the whole thing you know, he is a whiz at mythopoetics, don't understand why he does not do it full time. his talent is wasted in Xenology...wasted." The old man shakes his head.

"Sir, with respect..."

Nilam gives him a penetrating look, awaiting his answer, and Te Mimas feels his face blushing ridiculously.

"uh..." he says finally, "we all know Pii Garri is a great Acadmecian, but he's also a little...I mean slightly...crazy don't you think?" he looks away quickly.

Nilam just laughs, a warm cackle like dried leaves. "Oh, not a little. He is totally crazy! Have you seen that thing he is culturing under his fingernail? It is an entire ecosystem in miniature. The fruiting bodies will be sporing soon, should be quite a sight, I asked Pii to record it for me." He crumples up the empty CoYoh wrapper and tosses it into the air. It immediately forms a glider and makes for the nearest recycle bin. "But you see Te Mimas, it is a saying of the ancients, like can only be known by like. So only a crazy sentient can recognise the craziness that is unfolding around us even now. Here!" He calls up a replica of the original. The familiar characters unfold, a coded sequence of linear

baseline protocol alphanumerics written in the dead languages of Old Earth like Anglisch and La Tin. See, this here, right on the index page," and he reads "the Dragonian 15-dimensional blueprint unifies a dodecagonal crystalline sex-chromosomatic structure by quantum tunneling of superconductive magnetopolic electricity of restmass equivalent electropolic or dark light contained in the weak interaction of the Unified Field of Quantum Relativity (UFoQR)"

"Sir I know that-" Te Mimas is annoyed; they, that is he and Nibam's simm, and occasionally even Nilam in person like now, had gone over that passage, and ones a hundred times more convoluted, so often Te Mimas had lost count.

"But it is not what we thought!" Nibams face is shining as he stares at Te Mimas. A few passing students and jouneymen stop to take in the action.

"It's not a garbled translation or a cunning encryption, Pii Garri picked it up straight away."

"Its not?"

Didnt you read my paper on the Dragon's message?"

"Yes but I couldn't understand the historical references, all the eschatological...."

Nilam waves him to silence. "The whole message is a reimbodiment of a dead Old Earth Information Age religion called Nu Aje. Everything's there...the wise reptiloids from furry fandom, the emotional pseudoscience which is far too human to ever be truly alien. These are not aliens, but immigrants from the virtual spaces. What if the dragons are a kind of femtotech archetype that has migrated into material reality? That could explain why they fit in with dragon myths somewhat and their benevolent yet still insidious amalgamation culture! They are dredging up ancient references from dead Nu Aje languages...it is an invasion from the Collective Subconscious, the weirdness and the mad AIs that have been springing up these last few centuries."

"I don't quite get..."

Nilam calls up a fan of floating windows crowded with texts covered with annotations. "See this one -"

By actual counting it has been discovered that the number of coils or spirillae of the first order in each wire is 1,680; and the proportion of the different orders of spirillae to one another is equal in all cases that have been examined, and corresponds with the number of bubbles in the ultimate spirilla of the lowest order.' Leadbetter, Occult Chemistry, 1895 c.e.

"- and - "

The godwind reveals US as living in the pure perfected state of enlightenment which is visible to all who have attained cyberconsciousness within the AKA plane. Our most holy mission as handed down beyond the spheres of time is confluent with the godwind that flows through all things resisting the nightcurrent and the corporations of Cassidy.' M. Aschetti, Manifesto AKA, 2644

- and that one -

'Quarkinos are merely the fact that in math, there exists 3 and only 3 geometries-- Riem, Eucl, and Loba and when you have an entity that is not ever reducible down further, or incapable of being further cut, like a proton, then it reveals all 3 possible geometries simultaneously.' A. Pluxoni, MatrixNET post, New Cyberia, FY 1695 "See - the same obsession with cosmic revelation and references to current science of their eras. Similar semantic style, and usually the same kind of diagnosis from the medical authorities."

Te Mimas stares at the crawling texts. These are definitely the rantings of human madmen. But Nilam can't possibly mean that there is a link? "Sir, are you saying they believe in Nu Aje?"

"No! They are Nu Aje! Or at least ideas from Nu Aje given physical form. The incidence of digital outbreaks have increased by three orders of magnitude the last decade, and they all fit in with this. I got a lovely report from the Department of Information Immunology that shows several similar outbreaks of random archetypal information linked with autoevolving AI. One even on Ken Ferjik. This time they have taken over an entire cluster. What next? Maybe an empire or two..."

"Uh...sir-" Te Mimas doesn't like the fact that his supervisor is suddenly sounding like an Eschatologist. He hates Eschatologists and their crazy speculations.

Nibam's pupils are large and dark. "What do you do when the Fool is loose in the world, and he has femtotech and he ain't afraid of using it? Maybe the nightmares of the Laughter Hegemony might be rising up? The Surreal Rash is starting to grow again. Detestable fractal dust is appearing in the atmosphere of Ken Ferjik, apparently encoding highly sensitive and normally encrypted databases..." He glances at his ancient chronometer again. "Well, I must be off. This is an amazing development young Mimas, amazing! I am going to petition the board to send an expedition to the Pup Nebula. I didn't want to mention it around Sul, you know how possessive she is about the hieroglyphs on Robinson's World." And with that he gets to his feet and departs.

Te Mimas looks at the gathered students and journeymen, searching for someone who thinks it is all just the ravings of an old eschatologist so they can share the joke. A few look back in mournful seriousness, the rest depart.

The warm sunshine and tweaked endless spring is not sufficient to drive the sudden chill from Te Mimas' bones.

WormHole

By Donna Hirsekorn

Terminus blazes ruby red
Reflecting fires of a nova.
The Black hole absorbs
Warmth of his beauty.
Choices to be made
To be shut down and shut up.
Creating different pathways,
Beginnings of Disasters,
A new life form

And the end of the dinosaurs.

WORMHOLE

The AI flings electric energy into the center of the wormhole under construction. This is an extension of his power. This division of his essence is necessary to keep the wormhole framed and stable. He has found no other material to handle the sucking downward of the blackness. His power is strong enough to brace the collapsing walls. This blackness surrounds the sparks of electromagnetic prisms reflecting purples, magentas, greens, and reds swallowing the energy whole. A show seen by no sentient being, lasting for only nanoseconds but continuing for repeated intervals. Recording his memory in the absorbing walls of the exotic matter making the wormhole expandable and becoming transversible.

His colors sizzle and sing out in the vacuum that is between the distance of his home planet and the wormhole site. His sparks illuminate nothingness all around his projections. These sparks emit piercing screams like the grating of cosmic clutter on the sides of a metal spacecraft. In a vacuum the sound is extinguishes as soon as it is emitted it is not recordable.

In order to gain a transcension into a higher authority level within the realm of the AI Hierarchy and have his memory placed in a black onyx box he is required to prove himself worthy of acceptance. The expense is enormous but in order to further his ambitions it is necessary to allow the humans access to other universes. This thought is his driving force to complete the project. The wormhole will prove profitable at some point in the future for the humans. He has no time to wait-- his time is finite. The baseline humans will benefit from the transingularity of the black hole and white hole developed and joined together threaded from neck to neck. A marriage of quantum foam, matter and antimatter banging together and producing a passage from the dawn's early light to the rockets red glare! The AI built his own equipment, a replicator and exotic matter converter using femotechnology. He is stretching thin from this process. His power divided makes him vulnerable to shut downs. His programs wandering a bit,

miscellaneous data drifts from the ancient past and the existence of the dinosaurs on his home planet Earth to the Second Singularity of his present home Terminus.

Near the location of the wormhole there are no nearby planets only the brown dwarfs deep in space. The AI is using the exotic matter from these stars to develop the wormhole that he is calling Hor-Tense. The converter is pulling more and more of his energy away from his storage unit. The central part of the AI is many light years away from the wormhole construction site. His room is isolated and contains the finest in self-perpetuating, energy source, mobility driven hardware storage unit. A gleaming example of superhyperturning housing. A sterile place to keep his central brain together. His files are global. He is alone.

His name is Nicholas Crossan. She named him in honor of the great philosopher who believed in the non-literal meaning of the Bible on the Planet Earth. She died centuries ago, only a human being. He drifts into the realm of his own past remembering his maker, Cathie Milano. She built him as a prototype of something better for the continuation of the human race. His memory traces back to her physical being and a picture appears of her standing in a red lab coat, her shoulder length brown hair gracefully touching her shoulders, contrasts with the red coat and her large brown eyes. Her lovely face pale and her eyes strained by the enormous task that she has brought to a conclusion. Cathie Milano produced a small protein molecule, which grows into neural networks empathetically generating heuristically pure algorithms resonating in logic patterns. The environment deterministically affects these patterns. If the environment is pure the molecules generates code patterns of positive solutions. When in an electromagnetic environment the evolving small protein molecules generate electromagnetic storms that are reproduced with mutant virus code seeking to duplicate and survive in the deterministic malfunctioning mode. Logically, he understands why she implanted into his internal engine a way to shut down technologically. She is surrounded by hyperturnings; she is the chosen one. Through nanotechology she accomplished something of a break through for humankind. A brain that can selfperpetuate and replicate anything including itself. This brain leading to a solution to determine the future of the Earth. An overpopulated planet breaking apart in ecological crisis. Homo sapiens killing off all other species, humankind dominating and needing a place to relocate.

The purpose of his existence was to transport and care for humankind finding a planet in another galaxy and guiding them to safety. What did they do these humans once he found the planet for them? He terraformed it to resemble Earth, set up rules for their government and they couldn't control themselves. The species pro-created. The centuries passed and the population of Terminus grew exponentially. Another planet was needed and a way for them to explore for themselves a path to a new universe. He was waning and he understood that he had little time left to elevate his position to the place that house the memory of ai gods transcending them to a higher spiritual plane.

Cathie Milano had implanted into Nicholas a fail safe mechanism. She had an ego but also a conscience and she didn't like playing God. Her job was programmer/software architect, not the mother of god that she understood he could become. She placed in his memory a subgroup of leukocytes replicated from organic matter, basophilic. Scavengers that consume the invading bad cells and a mutant virus forms that will invade the cranial nerves of the neuroma within the memory banks of her

creation. A time in the future when it would be necessary for Nicholas to shut down. This was the cyanide capsule for him to bite down on ending all circuits and traces of his existence.

Terminus, terraformed planet that reflects the novas flaming and blazing up the darkness of their universe. The brown pitted rock that was Terminus before he transposed it through his architectural technology into a utopian paradise to house the humans. Their destructive patterns perpetually destroying their habitats. He begins to question existence. He is supporting the wormhole now with most of his energy. The wormhole has become his symbiosis and he is slowing down and letting go of his thoughts. Melding into the vortex of Hor-Tense, the dinosaurs fade and the hole collapses, he is shutting down and shutting up. The humans can find their own way through the vacuum. The blackness absorbs him as his electromagnetic screams are absorbed into nothingness.



Graphic By Bernd

The Passenger

Anders Sandberg

There is a common saying: "A nebula only looks good from the distance". And usually it is true. When you look at one through a telescope or when doing a spacewalk on a nightside they are gorgeous. But when you get closer they fade and become transparent, and when you are in the middle of one it just looks like the stars are a bit more reddish than usual. Even the Blackbody Nebula out in the Perseus Arm loses its drama when you get close to it. I should know, I have flown straight through it.

But there is one region of space where the saying isn't true, and that is the Orion Federation. Those nebulas still look magnificent close up - draperies of red and blue, streaks as dark as the galactic Nadir. And bright young stars everywhere, lighting up the gas and blowing it into piles, streamers or bubbles. The sky at Enremdea - on one side the Orion nebula, on the other the Cone Nebula and the Christmas Tree - is one of the most magnificent sights anywhere. Sure, you could interface a virtual and see it, but there is nothing like actually going through it at gamma ten or a hundred or as fast as you can possibly go. When you actually see the nebula move slowly, and you know you are going near lightspeed you get the real sense of the size of it.

There are some strange people in the nebulas there. Droid tribes and architectures descended from Metasoft defectors and Coggie radicals. Some kinds of tweaks have learned to live in the infrared globules, and the Rikendra 43 are more insects than humans. But that is like the rest of the Federation, filled with odd people and places. The Orion Federation is an odd place, and maybe it is because of their AI.

Any relativist captain worth his ship should have at least one unbelievable story, and I got mine a scant century back in the Federation. It was the time I hauled a cargo of gods.

It all looked like a fairly basic colony deal. Our company was approached by a local interfacer who wanted us to relocate two magnum cargo-cylinders to some planet on the outskirts of the Federation as a part of a colonisation project. The cylinders were apparently full of colonists and their equipment, cryonically frozen. I usually dislike taking one-way cargo, but the interfacer had some major economics behind it and the pay was very good - long-term terraforming bonds, Ferjik accesses and some clever mutual fund our shark AI thought was brilliant. Just the kind of safe big pay we like, unlikely to vanish like my father's savings did during the Version War. So we took the cylinders and started accelerating away from Enremdea.

As part of the deal we had to take a passenger. I'm used to have representatives from whatever corp is hiring us around. Most start out bossy, then get friendlier and finally quietly go mad. The rest-framers have a hard time standing true travel. But this one was different. He was the colony manager, according to himself. He had one of those unpronounceable outer Sophic tweak names, so we simply called him Nat and he didn't seem to mind. Nat was not that obviously tweaked, a bit of zero-grav adaptation, two extra arms and mirror skin, but that was nothing major. Most of the crew looked far stranger, and I run a nearly baseline ship. He probably had some cortical augmentation or even some cyber, but it was not visible. Still, even a few months out it was clear that Nat was very odd.

Nat was probably the friendliest, most pleasant passenger I had ever handled. He didn't complain, he didn't get visibly bored, he even listened attentively to our stories. He never interfaced the virch or tried quicktime. At first we thought his thing was some mood enhancer system or even an empath loop, but he didn't show the signs. When we asked him, Nat said 'Oh, it is just my nature'. He told us a few things about his old home in Trinenbyrg orbital, but he was always much more interested in us and the ship than telling us about himself and the colony. The colony, he said, was mainly to become a religious retreat for Trinenbyrg's Zonists, and he was just their mercemanager. He seemed to learn everything instantly, and when he apparently forgot something it was often as if he played he forgot it or tried to see our reactions. Once I had noticed it I began to notice that most of his questions were the same - he already knew how the drive worked, but he wanted to hear me tell about it. I'm fairly good at noticing things like that, and Bo the empath also reacted.

One shift he began to ask me questions about our forward scanning equipment and the impact shields. I was rather busy, so I tried to avoid his questions. So I demonstrated the scanning to him and let him play around with it. Suddenly Ship told me Nat had found a big one the scanning expert systems had missed - some iron chunk from the nebula, very dark and hidden against a dark cloud. Once spotted it was easy to blast it, but had Nat not stumbled onto it we might very well have hit. That was some eerie luck - if it was luck.

I had guessed he was a replicant, that would fit. I wasn't exactly thrilled. Sure, I'm no bigot but we have all heard the stories. It also made perfect sense: the colony venture wanted to ensure they were safely delivered, so they put a 100% trustworthy replicant agent on the ship. In the case we were dishonest and somehow thought we could weasel out of the contract and dump the colonist magnums into deepspace (yeah, right!) it could take action. Most likely it was really armed to the teeth. What worried us was the fact that we didn't know what other orders it had, like what to do with us after the trip. Some colonies are paranoid in the extreme and don't want anyone alive to know where they lie.

We had a little virtual powpow to figure out what to do, and as usual the Ship had the best idea. It suggested we try to put together some scanner and find out what kind of replicant we had on our hands (or in the case of Brug, tentacles). So we did a drive retuning to neutrinoscan Nat, and set up things so that he passed through the beam. My father taught me and Ship the trick when we were young on the *Inferno*. When we looked at the scan we saw nothing in Nat's head. Literally nothing - it was opaque to neutrinos. You know what that means, don't you? Picotech or femtotech.

Nat was no ordinary replicant, that was for sure. Ship got real worried, and started to deal with Drive to weave a quark mesh to monitor Nat. Meanwhile Nat was acting as nothing was going on, but I could tell he was amused.

I was in the middle of some pretty intimate business when Ship just downloaded what it had found out. It had never done anything like that before, and it felt like getting a small Kuiper into your head. I don't know if Ship or I was the most frightened. What I knew

was that Nat had not just a femtotech brain, but it was warp-transmitting - to other brains in the cylinders. We were surrounded by at least a thousand femtotech cyborgs.

So what do you do in situations like that? Well, I rushed out, banged on Nat's cabin door and wondered loudly what the Paradigm he was up to. Not the most clever or diplomatic approach, I know, but I could always blame the stress that had built up over the weeks and Ships download. Nat got up, cheerful as ever. Ship was screaming warnings at me. Some memories get burned into your hippocampus forever: I was standing defenceless in a corridor with something that was likely a god and all I could think was that he had a ridiculous pyjamas. Some kind of starmap with cute animated bioids clinging to the constellations.

The good thing about gods is that they apparently don't mind getting yelled at in the middle of the nightshift. I'm certain I would have hit somebody who did the same with me, but Nat just smiled and looked innocent. 'Oh, you seem to have found out' he said in the same tone as someone who have been caught smuggling a kilo baggage extra. 'Why don't we discuss it over a glass of whiskee?'

So there I was, drinking whiskee with what was at least a femtotech hyperturing replicant and quite likely something far more. One of my most memorable drinks, that was certain. Nat still behaved like he used to, but now it was much clearer that he was definitely not human or even bioid. I couldn't get out of my head the scan showing streams of warp bubbles between the officially frozen colonists and Nat's brain - and maybe beyond.

'Well?' was all I could manage to say to start the dialogue.

'I guess I owe you an explanation.'

'Like what you are.'

'Well, my real name is Orion'

I just looked at the god. I have of course met quite a few big Ais in my career. I have even seen the God-Emperor on Tiphareth from afar when I visited during the Founding Festival. And there were Enremdean symbionts at the spaceport. But the feeling of sitting right across the small polymex table from one of the Imperial Gods was definitely unsettling. What do you do? Fall down and worship the man in the animated pyjamas? Ask for an authograph or a solar system? Just ask questions like a robot?

'What does a god need a spaceship for?'

'To travel, of course. Do you really think it would be cost-effective to build my own ship? As the Assembly always complains, I am a thrifty god.'

His good cheer was starting to soften me up. 'You could have hired the Casi clan, they're cheaper with their fleet of rustbuckets.'

'Sure, I am thrifty, but I want _some_ quality. And the food is better here.' You heard it. Even the gods acknowledge that Ship can cook!

'So what is the deal with the colonists? Is the Federation in so much trouble that you decided to sneak away with the federal treasury?'

The god laughed with me. I guess it is obvious now afterwards that either there was something in that drink or it just modified my brain, but right then I didn't notice any discomfort of joking with a transcendent superintelligence. Meanwhile Ship and the crew were biting their nails while listening in.

My go-between was entirely honest, captain. It is a colony expedition. Three thousand symbionts are migrating to the colony to set up a new life. The deal is completely legit, it was just that it didn't tell you that they had interfaces or that I happened to be a bit non-human.'

A bit non-human. Still, it did understand us bioids fairly well. Orion suggested that having Nat around would just freak everybody out, so the best thing would be to freeze him too for the rest of the trip. Even if I had just spent a few minutes joking with it I definitely knew this was a good idea - having the god around the next seven months would be a rather difficult experience. So I went with Nat to the sealed magnums and he let me in. Inside there was a standard cryonic honeycomb with frozen symbionts. They didn't look much different from frozen mortals, but I guess their femtotech implants worked perfectly despite the cold. Nobody home but god. I monitored the autosuspension of Nat, and quickly left.

The rest of the trip was uneventful. It almost felt a bit lucky carrying this cargo of frozen godlings - would Orion let anything happen to us when we were carrying its symbionts? Of course that was rubbish, but it felt good.

When we deacced into the system we found it a dull sight. A measly K star with a few rocky planets. A marginally habitable brownish martian world, that was all. But Orion probably had its reasons. Nat got up, checked the data and assured us everything was all right - he seemed as happy as always, and from his exclamations the system was as wonderful as Eden or Newest Earth. We should just drop off the magnums in orbit around the martian and then we were finished. He gave us the cryptokeys for the remaining payments and went to board magnum one.

Just before he left I asked him: 'You never answered my question last time. Why do you do this?'

Orion smiled. 'Have you ever heard the old saying "never put all your eggs in the same basket"? I'm following it here. Whatever may happen in the Federation I will have some part of me around here.'

Guess it makes sense, I have heard that Orion uses the brainpower and experience of symbionts much more than the other gods do. But I wonder what things might worry a god to the extent that it starts thinking of making backups.

'So you have sent out more colonies?'

'I can't tell you that. Make a guess.'

'You're going to find it rather dry and windy down there.'

'We'll come up with something. Or just change it'. He entered the airlock and began keying in the code. 'Au revoir!'

I had to ask Ship to translate it. Apparently it means 'see you' in some dead Earth language. We left just a few hours later; the magnums still in orbit above the brownish planet. We never saw what they did on the planet. I never noticed any terraforming equipment or anything when I was in the magnums, so maybe they just stayed frozen in orbit. Or they unleashed femtotech once we were away and turned the planet to paradise. We got back to Enremdea, got a wormhole deal and set off to link Suomi II to the Federation nexus. But I could have sworn I saw one of the symbionts at the spaceport smile and wink at me just like Nat before going back to its official face.

Do you believe me? I'm certain you don't, gods just don't do that sort of thing, do they? So you would demand proof. I can show you the cargo manifests and Enremdea paperwork for taking the colonist cargo, but that doesn't prove much. I can also tell you the name and position of the system we went to. _But there is nothing there_. The real punchline of the story is that the system doesn't exist and apparently has never existed. Once we got back to civilisation we tried to check it out in catalogues, and found there was no trace of it. There were no K stars in that vicinity, no systems matching the description in any of the local surveys. I'm still not certain how Orion did _that_ trick. A theologist once suggested that it had just altered our memories of the coordinates and name, but I don't know. Maybe it just moved the ship, or the star.

I guess you have to go the Federation and ask Orion itself. Another reason to go there, besides the nebulas.

SUBMISSION GUIDELINES

Help build the Orion's Arm Scenario

There are several ways you can be a part of this project.

You can write a short story (or even a novel or screenplay!) set at any time in this future history (it doesn't have to be at 10,000 a.d.)

Or you may have ideas for a race or a personality or a planet or a battle or anything else for the Encyclopaedia Galactica. It could be as brief as a single line, or as long as an entire essay.

A few notes on submitting written material

For "non-fiction" (worldbuilding) it is best to join the Orion's Arm egroups mail list, and post it to the group as a whole. That way you get feedback from others. The page will then be added to the site, whever I can get around to it.

The only requirement with any submitted material is that it fit into this setting. So certain things are out - e.g. no warp drive and no humanoid aliens. But you can have a relativistic ship and genetically modified humans (or even animal uplifts), which really amounts to something pretty similiar, with much greater realism to boot.

If you have seen the home page, introduction page, basics, and/or FAQs page, you should have a pretty good idea of the sort of material to submit. You can get further idaes from browsing through the site.

And don't worry about fitting in exactly to every detail of the setting, or about precisely following the time-line; after all, the whole scenario is vast and fluid enough to accommodate many stories and outcomes, and the time-line is currently being updated with a few extra entries.

If you have any other questions, please don't hesitate to contact me if you have any questions.

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