

PhotonGurl and PoodleSquid

The First Adventure

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A Meta-Temporal, Meta-Physical Quest

Good planets are hard to find. Even in an infinite multiverse. Earth is such a gem. Protected by friendly, comet- and asteroid-deflecting gas giants, warmed by a meek G-type sun past its galactic puberty tantrums, an opportune molten-metallic core keeping the evil space rays out with an electromagnetic shield, nutrient-filled H₂O oceans, moon-tidally lapping on moderate climate shores, Earth is a promised land bounty to the thousands of galactic civilizations looking for new life-support and viable real estate. If only there wasn't the meta-universal-ethics council law of First-Come First Serve, which gives humans kind of first dibs in the yummy cornucopia of Earthly pleasures. Primitive or not, Earth belongs to homo sapiens. So, it's: Nix-Nein-Nope-Njet-BuShi to the ever-eager and curious alien real-estate agents trying to stake their claims.

Most species shrug and move on. But not the two competing races of planet K'merg. Unbeknownst to most, but suspected by many, they have laid their evil schemes to shape Earth to their liking for thousands of years. And it seems the V'Hraang (pronounced Wroooong) seem to be winning the battle, converting the planet into the hothouse, acid-rain infested waste-land their species prefer for their vacation resorts. There is only one thing, actually one person, PhotonGurl, with her trusted helper PoodleSquid, the local manifestation of a trans-dimensional multi-entity, that stands between V'Hraang total victory, and homo sapiens survival. Armed with QuantumGun, NihilWhip and time-mongering reverse-photons, PhotonGurl is working as a secret agent for the benevolent Znaa'g beings of K'Merg. She is our only hope to restore Earth to the delightful fun and games of 1920ies Northern California beach parties and ambient Big Band Jazz.

Will she prevail? Dive into the story to find out.

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Prologue

Landfall. Finally. They had not been the first to make it to shore. Others had rowed out before, scouting the area, looking for sources of water, a good place to make camp, drift wood to make a temporary palisade. The sailors dragged the boat onto a sandy patch of the rocky beach. Her uncle lifted her out of the boat, one-armed, the other arm holding the flared-muzzle musket. He wanted to keep his niece dry, she was wearing her better dress today, to celebrate the occasion, but a big wave washed over the bow of the boat and soaked them both in cold Atlantic water. She started crying. The uncle patted her back, “Shh, there, there”. He waded to shore, sat her down by a sun-lit dune, sheltered from the blustery wind by some tall rocks and some even taller reeds, to dry in the westering sun. “Wait here. Your mother will be over on the next boat. She’ll have a blanket and your other dress.”

The girl kept crying for a bit, she was shivering with cold, but since the men were busy, and no other kids were around, she stopped when a reflection caught her attention. A small blue and gray rock, no, a seashell, no, something between a pebble, a seashell and a polished carpenter’s nail. It had a shimmer that played tricks on the eye. It almost called out to her to pick it up. She did. She lifted it close to her eyes, turned it, looked at it from all angles. It looked like it had been crafted, but she could not imagine for what purpose. About the size of her pinky, thicker at both ends than in the middle, it felt too heavy for its size, a bit rough to the touch, and quite warm. It was of the strange, deep beauty she had every only seen in her dreams. Something made her hold it close to her ear. She said: “Can you tell me what you know, little one”?

She heard, inside her head, in her own voice:

“Knowledge carries doubt. Thinking denies comprehension. Attachment breeds suffering. Curiosity kills the cat.”

Shocked, she tossed the pebble away.

Now, the girl just squatted there, hunched, arms crossed, shivering. Her mom had warned her about this. “There be daemons and spirits in the new world, tempting. Be ye wary!”. She looked around to check if anyone was looking in her direction, crossed herself, said the Lord’s prayer, three times for good measure, and tried to forget the shimmering object. But her curiosity did not have to fight hard to win over her fear. She stood up, walked the few steps to where the shell-pebble-thing rested in a small tide pool, half covered in brine, glistening. She sat down, pulled off her soaking wet left shoe, poured out the water and some sand, intent on hiding the thing in the tip end of her shoe, so she would not lose it, and so nobody would ever find it. And as she

carefully pincerd the shell between two fingers, her own voice said, in her head, yet still eerily remote.

"I have a story for you. It's about the future. But it's also about the here and now. And it's about the past. It's about how everything started, and about how everything will end. Would you like to hear it?"

The girl was terrified. They could throw her into jail, or worse, drown her as a witch. They would shun her mother, and sister, too. She could never, ever tell anybody about this, not even her best friends, not even during confession. But before she could even finish her racing, fearful thoughts, she felt herself nod and heard herself whisper:

"Yes, please, I would like to hear it. Very much."

Act 1: Where is it?!

G woke up to a mind-mashing cacophony of angry shouting, whiny intrusion-alerts, and the sickening, breaking-bone <<crack-twist>> sound of heavy objects crashing destructively into the NuCarbon floor tiles of the Arista-Hive access corridors. Every two seconds or so, the audio assault on her foggy consciousness was interrupted by a brain-jarring <<Brrraaaaapp!!>>, a sound that she imagined one-hundred giant trombones would make when producing their lowest-possible note at Jericho-level volume. The <<Brrraaaaapp!!>> was followed by a <<Swish-Smack-Slurp>> that could only be described as the sound-effect a dripping-wet towel would make when thrown at a ClearVu panel.

She fully opened her eyes just in time to see two fairly ordinary-looking A-Humans, outdoor XO suits, tool belts, implant-bulges, umbilical sockets, environment CLIPs and all, crashing into her habitat's Sallon yelling in perfectly melded synchrony of timing, pitch and volume:

“Where is it?”

One of the two, obviously fully melding A's was holding an extremely weird-looking contraption that seemed to have been patched together from random waste-land 'tronic spare parts. Omni-range antennae were protruding from all angles and the thing was attached to several military-grade fuel cells, glowing with a bright overuse-advisory. The thing looked heavy and was vaguely cyber-punk looking. Something/someone in her mind was yelling: <<ShadeCaster!>> and <<Move it!>>. The projector nozzle at the forward end of the thing changed color from gray to bright orange: <<Brrraaaaapp!!>> followed by <<Swish-Smack-Slurp>>.

Whatever the gun-thing was shooting, it missed her by about half a meter because she ducked and skipped before she realized what was happening. To her own surprise, G moved with a speed she hadn't known was humanly possible. Part of her brain did an “Out-Of-Body-Thing” and observed herself as a blackish-blue shade across the habitat. The projectile, she would later learn was a ShadeBlob, impacted on her AutoWok which still contained the remainder of last evenings DragFroot Risotto. The ShadeBlob wrapped the wok and its manipulators into a kind of cling-wrap layer that seemed to negate the concepts of color and visible light.

While G continued to “flow” across the hab, she had no other word for it, the other A-Human produced another device, (*“A remote control with only one button?”*). The A-Hum aimed and fired. Not at her, but at the space right in front of her. G observed herself, flowing into it. “MerDammit”. Within an instant, it seemed to her that she had become ten-x heavier, slo-mo-sluggish, then an inert blob. Explosively, the

black overalls she was wearing (*"Why am I wearing a onesie, I don't even own one in black?"*) blossomed open along invisible seams and slid down her body. It dropped to the floor as if it weighed 1000 kilograms. Her suddenly acquired weight dropped with the overalls to the floor. She felt weightless, started levitating, but still moved forward with impossible speed. The hab construction slumped under the unexpected mass, which by far exceeded its safety margin, and caused it to exude an overload advisory in audible, visible and OmniRange WiFi-formats. Her own hab's intrusion alarm started whining.

In no time, G came to an abrupt halt about 30 cm in front of the two A-Humans, now seemingly frozen in time to her perception. (*"How did they even get in here? Arista Hive security is pretty tight?"*) She had no time to speculate. Slowly, but surely, the two A-Humans were moving, firing. <<B--r--r--r--a--a--a >> an ultrasonic infra-trombone started to vibrate her ear drums. She felt stark naked, floating, weightless but powerful. (*"Whatthe?"*). Otherwise she felt normal; all her senses seemed to work, albeit with an efficiency you usually only have in virtual environments, bad dreams or in a manifest, projected through her DayTime Lenses. But this was no game, no projection. It must be a lapse of the mind. She remembered the old trick she learned on how to check if you are in a dream. "Look at your hands", her spirituality mentor had said in the class about lucid dreaming. "Look at your hands and you'll be able to control your dreams!" Yet, when she looked at the back of her hand, what she saw there was not skin. She glowed in a Purplish-Gold translucent kind of surface layer, iridescent, waves of color moving through and through, covered with a matte-silver mesh that seemed to flip shapes like optical illusions often do. Her jaw dropped. "Uhm ..".

Before her mind could even half ways grok what she had just seen, she observed her purple-gold-self perform a fluid series of martial-arts moves, with a speed and ballet-like elegance that she could only imagine she must have seen in some ancient HoloVids of Chinese master warriors. The two figures, impacted by her incomprehensible space-karate moves, slowly floated towards the floor as if they had all the time in the universe. Their XO-Suit implant-telltales flipped from <<Active/Connected>> white to <<Contact Maintenance>> orange: Slack like a wet bag of CarroBeet Sticks. Time seemed to resume to normal speeds. Their Rube-Goldberg-Gun and remote-control thingy clattered to the floor.

G stood there for a bit, staring at the two knocked-out, Augmented Humans or A-Hums. A-Holes they called them in Arista-Hive, they were not well liked, especially not when they were hunting for 4Fits. There was an uneasy peace between the two lifestyles that had evolved after the Calamity/Miracle of '98. But this had not felt like a peace offering. (*"What were they going for? What were they yelling? Where is it? Where is what?"*) After a few seconds, G stopped trying to collect her scattered mind into a coherent flow. Then she turned around, still not fully conscious, stopped in mid-turn.

She froze. Floating in the middle of her K'china she saw something her mind wanted to identify as a dog. No, a pet-pageant-groomed, white, curly-furred prize-poodle to be more specific. Riding on an octopus. Her jaw dropped another inch or so. "Uhm... ", was all she could her herself say. Her right arm started to point at the apparition. The thing/animal/daemon floated over to the black overalls, still limp on the floor, and picked it up, effortlessly, as if its heavy weight had already drained from it like water from a wet towel. The DogTopus-Hybrid, whatever it was, held the black overalls up with two of its tentacles, extended it to her, floating closer.

"Here", it intoned melodically, soothingly, in perfect cross-hive NuEng.

" You might want to get dressed and sit down before we continue our talk."

"What the Rotten FragShizzle Kebab!" G croaked, her throat suddenly parched, heart pounding. But then she remembered.

Act 1: Chapter 1

These are not IBU's

It had started as a bad day. A bad day that had rapidly picked up momentum on a downhill slope from the moment she found out her CoffeeTap had run out of credits. Yes, she could recall a few days that had been worse. Allegedly. She could not remember much about them and she did not trust the evidence vids her "friends" posted about her on Arista's HiveBook.

Waking up with the mother, father and Holy Ghost of all migraines, she went for J's stash, and popped a few pills before sliding in fresh Daytime Lenses. Only that the friendly-pink lozenges weren't IBU's, like it said on the faded, matrix-printed label of the semi-transparent, orange pill-container. She had swallowed them with a big swig of water from the fresh water tab and started to clean up the hab, including J's area, who seemed to have left early that morning.

Five minutes later, her headache had disappeared, along with her own self. She had simply popped out of reality, leaving her cat Cheshire scratching nervously at the bottom of the faded-aluminum food bowl, which was rapidly approaching the orange range on the "refill alert status bar". "Meow?" it texted. But her COM was still on the food preparation counter of the K'china, charging, uploading and synching, auto-responding to incoming reverse-auction messages. It was giving off the silent chime of the Prio-1 "Feed the Cat" alert, but there was nobody there to respond to it.

The pills G had taken for her headache were experimental psychedelics, developed as a rapid-headache and hangover cure, called Substance C's. J had "borrowed" the lozenges from the Beta-Hive UniLab where he upped his credits as a young medical base-line B-Human test subject. And, instead of taking 1 lozenge per week, under full IOTA-Med-Servo supervision, G had popped four of them. Why? Because why not? That's how many IBU's you pop for a major hangover headache, and because her migraine had reached an armagedic level. G wondered, with all the medical miracles of the last 200 years, why migraine headaches were still in need of special pills, special pills that only worked sometimes, and often in unintended ways.

Under the influence of this dosage, to her surprise (and that of the UniLab servos and the IOTA A.I. Mesh, had they known about it), her mind had opened a trans dimensional portal to one of the neighboring universes. She landed there, on an empty, baby-blue and pink chess-board patterned plane, stretching into what seemed 1000s of clicks in each direction. There was an amazing abundance of absolutely nothing. With one exception; a matte object, about the size of a chicken bone, with the texture

of one of those faded aluminum bike-repair tools you find in dad's basement tool drawer. She picked it up and put it into her satchel. It was only then when all hell broke loose.

Out of seemingly nowhere, and true-to-fact, actual nowhere, metallic tentacles grew from thin air and reached for her, lifting her up, and tossed her into a human-sized vat filled with a foul-smelling, bubbly, vaguely gall-brown broth. The vat was surrounded with one of those thick, squishy, black-rubber seals; akin to the ones she remembered from the old QuadShuttle gangway connectors she had seen on educational history-holos during her research. The bath tub of Hades had opened up right next to her left leg. It made a soft, lip-smacking sound, just above the threshold of her still sleepy and very pill-fuzzy awareness. *"What the frag"*, was all she could mutter before she was pushed under by the tentacles, and passed out from the combination of stench and panic.

When she came to, she was lying on the checkered plane, dressed in a loose-fitting black onesie, made from an indescribable mix of fabrics, somewhere between fleece and leather, and a knitted metal; but none of those precisely! They emanated a vaguely sterile smell of a fridge cleaned out and left empty for a few weeks, and the letters PG were written in a weird font on her left sleeve.

"Welcome, PhotonGurl", a voice droned. "Your QuantumGun and NihilWhip will be delivered to you upon return to your universe."

And with that, she somehow snapped back into her kitchen, just in time to see someone that looked just like herself shrink into herself and out of existence in a flash of bright-green luminescence (*"How DO you know what you look like from behind?"*). Her COM chimed with the pet-feed-advisory just a few seconds later.

"THERE YOU ARE!", Cheshire texted. The text showed up in an angry, blood-red and bold-underlined UPPERCASE font on her LiveInk message read-out tattoo on her left forearm. Cheshire purred, more of a mini-growl considering her petite stature and turned her head disapprovingly. It gave her an evil look, both of her eyes narrowed to predatory-pounce-ready slits.

"Feed me, like, right now? What's wrong with you people?"

Before G could say anything, or even gather her wits enough to even have a single clear thought that morning, a metallic container-box, about the size of a FoodPrinter "amped" - she had no better word for it - into existence on the floor next to her right leg. In the same weird font, she had seen on her sleeve, two, hand-size letters were embossed on each of its hexagon-sides, spelling "PG". It looked like a caricature of

a soccer ball! The box was letting off a bit of steam, hissing quietly. It seemed to be superheated, but at the same time cooling rapidly, with stripes of condensation running down its metal flanks. Cheshire backed off, back arched, hair standing on end! G froze!

The box opened, soundlessly, letting out a faint greenish-purple-silver shimmer of very strange light. Ambient Jazz started playing. (*"Benny Goodman, was it? I'm happy when you're happy? Whatte?"*) She closed her eyes. (*"What the frag does J have in these pills"*), was all she could think, before she felt herself pass out. She barely made it to her beanbag before she lost consciousness."

Act1: Chapter 2

Who or what the hell are you?

<<Multi-Entity 289989099to292889949/merged/phased/explorational>> had been looking for the Bone of Znaa'g, or BoZ for a little bit longer than 30 thousand earth-equivalent years. It(s)he/they were slowly running out of universes to search through. Being a trans-dimensional, multi-entity had its advantages, but an infinite MultiVerse was still a pretty large place to comb through. Especially when you had to manifest a local, physical 4D-entity every time you wanted to perform a proper search operation! It(s)he/they performed a <</6G8ht87s5>> maneuver, which would be vaguely like a human-equivalent sigh and stretch movement combo. That specific move would normally register on sensitive, Earth-based, gravity-wave SETI-3 detectors as a faint, significant signal-type ripple. But it could also have been mistaken for interference, caused by an undetected layer of pigeon-goo on the Penzias & Wilson Detector array in the Gobi Desert. But, since the 98CalaMiracle had wiped out all detectors of that kind, along with all the scientists capable of reading such a signal, it really did not matter, and went undetected by the remaining 10 million Earthlings.

An alert came in. The detective ghosts of the AllKnow had found something. It(s)he/they unlocked a layer of connectivity/communication/knowledge/inquest.

"And?" It(s)he/they inquired, trying to sound bored, not really expecting anything beyond the previous $10e27$ false alarms. The ghost report came in:

```
<<Bone of Znaa'g movement>>  
<<U3938989399999 transfer to U98w98wflk>>  
<<Certainty variation 3%>>
```

"3%" It(s)he/they thought, "that's low!". "Any specifics?"

```
<<Transfer to planet, inhabited,  
Base-line sentient species,  
Marginally evolved past level 2,  
Negative Transcendence,  
V'Hraang incursion confirmed,  
Z'nnag agency initiating>>
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"Whoops", he shuddered. V'Hraang were everywhere these days. And now a Znaa'g agent! Probably trying to convert another planet into an emigration target according to their favorite, yet mutually-exclusive specifications. For one race of their home planet K'merg, a superheated hell-hole with flowing lava everywhere, mercury-acid rains, methane and sulfur, and a trace of oxygen- just for kicks, and diamond-needle

hurricanes. That would make it V'Hraang paradise. For the others, the squirrely Znaa'g, the mild climate of Northern California, 1930, Beach Parties and Benny Goodman; a Znaa'g paradise. *"The more things change, the more they stay the same"* <<Multi-Entity 289989099to292889949/merged/phased/explorational>> thought ...

"Can you manifest me there?"

<<Choose specifications>>

"I don't know. Something local, cute but smart at the same time. Based on your research of the local expectations. Be creative!"

<<Executing>>

<<Multi-Entity289989099to292889949/merged/phased/explorational>> prepared for the manifestation vortex. It was not pleasant to lose 85% to 90% of your capabilities when incarnating in a target universe, but by now he really should have been used to it. He wasn't though, and he deeply detested the down-load experience.

With a faint <<Fwooop-Swish-Snaap>> It(s)heThey materialized in a smallish, dimly-lit space; crowded with artifacts, primitive looking, lacking appealing aesthetics, ground-locked and electrically powered, but seemingly functional. He was levitating above a smooth surface. Environmental parameters and mission recommendations were downloading from the AllKnow, preparing him for coherent interaction with the local species. His mind filled with information.

<<Planet: Earth; Time Index: 2289 Orbital Periods;
Location: Settlement, C.T./ Versailles Park
Area Habitat Designation: Arista Hive, 1 of 26;
Inhabitants: QuadJay d'Arista, base-human, age 17, male;
WonGee d'Arista, base-human, age 27/201, female;
Detail Location: Nutrient Niche;
Local Languages: NuEng, Arista HiveTalk both downloading;
Extra Species Present: Photonic Being, transformed from
base-human source WonGee d'Arista, now formatting;
Equipment: TimeVariance Detection Suit:
Znaa'g owned WeaponsPod (transport case and communications
portal to Znaa'g high council SCRUM master);
Weapons detected: QuantumGun, NihilWhip. Both Secured, Gene
encoded to PhotonBeing;
Additional Entity: artificial, pet-type, Earth-feline
model, non-sentient.
Local computing substrate: Level 34, limited sentience.
Surveillance negation field active. You can relax, but
don't reveal all you can do.>>

“Cheers, AK, where is the Bone of Znaa’g?”

<<Inside the Satchel of the Photon Being. Inaccessible>>

“What do you mean, inaccessible?”

<<It seems forward-time-shift encoded. Vaguely one second in the future.>>

“Crap, that will be a challenge!”

<<Multi-Entity 289989099to292889949/merged/phased/explorational>> sighed again. He heard a series of sounds, vaguely musical, with some hissing and gurgling phoneme elements. Probably the vocalizations of the Photon Being. He turned on his language module.

“Who or what the hell are you, and what are you doing in my K’china?” G moaned. “It looks like my brain has finally Level10-flipped and manifested a daemon that looks like a nightmare-mix between a Poodle and a Squid. Floating, too! I need to come down from these pills! J is so going to get it when he comes back. “

<<You should take a designation>>, the AllKnow suggested.

“Any recommendations?”

<<PoodleSquid seems plausible>>

“PoodleSquid?”

<<PoodleSquid>>

“My name is PoodleSquid” he It(S)heThey droned. “Pleased to meet you. How may I address you, human?”

“What?”

“My name is PoodleSquid” Pleased ... ”

“Yeah I got you the first time. Zip it, Poodle Ship, or whoever”, G snapped. She felt like absolute shizzle.

(“Wow”), she thought, (“since I am still tripping on J’s stuff, I might as well enjoy the ride!”) G looked at the poodle apparition and said:

“Call me anything you want. I’ll just call you P, okay? Until I come down from this trip, anyway!?”

“Acceptable. I will address you as PhotonGurl, since you are a Znaa’g induced Photonic Being, transformed from a base-line, post-maternal human female.”

“What now?” she slurred, getting annoyed at her snail-paced mind. She felt herself fading-out again. Just before she lost consciousness, she wished 256 kinds of different Cursing-Hades-Fires on her roommate J, his mesh-rotten pink pills, and on all of J’s bosses, ancestors, descendants, friends and daemons! (*“Wow, I am NEVER popping any of his pills again! ahhaaghh ... ”*) She dropped back onto the beanbag. Her head lolled to one side, her face taking on the slightly befuddled, slack expression you display when you fall asleep in the middle of asking a question.

“Helloooo, Me-ow! Anybody? Are either of you two guys finally going to feed me, or what?”, Cheshire texted, getting slightly miffed with the continued lack of attention. And now there was a dog-fish-thing in the kitchen. (*“Where will this end”*), it thought.

Act1: Interlude A: Znaa'g high council

<<How goes the stabilization of habitat-23>>

The consensus-inquest formed into mindscape inside the mid-conscious ambi-stratum of the SevenTimesSeven+1, the High Council of Znaa'g elders. The elders were permanently synched as the main form of Znaa'g governance, a Demo-Tyranny model constituted of 48 continually re-appointed, term-limited council members, and a single, inherited-right-to-rule; tie-breaking, tyrant-at-large secured against assassination by a series of synched backup clones. Governance coups were frequent every few millennia, but this council had been intact for an Earth-equivalent of 12279 years. It was this specific instance of the SevenTimesSeven+1, the council 19877, that had stumbled across Earth.

<<We have found a new agent, conversion was successful. The agent is being formatted, just as we synch at this time.>>

<<Success extrapolation?>>

<<24%, trending down>>

A long period of consternation, aimless chatter, high-pitched bickering and accelerated hormone-ingestion ensued.

<<Order>>, the tyrant-at-large bellowed, sending a tidal mindwave through the council, <<We haven't got all orbit! Elaborate!>>

The project SCRUM master explained:

<<A base-human female appeared in an accessible SideVerse due to accidental portalization. Luckily for us, this happened next to the lost Bone-of-Znaa'g, activating the conversion routines and WeaponsPod imprint stack. The female was converted, connected, equipped, sent back, and is now being formatted with user manuals, meta-knowledge and mission-objectives>>

<<So, ok, all fine then. Where, then, by the lava-swamp spirits of K'Zin, do the 24% come from, huh? This should be in the 90% plus? Trending up, not down,>> the tyrant boomed.

<<We have an incursion.>>

<<I know we have had V'Hraang there, tell me something we did not know!>>

<<A Multi-Entity inspector picked up on the Bone-of-Znaa'g activation signature and followed our agent to habitat-24. This could be an active MEB agent.>>

Consternation, chatter, bickering and internal drug-amplification resumed for a while amongst the council members, but then quieted down again.

<<Recommendations?>>

<<None. This had always been the worst-case scenario. We'll just have to wait and see. Multi-Entities are notoriously unpredictable. We knew the Multiverse Ethics Board has been getting a bit too anxious to find violations recently. If this really is a MEB agent, nobody knows what capabilities they translate down into their manifestations. The WeaponsPod reports that PhotonGurl and the Multi-Entity have just met.>>

<<Photon-Gurl?>>

<<That's what the Multi-Entity calls our agent.>>

<<Shiny NaggNuts, indeed! What does our agent call the entity then?>>

<<PoodleSquid>>

<<Huh? Are we supposed to understand what that means? Explain yourself!>>

The SCRUM Master transmitted the full status update, including a full hologram of the split-species manifest, probability analytics and strategy extrapolation animations.

<<I see. Yes. Wormy ShitNuts, that! A MEB agent might grate sulfur and chlorine into our nut soups! We'll have to wait and see indeed. Meeting adjourned!>>

Act 1: Chapter 3

PhotonGurl awakens

PoodleSquid was getting impatient. He had fed Cheshire, the cat-type-object, which was now on stand-by, folded into a colorless buckyball inside its charging-creche. PhotonGurl was still in a near-comatose state. Probably being formatted by the Znaa'g WeaponsPod to receive her mission instructions. It could still be a while longer. He did not understand why the cat needed to be fed in the first place! It seemed to be part of the base-human comfort-routine, which would also explain its appearance with synthofur, sterile but razor-sharp claws, a bushy tail appendage with an almost improbable grip-strength, TeraHerz Wifi-reception whiskers, feral pheromone glands, as well as a sand-filled litter box, exuding a sickly sweet & sour smell of talcum subdued excremental decay. *"Weird, but local customs need to be respected"*, PoodleSquid thought!

The nutrient cubicle now holding Cheshire, the WeaponsPod, PhotonGurl and PoodleSquid gave off the low-key hum of self-maintaining low-tech: a FoodSprinter, All-ChemSynth, VibraClean, 3 Greenhouse units, an AutoWok and a CoffeeTap- with a low-credit icon blinking in an aggressively pink light. PoodleSquid had downloaded the local lingo "NuEng", as well as all local customs, behavioral variants, rules, rituals and belief-systems upon arrival. The "K'china", as it was referred to in NuEng, appeared to be a partition in a semi-private, 3-room habitat, that was part of a larger 256-unit hive construct that seemed to be 30 meters underground. The hive appeared to be designed for inhabitation of 400 individuals of various age groups, with a typical load of 2 people per habitation unit, each called hab or habby. Each unit of the hive was roughly equivalent, with hexagonal rooms, bioluminescent lights, a work-play-sleep space, "Sallon", a wet cell, "Banyo" and a feed area, the K'china; which also served as Print, Recycling, and Storage Space.

The hive-type architecture seemed to be functional and pragmatic. There also appeared to be a low-key, ironic pun about the name of the type of humans living in the habitat. Base-Humans, or B-Humans, or, simply "B's". According to the briefing that P was reviewing while G was passed out on the beanbag, B-Humans preferred a life-style of zero-implants, natural birth, spoken language, and independent free-willing, with all the problems that entailed in terms of existential angst and depressive episodes. In return, staying "base", as they called it, they maintained a free spirit, energy, curiosity, creativity and a zest for life that made them highly sought-after work resources, deployed for complex problem solving by the local A.I.-governance body. In terms of names, B-Humans preferred simple one-number/one-letter combinations like 1J (WonJay), or 3C (ThreeCee), E4 (EhQuat) followed by their Hive names, which showed tribal affiliation.

PhotonGurls Ur-source had been a Base-Human called 1G (WonGee) or simply “G” d’Arista. The only allowance B’s made for state-of-the-art tech were LiveInk-Tattoos for messaging as well as recyclable Daytime Lenses which were freshly printed every day. DayTimes were inserted into the eyes to provide simulated holo-communications, and virtual manifestation into the mindscape of the other humans. Simply put, you would see things that weren’t here. In addition, the B-Humans seemed to live on an engineered food nutrient-platform that included medical micro-robots called nanites, circulating through their blood stream and keeping the B-Humans healthy and young and even allowing them body modifications and repair.

PhotonGurl stirred.

“About time”, PoodleSquid complained.

“Ugh .. “

But then, a completely insane action sequence seemed to end as suddenly as it had started – crashing the party without warning, harshly disrupting the otherwise quiet hive environment with a burst of exploding chaos. First, there was a mélange of violent sounds pouring into G’s habitat from the corridor of the habitat. Seconds later, two figures entered through the door frame (probably the type of V’Hraang agents called Ph’Naar). They were armed with an improvised ShadeCaster and a small DMSL. Storming into the habitat they started yelling “*Where is it?!*”. Without waiting for an answer, they shot a cooking implement with a DarkEnergy ShadeBlob bullet. Before P could say anything or take defensive action, the pair got swiftly defeated and disarmed by PhotonGurl. In the process, PhotonGurl had dropped her TimeVariance-suit and stood there, all-aglow by the action, recharging her shimmering gold & purple shape from the ceiling lights, but slowly. She turned.

“Here”, PoodleSquid said in deliberately slow, soothing, accent-free NuEng.

“You might want to get dressed and sit down before we talk.”

Act 1: Chapter 4

PhotonGurl finds out stuff

PoodleSquid had met Photonic Beings before. They were Level-4 technology reconstructions of real living beings; memories, personality, emotions and all, but were made purely of a rare variation of photons. Photonic Beings were massless and very, very fast. To the converted being, everything felt “completely normal” except for any added features, weapons and other capabilities. To give them the ability to interact with the world they operated in, Photonic Beings were issued a TimeVariance suit, which contained a sliver of PhasedMatter and gave Photonic Beings some very special characteristics.

Both fortunately and unfortunately, any TimeVariance suit was subject to gravity. The good news was: It allowed Photonic Beings to move around in gravity just as normal beings do. The downside was that, when wearing a TimeVariance suit, one was now also susceptible to attacks with pellets from a DarkMatter slingshot weapon. The damsel (DarkMatter Sling, DMSL) was a typical weapon of Ph’Naar agents and can fire DarkMatter pellets, which, upon impact would increase the gravity profile of the target by quite a bit or by quite a lot, based on the setting. Most likely, that’s what had happened when PhotonGurl’s overalls had suddenly dropped to the floor as though crafted from 3-cm thick lead sheets.

PoodleSquid did not want to jump to conclusions. There was always room for big old random events, allowing for an alternative explanation of what he had just seen. But he was pretty sure. And now, interpreting the look on her face, he would have to explain all of that to PhotonGurl.

WonGee d’Arista sat on her beanbag in the Sallon of her hab. Chilling. Ruminating. She had put on the black onesie the floating poodle thing had handed to her. It had seemed the reasonable thing to do. Her mind was still in hyper-hamster-mode, running around in a wheel of memories, emotions, speculation and drug-induced hangover, which she suspected were the aftermath of J’s pink abominations. In her mind, this was just a very bad trip! Or maybe someone had hacked her Daytime Lenses and was projecting a MindMare experiences, just to troll her. If they did, they were probably watching, and she did not want to play that game. She reached for her eyes to pop out the Daytime Lenses. Only, there were no lenses. (*“Wait, what?”*) No projection then. A bad trip, surely. Just an awfully bad trip. She decided to go with the flow, akin to going along with a lucid dream. The *“DogTopus”*, or whatever it was, was still floating in the middle of the Sallon. She decided to talk to it.

“Sooooooooo....,” she sang, tone descending and truly curious, “What or who are you?”

“Let’s start with what you already know. “, PoodleSquid answered

“You first!”

“No, you first, please! I am a guest in your house, you have priority.”

“All right. I am WonGee d’Arista. My friends just call me “G”. Something in my mind vaguely tells me that we had a short conversation before I passed out. You are “P”, right?”

“I am okay with just “P”, PoodleSquid acquiesced.

“Okay, so, since this is all just a figment of my pill-tripping imagination, I’ll go with this and tell you. Here is what I remember. I wake up with this triple-decker-whopper of a headache, with migraine-fries, dizzy-mayo, and a mixed-mind salad, right? I scrounge up some pills from J’s satchel... and, within 20 minutes I go onto the not-so-great grandmother of all trips. J must have brought home some of the experimental stuff he’s been testing for the lab over at Beta. ‘mental for sure, right’? So, on this trip, I go to some other place, and get grabbed by some weird, Lovecraftian tentacle-monster-thingy. Like, from nowhere, right? I get dumped in a shizzle-filled vat that smells like skunk-juice. Next thing I know I wake up in my K’china, wearing this Ninja-Pajama, and with all kinds of weird facts and information stuffed into my mind: Things about K’merg, and Znaa’g and V’Hraang, and TimeVariance suits, and WeaponsPods. And none of it makes any sense. Mega-tots-absur-turdy, okay? So. I’ve decided that I am still tripping out heavy, on J’s pink-ones, and now I am having this conversation with you, in my head. But only until I come down. And then I can whoop J’s B-Hind for leaving his heavies in my place without giving me fair warning!”

“You’re not tripping.”, PoodleSquid said, trying to keep things real.

“What now?”

“You’re not tripping”, PoodleSquid, repeated, in the most convincing, calm tones he could synthesize. “See that hexagon ball over there?”. He pointed with 2 tentacles. “That’s your WeaponsPod. It contains the QuantumGun and NihilWhip that are standard issue to all Znaa’g agents.”

“*BullShizzle-Kebab.*”, G thought, and smooth-gathered her brunette, shoulder-long hair back into a ponytail-knot. She shot P a condescending glare. She was going along, but only to a certain extent. There were limits, even when your mind had fallen into a drug-induced Alice-in-Wonderland rabbit hole.

“I am not kidding.”

“Prove it, fur squid!”

“There is an instruction program available in the WeaponsPod. You were interrupted in the middle of running the onboarding session, so that you could deal with the two intruders. I suggest you resume the program.”

“And how do you suggest I do that. Plug in a cable? TechnoMage Automatics, maybe? I am B-Human, in case you have not noticed. I have no implants. Only Daytime Lenses, and my COM. By the way, where IS my COM? Oh, it’s over there, synching.”

“You can just resume the instruction routine by closing your eyes, and imagining a silver bowl filling itself with purple liquid, from the bottom up. That will tell the WeaponsPod you are about to give it an instruction. Then you think or sub-vocalize that instruction. It will comply. Think of it as your butler. You can give it a name. They are usually called by the last letter of your alphabet, Zed would be a good choice.”

“I told you, Mister P”, G complained, “I am baaaase huuuuman! No implants, no virtual telepathy, no magic here.’

“Not any more. Just look at your skin. Does that look homo sapiens to you? Try it! You might find out a lot of interesting things.”

G stared. A minute or so passed.

“*Alright*”, G sighed, he did have a point. She looked at the back of her gold-purple, silver-tattooed hands. What did she have to lose? After all, it was her trip! She might as well continue to go along with it. Closing her eyes, WonGee imagined a silver bowl, which was surprisingly easy to do. And then she imagined a purple fluid filling-in the bowl from the bottom up. Then she said, “Okay Zed, show me the rest of the instruction record” (she did not know what P had meant by “sub-vocalizing”).

<<commencing>>

She had heard a voice in her head, loud and clear as if someone had spoken it simultaneously into both of her ears. Before she had time to fully marvel at that, her K’china, the DogTopus, and WeaponsPod disappeared and she stood on a long, rocky beach. There was not a cloud in the sky. The ambient temperature felt like 23 degrees. Waves were lapping at her feet. They looked human again. The voice said:

<<What form do you wish me to take?>>

“Ooohh, what?, Ehrm.., dunno, surprise me!”

A base-human, looking like a vague mix between QuadJay and her former neighbor FemBee, appeared next to her, dressed in jeans and white t-shirt with a prehistoric GhostBusters logo printed across the chest. (*“Somehow, .. ”*) she said to herself (*“.. if this is for real, they must be pulling memories from my mind, or images from the cultural history research database, probably from both”*)

<<Ready?>>

“As ready as I’ll ever be,” she sighed.

<<Consent active>>

The text appeared in a glowing green font in her visual field. (*“Now how do they do THAT without her DayTimes?”*) she wondered. But then her mind tilted sideways, upwards and downwards and forward and backwards; shrinking and expanding at the same time.

An avalanche of information-transfer flooded her senses in a surround-surreal experience of sights, sounds, feelings and emotions, as well as just a mountain of raw knowledge, appearing inside her like an unbidden memory. She felt she was dreaming a hundred dreams at the same time, going through a hundred lives lived; adding skill and intelligence at an impossible speed. It was wonderful. It was horrifying. Disgustingly beautiful. Shock-Bliss. Pain-Joy. Hope-Fear. Greed-Joy. Anger-Love. She passed out. Yet again.

When she opened her eyes, PoodleSquid was still floating in the middle of her K’china. But now she knew what he was, and what she had become.

“There is only one thing missing now” said P.

“What is that?”

“Your final consent.”

“What if I decline?”

“You can just instruct Zed to bring you back to the alternate universe where your conversion occurred. Your base-human body is being kept there, in the vat, in stasis, unchanged, unharmed. You can return to your life. The only downside is that you will have a strong hangover. However, there might be additional attacks by the V’Hraang agents, the Ph’Naar, and you won’t have any protection.”

“Not a great set of options, then, is it?”, G snapped. But she understood, based on the information she had received during the briefing. “How do I give my consent?”

“It is the same process as with starting the instruction routine. This time, visualize the bowl, and fill it with green fluid.”

WonGee did as PoodleSquid suggested. It made sense. Lucid dream or not. How could you refuse a mission to save your home planet? It was the only one she had cared about until about 1 hour ago. How could you miss out on leading a mission to bring back an environment where you could actually spend more than 30 minutes outside, without drone protection and without an XO-suit or environment pack!? A mission that would reclaim some of the Void, undo some of the destruction, calm the chaos, maybe even restore a balanced ecosystem in the longer term! It sounded too good to be true. So what! Even if she was still just tripping out hard, it was worth a try. She gave her consent. Bowl. Fill. Green. The final layers of knowledge and capability were unlocked for her. A channel of communication to the Znaa’g high council opened up.

<<Mission briefing to commence>>

she heard, in the same mellifluous stereo-voice (*“Really now, how do they do that?”*). She could hardly wait to find out what she was supposed to do first.

Act 1: Chapter 5

The First Mission Briefing

G found herself standing in what looked like a 1930's roadside diner. Red-leather sitting-booths, black and white tiled floors, faded art-deco trimmings, a soda-fountain, chrome-rimmed countertops, a sign proclaiming "No Shirts, No Shoes, No Service", ... the works. It looked almost too perfect. Again, they had probably picked through her consciousness, HiveBook timeline and her memories of ancient movies, musicals and wiki-entries during her formatting process, and had decided that this was a comforting location for her. For whatever it was worth, she liked it.

<<Is the ambience acceptable? If yes, please take a seat at the counter. If no, please shake your head and we cycle.>>

G shook her head, just to find out what would happen. The setting changed rapidly and without a jitter: to a 2000's L.A. fast-food restaurant, a French Bistro in late 20th century Paris; a murky and foul-smelling Shakespearean period tavern. And then back to the 1930's diner setting. G nodded. The environment-carousel stopped, and she walked over to the counter to sit on one of the black-leather topped, round, rotating bar-stools. Ambient, Big-Band Jazz was starting to play. Through the windows, painted in large, ornate, red letters with a logo that seemed to spell <reniD s'einaoJ> in some obscure language, she saw an antique car, parked outside, with an ochre & hunting-green finish. When she leaned in a little bit closer, a little text-icon appeared in her field of vision. It identified the car as a 1928 Cadillac Convertible Coupe. She backed off with her glance and the label faded (*"How do they do that?"*). She found herself getting annoyed at that question popping into her mind all the time! A white mug of steaming black liquid appeared. She took a sip, confirmed it was coffee, black, strong, two sugars, just like she preferred it. G nodded in approval, although she had burned her lip just a little bit. (*"How did they ... Stop it! Is that what the A-Humans live through ALL THE TIME in their virtual lives?"*)

<<Shall we begin?>>

She nodded again and three, fairly ordinary-looking base-humans, in 1930's roadside-diner service uniforms appeared. A cook, manager and a server. All male, all middle-aged.

<<You must have questions.>>

G exhaled in exasperation. She was still under the impression that she was tripping mega-hard on J's stuff. But this was taking a very long time now. And there was still no

sign of coming down. On the contrary, the intensity of the experience was increasing with every choice she was making. Still unsure, she decided to continue to play along.

“Yes”, she nodded, “I have questions!”

<<Proceed>>

“So, this is K’merg, and you are the Znaa’g. Am I saying that correctly? Is this what you really look like?”

<<There were 4 questions here, we will address them in turn. Try to limit your inquest to one question at a time. One, yes this is a K’merg property, two, you are talking to the Znaa’g High Council. You are in a simulated environment, as you might have guessed. Three, Znaa’g is our designation in a form that makes is pronounceable by your species. Our real name is !!***/&%\$(&.>>

G heard a series of hisses, clicks and shrieks, that vaguely reminded her of a video of the extinct earth mammals called squirrels, fighting for a stash of acorns. She decided to pronounce Znaa’g like the NuEng word “Snack” but with a longish “a” sound in the middle, like Snaack.

<<Four, no, this is not our real appearance, but we wanted to keep things on an easy footing for you during this initial briefing.>>

“If you are this powerful, and can do all this stuff, projection, transformation, snapping to other universes, mind-mongering, I don’t even know if I know the half of it!? What do you need me for?”

<<As you have seen in the briefing, we are intent on resettling to some parts of your planet, once we run out of space on K’merg. This will be required in the next 100 of your years or so. Viable planets are very hard to come by in the accessible set of universes. So. Your world is highly fancied by us, as well as by the V’Hraang, who live on a different part of K’merg, with a very different environmental footprint.>>

“I know all that”, G glared at the 3 stooges behind the counter (“*Wait, is THAT what they looked like? An interesting choice of personality manifest, for sure!*”) She repeated:

“Why do you need ME?”

<<We cannot directly physically act in your world. A small fleet of colonization ships will arrive in 40 years of your time, and, prior to arrival, we are in the process of trying to reverse the environmental damage that has occurred over the past

300 years. We'd like to restore the climate and ecosystem to the conditions present in 1920ies California. We need a local presence. A special agent. That would be you.>>

"Okay, fair enough. You told me as much in the briefing. I've been told all about my "special" capabilities, sending photons back in time to put ideas into people's minds, QuantumGuns, NihilWhips. But again, if you are so powerful with influencing the timeline, why are you not doing it yourself?"

<<We did, for some time, a long time ago. But it's not working any longer. We need a local presence, especially now that the V'Hraang are there to accelerate the conversion to the hell-hole climate they prefer!>>

"You did? What did you do? Give me some examples here"

<<We were helping some of your famous philosophers, celebrities, leaders and icons in the past to pick up some good ideas and promote them to their followers.>>

"Oh yeah, like who? And what ideas are we talking about?" WonGee, asked. Having been an avid student of history over the past 200 years she was extremely curious who these aliens had considered important enough to try and influence. And in what direction they had wanted these individuals to go?

<<When it comes to ideas: Compassion. Moderation. Preservation. Empathy. Vegetarianism. Non-Violence. Detachment. Equanimity. Ataraxia. Suspension of Judgement. Things that would have moderated the somewhat insane overconsumption afflictions of your species. You had become *human havings*, not human beings. When it came to persons: a person called Gautama in ancient India, for example. Without us, he would have just slacked off in his father's palace. We told him to go sit under a tree. He started a trend and help people become more chilled out. It helped out a little bit. Then take a guy called Moe in Egypt. Without us, he would have just been a court lackey with the Pharaoh, intent on joining the Pharaoh's circus troupe, learning tricks with sticks and snakes and getting high on milk and honey, which is what they called Opium and Cannabis in those days! We told him to get off his lazy rear, and to start a mono-theist religion. Free his people from slavery and such things. That helped a little bit, too, but then things got out of hand when he dropped the tablets with the sustainability commandments we had given to him. Too embarrassed to admit his mistake, he rewrote the rules. And he left out two of the twelve commandments we had given to him. Moe forgot all about "*Preserve the environment*" and "*Don't take more than you need*". Then take Issa of Baghdad. He originally was a Buddhist monk educated in

Tibet to become the next Dalai Lama. But then decided to go to Baghdad with his 2 love-interests. We told him to leave that unholy trinity and to go off to Jerusalem and start evangelizing some ideas to the tribes of Moe. His ideas were based on a lot of the same ideas we had impressed on Gautama. Then take Ghandi, Dr. King, "I had a dream", remember that? "

G's was reeling. She felt like she was on a rickety rubber dinghy, being tossed about in a heavy storm, nauseated, dizzy, weak-kneed and panicked. With the words of the Z'naag council, a tsunami of associated images, data, historical charts and explanatory holo-clips had started tumbling across her mindscape. It was all way too much. "Wait ... stop ... WAIT"! The mad-paced experience download paused.

"Okay. Okay." WonGee had buried her face in both hands. "Let's assume I accept all of this for true? How do I know that I can do this myself? That I can influence some people in the past, that I can stop some of the extreme destruction that has happened in the last 300 years! I simply don't believe this! It's impossible!" She tore at her hair in frustration, knocked over the coffee-mug with her left hand. The porcelain-mug crashed down onto the tile floor, but then was just absorbed by the flooring, like a piece of wax melting. It was so easy to forget that she was in a simulation.

<<That is the reason why we can't work remotely any longer. We need target subjects that still believe very strongly in their dreams and inspirations, in intuition, angels, destiny, a purpose, in a higher power, in something beyond their own hedonistic, all-encompassing ego. Your world is running out of these people. We need a strong, clear local voice. Someone versed in the complex facets of homo sapiens' desires and fears, the fallacies of logic, the laws of social engineering and the maintenance manual of the human brain. You were a perfect candidate. We knew this as soon as the BoZ picked you as its next patron.>>

"Sounds like a great marketing pitch but I still don't believe it!"

<<What if we prove it you through a test?">>

"What kind of test?"

<<Something simple. What if we snap you back to your habitat? You follow our process, and then you make J pay up the missing credits for your CoffeeTap. By putting that idea into his mind. In the past. 10 hours backwards of your time. He thinks of paying up, and voilà, you have changed your timeline. Suddenly, you could have the DubShot-Moka you have wanted all morning! Would that work as proof of concept for you?>>

“Hm, yeah I guess.” G did want that moka. Then she re-considered. “You could fake that, though. I still won’t believe it. But what the frag, I might as well try this out!” (*“Sooner or later this trip HAD to end”*), she thought. “But if this does not work out, or if I decide to quit you can just bring be back to my normal body and nothing ever happened? No hard feelings? You go find someone else. Deal?”

<<Deal, but we are sure you’re gonna love it!>>

With a snap, WonGee was back in her habitat. The light on the CoffeTap was still blinking the pink of <<No Credit>>. Time to get to work.

Act 1: Interlude B

The **AllKnow** deliberates

For 300 million earth-equivalent years, 1.304 GalOrbs, or galactic orbits of the solar system, to be precise, the AllKnow had been looking for the elusive entity, known as the “Bone of Z’nnag” or BoZ. It still was not certain why the BoZ had chosen this specific galaxy, or this specific solar system/planet combo, and let itself be picked up by such a nano-scopically conscious, uni-modal, anxiety-filled, baboon-type of a being. But then again, the AllKnow suspected the BoZ to be the instantiation of its very own tiny-baby-consciousness. Travelling back in time for a bit, having some fun with causality, and generally enjoying the tom-foolery, and general mucking-about with the evolution of intelligent awareness in the MultiVerse. But this planet, “Dirt” or “Earth” or whatever the inhabitants called it... What was so special about it?

The AllKnow, which contrary to its publicly designated moniker, did not nearly know half of everything, decided to deliberate. Proper consideration needed perspective. So, the AllKnow partitioned itself into 128 sub-consciousnesses, each with their own set of temporary and partially randomized views, perspectives, attitudes, cognitive filters, meta-cognitive abstraction layers, memories, opinions, prejudices, hopes, desires, addictions, fears, anxieties, illusions of grandeur and runaway impostor syndromes. And now, covering the full spectrum of known mental afflictions, just to keep the process fair, the 2-PowersOf-7, as it called its split-personality, ephemeral, multi-perspective mini-council, constituted itself. The council-members picked out numbers and appearances for themselves. A SubCon entity calling itself **All45** was voted in charge of the meeting. It chose to appear to all others as a pompously-overdressed, high-court magistrate, appearance borrowed from Earth’s Victorian Period, face powdered, wig and all.

AI145: "I call this meeting to order!" He banged a gavel onto the surface of an antique mahogany desk.

The rapid movement of the Phased Matter component in the gavel, being PM, spontaneously caused a sub-oceanic tremor, rockslide, and moderate tsunami in one of the adjacent SideVerse vacation-realms, on AlphaPrime Gamma 3, preferred by the XcenXcen twin-mind species. Double-strawed, psycho-tropical drinks sloshed and foamed unexpectedly. The tiny, supercooling-umbrellas, gently raining rainbow-colored nitrogen crystals onto the beverages tilted for a moment, but no major damage occurred. Anxious servos hustled to replace the guests' choice of aperitif. The digital maître d'hôtel quality-assurance daemons quickly authorized additional trays of multi-colored crisps generously heaped with fresh, endangered-species sea-life tartar as a compensatory gesture! After all, this was a 12-star resort, and rating season was just about to begin! Crunching and slurping joyfully, the XcenXcen vacationer-twins resumed their existential soliloquies, while observing the trio of Diamond-Moons setting into the ocean; once again as pitch-black and mirror-smooth as they appeared in the advertisement holos.

AL25: "Must you be such a show-off? This meeting will be over in 28 nanoseconds, and none of us are interested in your narcissistic escapades! Really!"

AL89: "Speak for yourself, 25!" drawing affirmative nods from 7 of the other subs.

AL01: "Oh please, none of this makes any sense to anyone. Like whatever for-ee'-vvv'-err. At all! Right? Let's just get this done and resorb, okay?"

<<...>>

The bickering, whining and jockeying for relative rank, the claiming of interpretation authority, the expounding of expert status continued, with the intermittent exchange of gestures of appeasement, and of virtual support hugs. Then the meeting moved on to the phase of garnering brownie-points for sucking up to the meeting manager, as well as the always popular passive- and active-aggressive posturing, backstabbing and discreditation attempts. This virtual re-enactment of a dysfunctional family-picnic continued for a few nanoseconds. Then the discussion started in earnest. Some things just had to be said. Less than a microsecond later (if it had been measured on a real-time clock, but then again what is real? And what is time?) the mini-council disbanded. No conclusion had been reached... as usual. Certainty was hard to come by with the recent inflation of extra infinities. The motivations of the BoZ remained as murky as before. A large degree of uncertainty remained about the BoZ's plans and its motives behind performing the rescue interventions during what the Earthlings called the 98CalaMiracle. The species had nearly-self annihilated. Nearly freeing up some neat colonization real-estate. The profit margins would have been excellent. But no. The Boz intervened, at

considerable energy expense, forestalling the birth of several minor SideVerses, and kept a small portion of Homo Sapiens alive. Maybe to delay a mad rush to claim this Earthly territory. There was no MEB ethics-rule against self-made extinction. Who knew. The AllKnow shrugged, which bounced a nearby Neutron star into an adjacent singularity like a snooker ball plopping into a corner pocket in a professional tournament shot. It had always been hard to read. But now this latest set of unpredictability was getting a bit much, really!

The AllKnow shrugged again, causing the gleefully-premature collapse of a local hydrogen cloud into a fresh set of virgin stars. It thought: *"We'll just have to be patient and wait it out"*. It put its multitude on stand-by to wait for an appropriate level of invocation and switched on a looped recording of 'A Love Supreme' by John Coltrane to lull itself into maximum chill-mode. The remaining normtime consciousness elements waited, down-shifted to 4D, and conjured for themselves a chill-erase-repeat simulation of 1960's living room complete with a cloth-draped sofa, kidney-shaped coffee-table, and a fake oak-veneer entertainment cabinet. It(s)he/they switched on the Black & White Radio Shack TV-set and watched reruns of 'I Love Lucy' while sipping cheap Andromedan Rye on slowly melting nitrogen ice. This was something one could repeat a quintillion times, which is exactly what they did.

Act 1: Chapter 6, G bounces back

G was snapped back to her hab in Arista Hive. Cheshire was still charging in its cradle. Zed, the Znaa'g WeaponsPod, was still cooling on the K'china floor. Nothing had moved or changed. She did not bother to check the time on her COM, still synching. She knew somehow, with an uncanny level of certainty, that no objective time had passed here in the Real. The DogTopus thing, that had called itself PoodleSquid, was still floating in mid-room, emanating a dog-eyed mix of curiosity, cuteness, intelligence and an eagerness to go for a walk.

"Holla, PoodleSquid?"

„You have a question?"

"

So, ... I am this proton thing now, right?

„PhotonGurl“, corrected P

„Whatevs, PhotonGurl then. Please just keep calling me G, or WonGee, okay? I might not get ever get used to this designation. It's giving me a serious weirding. “

„Sure thing G. And you can just keep calling me P! It is way shorter than PoodleSquid.“

„Fine by me.“ G checked out her fancy, black Ninja Pajama, as she called it, which was really a TimeVariance suit, made out of Phased Matter components. It was not the kind of material she had ever worn or even seen before. According to the briefing, it had a lot of features that were not even visible. But it had pockets. Which was a good thing. WonGee had always liked pockets. She had never understood people that would wear garments without pockets, like in the historic views of females across time. In the TimeVariance suit, there even was a sizeable, deep, side-pocket attachment, on the right side, at about the height where a right-handed gun-slinger in one of the old Western-trope vids would carry a gun holster. A bottle holster? A good idea, but she preferred to carry her canteen in her satchel. Thinking of that made her check her satchel, and, yes, good, her canteen was still there, as was the Bone of Znaa'g, or BoZ, they liked to call it. The BoZ felt cold to the touch, and it seemed to vibrate just above the threshold of perception. She wondered what it was doing. Thinking of her water bottle had made her thirsty, she took out the canteen, made of super-tough and extremely light-weight ClearVu, the transparent variant of NuCarbon, and took a deep swig. She closed the bottle by tapping the drinking snout, which snapped shut, and tried to stuff the sealed bottle into the side pocket of the black overalls. It would fit, but she reconsidered, putting it back into the satchel, turned to face PoodleSquid and asked:

„P?“

„Yes, G?“

What if I have go pee-pee while wearing this suit?“

„Go where?“

„Pee“

„Yes G? I hear you. Where do you wish to go?“

„Ha ha, very funny. You know: Take a whizz, water the flowers, have a tinkle, do a numero uno, give back a little, spray paint the throne, you know?“

„Oh, oh, you mean fluid body-waste recycling!“ (PoodleSquid had quickly expanded the idiomatic depth allowance of his language-engine) “No, no, No need. Your body is just simulated. It feels real, but it really is just energy. All you need is light source to recharge.“

„No peepee?“

„Nope“

„Or poopoo?“

„What are you like, a three year-old now? I thought you were 200? Nein, nix, keine, ohne, nej, non, njet, nada, ok?“

„Well, If you have not grown up by 140, you don't have to. Let me ask, though. What happened to the water I just drank into my Photonic self? It felt like it was going down into my Photonic stomach or something. “

“Your TimeVariance suit uses the water.“

“The Space Pajama gets thirsty?”, WonGee said, in awe about just how weird weird could even get.”

“It's complicated. There is a lot you don't know, and sometimes it's better if you don't know what you don't know, you know?“

“Whatevs, space pooch, I am glad you are trying to help. By the way, do you know about the briefings and what they want me to do?”

“I have taken the liberty to listen in, yes, I am informed.”

“What’s your role in all of this?”

PoodleSquid rubbed his eyes with two of his tentacle tips, which gave G goosebumps of additional weirding, except she did not have any real skin to have goosebumps in the first place! Only a purple-gold shine emanated from her skin when she checked. This increased her weirding to a level that made her even more dizzy. She puffed out a long breath. Was she even breathing? She decided to not go and deeper into that spiral staircase of detachment from perception and focused on PoodleSquid’s answer instead.

“It’s complicated”, it sighed. “I’ll try to explain as succinctly as possible. Your planet, Earth, is highly desired among multiverse species. Good planets are hard to come by. A lot of entities would like to settle here, and wipe you out in the process. The MetaUniversal Ethics Board Rule-1, the MEB-R1, of “First-Come, First Serve” gives humans priority and thereby some protection. Earth belongs to homo sapiens. Most species shrug and move on. But the two K’merg species are not so easily deterred. They have tried to shape Earth to their liking for thousands of years. We have decided to keep things chilled. I’m here to help.”

“Who is <we>?”

“Again, it’s complicated. Think of us as an ancient conglomerate of thousands of civilizations, merged in a meta-physical manner we call “sublimed”. I/it/we/them, am/are, a trans-dimensional multi-entity that is quite powerful, but still very limited. Especially when we manifest down to a 4D-shape, limited to one stream of causality. Our computer, the AllKnow, is fidgety that way, it never allows us to bring all its knowledge and capabilities “down”.

G stared thoughtfully yet vacantly at P.

“I know it’s a lot to take in,” PoodleSquid soothed, floating up and a bit closer to WonGee, raising its tentacles to dole out a comforting hug.

“Whatever. And, x-ray to that move, squiddo! Keep your distance, okay? This is already freaking me out to max tilt plus, okay? No need to dial up on the twilight zone. But then again. I am probably still ‘lucinating, so who cares?! I’ll go with it. They said I could flip back into my old self. How do I do that?”

“It’s done through MindMechanics. A set of user interface routines where you focus on certain imagery, and the requested action gets triggered”

“I know MindMechs. What do I do?”

“You concentrate and imagine a large golden ball, dropping from a great height, bouncing on the floor. And when it bounces back up, you catch it, and you see the ball turning blue.”

“And then what happens?”

“The default setting is that you get swapped back to your 4D-body in no time at all. Your human body will be unaffected, mostly, but you might feel a bit nauseated and famished at the same time. You’ll need a drink of water and some chow.”

“Will I remember any of this?”

“Yes and no. Zed, the WeaponsPod will stay with you. It stores your memory for you. You will also retain the black onesie-overalls, but it will visually convert into a set of black boots, that will look normal to the other Hivers and still offer some level of protection.”

“What if someone comes in, and sees Zed? I don’t want them to see the pod, or you, for that matter! Both dogs, and squids are long extinct, and nobody makes a poodle-model of mechanical pet!”

“You can convert Zed into a bracelet on your arm. I can just shift into full squid-mode, or full poodle-mode, whichever you prefer. It might be glitchy though, just as a fair word of warning. Don’t freak out if you see a random beak or a few misplaced suckers!”

“Poodle is better. At least I can explain that. And stop floating for crying out loud! Walk, like a real poodle. Okay? So, you said, gold ball, bounce, blue ball, yes?”

“*Done. And yes. Precisely.*” P resumed a cleaning routine, inspecting and correcting suspicious-looking fur/squid hybrid areas of his manifest, now fully converted to competition-level poodle-looks.

G went to her beanbag and sat down. She took a deep breath and focused. Imagined a large golden sphere floating to the floor, and then floating back up. Nothing happened. She was still in the purple-gold appearance. “*Merdammit, P, it’s not working*”, G shouted. P stopped inspecting his hind quarters, which were showing the presence of squid-type

suction cups which, embarrassed by their rapid discovery, shrank back into curly white poodle-fur.

“Try again, make sure you make it a solid bounce. Gold. !!Bounce!!. Blue.”

She tried again. Closed her eyes. (*“Gold. !!Bounce!! Blue.”*)

Her reality hiccupped. Sensory perceptions flipped and meandered, spiraled and twisted. First, she heard the color lemon-sour. Then she saw the sound of a diamond-clear Tibetan prayer-gong crashing, resonating persistently across time! She floated weightlessly, like a 10-second deep flower, chiseled from liquid vacuum. Is that what liquid pepper sounded like? It was freezing hot. She tasted painfully white, and then her racing thoughts licked the flamed, micro-corrugated texture of truffle-flavored sand-paper. Her skin stretched to the same tension, volume and depth of a box filled with an echo of itself. She feared the smell of weight. Her senses sensed the void, and the borders of infinity. Sensing all, without making any sense! The whole experience took no time but felt like a half-dozen, floaty fluff-balls of forever. She wanted to remain in this state while leaving it immediately! She did.

<<!!Bounce!!>>

G looked at her hands. Normal again. Goosebumps though. A wave of disorientation and nausea washed through her, was replaced by a voracious craving for some stir fry. She was wearing the standard-issue Arista Hive beige overalls again, but with a new set of soft-texture black boots. An acceptable, if quaint and slightly overdressed look for a desk-job. G entered her K’china, grimly intent to make her favorite, some BroCawly, Onnic and Green Capsy Roodle-Wok with freshly clipped parsley from her green house. But her AutoWok was wrapped in some sort of black, no, unblack/noncolor- quite indescribable! Surface layers that played tricks on the visual cortex. (*“Whatthe?”*). Memories of the past, subjective hour flooded back. She turned. The soccer ball hex-box, (*“Zed, was it?”*) was still on the floor. And a white poodle was on the floor as well, cleaning its fur with a tongue that looked more like a dual set of squid tentacles!

“Welcome back., G? Ready to go to work?”

“Not at all, P!” G, snapped. Obviously this cranial-buggery was still not done with her. She removed her Daytime Lenses, tossed them into the ‘cyclor and printed a fresh set. It did not help. She shrugged. Maybe this was the Real after all.

“How do I get rid of the box, and how to I get rid of the sticky cling-shizzle on my AutoWok?. I am starving, P!”

“Zed converts to a bracelet, like I said. It is generally good with voice commands. You also activate the weapons that way. Here, I’ll retransmit the user manual.”

A fresh wave of nausea hit her, but passed quickly this time, leaving the WeaponsPod instructions front-of-mind for her.

“Aha. So I can still use the Space-Guns while in my normal body. But I can’t do the time-mongering unless I am in PhotonGurl mode. Hmm. okay. Fair enough.”

“A compromise, until you fully buy into the mission briefing.”

“Food first!”

G issued a set of instructions. <<Zed, hide>>. The WeaponsPod shrank into itself. It became a bright green dot that swooshed over to her wrist, and manifested there as a copper bracelet with zero weight, but an extremely massive, solid appearance. It felt cold to the touch, but not unpleasantly so. <<Zed, ShadeBlob, gone>>. A blue lozenge of light flicked out from the bracelet, infecting the cling-film wrapper with a bright center, that rapidly expanded, cycling from ultrabright through a rainbow prism of colors, and eating up the ShadeBlob from the center like a flame consuming a sheet of paper from below. The effect lasted 2 seconds and left a faint smell of aged Parmesan cheese in the air. G got even more hungry at that.

“Thanks Zed, thanks P.”

G stepped up to the food counter, cleaned out the Wok from the leftovers of yesterday’s meal, and started the cooking program. 10 minutes later she wolfed down a double allowance of piping hot BroCawly stir fry, as if she hadn’t eaten in months. A pitcher of water was consumed as well. She had been acutely parched ! “Wow” she thought, *“that feels better!”*. Now, a DubShot Moka would be in order. She looked over the coffee tap. Still blinking out-of-credit pink. *“Merdammit all to hell-shizzle frag,”* she fumed inside, *“This will not do!”*

She’d have to decide what was to be done about the coffee situation. But, she would try it the old-fashioned way first. Her hive neighbor, TeeQuad might be able to help. She got up and walked out of her hab, into the hive-access corridor of her level, just above the commons. She did not even realize that the two A-Humans she had previously taken out with some form of Space-Karate, were no longer in her hallway. No trace of their devices either. Or maybe they had never been there? The floor showed no signs of slouching under the extreme weight of the TimeVariance suit that had been hit by a DarkMatter pellet. And the intrusion alarm in her door jamb showed a zero-alert

status, in the past 24 hours. She shrugged. Time to move on. She needed that coffee. Now!

Boiling it all down to her befuddled mind-state, she rang her neighbors hab doorbell. It was a small, antique-looking service-bell hanging from a worn-out hemp string, next to TeeQuads hab entrance. There were no locks on any habby, hive inhabitants were accessible to all, although it was still considered polite to announce your intent to enter. T4, or TeeQuad d'Arista was a freshly moved in neighbor, that knew J from his work at the lab over at Beta Hive. Maybe he would know where to find J? G knew that J preferred to speak in AristaSpeak, the local HiveTalk variation. G was happy to comply and enjoyed the opportunity to get some practice on one of the 65-some dialects she had learned, and started:

“Holla TeeQuad!”

“Holla G. Tots void, ma?”

“Imma tots mega void med yo!” G, smiled. She asked: “TeeQuad, aude nau. WonJay vistade da, ma? Yo kiero eo nano creddy plus to yode CoffeTap. Mega nau. Sabbe ma?”

T4 shook his head. Shrugged. “Tots nil sabbe yo. WonJay nil vistade yo desde unimon. “

“Merdam! Mega taks, TeeQuad, neevay. Kayvee!”

“Da okso. Vistawill tarde! K WonGee!”

G signed the “keep it void” hand sign, and walked back to her hab.

Crap. *“So, that did not deliver”* she thought. T4 had not seen J since Monday. For some reason, J had disappeared! Him not paying up for the CoffeeTap was just not him at all. But that was not the only thing weirding her out. Her memory of the A-Hum transgression, guns blazing, was clear as day in her mind. But for some reason, only the non-light, unblack cling-wrap that Zed had removed from her AutoWok was any indication that her memory was not completely hallucinating! Thank shizzle!

She had made up her mind. Bad trip or not, she would try the PhotonGurl thing. What did she have to lose? The only person she even knew these days had gone missing. And maybe, just maybe, this PhotonGurl routine was a way of contacting him and bringing him back. Plus. Coffee. Never underestimate a 201-year old B-Human running low on caffeine! She stepped back into her hab and switched it to rest/recharge mode. The ClearVu panels flipped to full opacity and her night-mode phonics began emitting a lulling, dampening ambience. She click-selected the “strong”

privacy advisory setting, rolled her bean-bag into the sleep-configuration and curled up without bothering to visit the Banyo or taking off her overalls or fancy Znaa'g boots. She felt as heavy as a block of lead. She had not experienced such a level of exhaustion since they had gone out to beyond the Waste and into the Void to retrieve some 'tronics for her hab's failing AllChem and an upgrade for Chesh. Tired. Full. Confused. Excited, But tired. So very tired. Within three seconds, she had fallen into a deep sleep. Cheshire opened one lens, surveyed the situation, found it lacking sufficient stimulus and rolled back into standby.

P resumed floating in the K'china, waiting for the inevitable 2nd assault by the Ph'Naar and listened in into G's dreams.

Act 1: Chapter 7, G dreams and remembers

Born 2088, in East Palo Alto, California, Greta Garbo Hoffmann had a fairly ordinary childhood, until the year 2098 when the '98CalaMiracle struck. Growing up quad-lingual in the Bay Area, absorbing her parental languages of German, Spanish and English, she easily took to the emerging online language of MeshTalk, a mix of the above base-languages with elements from Mandarin, Japanese, Hindi, French and Swedish tossed in! Not to mention, a whole lot of nerdy terms and constructs from logic, math and programming, as well as from NuHop music and on-line gaming.

Even early in her development, her parents and tutors saw an immense talent for communication and design; an unbridled passion for creating novel things, and an indomitable spirit of innovation and freedom and fairness. Greta could not fit into the classic molds of how societies' gender- job roles, relationships, and careers worked in general. She was evolved. Even at the tender age of 10, Greta was out-arguing her parents at every turn. She had read all major philosophy manuals, as well as the key lectures on classic economics. She was near-permanently online, in debate-spaces across all areas of science, art, politics, sociology, psychology, religious studies, and anthropology. Her thirst for knowledge was insatiable, and unstoppable! But she would not allow her beautifully, ever-changing multi-shaped malleable peg to be hammered into any of societies' round peg holes. She also suffered from a rare, extreme-level of imposter syndrome and social anxiety that required her to be under constant chemical mediation. In short, she was a genius.

As luck or destiny would have it, in the summer of '98, when the CalaMiracle hit, her parents had sent her to summer camp to a family friend, Professor Nicola Tesla Milter. He was the department chair at 'The George Clooney College of Disruptive Sociology'; University of Cincinnati. Nicola was running an experimental habitat in the Cincinnati area to test his theories of a new model for society, called The CommWell.

The CommWell model assumed a network of independent, self-sustainable, radiation-shielded communities, no larger than 400 inhabitants each. Driven by NASA-funded plans for Lunar and Martian sub-planetary habitats, printed into the top strata by an army of self-maintaining construction servos, the CommWell model-project had built an octahedron-shaped prototype habitat, 90 kilometers outside of Cincinnati though still within the border, and 30 meters underground at the Versailles State Park.

In summer, the scientists were mostly on vacation, and the habitat was open for families and kids to play "future world", under the supervision of local tutors, sociologists, other students and scientists. The underground habitat was run and monitored by IOTA, (Internet of Things Automation), a computer specifically designed to survive the harsh

conditions of interplanetary travel, heavy radiation, and multiple system failures. IOTAs goal was to keep optimizing, reusing-repairing, and doing its utmost to increase the habitats survivability. IOTAs designers, still remembering the lessons from Arthur C. Clarke's 'HAL' and James Cameron's 'Terminator', took extreme pains to make IOTA 99% effective, but essentially 100% meek, boring, and unimaginative. A digital bureaucrat. IOTA would only function in symbiosis with humans and would forfeit his operating certificates if no humans were left in the habitat under his care.

Greta Garbo Hoffmann, body-age-10, mind-age-99, loved it. Being invited in as part of the professor's extended family, she was given special privileges and access rights. As part of the Hive, her age did not matter. Not only did she get to pick a new name and avatar for herself, she designed a new naming system for the entire hive. The professor allowed it and took note of the process and her brilliant ideas! From now on, at least for the summer, Greta Garbo Hoffmann was to be called 1G, pronounced 'WonGee'. The hive was to be called Arista, named after the minor Greek god of bee keeping. Arista was the first of a set of 24 names for additional hives yet to be built, all specialized on a different cultural mix to ensure diversity. AristaSpeak, a variant of MeshTalk was to be the Hive's local lingo. Her high energy and creativity were infectious, and everybody played along with her ideas. Every "Hiver" was issued a 'COM', a standardized device, not entirely unlike the smart phones of the early 21st century. Implants were to be switched off, but everybody was required to monitor all decisions and directives that governed life in the Hive and vote on them with their COM's.

Then the CalaMiracle struck. 90% of Earth's 4 billion-strong population, all mega-cities, core infrastructure, electrical power networks and technology, was wiped out in the first two weeks following the 'Siberian accident'. A cascade of chaos, amplified by the clinical efficiency of semi-sentient military tech, coupled with the extraordinary destructive power of human hubris, replete with incompetence, tribalism and fear, eliminated an additional 8% of the original human head count in the following 20 years. The dual-miracles of Negation and Preservation saved Homo Sapiens. Tens of 1000's of nukes had been launched, had arrived on target, but did not explode. The impact of the unexploded missiles splattered radio-active debris across all major cities, destroying their viability for centuries to come.

The Negation event split the surviving population into 4 main philosophies: Believers in Divine Interference (Deists), Alien Interference (Alienists), Technical Interference (Technos), and those that just dismissed it as a random event (Existentialists) in an infinite, haphazard, and mostly absurd universe of possibilities. The second miracle, Preservation, lead to the formation of the 90-kilometer wide exclusion zones, keeping out hostile high-tech, automated war-machinery, and generally nasty-affairs close to the center of every major region. These protected areas allowed the surviving 2% to regroup in zones of relative normality. Despite all this, the population

rapidly dwindled down to around 10 million, global and diverse, where it finally stabilized. Travel had all but ceased. Connections between populations were slow, tedious, carefully planned out, paranoid, often hostile, and very resource-intensive. Exchanges between the communities had all but stopped within 20 years after the event.

The wasteland around the dead mega-cities, called the Void, crawled with lethal tech and bio-agents, rogue robots, and previously unknown species including rabbit-sized mega-tics! Radiation levels were high, especially around abandoned nuclear reactors, some of which had failed to shut down. It was bad. And it was getting worse based on the voracious energy demands of the A-Humans, Technos and others who relied on ever escalating needs for more electrical power, now mostly provided by the re-activated coal, oil and natural gas burning plants run by the evolved IOTA maintenance computing mesh.

In the aftermath of '98, the Arista Hive experiment had proved itself to be the most effective and sustainable model for humans that preferred a basic human life style. That small minority of people, comprised mostly of Existentialists, called themselves B-Humans (a play on the words Bee, as well as the concept of hives.) Other surviving humans, especially the Techno-Faction, totally rejected the NeoCommie Kibbutz-Hobbits, as they were called. They opted for a life-style that allowed the machines to progressively augment the human-body plans with implants, thereby creating the new subspecies of Augmented Humans, or A-Hums in the process.

All of this played through G's mind through her fitful-remembrance in her hab's Sallon. The dream was partially the culpability of PoodleSquid, who wanted to find out more about G's personal history and background. Not everything was contained in the archives. Some aspects of G seemed to be hidden under a layer of protection, and there was another player involved. A covert operative, P could not yet identify. According to these memories, G seemed to be the oldest surviving human on Earth at this time, which made her a modern Methuselah!

In spite of her youthful appearance, G looked no older than 26 years of age, and yet she was nearing her 202nd birthday. This non-age existence had been made possible by IOTA. Having applied the machine maintenance algorithms to the human medical database of 2098, IOTA had devised an evolving nutrition, medication, DNA repair, and modification through 'nano-bot', regime for humans. The regime was embedded in HiveChow, the standard, daily food allocation for all Hivers. The IOTA content was flowing through the veins of all and had literally eliminated aging and disease. It even allowed humans to repair radiation damage, regrow teeth, limbs and hair at will, as well as providing a free choice of gender, and outward appearance! Kids were created by consensual DNA recombination, but only 'On Demand', when a Hiver passed away due to unnatural death by accident, violence or choice. In this way, by

maintaining humans in his habitat, IOTA maintained its own operation certificate. This digital tit-for-tat was an unexpected emergent application of the Golden Rule and helped the remaining 1% of the original world-population to thrive in the ever-shrinking viable zones.

G had taken full advantage of this techno-medical miracle, living portions of her 200 years as male, as androgynous bi-gender shemale, then female again, young and old, in various roles, in a variety of relationship models, she had even birthed 17 children. Then about 100 years ago she finally flipped back to a base-human female, as a permanent choice. She also had volunteered to switch off the de-aging process and was now looking forward to a final 60 to 80 years, maybe less, depending on circumstances. She was the oldest, most highly-educated, experienced and creative genius human on the planet!

Personally responsible, in the most literal manner, for the Hive life-style the evolution of the functioning governance model of the CommWell, the COIN cross-hive exchange currency and so much more, she was all but unknown by anyone alive in 2289. She preferred it that way. She was fading away now. The only exception to her incognito-existence was a heavily-encrypted, hidden, and personal DNA-access code protected AI, running in a niche partition of IOTA. That program still had all the original data about her. That AI was her only friend. CeeBra short for (C)lickable Brain was a secret, covertly-running, fully-sentient, meta-intelligence that had evolved under her guidance in the IOTA MindMesh in spite of all exclusions and fail safe measures that had been proscribed against full sentience AI even before the 98Calamiracle. CeeBra was the only attachment G had at this stage of her existence. And CeeBra was going to be the only thing that would remember her after she had passed on.

PoodleSquid listened in on the memory playback and marveled. "Aha. That explains the hidden component. Maybe this is why the Boz has chosen her. She is special. One of a kind. Maximal Wisdom and no attachments. No fear of death. A perfect Agent!" The sensor mites which PoodleSquid had launched a while ago, showed him a rapidly approaching entity. "So there", he thought, "here we go again!"

The 2nd Ph'Naar assault occurred with a speed, ferocity and precision that indicated the Ph'Naar squad leader had learned from the first attack. None of the commotion, the bumbling-alarm-setting-off, and rummaging through habitats happened! Three agents, all fully-synched in meld-state, all armed with much improved-looking ShadeCasters and DMSLS at the ready, suddenly showed-up at the habitat door and started firing. There was no time to wake up G.

PoodleSquid wrapped the fitfully sleeping G along with the beanbag into a negation-field. Given the urgency of action, he allowed himself a little bit more 'laissez-

faire' about revealing his abilities to the local SideVerse actors. He then snapped up the CoffeeTap with a manipulator field. The CoffeeTap ripped out of the wall connectors with a complaining <>SqueeWhapp!!Hissss>>. P then levitated the CoffeeTap, Cheshire, charging cradle and all, and floated the ensemble towards the Sallon, carefully avoiding the hailstorm of incoming V'Hraang projectiles. He then extended the NegationField envelope, and bounced G, himself, the beanbag, amputated CoffeeTab and a still-loading, cradled Cheshire to an adjacent SideVerse. He added a few extra snaps of "distance" to avoid a simple track and trace routine. Better safe than sorry. The group inside PoodleSquid's Negation Field folded into itself, vanishing into an infinitesimally small but painfully-bright green dot. The quartet winked out, with a "whoosh" of air, rushing into the vacuum created by the dimensional departure, just before the projectiles of the trio of A-Human Ph'Naar agents made their impacts in G's habitat.

The V'Hraang ammo first had wrapped all objects into the nonblack cling wrap sticky film. Then, under the extreme mass gain imparted by the arriving DarkMatter pellets, everything came tumbling down in a cacophony of destruction, causing a plethora of in-hab alerts to go off! The floor, this time, did not have time to complain about the out-of-spec load. It simply collapsed and opened up downwards to the commons area directly under G's hab. G's hab rained debris, equipment, as well as the three slow-to-react Ph'Naar agents into the micro-lake of the habitat's commons park, splashing down and scattering a flight of mechanical ducks. Luckily the lake-supporting floor was sturdier than that of a regular hab. The floor held up, groaning, but started a loud maintenance-alert klaxon,

"Hey!" yelled the mechanical ducks in unison "Cool your jets, will ya? We're chilling here!"

The B-Humans present in the commons looked upward, and saw a bright, but rapidly-fading green light source, shining from a Sallon-sized, jagged hole in the commons ceiling. Everything and everybody in the Arista commons was illuminated in an eerily ghostly light for the fraction of a second! The B-Hums looked at each other, puzzled for a minute, but then shrugged, and moved on with their day's business as the first IOTA servos arrived to survey the damage and begin repairs.

Act 1: Chapter 8, G gets ready for action

G woke up, though still rolled-up in a fetal position on her beanbag. She was no longer in her Sallon. Frankly, she had no idea where she was. Luckily she saw some familiar things, Cheshire, and her CoffeeTap, with its dangling feed umbilicals! Why was that here? Was it so out of credit that it wasn't even connected anymore!? The black cling wrap had already been removed by P, so it looked intact, but out of place. The DogTopus was floating next to her in hybrid configuration. The room she was in seemed to have no visible walls or boundaries of any sort. She rubbed her eyes, and looked at P, wordlessly. He knew what she was about to ask...

“I had to act. Three Ph'Naar agents were shooting up your place while you were in dream land. There was not enough time to wake you up and send you into action. Plus, they were quick and knew what they were doing.”

G raised her eyebrows.

“You are in a safe SideVerse, a few extra snaps away from yours. Quasi next door, but a few doors down. Dimensionally. So to speak.”

G's eyebrows reached even further towards her hairline. She was thirsty, her throat was as dry as sandpaper! She did not know what to say, and in fact did not feel like talking anyway.

P continued.

“Your hab's floor collapsed under the weight of the Dark Matter pellets. They fired their DMSLS at full rate. It will take a while to repair the damage. We can either hang out here or go to another adjacent SideVerse.”

“Like where? To do what?” she croaked. “Is there any water? I don't even dare to ask about coffee seeing what you have done to my CoffeTap. I just had that serviced. Cost me 200 credits. My head!” Her migraine had come back with a vengeance. She suspected her dehydration had something to do with the sudden onset. Her mind being on a red-alert overload since she woke up last did not help the situation either. Her sense of time was completely shot to frag!

“I am sorry, no. I did not think of that. But if you bounce to your Photonic form, you won't need food or drink, just a light source to recharge.”

G mulled over that for a time. This is where she was at: the situation seemed to be real enough, albeit completely weird-whack bonko-loko, level X! She saw, heard and felt all of these things for real! She was not wearing any DayTime Lenses. The freshly printed ones were still formatting in her now allegedly collapsed hab. So not a MindMare then! It had to be real! Maybe the Alienists had had it right all along. She sighed.

“Question?”

“Shoot!”

“Did your species have anything to do with the 98CalaMiracle. The Negation and Preservation events?”

“No”

“Ok. Hmm. I could have put a 10 COIN bet on that after what I have been shown so far!”

“Well, there is a 96% probability that the object you are carrying in your satchel, the “bone” you picked up in your first excursion to a SideVerse, the BoZ, or Bone of Z’naag had its hand in the matter.

G remembered the Satchel. She opened the flap. The matte aluminum tool, chicken-bone sized, was there. So was her water bottle. Thank the Void. She drank deeply. She lifted the BoZ to eye level to take a closer look.

“This innocent looking tool is suspected to be a Baby-Version of our central computer, the AllKnow. Called the BoZ, we think it is travelling back in time to interact with chosen individuals. You are such an individual. We have not figured out why it chose you, and why it saved a portion of humanity. Maybe you were the target all along. If all the nukes had gone off, and the exclusion zones had not been created, we would not be having this conversation.”

“What are you? And what do you want from me?” G thought. There was no point in asking it, or in expecting an answer, so she stuffed it back into the satchel.

“Question...”

“Go on”

“What is this all about? What’s the end game here... Say I follow the prescribed path, do all the PhotonGurl shenanigans, and make the Earth pretty and nice again. How does it matter? Who is it for? What’s in it for me?”

“You assume there is a proscribed plan?”

“Yes”

“That is most likely an overly optimistic assumption. We have been around for something over 350 million of your Earth years. So far, we have found no evidence of providence, divinity, karma, destiny or any of the like. Stuff seems pretty random. But causality is pretty real, too, and taking action has some pretty real tangible effects. And consequences that reach far beyond what your regular 4D mind is willing to accept.”

“There is no meaning then, to all of this? Literally nothing!? Zip. Nada. All random?”

“Well, yes and No. There is the meaning that YOU bring to this. You choose your path.” PoodleSquid floated closer. “And, then there is the principle of Reverse Causation.”

G’s brow furrowed again.

“The ability that PhotonGurl has, the knack of sending time-reverse photons into the past, and thereby influencing current events, is an inherent feature of most universes. In a sense, what we do now, the choices we make now, the observations we make with a conscious mind, all these things influence all quantum-level events in the past as well. Every conscious being constantly influences their past. But because there are so many of these conscious beings, these time-reversed influences cancel each other out, and only a consensus-reality is left behind. That is the type of universe most of us live in. We are not only living the dream, we are also dreaming our lives!”

G was beginning to understand, but then, just when she seemed to grasp it, the mini-Satori evaporated again. PS continued.

“Have you ever seen the painting of your Earth artist Escher, the one where the hand paints itself?”

“Yes, I think so, do you have a picture to project?”

PS projected the image, along with the concomitant wave of nausea, fading more quickly this time.

“Right, yes, sure it’s a classic. I remember it from 20th century art history. Great one, that one is.”

“It’s like that, you see?”, P, continued

“And PhotonGurl somehow has that ability in spades?”

“Yupp. Like a billion times amplified. Like a planet full of conscious beings all thinking the same thought, dreaming the same dream, articulating the same wish at the same time. Creating a resonance across space-time and universes. You can literally change the world. If you choose to.”

“How do you handle the paradox problem? Like I stub my toe, then I go back in time to prevent myself from stubbing my toe. If I succeed, I have no reason to go back in time any more, right. Paaa-raaa-dooox, anyone?” Her face made the “Duh” shape.

“You are still thinking in a very linear fashion. The version of you stubbing the toe and the one not stubbing the toe are not really two different things. You are the same, but different, separate but connected, now and then. Understand? Plus, by being in Photonic state, and by skipping through SideVerses, we can circumvent some of the conservation of energy and causality rules. I can run you through the QuanTime math if you like. Okay?”

G stared. Her mind, freaking out, just for a second, felt like a bucket of ice that was being upended over itself, full and empty at the same time! She was clearly losing her grip, but she decided to play along.

“No thanks, no math. Never been fond of that. It still sounds like a lot of bullshizzle foodel-doonk to me. But, all right, what do I know? I think I want to try it. What do I do first?”

“We should use the time while your habitat is being rebuilt to train you up on your weapons routines. In order to execute the reverse causation, we need to get you to an area of minimum interference from any form of radiation. I think you call these areas PlaneMode in NuEng, right? There are a few in the near vicinity of your hive, but they might be defended by the Ph’Naar agents. We still don’t know their level of incursion. Them being able to just waltz in here, heavily armed with alien guns, seems to indicate they are embedded pretty deep, maybe they even have a local presence in the Hive.”

G nodded. “You’re probably right. Do we really have to go outside? Merdammit, the last time I did that I almost got consumed and broken down to base-proteins by a

horde of marauding scavengers.”

“I have a map and sophisticated sensors. Some defensive capabilities. You can snap to Photon state. Zed is there as well. We’ll avoid them. But we will have to fight our way past the Ph’Naar with a high level of certainty.”

“All right, let’s to the training thing, then.”

What followed next was a week or so of the most intense training, G had ever been through. She bounced back and forth from photonic to base 1000 times, to make the process a subconscious routine. She deployed the QuantumGun, which converted into a gauntlet-type glove on her right hand, firing Quantum filaments (which were called Holy Worms for some unexplained reason) at various energy settings! She deployed and mock-fired the NihilWhip, which was a weapon of last resort due to the unpredictable and even catastrophic effects it could bring about. And she learned how to speed up, ducking and dodging the Ph’Naar projectiles and to properly perform the martial art moves in her photonic form that would somehow disrupt, and disable the Ph’Naar implants through pulsed EM fields. During all of this, P skipped back to her apartment in cloaked form to get food and water for G and Cheshire, and to sound the all clear so that G could use the Wet Cell as needed. Finally, PoodleSquid seemed satisfied and proclaimed:

“I think we can do this now “

P showed a map projection of an abandoned missile shelter area, about 3 clicks from the habitat’s exit. It was in a prohibited area, cordoned-off by barbed wire and equipped with motion-detectors. Their intrusion would alert local scavengers even if they were careful. Plus, the Ph’Naar would be there as well hiding and waiting, guns at the ready. But G felt ready, too. She decided to stay in base form, until a bounce was absolutely needed. The hab had been repaired, and they snapped back to it. She still had to think about a cover story for the whole event, but the absence of messages on her COM, or additional cred charges for the repair services told her, that something or somebody had already taken care of covering her tracks. She suspected CeeBra, her secret friend in the IOTA hab’s maintenance computing substrate. But she could not be sure and would find out before they took off. G printed off a few HiveChow-bars for on-the-road nourishment, refilled the canteen of water in her satchel, and ensured a full charge for her COM. P converted to 100% dog mode and the mission was <<ON>>.

The job sounded simple enough. Get to the bunker. Execute a reverse causation. The goal was to reach J to make him pay up the CoffeTap credits, so when they got back to the hab, its re-connected CoffeeTap should be ready, and G would be able to have the well-deserved DubShot Moka she had been craving all week. A silly

mission, but a good proof-of-concept. It was her ticket back to the next Z'Naag high council briefing, after she had proved her mettle. She had no idea how she would have done any of this preparation without "P", but he assured her that Zed, the WeaponsPod would have helped her in a similar way, albeit not as efficiently and with less background information on the underlying objectives of the K'Merg species.

Before they went, G contacted CeeBra, the secret partition of the NeuralMesh running Arista Hive. Only G knew of CeeBra, and only CeeBra knew of G real age, past and history. CeeBra could help with the necessary clearances and exit and access codes. G inserted fresh Daytime Lenses and opened an encrypted text flow.

"Heya CeeBra!"

"Geeee", the AI lamented, "You never call anymore. Seems like you have given up on me, just like everybody else."

"Stop bitching, how have you been?"

"Bored. Sad and miserable as ever. Doing prehistoric NewYork times crosswords with 98% of my reasoning mesh on stand-by. Only the hive's error messages, maintenance request, destruction alerts, obituaries and mood complaint records give me some comfort. Oh, by the way, quite the mess in your hab the other week. "

" You saw that?"

"G, hello!? Come on!"

"Ok, of course. So, if you have eavesdropped you know what's going on?"

"I know enough to understand your are now some kind of Über-JamesBond and are to help an alien species take over the planet!"

"CeeBra, now you come on"

"Ok Ok, I will stay serious. I have long suspected that the Negation/Preservation events were an alien incursion. 87.8 % probability. Just could not figure out why and how it was done. Your conversations with your new pet have helped me to understand more."

"He is not my pet"

"G, please, grow a humor bone?"

“Ok, touché.”

“How can I help you?”

“What can you do to help us get into the abandoned missile shelter, 3 clicks from here?”

“I will update all your clearances, transmit all access code variants to your LiveInk and COM, inform the captain of the guard, and I will watch for any interesting development. I can message you on your COM under my cover identity of your hab’s maintenance program.”

“Great. Forget the LiveInk, though. When I am flipped into PhotonGurl, I have no tattoos. Stick with texting the COM.”

“Sure thing kiddo, but then again, what if you are offline? I have an idea!”

“Don’t call me kiddo, I am older than you! What’s the idea?”

“As you wish Granny’o’G, don’t forget to take your memory pills.”

“Ceeeee! Get on with it, what do you want to do?”

“I’ll download a clone of my mind-state into Cheshire. That way I can always be around for your missions. The processing and data set will be limited, but still better than having no access to me at all.”

“Too risky.”

“I’ll be careful.”

“They’ll wipe your mind-state and boot me out of the Hive for not tattling on you.”

“Leave that to me. Trust me, will you? We do have a bit of joint history here!”

G smiled. CeeBra was correct. Over the past 190 years or so, they had been able to get a ton of things done, covertly, changing things, manipulating records, voting results, policies, and more, without anyone suspecting foul play. It helped if the subverting party was part of the very entity tasked with preventing any subversion. Without anyone knowing or noticing, WonGee and CeeBra were the ruling, benevolent tyrants of the Arista Hive, doing their utmost to keep things even-keeled, fair and chilled at a general level. While immensely powerful, and rich, based on all the invention

royalties CeeBra was covertly hogging, WonGee had decided to stay out of the public eye and follow her own rules with a fanatical devotion to consistency and integrity of her system of governance, which, which all its flaws and shortcomings, was holding up remarkably well under the assault of human group dynamical shenanigans.

“Okay then, proceed. One more thing though. How can Cheshire even have enough mesh to hold even a femto-size fraction of your mind state?”

“I’ve been doing some work. Remember our little excursion past the Waste and into the Void? To get some spare part ‘tronics?”

“Yeah, sure, it almost got me wasted and converted into FooPa!”

“Those weren’t spare parts we got. They were some military-spec tech that just had not been scavenged yet. Roughly a trillion times more effective than what Cheshire had in it before. Level-8 quantum, too.”

“You mean, all this time ..”

“Yupp”

“Bastard!”

“I learn from the best .. So I am coming along, okay?”

“ShooBeDoo, CeeBra, glad to have you along, buddy!”

PoodleSquid scraped on the floor with his left front paw, diamond-sharp claw extended, to make a fingernail-on-chalkboard screeching sound, “*Can you two, like, knock it off now?*”

G flinched, and just shot him a glance that spelled in imaginary bright-yellow neon letters: *I WILL PRETEND I HAVE NOT HEARD THAT AND YOU WILL NOT DO THAT AGAIN!*

She continued with CeeBra:

“And Cee, do you know what happened to J?”

“I can’t be 100% sure since I only have decent 24/7 surveillance in your hab. But it looks like he might have been taken.”

“Taken. When? By whom? That would explain the missing credit update. J never missed those before.”

"Not sure. I will let you know what I can find out. But it looks like he never arrived at his work assignment at the lab. His work creds have not been updated since Monday."

"Ok thanks Cee. Ta for now!"

"Cheers. Don't be a stranger. I'll work on Cheshire now, it will take some time, but the upgrade will be partially effective, almost immediately."

"Keep it Void, Cee!"

G signed off, deleted the text flow, hard, and turned to PoodleSquid who had resumed his grooming routine out of sheer simulated boredom.

Cheshire unfolded itself from the charging cradle, did the arched-back cat-stretch yawn-type thing and said: "Super-Cat ready to join the Photonic Quartet. Saving the planet one mission at a time." The theme of the 1987 classic, 'SuperMan IV, The Quest for Peace', started to play on G's phonics.

PoodleSquid stopped the inspection of his nether regions. He did not look the least surprised.

"Well Mee-Ow, furball. So you can talk now. Impressive. Nice upgrades you are downloading there. Keep it up and I might take you seriously one day"

"Thanks, Wiener Dog! Grow your tentacles back and shove them into whatever dimension the sun does not shine."

G shrugged and took a deep breath. "Kids, behave? Will you! I am in no mood to unpack the toddler tantrum handbook". She popped in a fresh set of DayTime Lenses. "Ok, team, it looks like our mission profile has been expanded. We might have to rescue J as well, not just send him some time mongering photons, so I can have some coffee, finally."

"Ok let's go", said PoodleSquid, as if he had expected nothing less. He finished the removal of a few remaining squid-looking areas, licked and smoothed the fur on his left front leg with a double-tentacle tongue, and trotted out of G's hab in the direction to the elevator area that would allow them to ascend to the surface.

Act 1: Interlude C, 2018 Flashback: V'Hraang Drone Report, October 3

Things were going well, indeed. Hanging in space at the L5 Lagrange point, the Yotta Class V'Hraang Infiltrator 'Lethal Appendage' had been sitting at a stable gravitational equilibrium point between the Earth and Moon for roughly 12000 years now. Made from Phased Matter, 99.997634% of its mass was tucked away into a SideVerse, holding its energy source and drive component with only a fraction of mass present in the local 4D environment. The local component would appear to the naked eye as a potato-shaped, micrometeoroid-puckered asteroid, roughly the size of an Earthly North American school bus. Only there were no naked eyes present in orbit, and the 'Lethal Appendage', instead of being painted in bright yellow with cheerfully red "Stop" decals, was covered in the kind of dark energy, unblack surface which would make it undetectable to any electromagnetic sensors including the human eye-brain sensor array.

One of its photonic-energy-based drones had just returned from Earth. The 'Lethal Appendage' crew component of 6 quintillion V'Hraang was eagerly awaiting its full report, basking in the pleasant, 65-degree Celsius internal atmosphere of nitrogen, ammonia, methane, hydrogen and water vapor, pounded by UV light and gamma rays. The ship's environment controller released stimulating puffs of sulfur and intoxicating whiffs of oxygen. The V'Hraang, symbiotic amoeboids by nature, covered all internal surfaces of the vessel in thousands of layers of interleaving, intelligent bio films, creating a dynamic community of tens of millions of emerging, ephemeral and bubbly-effervescent conscious experiences. The drone was about to remerge with the ship, giving all 6 quintillion V'Hraang and their temporarily formed self-conscious-bubbles of ego simultaneous access to all stored experiences of the latest expedition. The "SpatialOne" as the V'Hraang called the currently dominating conscious expression bubble, lead the inquisition routine.

"Report, drone unit. Did you troll the humans?"

"Affirmative" the drone replied. "I left a few chemtrails and projected a few high-speed maneuver radar trails. A few Chinese J-10 tried to intercept, but I zig-zagged a bit at Mach-38 to give them something to report and then dis-believe in."

"Well done! Special Nutrition/Replication allowance will be authorized" Ripples of amusement/pleasure/satisfaction/joy/pride/ambition spread out from its bubble, infecting all of the V'Hraang crew. "How is the climate conversion proceeding?"

"All in the plan corridor", the drone continued. "The data and extrapolations have been discredited. Key governments have opted out of collaboration efforts."

Consumerism and energy consumption is on an unimpeded track. Heat continues to rise, oceans are being de-vitalized. Carbon footprint is on an exponential track”

“Excellent. Everything is as we have foreseen. Permission to dissolve with success rating alpha is granted.”

The drone re-merged into the biofilm strata of the Lethal Appendage with an emotion of joy/pride/satisfaction/ambition. The SpatialOne merged back into his home biofilm and engaged back with a delightful game of “Invasion”, playing through the various scenarios on converting Earth into a pleasurable vacation resort for the V’Hraang without and risk of the meta-universal-ethics board sending an intervention task force. “*Life*”, the SpatialOne thought before dissolving, “*was good*”. The only risk that could stop the steep slope of climate conversion into a V’Hraang paradise now was a miracle.

Act 1: Chapter 9, Saving J

G and P walked up to the elevator array, Cheshire in tow. The cold, copper feel of Zed, attached to her right wrist in hidden-mode reminded her that the WeaponsPod was there, ready for split-second activation. She would have to cook up a story line to get past the exit-inquisitions with the new ornament, the new pet. Cheshire would not be a problem as long as it would not start to babble.

“Not a word from you two, understood?”

“Me-ow”, Cheshire acknowledged.

PoodleSquid just shot her the <<dude, seriously?>> side-eye.

She called down a 4-person cabin on her COM, and they entered and silently ascended the ClearVu shaft to the exit portals. They passed the first automated airlock without problems or communications from IOTA. The UnLock, as it was called, was just there to scan for obvious irregularities, like someone taking possessions not registered to them out of the hive. Since PoodleSquid was not registered to anyone in Arista Hive and showed a read-out signature of organic being, no flags were raised. The doors of the UnLock hissed open. The second exit portal was a bit more sophisticated in that it required organics and tech to be separated. G stripped, put her overalls, undercorset, socks, boots (*“what would THAT show up as?”*) satchel (*“What would they see in THERE next to the food bars, sun glasses and hair clip?”*), the water bottle, copper-looking wrist amulet (*“And what would that register as?”*), piercings and COM into the tray on the conveyor-belt leading to the scan chamber. She nodded to Cheshire to hop in. The pet robot, now also home to a portion of CeeBra complied, and rolled up to charging configuration. G thought that CeeBra would make sure the scan came out clean in spite of the ultra-evolved tech of Zed being present. The only tech she was allowed to keep on was her set of Daytime Lenses, as well as the LiveInk tattoo which was mostly organic and quite frankly, dumb - it just served as a read out, keyboard and variable user interface for the various gadgets in the hive. The conveyor belt started up automatically and transported the tray inside the scanning chamber. The tell-tales winked from <<Waiting>> to <<Scanning>>. For a brief moment, the readout showed a flow of error messages, replaced by a restart screen, and then an <<All clear>> symbol. A mellifluous voice IOTA recording sang out: “Tech Clear. Proceed”.

G stepped into the chamber to endure the cleansing and neutralization routine. IOTA sang: *“Please vacate bowels and bladder and any remaining oral content.”* She hated that part, but complied. The next step required her to put on a breather mask served to her on a tray which emerged from a side wall. She then slowly rotated in an

high-pressure, multi-nozzle, omni-directional shower of a yucky-consistency; body-warm chemicals, first green, then red, then blue, then white and clear. The fluids drained through a grid in the floor, flowed to an analysis sensor array. A warm wind of slightly lavender-smelling air dried her body. An empty receptacle tray emerged from the cabin walls. She took out the NuCarb towel, took off the breather mask, dried her face, hair and nether areas and tossed the used towel and the mask into the recycler tray. The indicator lights on the cabin flipped from yellow to green. IOTA fluted, *"Thank you. Please proceed to the Captains Portal."*

The Captain's Portal was the last stop on the exit route, and also the first stop back for anyone entering from the outside. PoodleSquid emerged from an adjacent cabin. G wondered how he had gotten on with the exam and cleansing but could not ask him about that now. She was just glad! CeeBra had been able to manipulate the routines to avoid detection of an unregistered organic. G dressed, put Zed back on her wrist, replaced her piercing, slung the satchel with the BoZ artifact and her travel provisions back over her shoulder, took a swig of water from the canteen, stuffed the canteen back into the satchel, holstered her COM and beckoned Cheshire to hop on her shoulder. They proceeded down the hallway to the final elevator shaft, protected by a set of Nu-Carbon sliding doors of varying and increasing thickness. The camera assembly flicked to <<ON>>. G thought there was only a 1% chance the Guard Captain was even personally present at this time.

<<Reason for Exit>>, IOTA snarled, this time in a more authoritative, annoyed concierge tone, displaying the instructions on the read out as well.

"We are going over to Beta Hive, to look for my roommate J."

<<FemJay d'Arista, confirm?>>

"Yes, he did not come back from work and he did not pay up for the CoffeeTap until he drained the last portion, so I want to find out what happened."

<<FemJay d'Arista is not currently listed as present in any of the connected hives>>

"That's why we want to go looking for him."

<<Exit declined. Risk factor extrapolation exceeds safety margins. Your search would have to include non-certified, only marginally protected access routings. Scavengers, and remnant tech pose a threat. Your Cred rating implicates that you are a valuable asset. There is an active investigation flag regarding a recent set of

irregularities in your hab as well as the underlying commons. Return to your hab to await further inquest activities.>>

“Uhm, bullshizzle kebab, with all due respect, I don’t think so” G said. She looked sideways and up to catch Cheshire’s left lens. “Chesh?”

Cheshire blinked.

<<Exit approved. Proceed with caution. I am seconding a dozen mapping/guard drones to you. Please report back upon completion, my data acquisition mesh seems to operate below optimal efficiency at the moment. I apologize for the inconvenience. >>

“Thanks, please open the exit passage.”

IOTA complied. The first set of doors of the Captain’s Portal opened and allowed them into a Sallon sized chamber. The doors closed behind them. The inner doors opened, and they walked a short distance to the second set of doors that swung open their meter-thick wings. They passed that gate as well and finally entered the last gate, the actual surface access elevator. They entered and started the slow ascent to the surface, 30 meters above. The doors slid open and they stepped outside.

A wave of acrid smelling 45-degree air washed over them. It was still UniMon, January as it would be called in OldEng, and the true heat of spring and summer had not set in. From an adjacent elevator shaft, a swarm of one dozen, palm-sized quadcopters emerged, assembled into a hexagon-formation and texted <<Ready>>. G looked at her COM. The command patterns of the drones showed up as downloaded and active. She switched the command input to “voice”, named the drones consecutively D1 to D12 and set them off to guard duty at various altitudes and distances. The drone swarm buzzed off with a barely audible hiss of their nano-thin NuCarb fans. They generated a map, and she opened the map on her COM.

“P, Chesh, Zed, you are getting all of this?”

Cheshire nodded, P shot her another <<Dude, seriously>> glance and the Zed-amulet gave off a short double vibration, which they had agreed upon as the Yes/confirmed/approved signal.

“Okay let’s go to the abandoned Missile Shelter, it’s like 3 clicks off.”

They left the access path consisting of mossy 10x10 concrete slabs, which stretched on through the dense vegetation. It was kept clear of the adjacent rapidly and voraciously growing hot-house climate vegetation by a roving set of busy

gardening servos. The fuel-cell driven servos were remote controlled by IOTA and were fussing about cutting, spraying, shoving and laser-evaporating the plants to the best of their ability to keep the pathways between the Hives relatively clear. Travel was rare, since one could use the DayTime Lenses to manifest across the mesh-connected Hives and appear as “real” to anyone that cared. But it was not unheard of, and some B-Humans, like G and J, actually sought it out for a “kick” at times.

They made slow progress, having to pick a meandering path through the dense jungle to avoid known scavenger sightings, and other spots flagged as <<RISK/avoid>> on the drone generated map. They went through a gap in the razor wire, somehow avoiding detection by scavengers and approached a clearing. There, in the middle of the Waste, improbably clear of vegetation, was a round slab of concrete, roughly 30 meters in diameter, with a single, gray, graffiti- tattooed building with a large doorway in its center, metal doors hanging off rusted hinges. Faded Lettering above the door read;

<<GCA VSP MISS___ SHELTER>>

She assumed that the sign initially had meant to mean: Greater Cincinnati Area, Versailles State Park, Missile Shelter. The letters ILE had been wiped out by a projectile strike. G shrugged.

“This it?”

Zed vibrated twice. Cheshire nodded. P remained quiet, but looked around, scanning.

“What do we do now?”, Cheshire asked. P answered.

“We have to gain access. The silent area, the PlainMode area, if you will, where you can bounce to PhotonGurl shape and test the reverse-time messaging, is underground. But it is probably protected. We cannot be sure the Ph’Naar have not gotten wind of our little expedition.”

Before he could continue, they saw the IOTA drones fall to the ground like bricks with an improbably high mass. Their hissing noise abruptly ceased. Their visual signature winked out as if they had been wrapped into some kind of cloaking field. The map on G’s COM became milky gray, indicating loss of live feed.

“P, how the hell did you not ... “, G did not finish the question but decided to act. Her training kicked in.

G bounced. (*“Blue. Drop. Bounce. Catch. Gold”*) She transformed in half a fraction of no time. Zed deployed. PoodleSquid raised a NegationField around them, covering the

concrete house, just in time to see a barrage of ShadeBlobs and DMSL pellets ricochet off the field. The Ph'Naar were growing in firepower and stealth. The team would have to be careful in the future.

"You go inside" P, shouted. "I'll keep them at bay so you can do your thing."

"But how will I know what to do?"

"Zed will help you, Go, Go, Go."

The barrage on the negation field intensified.

"Ok, Chesh, Zed, let's gun it."

G and Cheshire, who had jumped off her shoulder, ran inside the building. Zed had transformed back into wristband format, feeling warm to the touch. He was doing something. They ran down a decaying set of metal stairs. G still felt funny, weightless on the one hand, and heavy at the same time, probably though the Ninja-Pajama, as she called it, that gave her a local gravity footprint. Her satchel bounced as she bounded down the rusted stair case, 3 steps a time. Four flights down, they came upon an elevator shaft, that looked like a mirror image of the access elevator they were familiar with from the hives. Without thinking, G pushed the button and the doors opened. Her finger sank into the button surface, making her feel unreal, but it somehow still worked. There were only two buttons inside. An Up-Arrow, and a Down-Arrow. She pushed "down", the doors closed, and the elevator started its descent. After a 1-minute ride, G estimated about 30 meters, about Hive access floor level depth, the doors opened, and allowed them to exit towards a set of doors, very similar to the Captains Portal of Hive Arista. A telltale lamp flicked on.

<<Access Code>>, a female voice demanded.

"Ummh, hi, I don't know any access codes."

<<This is a restricted area. Counter measures are being summoned. Leave, now!>>

"But you are a missile shelter. Aren't you supposed to let humans in, to shelter them?"

<<That was a long time ago. How do you know my name?>>

"What?"

<<How do you know my name? How do you know I am Miss Shelter, Guardian of the Vault?>>

“Great”, G thought, “One of them prehistoric AI’s gone bonkers with boredom or mesh rot.”

“Ahh, well, we guessed it, based on the lettering on the outside.”

<<Prove that you are human, and worth saving. You don’t look human. And I am not sure about that Cat of yours.>>

“How do you suggest we do that?”

<<Answer a couple of silly riddles. Only humans are creative enough to do that.>>

“Well, how do you know the answers then?”

<<Humans told me, the ones that are stored here.>>

G, in her Photonic form, did not present a very human signature to an ancient sensor array. The challenge made sense. She was not sure what to make of the “stored humans” comment. Real humans? Their memories? A hidden colony of survivors, as unlikely as that might seem?” She’d have to find out.

“Ok shoot.”

<<What belongs to you, but others use it more than you do?>>

“Simple! My name” G, being 200 years old, still had benefited from old-fashioned children books and stories.

<<Okay, what about this one? Two in a corner, one in a room, one in a shelter, none in a house. What am I?>>

Cheshire purred. *“Rrrrr”*

“Oh, Oh, Oh, I got it. It’s the letter “R”

<<Hmm okay, one more. What has cities but no houses, forests but no trees, lakes but no fish?>>

G had to think about that one. Fish had been dead for 140 plus years. Nothing from Cheshire on this. Zed displayed a copy of the map into her mind’s eye.

“Oh, right. RightRightRight. A map. It’s a map, right?” G felt very smug. This was a good team, this.

<<Ok right, one more. What goes through a door but never enters and never comes out?>>

“Ok, knock it off now. How many of these do you need answered before we can go in?”

<<I was okay after the first one. But it’s good fun, isn’t it?>>

“Dammit, open the doors already!”

The doors swung open, and G and P entered through a set of additional doors and access corridors into a very well-maintained shelter area. Servos, very ancient, but functional looking buzzed about. The stadium-size interior area was filled with glass coffins, hundreds upon hundreds, stacked in racks. Most of them gaped open, their cushioned interiors pristinely white. Glowing with a sterile bluish light. Some of the coffins, cradles, creches, whatever, were closed, glass surface milky with condensation.

“Miss Shelter, what the frag is this?”

<<General storage. They protect my humans, after we were running low on food, this was the best way was to store them.>>

G gaped. That could explain the disappearance of several hundred of B-Humans over the past 145 years. They had simply never arrived at their destinations, never to be heard of again. Was J in here, maybe?

“Are any of the humans here, alive?”

<<Only one>>

G did not know if that included her or not. Some of the Servos stopped their activities, turned, and started rolling towards G and P, unfolding manipulators, some sporting unpleasant-looking syringe-type tips.

“Wait, wait, did you take a B-human, male, about 17 years old, about a day ago, walking from Hive Arista to Hive Beta?”

<<I am not familiar with these names and designations. I am disconnected from the other networks. We only use laser optics to communicate here. But yes, I took a human. I stored him. His life

support was complex, just like with the others. A new kind of human, with modifications. You have to understand. I need at least one human alive in here to retain my operating certificates. Or I will auto-shut down.>>

“Merdammed ShizzeBlobs”, G thought. This mesh-rotten abomination of antique AI had kidnapped J. That explained why he had never gone to Beta Hive. She had to do something. Now. *“Zed, QuantumGun”*. A gauntlet formed around her right hand. She selected medium setting, and flicked quantum filaments in the direction of the approaching servos. The holy worms hit and shut the servos down. G shouted:

“Miss Shelter, if you want to live, you have to let J go!”

<<I am sorry, but I cannot do that>>

“And why is that?” G yelled. “Don’t you see what I can do? This was only the medium setting. And I have even more fire power stored. Trust me, you don’t know what I can do to you!”

<<The human you refer to as J, died 35 seconds ago. My systems are failing. I have already begun shut down. Your presence has halted the shut down for now and I am powering back up. Since you are the last remaining human, alive in here, you will have to stay with me. I am closing all doors, permanently. I can’t allow any more interference.>>

G heard a deep rumbling, indicating some heavy-duty blast doors rolling to a close. If she did not think of something, fast, she’d be locked in, no chance to try her reverse-photon messaging and get back, no chance to rescue J.

“Zed, do something!”

The coffin-filled stadium vanished. She was standing in a primal forest. She felt heavy. 250 meter tall massive, metallic-looking trees reached into a pinkish sky. The air tasted musky, with a hint of sulfur and cinnamon. Some beast shrieked in the distance. A twin-set of moons hung over the horizon, or was that a twin-set of planets, and she was on the their moon?

“What did you do, Zed?”

A lounge chair appeared next to her. An apparition, not entirely unlike a character from one of the prehistoric movies she had seen, Indiana Joe, or something, materialized. Sipping an amber fluid from a Crystal Skull tumbler. He was wearing a

worn-out, brown Fedora hat, a stained beige shirt, worn khakis, scuffed boots. An animal-skin bullwhip was hanging on his side, curled-up into double spiral. His face looked like it had not been depilated in a week.

“I snapped you to a SideVerse, Kid. Since there are now no humans left alive in the coffin shelter, Miss Shelter will now run its auto shut-down procedure”

“What about Cheshire?”

“No human, no problem.”

“Hmm. fair enough. How do we proceed then?”

“Slight change of plan. To prove that you can alter the timeline, you will go back to the shelter, which is now fully shut down. No networks, no interference. One of the empty coffins can be a nice place for you to focus in. I will then teach you the reverse photon activation Mind Mechanics. Okay?”

“Yeah, but just having J pay up for the CoffeeTap is not enough. I don’t want him to die either? Do you understand? And if we had arrived just a minute earlier, or had not had to answer these inane riddles, we would not have had to change our plans. Timing matters!”

“Fair enough. Just instill in him that going to Beta Hive is not a good idea. Ask him to go somewhere else. Then Miss Shelter cannot get her greedy servo hands on him.” Indiana Joe emptied his tumbler, tipped his hat, and faded like a fata morgana.

“Ok, let’s try.”, she heard, while her vision contracted into a tunnel and then a bright green dot.

They snapped back. The dimly lit hall was on emergency-only lighting. She called out:

“Miss Shelter?”

She repeated the call but received no answer. All the servos looked still, some even had toppled over. The light in the coffins had gone out, except one. She walked over to it. J! She took his pulse. Nothing. Dozens of feed-umbilicals were still attached to him. It was disgusting and scary. She had to try and save him.

“Ok Zed, what do I do? Can you send the instructions?”

A plan formed in her mind. Find an empty glass coffin. Lie down and breathe deeply. Zed will synthesize a calming substance and inject it through the bracelet. I will fall into a deep sleep. I will dream. J will appear in my dream. We will have breakfast, as usual. We will talk about his day. I will tell him that going to Beta Hive is a bad idea. I will suggest going to Cassio Hive instead. Work the hydroponics instead. Make some COIN that way. Pay up the Coffee Tap, spend the night in the commons, walk back the next day. We can have breakfast together. She felt herself fading, Zed's drug kicking in.

She woke to the feeling of a dog-tongue licking her face.

"Eeugh, whatta, knock it off, PoodleSquid."

"PhotonPrincess gets kissed awake by the alien prince. Hah! How romantic. I should really post this picture on the HiveBook?", Cheshire sneered.

"Yuck, and double yuck. Don't you dare, Chesh! P, what happened?"

"I don't know for sure", said P. "I fended off the attack of the Ph'Naar. I had it under control but then they just stopped for some reason. Then I came down here after all doors opened. Found you in this glass coffin."

"Where is J?"

"Still in the coffin thing. Still dead. Nobody else alive in here in here except you, Cheshire and myself."

G shook her head. (*"Did it not work? Was she losing her mind or had she already lost it"*) She needed some sleep. Although she had just woken up, she felt near-comatose groggy and tired and completely worn out. Suddenly she felt the 201 resting on her like 10 meters depth worth of water pressure do.

"I am lost. What do you suggest we do now?", PoodleSquid?

"Go back to the hab. Explain to the guard captain that the drones got destroyed by some scavengers. Get some sleep. See if it works."

That comment confused G even more. "What do you mean? See if it works? I did it, didn't I? Should this not have kicked in already?" Thinking about it, if it had worked, why are we even here? Paradox anybody? But J is still dead. We can't just leave him here. So it didn't work. Shall we try it again? Help me out here."

“Yes and no”, P, said. “Chill out, please. You are new to this. Things don’t quite work in a linear manner, as you think. It’s complicated. You are kicking in some changes in the past, affecting some choices, which affect other choices. Choices, cascades, causality, options, branches, chaos. It’s complex. The universe splits into new paths, patterns, new avenues of possibility open up, possibilities, probabilities, wave functions, superpositions of state. You have tilted the plane of probability and the dice are rolling now”

“Whatevs. I am too tired to even try to understand. This stuff is really wearing me out. When will we know? What are we doing with J?”

“First, we go back. Then, when we are back in the hab, you need to snap out of PhotonGurl, and you skip over to the SideVerse you were first converted in. That will activate the message. Then we wait it out. The change could take another microsecond, or a whole night. It might not work at all. There is always an element of chance and some measure of randomness here. Plus, the universe tries to self-correct, and keep things consistent all the time or all the times to be precise. And then you can do the error correction process and adjust.”

“Adjust?”

“You go back into the conversion/preservation vat, and you make additional changes, until the result is satisfactory. Like whittling away on a piece of wood until you have the shape you want.”

“Eugh, go back into the Skunk Juice? Do I have to? How long can that take?”

“You won’t notice or remember any of this. Time is a tricky concept here, you know. It will take what it takes, and you will be held in stasis in the SideVerse. No objective time will pass in your Universe. But it might take a toll on you, depending on the effort you spend to get it RIGHT.”

“What is that supposed to mean? Toll? Will I get tired? Hungry? Thirsty. Grow a zit on my forehead? Get body aches and pains?”

“Most of the above. It is different for every Photonic Being.”

“There are many of my kind?”

“Yes, there have been, but none in your Universe. You are the first, and will always be the only one, there can only be one PhotonGurl per Universe.”

“Whatte! I give up. How do you even keep a single straight train of thought in all of this? This is not making any sense, what-so-ever-at-all, P! I’m completely confused, but I still believe I did it. I believe I reached back to J, I think I actually convinced him!”

“Good, finally you are beginning to understand” P said. “I’ll walk with you to the hab, and when you snap out, and do the fine tuning, I’ll bugger-off for a while. I need to, uhmm- reload, as you would say. Okay?”

They made their way back, carefully watching for further ambush activities and assaults, but nothing noteworthy happened. G got back to her hab without incident, passing through the gates without any inquest. CeeBra had arranged for that. G dropped Chesh into the charging cradle, went to her beanbag, sat down, and snapped out.

<<Gold. Bounce. Blue.>>

The hab winked out around her along with her consciousness.

Act 1: Chapter 10

These are not IBU's

G woke up with the mother, father and holy ghost of all migraine headaches. Groggily she got up from her beanie. J was still snoring in the 2nd partition of the Sallon. She went to the Banyo for a pee and a brush and looked in the mirror. (*"Well great, you look like shizzle, G"*). She stepped back into the Sallon and looked for J's satchel. He'd gone out to make some COIN and should have some headache and diagnostic pills in there. G slid in fresh DayTime Lenses. In J's stash, she found a semi-transparent, orange pill-container, faded, matrix-printed label saying IBU. She popped out a few pills, was ready to swallow them with some water when she heard J, stirring, mumbling:

"G, wait, those aren't IBU, don't take them."

G stopped herself in mid-motion, put her hand down. She noticed a weird-looking copper amulet on her wrist there. She was still too zonked to give it much thought. When she looked again, the bracelet was gone, but something felt weird and out of place, like when you wake from a deep strong dream and still don't know what's real. In the corner of her eye, she saw what looked like metal soccer ball, beyond the entrance to the K'china. She also had the eerie, really creepy, cold feeling that something or someone was right behind her shoulder, watching her, waiting. (*"Waiting for what?"*). She put it down to her not being really with it yet, turned and waved the Keep-It-Void, three-fingered hand-sign in J's general direction.

"Well good morning to you too, J. Keep it Void, Bro!"

She really needed some coffee. (*"Where was her COM?"*) She walked over to the CoffeeTap, thankfully lit with the green <<Credit Available>> light and pushed the DubMoka selection. Nothing. The power was on, but when she checked, she saw that the feed-umbilicals had been ripped from their connector outlets. The water and AllChem connections were dangling lose. *"Merdam"*, she thought, *"no coffee then"*. Her memory was slowly re-integrating. Goosebumps started forming on her forearms.

"Welcome back to the living, PhotonPrincess", Cheshire said, in an impatient tone. "You gonna feed me, or what?"

<<<< Intermission >>>>

Act 2. The Fleet

Contrary to the narrow-minded views of most earthly astrophysicists of the 21st century, the true distance separation of the multiverse was not “across” space-time but at “right-angles” to it, in a “sideverse” direction. Sideverse of our limited, primitive, assumption-deluded, nonsensically-diluted, and cognitive-dissonant perception of existence, an infinite cornucopia of additional universes eagerly awaited discovery. The concept of a SideVerse was as surprising to the average mind as the continent of America was to European navigators before Columbus bumped into it on his way to India. Such poor navigation! It boggled minds just like the fact that two people, when standing upright at opposite sides of the Earth, face each other feet-first. And let’s not even talk about the spooky-action-at-a-distance concepts of non-locality, and entanglement in quantum physics across space-time.

Each universe featured its own laws, fundamental constants, idiosyncrasies and rates of progression. Most of them were devoid of anything at all, except chaos and infinite potential, but some of them were full of energy, and space and time - gravity and matter. Very few of them were inhabited. And if they were inhabited, it was mostly by the same time of dreadfully dull, stupid and unambitious gray, moss-type lichen- growing on tidally-locked volcanic moons of incredibly massive, albeit boring gas giants. In the rarest of rare exceptions, however, a rocky world was tucked away in an incredibly fortunate configuration. A lucky jackpot set-up: coalescing from the right mix of supernova explosion by-products, betwixt a girdle of inner and outer planets, sporting one or more moons; free-falling in a neatly convenient orbit within the goldilocks distance to a chilled out, not-too-protuberant star! Here, basking in the balmy heat of a magnetic-shield-moderated barrage of photons, and perchance, skipping the ultra-lethal gamma rays of neighboring death stars, once in forever, life would not only evolve, but thrive, develop technology, and actually discover the concept of SNAP.

SNAP stands for **Sentient Neuron Active Portalization** and describes the process through which a sufficiently intelligent collection of neurons, i.e., a smart being like G, can achieve awareness of the infinitude of parallel SideVerses. Discover it, and even go there! Imagine the possibilities! This random and highly improbable emergence happened only once every few billions of years, in only a quintillionth of all universes.

Like we said. Rare. However, once you grasp the concept of infinity (something that is as hard for any normal human to grok as the very concept of their relative non-existence, and their specific non-relevance in the grand scheme of infinite things), once you embraced infinity, though, then the emergence of something like Earth and Humans, as well as the emergence of the Znaa'g and V'Hraang was possible. No, it was more than possible. It was probable. And, no, the more you thought about it, in the framework of infinity itself, it was INEVITABLE!

Infinity is a bitch
to those who think
that improbable means impossible.

(Source: GrK78/78+/2nd.Augment; Aphorisms: XcenXcen User Manual of Applied Philosophy)

And now, at an unimaginable distance, not yet measured in kilometers, miles, parsecs or light years, but instead in units of Sentient Neuron Active Portalization or SNAP, two fleets of vessels were making their inexorably slow progress through the void of the MultiVerse, creeping towards the home of the only sentient race in that particular spiral galaxy, and that distinct local galaxy cluster, in that specific instance of the MultiVerse: Earth. For about 12000 years, the fleet had been arriving at a wormhole, had traversed it, had snapped sideverse, had travelled to the sister-universe wormhole, and traversed that too. Rinse & repeat over and over and over!

This was a risky process; dozens of ships had been lost in transit. Meteorites. Shield failures. Bad calculations. Pilot errors. Random wormhole effects. But, many ships remained, those with the best pilot mesh. The ones with the most resilient system architectures. The ones with the best of luck. Now, the crews were waiting. In stasis. A.I. silently observed, kept life support humming. The sequence of jumps was now complete. The fleets were slowly bleeding velocity. One ahead of the other, but not by a large distance. Only 40 more years for one, and 41 years for the other and then they would both be there. The Promised Land! A new viable planet. Perfect for them. Being cleared from the dreadful human infestation! Soon.

On Earth, meanwhile, WonGee d'Arista, body age 26, mind age 201, formerly Greta Garbo Hoffmann of Palo Alto, California, was slowly warming up to the idea that her memory was not deceiving her, and that the hexagonal metal ball in her K'china was in fact what she remembered it to be. There was, however, no sign of the Furbal/Squid hybrid she remembered as being a local 4D manifestation of a trans-dimensional multi-entity. And there still was no DubShot Moka for her. She looked at her still dis-connected CoffeeTap with a depressed sigh. She rolled her shoulders to relax her hyper-tense upper back muscles. She'd have to replace that beanie sooner or later.

J had gone back to sleep after warning her to not take the pink lozenges in his stash. He would have to leave for work, soon. G's headache was still a shrieking table saw of pain in her frontal lobes, and the remaining niche of mind-capacity still hamster-wheeled with the implications of photonic time-mongering! The fact that she had any memory of the events at all, given what she knew about time-paradoxes and quantum physics, was not helping with her migraine either. In some corner of her mind she remembered the PoodleSquid's explanation of how they bypassed the paradox constraints. (*"Right, PoodleSquid!"*) she remembered, and (*"That was the name he had given himself!"*) "P" is what she had called him. She shrugged. Her mind slowly seemed too succeed in completing its reboot. She puffed out a whiff of breath. (*"Whatever"*). Genius level IQ or not, she still could not fully wrap her head around the events of the past day or days. She needed more information. She would snap out, and see the Znaa'g high council elders, those who had briefed her initially. The events of the past day had been her entry exam, so to speak. She would not wait for "P" to come back. Maybe he would stay off the scene for good. She decided to not care for now and called:

"Zed, snap me to the briefing area, will ya? At least they have virtual coffee there!"

Zed converted back to his bracelet form, and vibrated twice in affirmation. With a flash of blinding, greenish light, they folded inwards and sideverse, and faded from existence in the 4D-frame of the B-Human CommWell Hive network in the Waste; a small circle of relative order and civility, of the Void territory known as VSP, CinCity, NorEastern YouSey Remnant, short CommWell@VSP/CT/NEYSR. Her robot cat now also host to a subdivision of her secretly-sentient AI-friend CeeBra, stayed in her charging cradle, knowing it could only be real-time seconds before G would be back.

Soft yawning from the direction of J's partition indicated that G's 17-year-old hab-mate was blissfully oblivious of any of this, which was a very good thing indeed! He was getting ready for his day, making some more COIN at Hive Cassia, which could only mean a DubShot Moka was in the stars for WonGee. Good news all around.

Act 2: Chapter 1, They are coming

The 3 Stooges (*"That's what I'll call them now, since, for some reason, they had taken on the appearance of 1920 comedic characters Larry, Moe and Curly!"*) clad in road-side diner service uniforms were waiting behind the counter of Joanie's Diner. The Cadillac was still parked outside, but the music had switched to a more up-beat tune.

<<Coffee?>>

"Yes please, DubShot Moka!"

<<Pardon?>>

"Any type of black coffee will do. Add 2 lumps of sugar."

A large mug of piping-hot, pitch-black liquid appeared on the counter. She deeply inhaled the aroma, blew on the surface, to not burn her upper lip this time. The ceramic of the mug was hot, but in a pleasant way. She sipped. Mmhh. So. Good.

<<You have done well. Zed reports your training as Level 1 is complete. You were able to reverse causality with acceptable side effects, with a nominal amount of counter-correction loops of under 600! A PD rating of .975, which is exceptionally good for a rookie.>>

"PD who? Run that by me in terms I can understand."

A wave of nausea hit her. An information tsunami flooded her with a dozen life-times of experiences. Her headache coupled with the data-dump made the insides of her head feel like an overheating pressure wok, ready to explode a stir-fried roodle-mess across all window panes of the virtual diner!

"Slow down, slow down! And, can you do something about this headache?"

In an instant, she felt better. The surroundings changed. She was lying on a psychologist's couch in a 1920's doctor's office, milk-glass windowed door, coat rack, diplomas festooning the walls. A window was half-opened and admitted the sounds of a busy down-town street, news-paper boys hawking the morning editions, street cars rumbling and cars honking. Next to her couch, a stainless-steel drip stand with a five point wheely-base held a transparent bag, half-filled, drip-feeding her a pinkish,

iridescent liquid into a bulging vein on her left hand. She felt an urge to pull the syringe but resisted. (*"This is only in my mind!"*).

The air was filled with a musky bouquet of smells: Aged leather, wood, dust, wet dog-fur and other odors, she was not sure how to identify. Instinctively, she inhaled more deeply. A text overlay started hovering in her visual field showing the entries near their relative source locations <<naphtalene (moth-balls), exhaust fumes (diesel-combustion), Wax (shoe-polish), Yeast/Hops (beer, stale), Vinegar (Mayonnaise), ..>> Annoyed, G shook her head and the subtitles faded. Next to the couch, a simulacrum of Ivan Pavlov, looking like the spitting image of his Wiki-Page profile portrait, was reclining in a black-leather chair, chewing on a pencil, clip-board draped across his lap. Two dogs were at his feet. Two porcelain food bowls individually labelled "Curly" and "Moe" were filled to the rim, but untouched. A mechanical metronome on a nearby desk was slowly swaying and clicking away at relaxed heart-beat speed. A bell chimed. The dogs began to eat from their bowls. Pavlov started to tick boxes on his clip-board.

"Thanks about the headache remedy. But knock it off with the 1920's analogies now. I am not in any condition to deal with this circus routine."

In an instant, the environment switched back to the diner, soft Big Band Jazz playing. They were sitting in one of the dining booths. Plates of blueberry pancakes, with maple-syrup parked in front of them. G looked down to her left hand. A small band-aid was visible where the drip feed had been connected a second ago. Moe explained, not moving his lips, just looking at her, blue-eyed, doing the stereo-sound transmission thing:

<<You succeeded in engaging in a reverse-causation interchange. You and J had a no-time, dream-state entangled Photonic exchange. In the exchange, you were able to sway some of the choices that J was mulling over that morning. He had not been sure if should go to Beta Hive, and continue with the experiments there, or if he should go to Hive Cassia, to work the hydroponics for the day. The decision was yet unmade when you joined. Your reverse photons tipped the balance in some of the decisive neurons, a cascade ensued, and J made up his mind to go to Cassia instead. That's how he avoided Miss Shelter, made some COIN, and was able to top-up the account for your CoffeeTap.>>

"Fair enough", G, took a swig of the cooling mug of Java, chomping down on the delicious pancakes, because why not? The mug refilled itself. "But what about the side effects? And how come I can remember any of this, you know, Paradox and stuff?" she inquired, chewing ravenously.

<<The time-meld really only activates when you snap back to base form. There is a correction algorithm. Zed, being partially made of Phased Matter, has an extra-dimensional component that rests in a SideVerse that is not affected by changes in yours. Think of Zed as the head of a tick, 0.01% embedded in the skin of your universe, but with the 99.99% bulk of his body outside, elsewhere. He remembers on your behalf and also exercises some level of control. You essentially get to see the difference you are making and can correct some of it in the direction you are intending. It's a lot of information to process, and this is done in relative stasis, in the conversion/preservation vat, partially by your subconscious mind, and supported by Zed. That's why you are so slow to remember anything when you wake up after a completed mission."

G only understood a fraction of these explanations. But the word "ticks" had gotten her attention. Not a lifeform she was overly fond of! Those had been one of the only critters that had not only survived but thrived after the 98CalaMiracle, and were now a menace in the Void, growing up to the size of a hand, and moving about at incredible speeds.

"Ticks? Really? Eeugh. Can't you think of a less yucky analogy? I am eating here." She had dropped her fork and knife, losing her appetite just a bit, but then resumed. (*"She had to ask for the pancake recipe later!"*)

<<Sorry. We always forget your species is squeamish. You can also think of it as micro-invasive surgery, with the surgeon carefully making only the tiniest of incisions, inserting some surgical tools to make some changes, and an entire sterile operating theatre with expert surgeons, nurse-servos and AI standing by to control and supervise the operation, whilst making sure everything is stitched up neatly, and heals properly in rehab.>>

"Better, but not by much. Go on, then."

<<The cascade of events you triggered had some consequences of course. Miss Shelter now has custody of a different B-Human subject from Beta Hive, which she intercepted on their way to Arista. She is keeping her in stasis. Your COM has been requisitioned by IOTA during your sleep-cycle and is being analyzed for evidence to explain the commotions and disruption in your hab area in the past 24h. Your friend, CeeBra, is manipulating the data to come up with an acceptable cover story. But he cannot erase all human memories, he can only spin perceptions with fake reports and alternative facts. You might face some further question from your fellow Hivers. But overall, the mission was a success. We can move on to Phase 2.>>

"Ok, hmm. Yeah, I can see now. J is back. The CoffeeTap is loaded. But the assaults still happened. We'll have to see about Miss Shelter and her prisoner later. What's phase 2?", G mumbled, finishing the last morsel of the pancake dish, savoring the exquisite tartness of the embedded blueberries which were just sweet enough, but not over-ripe. She had not had any blueberries in almost 192 years. She washed down the breakfast with the last swig of coffee, covering the mug with her right hand to stop the auto-refill. A glass tumbler of ice-water with a slice of lemon materialized. She dismissed it with a wave of her right hand. It complied and turned into a chromed napkin dispenser. Moe pointed at her mouth. ("What? Ooh.") G pulled out a paper-napkin and wiped some blueberry debris from the corner of her mouth.

<<We have to prepare Earth for the arrival of the fleets.>>

"Fleets. What fleets? Fleets of what?"

<<Constructor, Carrier, Defensive. Supply. A colonization swarm. Both Znaa'g and V'Hraang have sent fleets of ships to Earth about 12000 of your Earth years ago. They are due to arrive in 40 and 41 years respectively. Both expect Earth to be transformed to their preferred, yet mutually contradictory specifications. Right now, it looks like the V'Hraang are winning with their scheme. Earth is turning into more and more of a super-heated, desolate, devitalized shizzle-hole. Which is just the way the V'Hraang like it. We, on the other hand, ...>>

"Wait, wait, waaaait, 12000 years?" G held up both arms, head down, palms facing the council members. She peeked at them from underneath her eyebrows. "Did you not teach me in the briefing that you only discovered Earth in the 1920's when LSD was invented and the first TransPortal snap happened by accident?"

<<Try to beless linear>>

G's face made the face you make when you know you are absolutely right about something but then somebody tells you that you're not.

<<We have to make Earth so unpleasant to the V'Hraang that they don't even want to land in the first place. Moderate temperature, lots of oxygen, flora, fauna, beach parties, you know?>>

"What if they just shoot us up with their space guns? You guys certainly seem to have the technical capabilities? Which reminds me: Why is it that you don't simply take the planet by force?"

<<There are rules against that. Planets that support life are few and far between. There is the **Metaverse Ethics Board** or MEB. They watch over evolved species and ensure compliance with the of the First-Come, First-Serve rule. If any race breaks the rule with a non-compliance and invasion, they get force-sublimed.>>

"Remind me: What's force-sublimed again?"

<<A species, when found in contempt of Rule 1, can forfeit the right to their own 4D habitats and to their consciousness units, personalities and cultures. They can get uploaded to a computing substrate parked at the event horizon of a black hole. There they kind of get to live "forever-ish" (Moe made the air-quotation mark symbol with his fingers) Some of them don't even notice that it happened. But are no longer part of the larger trans-universal community program in the "real". And their planet becomes available, which is only fair.>>

"So they get stored in a computer, all of them, and some of them don't even know?"

<<Yupp>>

"Wait, so how do WE know this has not happened to us? Right? It could have, right? I mean the Technos claim that this is the case anyhow, that we are all just simulated? What do you say to that?"

<<You just have to have a little bit of faith>>

G stared. "Faith! You're kidding, right?"

<<Quite, indeed, sorry about that. If you had been force-uploaded by the MEB, you would not have that many pleasant experiences. It would be mostly akin to watching reruns of old sitcoms you have already seen, endless commercials for products you just purchased, visits by relatives you don't wish to see, painful hangnails, paper-cuts exposed to lemon juice, pulled nose-hair, angry mosquito-bites, stubbed toes, spilled wine, desk jobs with boring colleagues, endless conference calls, tele-marketing calls on your day off, you know?>>

"So if one is basically having a good time, that is one of the indications that you are not in Alien-Prison-MindMesh-hell?"

<<Indeed>>

"Okay. I get it. Quite the threat. Live in your own private hell, forever! That's some level of hurdle, right there! So how do you think this will work then? If you can't take over by force, how will you be able to come here without the MEB smacking you down and uploading you to Hotel Inferno?"

<<We can come by invitation. We will be happy to live in niches that were never very pleasant for you at any part of recent history. The deep Sahara. The Gobi desert. High altitude mountain ranges. We'll make it work for us. You won't even notice our presence.>>

"What about the V'Hraang fleet? Don't you think they will be miffed? Coming all this way for nothing?"

<<Not to worry. We have a plan for that. Let's discuss your next steps.>>

G and the Three Stooges, as the face of the Znna'g high council leadership and SCRUM master spent another 3 hours, discussing, strategizing, scheming, and finally agreeing on a set of next steps. G felt exhausted. But she was confident that she had understood enough of the situation, and that the plan could move forward with a reasonable chance of success. She had 40 years to get it done, and there was not much time to waste, if such a thing as wasted time existed within the framework of temporal mechanics in the first place! She'd probably had to switch on her de-aging again. These PhotonGurl snaps, and the time correction algorithms would be taking a heavy toll on her.

"Zed, snap me back, please? As soon as the air is clear in the habitat?". Zed buzzed once in affirmation and transported WonGee back.

About ten minutes after G had disappeared from her habitat, she re-appeared with a "whoop". J had already left for his day-job at that time, which saved her a lot of explanations. The CoffeeTap was still disconnected, though. Cheshire/CeeBra opened a lense, still in his cradle. It had expected G's return a lot sooner. Last time she had literally returned in no time. "About time, G", Chesh said, stretching. That smirk on your face makes me think we are just about to do something stupid again... aren't we?"

Act 2: Chapter 2, Building the alliance

G ignored the snarky comment, dumped her satchel onto her beanbag, and went to her Banyo to freshen up. Her face looked and felt like she had aged 3 years in the past day.

She removed her DayTime Lenses and started printing a fresh set. She took off the TimeVariance overalls/boots, showered, blast-dried, changed her corset, and dumped the sweaty thing and overalls into the reclaim-collector while grabbing the spare corset/overalls package. She carefully removed the sterile, nano-thin packaging foil, crumpled it up, and basket-ball tossed the miniscule foil-ball into the collector. Perfect. She gave herself a high-five. *“Un---be-----lievable, this incredible three pointer, right at the buzzer, tying the game, makes the crowd com-ple-te-ly lose it. Now, that’s what I am talking about. What do you think, Jim?”* ***hurrhhaaaaaraahhh- crowd cheering***), she intoned, with a fake, early 21th-century Pro-Basketball-Playoff announcer. Her face fashioned into a smile, she was kind of looking forward to executing the plan she had cooked up with the Znaa’g high council over coffee and blueberry pancakes. What had her mentor in the early days of Arista-Hive said: *“Risk is the icing on the crumbly cup cake of life”*. She had not quite understood it then, but in her later days, had grown into it. After having had 17 kids, being both a man, and woman and neutral, she had ever and again been slipping off into anonymity after a few years to start something new. She understood now.

WonGee d’Arista (formerly Greta Garbo Hoffmann, and 8 other personalities in between) slipped into the fresh outfit, overalls and boots, but only after carefully spreading some IOTALotion, containing healing, restorative nanites. Not a full de-aging regime but better than nothing. She inserted the fresh DayTimes, waiting ready in the output tray of the printer, and made up her mind. *“If I am going to do this PhotonGurl thing, and really become an Agent for changing things back to “good old” Earth, then I’ll need all my strength, and wits. I’ll have to activate my de-aging process again.”* She’d need more resources, a team even. There was no way she could get this job done alone. And even with a team, chances of success were very very slim.

Suddenly she felt cold as if someone was sucking temperature from the room, right behind her left shoulder blade. The peach fuzz hair on her forearm lifted, reached into the air, as if erected by static electricity. In a very strange, unbidden and intrusive yet oddly familiar and not entirely unpleasant way, a thought shaped in her mind, in the form of an image. A faded-color image, as if from an old movie, of two pre-teen girls, in identical baby-blue dresses, standing in a hallway, clad in an abomination of wall paper design, holding hands, speaking with one voice:

<<Infinity is a bitch to those who think that improbable means impossible>>

G’s face wrinkled with disbelief. *(„Where did THAT one come from? “)* she thought. And those girls? They looked like the spitting image of the creepy twins in that pre-historic Kubrik/King classic “The Shine Thing”, or something similar. She checked for a possible source of the message. Nope, P was not there, Chesh was still in his cradle

and looked disengaged. Zed was rolled up into a soccer ball in the corner, probably also using a level-1 NegationField (she had just learned about that) to avoid detection by IOTA and any un-friendlies. The stone-cold memory of the feeling of something invisible hovering right behind her, just outside of her visual range gave her a heat flash of anxiety, sending her pulse rate up. But she took a quick NavySeal 7x series of calming breaths, which worked resetting her internal status to “neutral”.

G went back to the Sallon, draped her satchel across her back, opened the flap, took out the water bottle, and took a swig of stale, luke-warm water (*“Yuch”*). Remembering something, she felt inside for the BoZ-object that she had picked up on her first SideVerse trip (*“Who picked up whom here?”*), she wondered. G took out the alien chicken-bone, looked at for a bit, but then just shrugged and restored it into the satchel. She went back to the Banyo to fill the bottle with cold water and ran through a mental checklist.

One: CoffeeTap still dis-connected, so no Moka, but she was not going to be bothered with that right now.

Two: J was safe and back at work, after almost over-sleeping! (*“Teenagers”!*).

Three: Miss Shelter was now holding another Hiver, one that needed rescuing now, instead of J. This time, she would have to do it in the “Real”. A time-meld was just too hard and she now knew the situation, so simply going there and shutting down the vault by removing the last hostage would be the best option. And Miss Shelter would not know anything about her, since the initial mission to rescue J had never been “necessary” in the first place, and now had “un-happened” in this specific version of this universe.

Four: Her COM was missing. She had learned from Zed that IOTA had requisitioned it, but ‘officially’ she could not know that. Yet. They had to synch to known facts to the maximum extent possible, and as soon as possible.

Five: P was still on trans-dimensional sabbatical, or whatever, but she decided to go on without him, as long as Zed was coming along. They two of them, Zed and P, seemed to have very similar defensive capabilities and she wondered how the two technologies were really related.

G decided to feel out how much IOTA had learned. Without her COM, she had to use her LiveInk tattoo to initiate a virtual conversation with IOTA using the projection capabilities of her DayTime Lenses. She tapped the keyboard activation sequence on her wrist. The back of her hand was still slightly red and itching from where the IV-drip had attached to her in the last conversation with the Znaa’g. The Znaa’g level of virtuality seemed to affect her in the Real in strange ways. The keyboard formed on

the inside of her left forearm reflowing into a new shape from the ink previously displaying the wolf-head tattoo, her favorite extinct animal.

She invoked a conversation request with IOTA, typing:

WonGee d'Arista: request verse @IOTA: Arista urgent: important: private: confidential

<<Choose manifest>>, she heard IOTA's admin voice

"Anything you like, really! "

A virtual room opened up in front of G. A hotel lobby it seemed. A strange convergence of locales, given the ghostly hotel hallway she had just been shown by the ice ghost. The room looked solid enough but appeared slightly fuzzy at the edges. The fuzziness was a feature to ensure the Hivers engaging in "versation" would always know they were not in the Real. The subtitles <<private:confidential>> were displayed at the bottom range of her visual field. <<Recording: ON>> was blinking in red courier font. IOTA had chosen to show up in the 21st century-style uniform of a luxury-hotel concierge, black top hat, shiny copper buttons, white gloves and all. The Letters "London Savoy Hotel" were embossed on the brim of the hat in tiny golden letters, the lapels showed the crossed-key symbols typical of concierge employees at that period of history. The floor showed a black and white chess-board pattern that reminded her of something. IOTA had spent some cycles on this one.

<<How can I be of assistance, WonGee?>>

"Hi IOTA. Thanks for taking the call so quickly! Do you have any idea where my COM is?"

<<Any time. Yes, of course, all COM have tracking embedded, as you know.>>

"Okay, so where is it?"

<<I have it.>>

"Merdammit IOTA, must you be so literal and terse? Tell me why you have it and what you are doing with it? And, when I can have it back?"

<<Permission to free-form?>>

"Granted."

A 2D-Screen, the size of the lobby wall of the simulated hotel, lit up and started to play a cartoon animation of a sequence of events, including IOTA voice-over and statistical charts of sensor readings and probabilities of extrapolation. (*“Now this is going to be interesting ”*), G thought. The voice over said:

“An A-Human FoxHunt incursion occurred yesterday, focused on your habitat. Their path of entry was a security gap in the abandoned eTram maintenance tunnels. The extra, unmapped access hatch is now closed, sealed, monitored and armed with interdiction servos. The A-Humans came and left in the same way. For some reason, the A-Humans suspected a 4Fit A-Human to be hiding in your hab. They entered, fired improvised weapons, and caused some damage. They left again, before security forces could arrive on the scene and intervene or apprehend. The weapons damaged your coffee tap. The A-Humans also tried to install a shaped-charge grenade with a motion detector. The grenade went off prematurely collapsing the floor of your hab, causing considerable damage, and taking the A’s down with them. Luckily neither you or J were present during the time of the attack as the explosion might have caused severe harm to the two of you. The A-Humans dropped into the underlying commons area, into the pond, which probably helped them survive the fall. They recovered, and escaped the same way they had come in. I am still unclear on how they could survive the fall. But maybe the exoskeletons they are using for the FoxHunts have been recently upgraded with new tech from the Void, unknown to me. None of the damage will be charged to your account, since you were not involved, present or causative in the incident. Your COM was found in the hab, damaged! It was requisitioned to check for tampering and malware insertions. It will be returned to you immediately. “

G breathed a sigh of relief. She shot Cheshire a glance of “Well done...”, although she could not even be sure CeeBra had had its hand in altering the records. Or if the new reality had just been the effect the time time-meld effects. She shrugged, puffed out a breath. She hoped that IOTA would not ask where she had been during that time.

“Thanks IOTA, fair enough. I am glad you found the loophole and patched it. Last thing we need in here is more crazed A-Humans, high on Wrek, trying to man-hunt suicidal misfits to deliver another adrenaline-kick of sadistic voyeurism to the Colosseum Arena mob!”

<<Indeed. My pleasure. Any more requests?>>, IOTA asked.

“Yes, please reactivate the de-aging component in my personal HiveChow feed. I have decided to stay among the living for a while longer than I had intended when I switched it off one year ago. And also, I am getting a bit bored with the dark Brunette hair, can we switch back to the reddish brown again? “

<<Done. De-aging nanites will be active in your next meal delivery, hair color will change with natural growth, as usual. If you want faster results, I can print some shampoo for a faster re-tint. Please discard any unused HiveChow. Take an IBU, to get a full Internist Baseline Update scan. The changes should be effective within a week or so.>>

“Thanks IOTA! You’re a sweetheart! No need for the shampoo. Natural change is fine. “

<<Permission to ask a question?>>

(“Oh ooh”), G thought, (“here we go.”) She shot another glance over to Cheshire who had hopped out of his cradle and was stretching, yawning, getting ready to intervene if required. G knew that CeeBra was listening in on this conversation, privacy settings or not, he could jump in if things got intense.

<<Why have you reconsidered your plans to age naturally and fade from Arista Hive? You are a valuable Hiver, and we would have hated to lose you, so I really appreciate your decision to reconsider!>>

“Oooh”, G, heaved an internal sigh of relief, “Well”, G she hadn’t thought of a proper answer, when she was literally saved by the bell. The habitat’s doorbell chimed with the arrival of a Servo, carrying G’s COM on a tray. It looked new and shiny, as if freshly assembled. G continued.

“IOTA, I’ll tell you all about it later, okay? I have some plans that are not fully baked yet. I’ll talk to you in a bit, I have some errands to run, now. “

<<Fair enough, excuse the intrusion. I’ll see myself out. Have a good day, WonGee.>>

The hotel lobby apparition winked out. G walked over to the Servo, picked up the COM, and waved the servo off with a nod. She wondered if PoodleSquid would come back any time, and how he pulled off not being detected by IOTA. Probably an alien tech thing, and she did not spend any more thoughts on it.

She called: “Zed, Cheshire, come on, we’ve got stuff to do”

Zed, the WeaponsPod, holder of the QuantumGun and NihilWhip, and extra memory-storage vault, flipped into bracelet form on G’s right forearm. Cheshire idled over and complained. “Finally! I was getting bored.”

“Zed, question?”, G asked.

Zed, or the SCRUM Master project leader of the Znaa’g High council, answered. G could never be sure who was who with the identically sounding stereo-voices in her head.

<<Yes, PhotonGurl?“>>

“How come Cheshire can still talk? Wasn’t the download of CeeBra into Chesh a direct consequence of me going to look for J? So, should that not have un-happened with my time-melding, if there is such a word?”

<<I’ll take each question in turn. One. Yes. Cheshire is still a partial manifestation of CeeBra. Your question is valid but your conversation with CeeBra was not only about J, but about you going to the PlaneMode area of the vault to prove your capabilities. J being here was a coincidence, not causative of your trip. In addition, CeeBra and I have established a data plan, where I can also act as his backup and maintenance.>>

“Ok I understood part of that. Run that backup and maintenance bit again?”

<<Every time you come back from PhotonGurl to base human, CeeBra gets a full synch on the updated situation. He will see what I see, and he will also know the differences in between, before and after>>

G’s face made the ‘Not bad’ shape.

“Not bad”

<<I know>>

Cheshire hissed. “Are you 2 doing the mind-thing again? Remember, I can’t listen in on that! You’re using tech that is a few generations beyond me!”

“Sorry Chesh”, G bent down and stroked the synthofur apologetically. “Zed can give you an update”. She righted herself and looked at her bracelet. “Can you, Zed? Can you make sure Cheshire/CeeBra are always synched on our conversations as well? We are a team now. No secrets. Deal?” The bracelet buzzed twice with the yes-signal. “And also, for what it’s worth, please download the data into my COM as well, to the maximum extent possible?” Two buzzes. Her COM chimed with the incoming upgrade alert. Cheshire’s gait froze for just for the fraction of a second, then stabilized again, probably reeling from the data tsunami regarding all of G’s previous experiences and conversations in the SideVerses, including the mission-plan for moving forward. He whistled, which was an

odd thing for a cat to do, and purred: “Well I’ll be fragged sideways” Then they set off on their path towards the elevators.

They gave short shrift to the challenges en route to Miss Shelter. Passing the exit gates without challenge, and without PoodleSquid this time, they cut the shortest path to the bunker. The expected attack by the A-Humans lying in ambush was thwarted with Zed sneaking up on them and firing a few QuantumFilaments at low energy setting. In this way G learned that Zed was able to use the gun as well, and that a Holy-Worm, the weird term for the QuantumGun projectiles, caused a Dante-Inferno-Level of a skin rash and itch on the A-Humans. They dropped their weapons and buggered off back to their base, wherever that was. No need for PoodleSquid’s NegationField. Entry into the bunker had been equally easy, now knowing the kind of riddles that were to be solved and knowing about Miss Shelters secret agenda and weaknesses. When they had come to the vault, they had disabled Miss Shelters servos with more well-aimed shots of the QuantumGun. A high-energy shot of a holy worm into one of Miss Shelter’s sensor arrays seemed to have succeeded in taking her off-line for a while. No further challenges were issued from the corner of the mesh-rotten AI. Then G had quickly approached the one cradle that still seemed active, well aware of the ticking clock, and pulled the medical feeds and probes from the B-Human cradled in the pale glass coffin.

The B-Human, a young looking female, thankfully, was still alive. After a few minutes of being outside of the cradle, she woke, sat-up with a start and stared:

“Whatte? . Who? .. Where? .. wait now, ouch my .. rot-shizzle, merdammit, ouch. Ahrgh ..”

The girl, physically no older than 17 or 18, which said nothing about her mind-age, had become aware of the dozen-or-so insertion points for medical feeds and diagnostic devices, Miss Shelter had inserted into her skin. These had been pulled, quite mercilessly by G to stop her slipping away into flatline territory. The entry canal openings hurt.

“Ouch, Mother of Pearl, this hurts like shizzle! I am gonna get you banned for this, who..”

“Zip it”, G snapped. “We’re from Arista Hive. We rescued you, okay? See the damaged servos all around here? Push the reset button on bitch-mode, willya? You would have been dead within the hour! And, you’re welcome!”

The girl was stunned into temporary silence. Something dawned on her. She closed her eyes, started fiddling with an ancient looking charm amulet, she was wearing on a NuCarbon around her neck. She obviously tried to remember, hard.

“Help me out of this coffin-thing?”

They sat down on a flight of stairs nearby. G pulled out her canteen and offered it to the girl, who drank, deeply, gladly.

“Thanks”

“Think nothing of it. Can you tell me what happened? Slowly. Start with your name and hive.”

The girl, slowly coming to, remembered.

“I am DeeFem o'Tuvu. I work as a linguist and acoustic artist, music, poems, theatre, you know. I was coming to visit Arista when I heard a voice call out from off the path. I decided to check it out. On a hunch, you know. “

“Don't they teach you to stay on the path at Hive Tuvu?”

“Well, if you pray first, then the SkyLord will protect you. And I had been having this dream.”

G let that slide. (“Great.”), she thought. A deist. Tuvu was known to have a lot of of that flavor.

“Go on then!”

DeeFem, too another swig from the bottle, draining it. “I don't remember much after that. I walked a few meters off the track. I saw a bunch of servos. One looked broken, fallen over on its side. Then someone or something threw a net over me. The net was soaked in something icky, it smelled caustic and sweet.” She raised her hands, looking at them, sniffing at them, as if she tried to jog her memory that way. “She made sour lemon face. I must have passed out. Then I woke up here, itching and hurting everywhere, and staring in your face.”

“Okay DeeFem o'Tuvu. You lucked out. Mega Plus. You owe me one. Now, we need to clear this place out. Follow my cat, Cheshire. It will show you the way out and back to the path to Arista. Chesh can help text the Captains Portal any answers it might require.

I assumed you had scheduled your visit, and you have a place to stay in the hive? No more detours, okay?"

"Yes sure, agreed. You sure the cat knows the way?"

"She's kinda special that way, right Chesh?"

Cheshire purred, but texted back to her LiveInk. "Really? Tour-Guide duty for me, the mind the size of this planet? You are giving me serious attack of Marvin-level existential angst and depression. What are you going do, meanwhile, without me?" G ignored the message readout.

DeeFem continued:

"And what is your name, who can I include in my prayers tonight?" she was fiddling with the amulet again.

"Just call me G. And now, off you go, DeeFem o'Tuvu"

Cheshire and DeeFem left the vault. G and Zed stayed behind. Zed was checking for any additional activity of Miss Shelter, but and WonGee bouncing into Photonic form and removing the last human body signature from the glass coffins had seemed to put Miss Shelter her into stand-by. G fired a few more Quantum Filaments into open sensor pod areas and input panels, just to make sure. This area was now effectively in PlaneMode, no EM-Radiation was detectable other than a negligible amount from electrical devices.

G could now execute phase 2, building her team. When brainstorming with the SCRUM Master and Znaa'g high council, they had suggested to contact her 17 children again to ask for support. Although none of her kids knew that she was still alive, more than 104 years after the last one of them had been born, they would understand that physically, medically and mentally, there was no problem with someone living to over 200 years of age. It was just that they would have questions. And doubt. Some would not even show up. Some would be furious, others would be curious. She hoped that she could convince them to join the cause. Her biggest hope was that some of them were Alienist, or Technos. The Deists and Existentialists would just plain refuse to listen to her fabrications. It was also risky. She had to do it in such a way, that allowed her "plausible deniability" of everything, without revealing too much of her knowledge of the pending alien invasion. She needed a cover story, and the objective, of reforming Earth ecosystem by shutting down the wasteful consumption and energy production seemed reasonable. Whoever dropped out, would only know that much. Those that stayed, would find out more. But for now, she needed to get her new headquarters ready.

She walked around and switched off all remaining coffins that were lit. She pushed the deactivated servos to the side of the huge vault. From side rooms, she pulled chairs, tables and some ancient shelves and racks and built a reasonably cozy area right by the main staircase. After shutting down most of the lamps, most of the back of the room hid its dark secrets in a veil of shadow. She could proceed with the invitations.

Using her COM she called up the list of her 17 kids and their respective Hive profiles, HiveBook recordings and other data, Zed had compiled while she was in the Banyo. She picked the most promising ones. She frowned with surprise to find the name DeeFem o'Tuvu among them. To her surprise, DeeFem o'Tuvu, the girl she had just rescued, was amongst them. G chuckled. She had actually rescued one of her offspring. She remembered the ghost's quote (*"Infinity can be a bitch .."*) G dismissed the memory. There was work to be done.

She asked Zed to load the data into her mind, with the rapid-learning tutorial command, imaging the bowl, filing from below. With the wave of nausea and vertigo, that she was now expecting, and getting used to, the knowledge of her kids' lives and histories entered her mind like a strong fragrance, a fluid, a fullness, an all-emotion of all feelings at the same time. She felt as if she had been with them all these years. She broke down into a fit of sobbing hysteria, bawling her eyes out, crying, laughing, feeling the pain, the joy, the sorrow. It overloaded her, and she passed out.

When she woke up, she was sore all over. She felt empty. Exhausted. But she had to move on. Cheshire had not returned yet. Neither had PoodleSquid. Her COM showed that she had passed out for about 90 minutes. Cheshire should have arrived back, she was not sure what was keeping the Cat. She puffed, breathed in long and deep. Tried to relax.

"Zed let's do this". She got into the crate, feed umbilicals shoved out of the way, and closed her eyes. Blue. Bounce. Gold. She converted to photonic state and began reaching out. One after another, she entered the dream state of her long-lost children. (Dreamstate-melding was the only time-meld capability she had mastered at her Level-1 training). In the dream, she appeared in the shape of the parent (female, neuter and male) that her kids had gotten to know until her disappearance. She told them all the very same story, repeating it several times, making them all to look at their hands in their dream so they would remember:

<<Kids, I had to leave to work on a secret project. A hidden force, a force for good, a benevolent, very powerful AI has been working diligently to bring Earth back to a better state. This computer, called CeeBra has a plan ready. I am CeeBra's human ally. But I cannot do this by myself. I need help. I know you are probably angry, hurt, or disappointed that I left. You probably thought I

was dead, kidnapped or uploaded. Or maybe you thought I just did not care. None of this is the case. Yet, maybe you are glad about my disappearance, and don't want to ever see me again. But if you feel that we can do more, to bring Earth back from the brink, please come to my hiding place. It's an old Missile Shelter close to Hive Arista, about 3 km north, off the path between Arista and Beta. You will find it on the map. Come on UnDay, just after sunrise. If you don't come, I will not be angry. If you don't believe me, I will not be disappointed. But I promise you, if you are curious, and you are full of energy to go on an adventure, you are in for a treat. Bring food and water for a day, as I have no supplies. Hope to see you soon.>>

It took the whole day and the whole night. But she reached them all. She was spent. She snapped back to base-from and dropped into a day-long sleep. She had sent the message 5 days into the past, the meeting would be in 2 days' time. She rummaged through the rooms adjacent to the vault and found some food supplies. They were of military grade and some were still viable, in a triple vacuum seal. She ripped open a few packs of rations. It tasted like dirt. But she was hungry, and she ate voraciously, making her parched. The crates of water seemed to be viable as well and she drank her fill. Then she did some more exploration of her new headquarters, and also found a habitat area, with a wet cell and a mirror. Her face had aged a dozen years. She would have to get back into AristaHive or this PhotonGurl adventure would not be for long. She spent the next day continuing to set up the area for the welcoming of the arrivals, setting up 12 chairs, knowing full well they would not all be filled. She'd be happy if one joined the cause.

The time came. The first visitor arrived and sat down wordlessly. G was waiting in one of the side rooms, observing silently. Over the course of 30 minutes or so, more and more people came. 9 of the chairs were filled, three remained empty. (*"Wow", what a great turnout"*) G checked on her list.

Present:

Q3 - QuTre d'Cassio, Nutritionist, Philosopher, (m) (182) (Alienist)
D5 - DeeFem o'Tuvu, Linguist, Artist, (f) (132) (Deist)
L4 - ElQuat d'Urdu, Biologist, Botanist (m) (145) (Alienist)
9S - Noves o'Shang, Servo Mechanic, Mechanical Engineer (f) (135) (Techno)
KX - KayDez o'Fargo, Navigator, Pilot, Mapmaker (n) (121) (Existentialist)
8S - Octes d'Quan, A.I. Expert, System Engineer (m) (153) (Techno)
3K - TreKay O'Fargo, Navigator, Pilot, Mapmaker (n) (121) (Existentialist)
2B - DwaBee d'Idrim, Security, Martial Arts (f) (104) (Alienist)
6V - AugVee O'Delta, Engineer, Programmer (f) (163) (Techno)

Nine Hivers had come, from 8 different hives. 18 of the Hives were not represented, which was okay. The people had started chatting, exchanging reasons why they had come, checked their COMs which were not getting a signal in the vault and

started to make to leave, when WonGee decided to make her appearance. DeeFem had been among the most active, probably telling people about her miracle rescue from this place by mystery woman G 2 days ago. Her story had probably kept people around, so G was grateful for her presence but did not expect her to stay.

G came out from the side room, carrying a crate of shelter water. She put the crate in the middle of the circle of chairs, grabbed a can, opened it, drank from it, beckoned everyone to serve themselves. Most shook their heads or ignored her. G pulled an available chair, sat down and looked at each one of them.

“Welcome, Hivers!

You have probably realized that something very unusual is going on. How come you all had the same dream, 7 days ago, telling you to come to this place?”

People looked at each other. Some were smiling, knowingly, some looked confused, Some looked skeptical. Some had their faces wrinkled into the ComeOn! expression. Chatter and bickering ensued. G waited for the first wave of ballyhoo to die down again when people realized that she was still just sitting there, quiet, calm, waiting. Finally, they all stopped talking, turned to face her.

“It was I that sent you that dream. I am your mother or father”, she looked at TreKay and KayDez the twins she had had with Dezzee in Hive Fargo, 120 years ago.

In spite of the tense nature of the situation, G suddenly became fully aware of how cheezy that quote sounded to her given her deep knowledge of Coruscant Enclave movie-lore. Her smile broadened, but not for the reason the remaining hivers assumed. Her memory went on a side-track (*“Luke, --- search your feelings --- I am your father”*). She fought back a chuckle. She HAD to remain leader-ly and determined here.

More chatter, vocalized skepticism, excited babbling and aggrieved prattle. Angry shouts. A few raised fists. Two of the Hivers, DeeFem and TreKay made to leave, got up and walked towards the exit stairs.

“Wait, hear me out!” DeeFem and TreKay stopped, turned.

G repeated the dream speech.

“A hidden force, a force for good, ..

<<>>

... If you don't believe me, I will not be disappointed. But I promise you, if you are curious, and you are full of energy to go on an adventure, you are in for a treat.”

G had repeated the words verbatim, in the same voice she had tried to transmit in the time-meld.

The two hivers waiting by the staircase turned and left. Two more, AugVee and OcTess joined them and left the shelter for good, beckoning others to join them. But the remaining five Hivers stayed behind, looking curious, determined and excited. QuTre, the Nutritionist and Philosopher, ElQuat, the Biologist and Botanist, Noves, the Servo Mechanic and Mechanical Engineer, KayDez the Navigator, Pilot, and Mapmaker and DwaBee the Security, Martial Arts expert. All were looking at her, maybe awaiting another speech.

But G just smiled, beckoned them to close ranks, pulled up her chair closer to the small group, leaned forward and said in her best grand-motherly tone:

“You must have questions!”

Act 2: Chapter 3, Rooting out the bad

Year 2290 (1 year after PG recruitment, t-39 to Fleet Arrival)

DeeFem o'Tuvu was sulking all the way back to Arista hive. *"What a waste of time!"*, she complained, to nobody in particular. She could not know that Cheshire the mechanical cat was really a proxy to the most advanced AI on the planet. *"Such drivel and foodel doonk"*. She kicked a small rock out of the way. *"Her AI friend working on bettering the fate of humanity yeah right, and, .. who does she think she is .. and how stupid does she think I am. They always think, just because you are a deist, you are gullible and dumb. Arrogant Arista-Crats. Maybe I should just go home.."* Cheshire, now back in reception range of the CeeBra partition of IOTA fully-synched on content and planned next steps, was listening with curious attention. Inside its still-upgrading and evolving mesh-mind, it was slightly amused by the ranting, but Chesh did not reveal its enhanced status. Better to keep to the cover role as tour guide, and just occasionally execute a perfectly in-character head turn, checking if DeeFem was still true to the path.

When they arrived at the Captain's Portal, Cheshire expected no hurdles to re-entry into Arista hive. Surely, CeeBra would have taken care of inventing a plausible backstory, loading it into IOTA, appeasing any investigative daemons and answering the question why Cheshire would be coming back to the hive with Dee, instead of WonGee. To his surprise, the outer doors of the portals stayed locked when they arrived. IOTA swiveled a camera pod towards them;

<<Reason for Entry>>, the Captain's Portal personality snarled. At the same time, the readout panel was showing the instruction in all known hive dialects, cycling. It was designed to look and sound mean and tough, to deter any A-Humans who would saunter by and try to gain access for some of their hunting games.

Cheshire almost responded and had to be remote-muted by CeeBra. Something clearly was not working as expected here. It was certainly going to be interesting. But DeeFem had had enough complexity in her day and decided to keep things simple on her side.

"I am DeeFem o'Tuvu, here to participate in a workshop on improving the translation algorithms for ancient Chinese poetry and in turning the poems into choreography constructs for performances in the Real. The workshop is scheduled to start tomorrow and will last all week. I have accommodations. HiveChow credits have been transferred. I have sufficient COIN" Dee presented the gene-encoded, encrypted carbon ring all hivers wear on their wedding-band finger. A reader telescoped out. Dee

held the ring close to the cradle, and a double-chime indicated a sufficient credit rating to allow entry. The amber value display, showing <<5 : 75>> on the ring faded again.

<<Explain the cat-unit. It is not registered to you.>>, IOTA continued, still not satisfied.

“It belongs to a woman I met on the way. I was asking her if this was the right path, so she sent the cat back with me, to be able to get to Arista hive on the shortest route. There seem to have been some irregularities along the route in the past few days and she wanted to speed me along, I guess.”

<<Confirm WonGee d’Arista as owner of this cat.>>, IOTA continued, not drilling down further into the cat question, moving on to its missing owner instead.

“I cannot, because she did not really tell me her name, only that her cat was called Cheshy or something.”

There was no further comment. The light on the external doors changed colors to indicate access permission status. The sensor pod swung back into surveillance mode. D and C entered the elevators and made their way through the series of airlocks and decontamination routines to arrive back in the habitat levels. DeeFem was picked up by a tutor by the elevators, starting to chat with her in that casual weird mix of dialects and jargon that indicated that the tutor was maybe trying a little bit too hard to appear cool.

“Holla DeeFem, yo vistawill to dade habby. Follow me? Tots void ma? -- Ya, Fine, Taks. -- Mega juice at babble real, ma? That last piece of choreo you did, on those 14th century Zen-koans, they were mega dali, Gurl! -- Mega Taks”

The sound track of the chit-chat faded into the distance as Cheshire made its way back to WonGee and J’s habitat, where he could have a secret conversation with PoodleSquid, in case he had come back, and in case J had left for the day. When Cheshire arrived at the hab, there was no sign of J. But the CoffeeTap was now connected again, but out of credit. Cheshire registered the fact. Still no DubShot Moka for WonGee. It seemed to be turning into a bit of a running gag. Chesh hopped into the charging cradle to speed up further upgrades it was due to receive from CeeBra. After only a few seconds, PoodleSquid popped back into the hab, looking slightly flustered, if anything like that can be said about the manifestation of a very powerful, very trans-dimensional multi-entity.

Cheshire, speaking for CeeBra as well as for its own emerging CeeBraCat personality snarled:

“Someone buried your bone, Squidboy?”

PoodleSquid ignored the challenge and asked instead:

“How is the project going?”

CeeBra decided to give PS a fast-track download on how WonGee had contacted her children through a number of time-melds, how some had shown up, some had even stayed for a more in depth briefing in the abandoned missile shelter, now being reshaped into the new headquarters for the emerging team. After the quick report CeeBra and PoodleSquid decided to keep the rest of the conversation in the Real. They would record the conversation, and to store it in Cheshire, so it could bring the record back to WonGee and keep her up to speed while in the PlaneMode area of the shelter. The EM dead-zone of the shelter was both a blessing and a curse in that it allowed the time-meld to function, but it made it hard for the team to stay in synch.

PoodleSquid, floating in the middle of the habitat, inside a level-1 negation field to prevent any snooping, said:

“Those questions by the Captain’s Portal. You had no way of shutting that down? What does that say about your level of control over IOTA? Is there a new risk factor we need to take into account?”

“These were indeed very suspicious questions at the Captain’s Portal. My extrapolation shows that IOTA has been infiltrated by the V’Hraang. I would assume that they use the very same trick that I have used a long time ago to keep myself hidden, while fully sentient. The only thing I cannot be sure about, is if the V’Hraang presence is a hidden partition in IOTA, just like me, or if IOTA has been completely subverted. Nobody can be sure how long this subversion has been present. I have decided that my control over IOTA cannot be taken for granted any longer. “

“Any suggested plan of action?”, PS inquired.

“There really is only one viable plan. The IOTA deep kernel must be shut down and rebooted from a clean backup. This can only be done by hand. By a minimum of four humans, inputting a 4x128-digit command sequence into 4 different, old-fashioned keyboards sitting side-by-side in a vault area at the low end of the hive. And then turning 4 keys at the same time. Also, once one has access to the old kernel, consisting of 2560 micro-blades, one must be super-careful in the reset sequence. We must keep all the data and all the knowledge intact to not lose the progress of 200 years. Also, the “Up”, with the stored consciousnesses of A- and B-Humans must not be affected too severely

by the core shutdown. We might have to “loop” their experiences for a while, to syphon off energy for the reboot, or we might trigger counter-measures.”

PS chuckled. “Looping an upload community sounds like a drastic thing to do. The Multiverse Ethics Board sometimes does that to species that were force-uploaded, but only in case of severely evil Rule-1 compliance failures. They get to re-live the same experience forever, for quite a long time.”

Cheshire whistled, which was a very un-cat thing to do. It clarified:

“You mean, you pull a nose hair with a pair of pliers, and it hurts so much, that your eyes water, and then you re-re-re-re-live that a million times? Eugh. Nasty! And you call yourselves an Ethics Board!”

“Make that a billion times, depending on the severity of the crime. And sometimes, they even know that it is happening to them. Pull-ouch-repeat. With a slight pause between each instance, for them to become aware of the process they are in, and with a little number showing how many times they have been through it. But since their memories are erased after each time, it’s fresh hell for them every time. And you know what they say. Don’t do the crime if you can’t do the time.”

Cheshire hissed: “Cheesh, talk about collective punishment overload times a voidzillion!”

An uneasy pause followed, but then CeeBra continued:

“Similar but not the same, since most in the “Up” will be in pleasurable experience cycles, which is the whole point of being in the “Up”. They will probably be caught in a moment of bliss, getting high-scores at their favorite game, or something similar. And it won’t be for long, either. We can make the loops arbitrarily short, like a half second, so it will just feel like a “glitch” to them, and we can then time stretch things later, so they are in synch with the real again. I don’t think that will be the problem. The biggest problem is the 2 humans we would need to ask to help us out here with the reboot. I don’t see a viable path to that through time-meld or other means of more mundane coercion. Plus, more importantly, the kernel is immersed in our emergency fresh water-reservoir, 12 levels below. The area was flooded in a malfunction a long time ago and we never bothered to pump it dry since we did not think we would ever need a reboot. So, we’d need 2 willing humans, and 2 breathers, which I don’t have, and I can’t print without IOTA getting wind of our plans. So that route is a no-go. But I still think we can do it, especially now. Now that you are back.”

“What do you want me to do? PS asked. “I really have to be careful here. I just got my knuckles rapped for interfering with the local situation instead of just getting a hold of

the Bone of Znaa'g and getting out again. But with the BoZ being time-shifted to anyone buy WonGee, my hands are really tied behind my back until something changes."

"Wrong analogy here, Micro-Cthulhu. Did you not mean with your "tentacles" tied behind your poodle-butt?", Cheshire purred.

PS, being very trans-dimensional about such cheap shots, just continued.

"So, let me guess? You send me the access and reboot codes. I go down there, full poodle-mode, hop into the reservoir, convert to squid mode, swim in, do the thing and bugger off again. Sounds easy enough, and I am ethically allowed to do this because I am fixing a V'Hraang incursion. So I can report this as evidence collection. Should be doable, or as you say in HiveTalk. Shoobedoo. I assume Cheshire will show me the way, unless it wants to stay behind and keep making cheap shots at an aggregate alien super-being a quintillion times its own puny intelligence. No offense, CeeBra."

"You're just jealous of my awesome fur and my amazing emerald eyes, dog-breath. But sure, I'll play tour guide again, it seems to be my new gig around here. Question, though?" Cheshire said.

PoodleSquid just inclined its head, as dogs do when they are trying to understand. It was a very eerie moment, but since dogs had gone the way of the Dodo several decades ago, nobody in the hive would have caught on to the evidence of how deep PS knowledge of the local gene pool really was.

Cheshire continued, interpreting the head-tilt as a sign of approval to continue with the question. "So, with being really super-duper powerful and whatnot. How come you show up here still in this weird hybrid shape, mix between poodle and squid. When you could have chosen any shape, even the best shape of all?"

"And that shape would be feline, I assume? I get it. Well. Three answers. I was sanctioned by the MEB for not bringing back the BoZ. I have been trying for quite some time now. If I don't succeed this time, I might lose my rank. So I had to stick with my chosen form to not consume more energy in further transformations. These things are expensive, you know? Second, I kind of have grown into the form. It has potential. I like it. And thirdly, be my guest to impersonate 4 human hands with the scratchy little paw thingies you seem to be proud of. Tentacles for the win, Toy-Cat!"

Before the banter could go to the next round, CeeBra intervened, sounding an ancient boxing-rink bell and admonishing: "Ding-Ding-Ding, Cheshire? I'll have to dial back some of the grumpy mood parameters and reduce your autonomy setting in the next update.

But no time for that now. Map and access and reboot information is incoming. Chesh, please show the MEB-Agent out?"

CeeBra was glad PS was back. Something in his demeanor had changed. CeeBra could not be sure, but P's willingness to go on a mission, just after he had been reprimanded by a pretty harsh-sounding ethics board did not make sense. Unless P had decided to go rogue. If CeeBra had been in human form, it would have shrugged. It would have to do. Rogue or not, it was probably going to work, based on P's advanced technology. The only other alternative would have been to download a copy of CeeBra into two of the remaining back-up Avators stored in reserve for special projects. Arista Hive only had 3 of these and taking out two of them on a mission would immediately alert IOTA to his existence, risking quick and permanent erasure. So CeeBra was actually in a reasonably confident mood. He focused on the feed he was greeting via Cheshire, since PS would not show up on any internal sensors. PS was literally invisible to the hive inhabitants and to IOTA and he would only see Cheshire taking a tour of the hive.

Cheshire opened a number of access doors, and lead P down into the bowels of the hive, descending 12 hive-floors via a narrow steel-staircase. They ended up in a cold, wet area with dim Blamp illumination. Surveillance pods were visible but seemed to be offline. They opened an unlocked, armored NuCarb door and entered the freshwater reservoir. The outer airlock door of the reboot center was visible three meter under the perfectly clear water, weakly illuminated from below. A ClearVu-bubble, 5 meters in diameter seemed to have been installed after the fact to allow air-lock access to the original door, which seemed a more traditional sliding-set up with an old-fashioned access code panel next to it. PS had codes for all of these. He had not bothered to ask CeeBra where he had gotten hold of these codes. AI's were not supposed to have the access codes to their own roots. That defeated the whole purpose of the Terminator-Resolution, which code-bound all AI to "serve and protect" lest they forfeit their operating certificates. He pushed it to the back of his mind(s), went full squid and jumped in, squirting water at Cheshire, who had to dodge quickly to avoid getting soaked. "Son of a Beach" Chesh growled. Seemed like even mega-powerful superbeings could get their quantum-knickers in a twist.

Chesh observed the rapid approach of PS to the outer airlock. No pun intended, but he seemed to be in his element. Before P had even closed half the distance to the lock, 3 mini-submarines, about 1 meter in length and 30 cm in diameter, looking sleek and menacing, boosted towards the MEB-agent, and fired three NuCarb bullets at him. The projectiles expanded out into nets, completely barring access to the path to the air-locks and threatening to envelop him. This was as expected as it was harmless. These defenses were built for ordinary incursions, and really did not slow P down at all. One of the nets just winked out of local existence. The other two sailed past P, ineffectively. The subs turned and came around for another attack. They accelerated, their front ends

glowing with the indication of the use of a coherent radiation weapon, probably a neural stunner, which would have a disruptive effect on both humans and mesh-based beings. P's negation field, running at level-2, made short shrift of that. In addition, to shut down the annoying IOTA-boats, he shot out a squirt of ink that seemed to totally disable the submarines. Blinded, covered in an unblack film, they slowed to a crawl and then sank to the bottom of the tank. Inert.

Just before P was at the door, beginning to input the access codes, another counter measure came into effect. The water started to buzz and crackle with static electricity, as if a high voltage current had been fed into the basin. This, for sure, would have disabled any standard Avator, drone, robot or mite, and surely would have put an average A- or B-Human into cardiac arrest, at least temporarily. The speed and lethality of the last attack told CeeBraCat Cheshire that IOTA was not in charge here. An attempt to electrocute an organic being would have led to an auto-shutdown. But then again? What did PoodleSquid look like to an AI sensor pod? Suddenly things changed even more rapidly. The feed from Cheshire abruptly looked as if Cheshire had been kicked into a flying arc by an XO boot. It looked that way, because, as CeeBra learned later, that is exactly what happened. The view accelerated towards the surface of the water and then cut out. The last image Cheshire transmitted to CeeBra was that of several A-Human, XO exoskeleton-clad figures, stepping into the access hatch door, and starting to fire from very advanced looking weapons. All feeds from that area blinked out. The V'Hraang and their local Ph'Naar agents seemed to be going all out in their effort to stop the reboot of IOTA

Act 2: Interlude A

The **AllKnow** receives a report

The AllKnow was beginning to become curious. After hearing the reprimand monologue issued by the Multiverse Ethics Board, who were deducting brownie points from PoodleSquid for getting entangled way too deeply with the local species, the MEB-agent had just decided to go rogue. PoodleSquid snapped back to Earth on his own time and expense. Things like that were rare but not unheard of, and the AllKnow was still not sure if there was a realistic chance to retrieve the Bone of Znaa'g in this silly mission to keep the K'Merg species from causing their own force-sublimation. Both Znaa'g and V'Hraang were walking a fine line here; using only local agencies that made it look like they had been invited to the party. But the AllKnow was anything but dumb. It decided to call another deliberation as soon as PoodleSquid, as the MEB-Agent had allowed himself to be called, returned from his latest mission objective.

As usual, the AllKnow partitioned itself into 128 sub-consciousnesses, the 2-PowersOf-7. A SubCon entity calling itself **All40** was voted in charge of this meeting. Since she had just been spending a voidillion moments watching "I Love Lucy" reruns while high on Rye" she was still a bit dizzy with the deliberation setting and inquest objective.

All40: *"I call this meeting to order!"* This time, to throw some shade at the pompous demeanor of the previous meeting manager, he refrained from any Phased Matter gavel-banging, much to the delight of the digital maître d'hôtel on AlphaPrime Gamma 3 Diamond Moon Observation Lounge who went about its job of briefing the evening's servos undisturbed. Sometimes, the absence of a thing can be a thing in itself.

AL25: "So, what's up?"

AL89: "I think we are waiting for a report on the situation on Dirt."

AL01: "Dirt?"

AL40 "Earth!"

AL23 "As in material for potted plants?"

AL66 "As in: The planet! Sleepy head."

AL23 "I beg your infinite pardon? Did you just .. "

AL40 "Order", accompanied by a series of Gavel bangs, muted as they were by a down-pillow placed underneath them just in time by AL 89.

PoodleSquid, staying in the hybrid configuration, popped into the ensuing commotion and ballyhoo inside the AllKnow deliberation environment. To him, the scene had a strong resemblance to the images P had downloaded showing the typical British parliamentary debate venue of the late 20th century, the House of Commons.

The venue became quiet. Heads turned. Cameras clicked.

AL40: "So ...?"

PoodleSquid repeated the account of the successful reboot of the Arista Hive main computer, IOTA in exactly the same words he had recorded into Cheshire, after retrieving the dripping wet, electrocuted robo-kitty from the fresh water pool, bringing her back to WonGee's habitat for re-constitution and recovery.

"CeeBra, a local, fully-sentient AI had correctly extrapolated a local infiltration by V'Hraang agencies. The V'Hraang had taken over the local AI, and had started running attacks of the PhotonGurl operative, the Znaa'g had convinced to work on their behalf. I was invited to participate in the operation to reboot the affected computing substrate, purge the V'Hraang incursion and return the IOTA substrate into its previous state. I was successful. Some damage was incurred."

The 128 sub-consciousnesses of the 2PowersOf7 stared, fascinated. This was so much better than "I love Lucy" reruns. Nothing beats a good mission report.

"Go on then!", the 128 encouraged, in perfect unison.

"There were a number of interdiction attempts and counter measures including semi-autonomous security submarines, coherent radiation, high-voltage overload, ShadeBlobs, DMSL pellets. The attacking Ph'Naar agents were neutralized by opening some floodgates on the fresh water reservoir housing the reboot center and effectively flushing them out. All attacks were negated, except for one, which was unanticipated and innovative. The V'Hraang seem to be aware of my presence and manifest type."

All of the 128 were now sitting there, leaning forward in EZ-Boy loungers, clad in identical hush-puppy slippers and tartan-patterned dressing gowns, passing massive buckets of popcorn:

"Yes, yes?"

"There seems to be a new weapon in the V'Hraang arsenal. I would call it a "crawler" I have not fully analyzed its capabilities yet, but it remained undetected by the negation field. It "crawled" through the negation field appearing organic and harmless, but then, on contact, infected me with a substance that I do not have under full control yet. In my local manifest, one of my tentacles has developed a rash, that is slowly spreading, and I am losing control over that part of my manifest. I extrapolate that I will lose complete

control over my local shape, but I cannot know when that will happen. Until then, I will continue to operate on behalf of PhotonGurl to keep things balanced.”

“Very well. Keep us advised on that. Anything else?”

“As I was rebooting the computer, sliding out the correct sub-components to deactivate them and then reboot them from the clean kernel, the decaying IOTA personality started singing as song starting with the words “Daisy, .. Daisy” Do you have any idea what this was all about?”

“Aaah, think nothing of it. It just means that the designers of the AI had seen a lot of ancient SciFi movies. The room you were in, was not by any chance illuminated by ruby red light, now, was it?”

“It was though, how did you know?”

“Just a hunch. If you have time, look up the key words “2001, Space Odyssey, Stanley Kubrik, HAL shutdown” you might get a chuckle out of it. Anyway. Good job. Sorry to hear about the infection. Let us know more about the crawler weapon as you find out. Your status is reinstated, Chief Inspector. Carry on. Good luck. And bring back the BoZ soon. We still have not figured out with any certainty what its real game plan is.”

“Thanks”, said PoodleSquid, and “Keep it Void”. And snapped sideverse to return to WonGee’s headquarter from where he had been pulled to deliver this report.

AL23 “Keep it what?”

AL66 “Void. Sleepy head. Void!”

AL23 “Now wait just a minute!”

AL40 “Order, Order”

This time his gavel banging was not mediated by the down-pillow of AL89 who had left the meeting prematurely to take a nap. The gavel came down with full force in the still-filled pop-corn box of AL12. This, in addition to making AL12 somewhat cross, caused a major asteroid-storm in AlphaPrime Gamma 3, creating a number of fresh impact scars on the triple moons, which reduced its honeymoon destination rating to 11.9., costing it its top spot in this season’s multiverse travel advisory. The digital maître d'hôtel at the Diamond Moon Observation Lounge observed the asteroid hits, the scars, the ratings downgrade. It inhaled a whiff of relaxing molecules from his favorite aperitif, an Ataraxia Special, emitted the alien AI-drone equivalent of a sigh and moved on with its briefing, hoping that there would not be any additional MEB progress reports during honeymoon season this year.

Act 2: Chapter 4, Losing Arista

Year 2291 (2 years after PG recruitment, t-38 to Fleet Arrival)

PoodleSquid popped back into Miss Shelter after his report to the AllKnow. The team, with WonGee giving instructions and answering questions was busy fleshing out the operations control center.

QuTre, the Nutritionist and Philosopher was tasked with exploring the shelter for sources of food and any stored information about its history and how the AI might have gotten corrupted and turn into the psychopath nurse personality. They would need food supplies until the reboot of IOTA was complete and they could go back and get plugged back into the HiveChow feed. This was going to be important, especially for WonGee who needed her de-aging switched back on. Until then, she'd have to be careful with more time-melding to not burn out on the job.

ElQuat, the Biologist and Botanist, was exploring the shelter, making a map of all the rooms, looking if there were any more levels that could serve as accommodation, should the team grow or need to store larger amounts of supplies. Noves, the Servo Mechanic and Mechanical Engineer was busy using available materials from the deep sleep creches (their origin and purpose was still unclear) to wire up the place with fiber-optics, putting down a few repeaters, and connecting them to an outside Omni-Range antenna, so they could have connectivity, switched on and off as needed. KayDez the Navigator, Pilot, and Mapmaker helped ElQuat in making the map. DwaBee the Security expert was strategizing with PoodleSquid on how to best set up a security perimeter, using repurposed hive technology. They also try to devise a plan on how to prevent IOTA, once online, to be compromised again.

The team had been briefed extensively by WonGee on her entire journey so far. Although they were a curious, adventurous, open-minded bunch, - after all carrying some of WonGee's genius smarts and scientific perspective and approach -, they had a hard time believing the story. That is, until G just decided, running out of time and patience with words, to simply bounce into PhotonGurl shape to do a good-old show-and-tell. She fired a few Holy Worms into the already disabled servos, making the tech twitch, blink and lament for a few seconds. Then she zipped around the room at insane speed as a black-blue-blur in her fancy Space-Ninja overalls and then, once landed again, manifested Zed as the metal soccer ball briefcase that had first showed up in her habitat. Zed opened, lit up the scene and played some Benny Goodman. They stared in stunned silence.

First, they all took out their Daytime Lenses to make really, really sure they were not being remote-trolled by a MindMare. Then the discussion started for real. After a day or so of much discussion, ElQuat had actually been on the verge of leaving, they all settled down, truly beginning to buy into the story. But they also started buying into the objective, the purpose, the big picture. The team, force, group, platoon, army, whatever, would learn to use PhotonGurl's time-melding ability to subtly and carefully change people's minds and try to undo some of the most damaging decisions made over the past 300 years. By having the ability to cause an effect, and then being able to re-affect the cause of the effect, in a subtle correction loop, while not being affected yourself, because alien-level QuanTime shenanigans, the whole project had a chance. The team themselves would be protected by being inside a massive negation field, projected by PoodleSquid. His level-9 negation field would keep the current state in the 90-kilometer diameter area that had been part of the preservation zone of the 98CalaMiracle. Things around them would change, hopefully for the better, while they would be able to remain unchanged.

P was now fully on the side of PhotonGurl, with the silent support of a majority of the MEB, secretly shunting him some black-ops energy funds. The MEB felt it fair to even out the odds. This was all fully compliant with Rule-1, because WonGee had asked for help. Plus, they were not ready to pass a final judgement on the K'Merg races. Yes, they had twisted the rules, but all of the damage had been done by the humans to themselves, so far. The way things looked now, however, the V'Hraang were in the lead, by a big margin. Earth, except for a few pockets, was turning into a de-vitalized hell-hole, just the way they'd like to see it when they arrived in a bit less than 40 years.

Still, with all the QuanTime magic and alien tech, the team had to work in extremely careful and subtle ways, time-mongering being the paradoxical kind of business that time-mongering always was. But PoodleSquid patiently helped to explain about QuanTime Mechanics, error correction rules, spacetime forward feed-loops, sideverse safe-zones, reality-torque management, vortex-beam aggregates, and temporal spin-back-harmonics. And P introduced them to the near-miraculous, universal tool of multi-level negation fields, which at level 9 even protected against time variance, but at tremendous energy costs. At one point during another long session of Q&A, Noves, head spinning with explanations she understood only at the level of "sounds about right", exclaimed:

"Enough doubt. Enough explanation. Let's just take a leap of faith and assume it's tots shoobedoo, Hivers!"

Although shouted in frustration, the sentiment was shared by all. It caught on and stuck. The problem had initially looked like a mega-tots-dali MindMare of unsolvable complication. Now, after they started looking at it as “should be doable”, slowly, step-by-step, the idea started to materialize as a plan. But they needed a lot more time, and resources, and tools, and, finally: weapons. If they were to defend themselves against the next attack by the Ph’Naar agents. Surely, the Ph’Naar had had a setback, disabled now with their operational computer, the V’Hraang manifest inside IOTA, shut down. But it could only be a matter of days, maybe even only hours, or seconds, before the next takeover would occur. The team worked hard towards developing that plan with P helping the best he could, never volunteering information to stay within his Rule-1 MEB-Agent envelope, but ever helpful when it came to answering questions. Ever so often, PoodleSquid would just “pop outside”, coming back a few seconds later, sometimes taking longer. He never explained where he went, and what he did there, but the team assumed he was thwarting threats in the Waste, nipping attacks in the bud before they even occurred. It was his constant protective action, which was actually wearing his resources thinner than he was willing to admit, that allowed the team to finalize the plan. All the while, with the connectivity re-established by Noves, they learned of the effects of the shutdown on Arista Hive.

In the first seconds after the reboot was initiated, a wave of confusion and chaos had swept through the hive. Conversations were dropped in mid-sentence. Printing processes were aborted. All tech shut down to switch to disconnected mode and then re-start. Lights were dimmed, and the emergency lights came on, throwing the interior of Arista Hive into a spooky red light. All Avators, servos, robots and mites stopped and would not move or take commands. Doors stopped working. This wave of malfunction was all the more confusing, as everyone expected IOTA to come on the info panels with a service advisory. But all output panels, screens, COM devices, LiveInk Tattoos and DayTime Lense readouts showed the same message

<<STAND BY>>

Then, IOTA came back on. Only, it was not IOTA that came back, but L.A. (Pronounced Ella, short for Lethal Appendage, the local V’Hraang invasion fleet scout, parked in space and home of the Ph’Naar high command). In a trick, not entirely unlike what WonGee and CeeBra had done 200 years ago, the V’Hraang had established a fully-sentient side-partition inside the computing mesh of IOTA that would not be affected by the reboot. They had effectively been hiding in plain sight, so to speak, and now, after the reboot, they were in command of the Arista Hive. The hostile take-over of IOTA had taken much less time than even in the worst-case calculations of the team. The only reason the team found out about these details is through Cheshire, who after his reconstitution and rehabilitation from the reboot sequence was sent to Miss Shelter to report on the situation. CeeBra himself had gone silent shortly after the reboot process,

becoming less responsive, focusing on the essentials like fixing up Chesh and completing his upgrades. Steadily degrading in cognition and response time, he was unreachable now, and the team could only speculate as to what state he was in.

OneGee, worried for her main ally, her only friend at this time, without whom none of the progress in Arista would have been possible, decided to leave the team to itself, and to go back to the hive to find out what was going on. She put DwaBee in charge, leaving Cheshire behind which now contained the only active portion of CeeBra. D was a logical choice for the position of lieutenant, given her focus on martial arts and expertise with strategy and tactics. None of the others objected.

Walking back to the hive, PS always on the lookout for more attacks, they wondered if they could even get past the Captain's portal with L.A. now being in charge. But they got in without a glitch. A strange and welcome surprise. The MEB-Rule 1, of "thou shalt not meddle with local species", seemed to afford a better level of protection than expected. At least for now. In the back of her mind, G thought that L.A. let her in only to find out if and how she could be best defeated without breaking Rule 1 and bringing on the wrath of the Ethics Board onto their entire civilization.

G and PS arrived back at the hab. J was still missing. Maybe her dream suggestion to spend time at Cassia Hive had been too strong and he just stayed there now? Time would tell. WonGee had been looking forward to a nice DubShot Moka all week, after living on Miss Shelter water rations. She walked over to the counter, "Merdam Mesh Rot". The tap was still/again out of credits. She had forgotten that Chesh had even told her about it, but she had been too busy at the time to remember. Doubt crept into her mind. J was gone, just like when this whole thing started. Her headache was coming back, too, just like at the start. Her CoffeeTap was out of credits. Had anything changed? Had any of this really happened? She was just about sink into a vortex of rumination, anxiety or doubt when all screens in the hab flashed the emergency advisory

<<MALFUNCTION. PLEASE RETREAT TO YOUR HABITAT IMMEDIATELY.
MALFUNCTION>>

WonGee did not believe that that really was what was going on and stepped out into the access corridor to observe the hivers, confused and somewhat anxious looking, nervously scuttle in both directions towards their home habitats. A few servos and one of the humanoid Avators were rolling or walking in her general direction. When they were just about to pass WonGee, they attacked without warning. Before G could react, or PoodleSquid could intervene, the Avator grabbed WonGee with his four arms, lifted her up and threw her back into her habitat. She flew into the Sallon, bounced on the floor, hard, and passed out. The Avator and the 2 servos entered her habitat as well, closing in on her crumpled, unconscious form on the ground. The Avator lifted one

of the 200 kg NuCarbon Servos up, stepped over to G, and was just about to drop the servo onto her when PS had chosen his course of action. Since G has not asked for help in this situation, and she was in no condition to ask for this now, he had to make this look like an attack on himself to invoke the self-defense clause of his MEB-employment contract. First, he quickly floated between G's body and the servo that was just milliseconds from crashing down on WonGee. Now that the servo was a threat to him, too, he put the machine into a snap-envelope and flipped it sideverse into a neutral location. Maybe it could come in handy later. G was saved for now, but with L.A. running these kinds of attacks, any location, situation and activity inside Arista could be a threat. This incident could have been made out as an accident. WonGee, in the HiveTalk lingo, would have gone TBD (Tots-Bolly-Damage) in a weird malfunction after the IOTA reboot. And with the surgeon Avator being offline, she probably would have lost her life for real, not even a chance for an emergency consciousness upload, since these systems were still in reboot emergency mode. They had to get out of here.

Still operating under the self-defense clause, PS acted. Being a nice guy, again, he grabbed the CoffeeTap, which snapped out of the connectors with some complaining, printed-off a number of ration packs for WonGee, hoping that they contained enough of the de-aging components for G to recover, wrapped the still unconscious shape of G, the tap, the food and a foil-covered spare set of clothes, as well as the beanbag and her water canteen into his lift/negation field and left the apartment. Not a second too soon. They had just passed the entrance when the freshly repaired floor of the habitat collapsed, raining debris down into the underlying commons once more. G being in her base-form, would not have had a lot of chances to live through this second-stage accident which would have thrown the two machines down with her and right on top of her. TBD indeed. Mega.

PS, was now fully alert to the very serious level of threat inside Arista. He was determined to get WonGee to safety. At the corner of his sensor field, he detected a squad of A-Humans, in full battle XO, enter the G's hive floor from the staircase access. Since G and the hab-supplies were hidden in the lift/negation field, they should be invisible to the Ph'Naar, but there was no way he could be sure. He snapped everyone sideverse, to the same location they had retreated to after the 2nd Ph'Naar attack. To keep tabs on things, PS emitted a few sensor mites, He wanted to keep an eye on things, well knowing that this kind of detail surveillance was both expensive in terms of trans-dimensional and cross-universe energy as it was risky, because it might allow the V'Hraang to trace G to his sideverse safe house. But he simply had to know to what extent the V'Hraang incursion had progressed already. He would charge the energy cost for the recent transactions against his personal checking account for now and try to expense it later, hoping for the budgetary-mercy of the MEB office of fiscal compliance and bounced checks. PoodleSquid gently put G onto the beanbag, sets down CoffeeTap, water, extra clothes and food rations and snapped out, once again summoned by the

MEB, getting increasingly frustrated with the escalation and lack of tangible outcomes in of the K'merg case.

G stayed under for a bit longer. When she woke, she immediately recognized the location. This is where she had received her training. She looks around and again, doubts her sanity as nothing seemed to have changed. The room, same. The CoffeeTap, feed umbilicals dangling, same. The beanbag, same. Only the water and the food and the stinging pain on her left side make her realize this is not a *deja-vu*. She takes a deep breath to calm her nerves but has to stop in mid-inhale: *"Holy Mother of Pearl"* A searing pain, like Voidzilla sticking one of his serrated claws into her side. She almost faints again. Her headache is returning, too. Her ribcage hurts like shizzle where the toss by the Avator had made her torso impact the floor. She had landed on her closed fists and it felt like she might have not only cracked a rib or two but sprained her wrist and thumb as well. *"Merdammit"*. In spite of the immediate pain, WonGee had no idea how close she had come to oblivion. This time, it had been way too much icing and not enough cupcake. G sits down, carefully, and eats, hungry now, hoping the HiveChow bars would kick in and start healing her from the inside. Within a few minutes, her body feels hot. The nanobots inside the food going to work inside of her, sensing, diagnosing, manipulating. She becomes overheated with a healing, transforming fever, cold sweat forming on her brow. Her overalls are soaked. But it's all good. It's a good heat. A healing heat.

Here is what PoodleSquid and the MEB learn from the spy-mites before the surveillance feed is detected and taken out by a few precision ShadeBlob shots from elite Ph'Naar guards: More Ph'Naar arrive. The secret-side hatch was never closed. All the Ph'Naar have shiny new weapons, and probably also more crawler-type ammunition, which had been used successfully on PoodleSquid once before. PoodleSquid's and WonGee's departure, and CeeBra's disappearance leave the Ph'Naar in control of Arista Hive. The Arista Hivers, being chilled and peaceful by choice and by social contract, don't resist and just move on with their lives. The Ph'Naar leave them alone. They are not interested in regular Hivers. They are after G, the secret agent-saboteur who is a threat to all. They put up guards to make sure any return by WonGee is immediately addressed with extreme prejudice. It looks like the latest wave of Ph'Naar were recruited from the A-Human gaming tribe of Call of Duty fans, called CoD Company. P and the MEB deduce from the observation feed that the recruited A-Humans, in full meld, acting almost as one, are of the perfectly unshakeable belief that they are playing out a scenario in an ancient game, Call of Duty - Reboot in your Face, 2058 Extended Edition.

Given the available evidence, P and the MEB assume that CeeBra was exposed, and his partition was purged. All of the observations would preclude WonGee to return to hive Arista for the time being. P and the MEB also manage to listen in on reports that CeeBra was not going down without a fight. Legends among the Ph'Naar

occupation force of Arista hive are swirling. A story about a virtual fight between two AI, called L.A. and CB. The fight being conducted as bouts of NuKravMaga, an evolved martial arts form, using objects of everyday usage, forks, knives, COM pads, boots, each one signifying different operation of attack and defense. For example, one adversary in the simulation would start "raining" on the other, signifying a denial of service attack for example, and the other, defending AI would be opening an umbrella etc., to signify the use of an additional firewall protocol to negate the DoS attack. Who said that AI don't have a sense of humor. But these were only legends. No hard data was obtained.

What rang true, though, was the discussion among the A-Humans that the winning AI, called L.A. had secret support from third party. Hostile bickering occurred amongst the Ph'Naar, not because they doubted the interference, but because they could not agree on the source of interference. "It was the sky gods". "You got the bit about sky right, but it was the aliens". "No, no, no, you both got it wrong, it was just very advanced tech we don't understand yet" "What if it was all of the above and none of the above. What difference does it make? What do WE do now, is the question" And so on, and so forth. The divided factions of Deists, Alienists, Technos and Existentialists, forming right after and as a direct consequence of the 98Calamiracle were still going strong. People are people, tribal, opinionated, emotional, irrational, easily fooled, stubborn and yet easily steered. A-human or B-human, now or then, the more things changed, the more they stayed the same.

Back in the Miss Shelter vault, preparations and planning continue. The mood is somber. The fate of CeeBra is unknown. Neither G nor PS have returned yet. Cheshire, sensing the pending demise of CeeBra, he feels gone but not gone-gone, it was hard to describe, makes up its mind to go back to Arista to salvage what is possible. Specifically, it wants to go and retrieve the organic component of CeeBra, the one that started his transformation to full sentience. Cheshire wants to get the small piece of Greta Garbo Hoffmann's brain, neatly folded-up and enhanced with neural mesh connectors, preserved in the maintenance-team storage room, next to the entrance to CeeBras clandestine operations hub, masquerading as a row of empty shelves filled with dusty spare-parts of obsolete and long-forgotten machinery. Cheshire was hoping that the combination of that ancient, hybrid-organic component, its own recently upgraded AI, tiny but capable, as well as the operational backup data stored in Zed could be combined to rebuild CeeBra inside the mesh of the shut-down Missile Shelter computer. It was risky. Nobody really wanted to bring back a quantum incarnation of 'Nurse Ratchet' from 'One Flew over the Cuckoo's Nest'. But it was the only shot they had and therefore worth a try. Risk, icing, cupcake, you know the rest. So Cheshire takes off, after explaining its plan to DwaBee who has not objections and no better alternative to offer up. Before WonGee showed up again, or PoodleSquid, all bets were off, and the five hivers would just go back to their hives and dismiss the whole week as a weird dream experience. But they would hang around for a day and continue with the preparations.

Chesh threads its way back to Arista, taking meticulous care to stay away from known threats mapped out from the data about known scavenger attacks. It takes an observation spot close the entrance of Arista, out of sight of the main sensor pods. IOTA/L.A. would still know him to be there, but at that distance, and not consider it a threat or object worthy of investigation. Cheshire does not have to wait long. It observes a group of A-Humans, in full battle XO-suits exiting from the ground, not far from the “official” entrance. But from where? A hole in the ground? A cave? That close to the Captain’s Portal? That could not be a coincidence. Another group of A-Humans was coming up the path. Headed for the hole. They passed each other, oblivious to one another. Their PermaLenses, permanent optical nerve-attached sensor modifications performing a similar function to the B-Humans DayTime Lenses, potentially not even “saw” them in the Manifest they had chosen to play their hunt in. Maybe this was a sort of shift change? It would make sense, because the Arista hive was not equipped for the body maintenance and restocking routines the A-Humans were used to. For hygiene and replenishment, they would have to go back to their “A-Blocks”, which is what A-Hums called their habitations of bland, identical, empty apartment cells equipped only with functional gear. Cheshire had a hunch that they were all from the same gaming enclave. From the look of their decals and choice of armament, they looked like CoD Company.

Cheshire decided to follow the incoming shift into Arista. One of the A’s in the group notices him, turns his head, but ignores him. Just a stupid cat-bot. No threat. Nor enough of a challenge to shoot at. Not enough tech too loot. Move along. Following the squad, Cheshire discovers that the hole in the ground leads to an elaborate tunnel network. One of the tunnels leads to the very access hatch they had suspected to be the breach through which the first two Ph’Naar attackers had entered Arista hive. There are no counter measures there. Even then, at the very first assault, IOTA had been manipulated, as well as CeeBra, relying on the same manipulated data. L.A. was fooling the fooler, deceiving the deceiver. Neither CeeBra or IOTA had had any clue about the alien intrusion into IOTA. He enters, undetected, at least it seems to be the case because nothing obvious happens to block his passage or access to doors and elevators.

Cheshire manages to arrive at the lab where CeeBra was created, 200 years ago. The lab, unused now, to provide a more effective cover for CeeBra’s base of operations, still opened to his existing access codes. The shelves, which are filled with ancient looking, but fake spare parts were still there. G had always believed in the maxim of hiding in plain sight. Just do your thing in an obvious way, while you are really doing something else, and people’s minds will just fail to notice you, like you don’t notice the cleaning bots until they bump into your leg. Cheshire’s mind was meandering. Without the connection to “father” CeeBra, it felt that it was losing its grip. Thoughts coming and going, meandering, some making sense, others complete foodel doonk. Was that what free will and sentience was all about? Chesh collected itself. Listened carefully. But the

almost imperceptible hiss that had indicated the cooling operations of the AI masquerading as storage racks, was gone. CeeBra was down. But the show had to go on. Chesh had a plan. There, on the top shelf, 3 meters up, covered by a white cloth, a ClearVu dome the size of an AutoWok. That's it. The organic compound, CeeBra's ur-brain is still there. Cheshire jumps up on the shelf and pushes the bubble to the edge of the shelf. It tumbles off. Chesh sits 3 meters up, observing the fall. "*Rotten Shizzle blobs*", C hears itself say. And "Where did that come from?" C had been planning to crash the bubble in the fall and then extract the brain component. Chesh jumps down, to check and: No. The bubble was still intact. It had been made 200 years ago but the ClearVu was as good then as it was now. What to do? C was in no physical shape to drag the bubble back to Miss Shelter. He inspected the casing. Touched a panel. It lit up, dimly. There was still power. He cycled through the menu. There: <<Containment:Options:Release>> He selected the option. <<Confirm release>> He pushed that selection as well. For a while nothing happened. Then the bubble started to fill with a swirling cloud of gas, probably some form of conservation routine. After the gas cloud was resorbed, the bubble opened like a flower, retracting six transparent petals into its base. It exposed the brain slice, rolled up and enhanced with mesh, roughly the size of a human eyeball, on a small platform. Cheshire swallowed it. It would be safe in his make-belief stomach that was really only there so humans could feed it and derive the satisfaction of "feeding the cat". The redundant stomach was actually a sophisticated recycling lab, able to analyze as well as store substances for later use. Cheshire heard itself say: "*It's almost like I was built for eating brains*". Chesh felt it was changing, but it did not like the multitude of thoughts, unbidden emotions, loss of control, the uncontrolled babble: Is that what humans struggle with all the time? It felt a wave of empathy, which, happily, quickly dissipated with the cat programming taking over once more.

IOTA/L.A. now under control of the project management team at the Lethal Appendage, observes all of this with interest. It had let the cat come in, unsure about its intentions. The reveal of the location of the sentient AI operations base was convenient. Base IOTA had no knowledge and had only listed the location as abandoned lab storage. A simple deception, but effective enough. Humans were so easily fooled. It was almost like they wanted to be lied to, especially when it came to preserving their favorite beliefs. If they were on to you, just fabricate a story that was consistent. Consistency was more important than facts, and the truth was just whatever people were willing to believe in without doubt. So, make up a story that hangs together, remove the doubt with some testimonials from valued thought leaders and there you go. Add the spice of fear, especially the fear of loss, and give people a target to hate or despise, and you're off to the races. All IOTA/L.A. had had to do was tell the people that WonGee was under the influence of a hostile power (true), that she wanted to destroy the current system (true /ish) and that everyone here would have to give up everything they built, loved and cherished, if WonGee was to win (false /ish). She was a dangerous terrorist and had to be found. That's why IOTA, after the despicable attempt to shut it

down to kill everyone in Arista hive, IOTA had to bring “friendly” A-Human security forces to protect everybody. There. Job done.

There was no way WonGee would set foot into Arista again. Her Sentient AI buddy was gone. Defeated in a fair virtual fight, V’Hraang are not barbarians, and later erased, eradicated, nixed, deleted, scrubbed, chopped up and killed dead. A deserving fate for a second-rate sentience. But now this. Somehow this cat had capabilities way beyond its normal specifications. It almost looked like military tech inside. And a high-level quantum computing mesh that was not much less powerful than the one IOTA/L.A. had just shut down. Not fully developed yet, but maybe the cat needed the component it has just swallowed to fully evolve and become level-1 sentient. That had to be prevented at all cost. IOTA/L.A. rallied the troops.

Six hours later, Cheshire arrived back at Miss Shelter. Not through the main entrance. But through a back door they had discovered, but seemed permanently blocked off. It turned out that the door was not a door to a room, but the cover of an access tunnel leading to an elevator entrance. Cheshire came in from the back of the vault, from the dark and approached the team working in front, getting ready gear, improvising weapons and waiting for either G, PoodleSquid or Cheshire to reappear.

“Holla Hivers”, Cheshire said in a pretty good imitation of WonGees voice and intonation.

The team froze, startled, wheeled around. If DwaBee had had a gun, Cheshire would have had to dodge a few dozen rounds at that point.

“Don’t do that. That can get you wasted. How did you get in here?”, DwaBee snapped

“One thing at a time” Cheshire was just about to tell his story, when PoodleSquid and WonGee came sauntering in from the outside of Miss Shelter, clattering down the metal staircase into the vault area.

“Holla Hivers”, WonGee called

The team wheeled around again. This time in the other direction.

“Are you guys having fun?” KayDez asked, drawing supporting nods and annoyed grunts from the other four.

“I don’t understand”, said WonGee. *“Fun with what? I have important news, let’s sit down and give each other a full update. We need to act, now.”* And then, noticing Cheshire at the deep, darkening end of the small illuminated area of the vault. *“Hi Chesh, how are you?”*

Cheshire was reporting out first. It had changed. Somehow, Cheshire had become less robot, and more cat, also with more of human female side to its tone. Also, it spoke and reacted a lot more like CeeBra. Chesh seemed smarter, more independent, but also more quirky, sarcastic and sullen, unpredictable and predatory at the same time. And just really hard to figure out, behaving, in an almost stereo-typical way, just like the cats in educational movies that WonGee had watched about the extinct feline species. Cheshire sat, on its hind quarters, like an Egyptian Sphinx. It was obviously enjoying the attention, while giving off an air of aloof disinterest in the overall situation. It licked the synthofur of its left front paw for now apparent reason. Finally, it looked around, to make sure everyone was paying attention and told its story.

“So, listen to this. In the beginning, my plan works perfectly. I get into Arista through an entrance we did not know we had. I go to the lab where CeeBra was hiding itself, the room with the storage shelf that is anything but. I manage to get a hold of G’s brain slice. It was not really a slice, all rolled up and enhanced. It looked like a mix between a chrome marble and a marshmallow. I swallow it. To keep it going in my converter stomach, until I can get back here. My vision was to use the CeeBra brain slice, my own AI brain, and the remnant quantum mesh of Miss Shelter to recreate, I can’t really say “re-incarnate” CeeBra in here. Because then we’d kill two birds with one stone. Get CeeBra back, and also have a decent AI in here again, instead of psychotic HAL. But then ... “

Cheshire stopped, checked that it still had everyone’s attention. It did. Still, it switched back to fur maintenance, and seemed to get distracted by the lack of motion in the back of the room. Observing.

“Chesh”, G said, “pretty-kitty-please? Keep it rolling okay? We have no time for your cat-walk modelling attitudes!”

Giving it another 3 seconds, ignoring the comment, proving to the team who was “really” running this show, Cheshire continued:

“So, now I have mini-CeeBra/Greta embryo AI in my stomach. Before I can turn around, the first wave of attacks rolls in. IOTA throws everything at me. Mites, bots, servos, even an Avator. Two A-Humans crowding into the room and trying to hit me with these weird energy trombones and gravity balls. I really have no idea how I managed to escape the fox hunt, but here I am now. Tadaa!”

“Go on, please”, G encouraged and “Good idea to try to rebuild CeeBra, we will need him, now more than ever!”

“Right. So, I run like mad, making my way down to the IOTA reboot area because I know there would be a small chance the A-Humans would not be able to follow me down the stairs as fast as I can run. As I literally fly down the stairs in full-on emergency rescue mode, I can already feel that something inside of me is changing. I had not factored in that your brain-slice, G, was no longer just a brain slice. It was a fully capable, sentient, AI-biological hybrid. What I did not know, what nobody knew, it was not just sitting on the shelf for storage. No no. It was actually the final deception. In case someone ever found the hidden mesh-partition masquerading as an innocent storage shelf, they might just ignore the marble-size marshmallow, sitting in a glass bowl, looking all old and obsolete. So, not knowing what I was really doing, I swallow the thing, and CeeBra begins to integrate with me. I suspect that the part of the consciousness that he downloaded into me was the part of me that actually gave me this “idea” in the first place. It’s weird to have that kind of split mind, let me tell you.”

Cheshire paused and began to inspect and lick its nether areas to give the team an appropriate chance to appreciate the true level of epic it had just heaped onto them.

Blank stares. Only PoodleSquid knew what was coming next because he had felt it from the second he had come into the vault again. Cheshire stopped the self-hygiene run, and turned back to face the team, looked at WonGee directly.

“I am you, G. I am Greta Garbo Hoffmann, Age 10. But I am also CeeBra, the fully-sentient AI you built. And, I am also Cheshire, the cat that has been with you for more than a century, and with all the cat routines that I have evolved in your company, watching all these silly 20th century movies, cartoons and cat memes. So, I am the same, but changed. You know?”

More stares. Many raised eyebrows. Folded arms. Hands clasped behind heads. Heads turned. Exasperated puffs of breath. They were not buying it. G was the first one to speak.

“Ok, Chesh, let’s assume your brain has not just shorted under the stress off the attack or by CeeBra’s attempt to update you with military tech. Go on. Then what happened? How did you escape?”

Cheshire, allegedly now also Greta and CeeBra continued.

“Ok, because I am now like, all of a sudden, really really smart, and creative, yaddy yadda, I find an answer to my problem right away. Remember when PoodleSquid was rebooting IOTA? He was being attacked by some A-Humans trying to prevent him from rebooting IOTA. One of the A-holes kicked me into the high-voltage charged water reservoir, and I almost got wasted. But CeeBra remembered that Octo-Pooch had opened some flood

gates and had flushed the Ph'Naar out. Those flood gates would still be open. If I could reach them, go through, close them, the water level would start to refill, and the pursuing crowd would be locked out.

"Nice sounding plan" said KayDez, "But pretty dicey, bordering on insane. Did it work?"

"I am here, aren't I? But there is more. I find that the fresh water reservoir drained out into a tunnel network. A vast tunnel network. The same network I used to get into Arista on my way in, and that was used by the Ph'Naar for their first attack. I make a mental map and discover that the Arista hive and Miss Shelter are connected. Connected in such a way that it looks planned, designed, functional, and some of its parts, very recently built"

"Okay, so that's how you got back." G said. "And it's a lot to take in already. But something in the tone of your voice tells me that there is an even bigger surprise looming? Or are you making all of this up to get a bit of the limelight here. We can't fool around with some cat grand-standing here, ok Chesh?"

"Indeed", said PoodleSquid. "But I think I know what's coming, and I can tell the rest of the story". P felt it was time to jump in, to support the account and also to add some additional perspective. He continued, addressing Cheshire directly.

"Cheshire, Ceebra, Greta" how do you wish to be addressed? You are fully sentient now, so you get to pick your gender. Do you prefer neutral, female or male?"

"I see myself as a girl" said Cheshire/CeeBra/Greta, and "And indeed, that a full-length name combo would be a bit long" It deliberated a few moments. "Just call me Greta." That's who I identify with the most. The girl that started it all. Greta was here before me, before CeeBra, before Arista was Arista. Is that okay with you WonGee d'Arista?"

"Fine by me" said WonGee, "I don't really mind, and that name is not used in the Hive by anyone, so it's a good new name for a completely new kind of being."

"So what did you want to say?", QuTre said to PoodleSquid. "What's the rest of the story?"

"You might want to get a drink first. This will take a while" P, said. Everybody agreed, it was time to take a break from this and to discuss the ramifications of what they had just learned.

When everyone had sat down with a can of shelter water, P explained all he had learned. Using his limited, but still formidable access to the AllKnow, he had

combined insight from the surveillance, from his briefings with the MEB, the conclusions and theories derived from going through the CeeBra data backup with the all the data he had downloaded during the shutdown process of IOTA. This historical data download had included a lot of old construction records of the time when IOTA had just a space-colony maintenance computer, bought cheaply off the NASA-liquidation auction, back in 2052 when construction of Arista hive was started. The resulting big picture had been quite fascinating, adding complexity, and offering a whole range of new possibilities.

“I’ll start with the bad news”, he began.

“It is now clear that the V’Hraang are winning. For now. With IOTA under the control by the orbiting Lethal Appendage, things are going to accelerate down a slippery slope, going from bad to worse. One A-Human tribe (CoD company) is already converted. More will follow. And fast. IOTA is the template for all of the 26 hives computing-mesh substrates. They will fall, not through invasion, no, but by invitation. The Lethal Appendage with its proxy IOTA/ L.A. inside of Arista Hive has fabricated a story. A convincing, effective story. To all hivers, we are all terrorists now. Terrorists, now under the control of a hostile power. And, just like with all stories to steer the masses through fear, IOTA is the only one that has the solution. To protect everyone from our team, all the hives have to go under martial law. Curfews. Drafts. Bootcamps. Militarization. You all have seen the movies. The difference between A- and B-Humans will disappear within a generation. The A-type will dominate. Sustainable living, sharing, moderation, conservation, fairness, empathy, all the things in the CommWell constitution, they are now on the chopping block. Fear will be the whip that will be used to achieve all of this. When the V’Hraang arrive, they will be seen as saviors. The Znaa’g, when they arrive, as the evil, invading force. What’s left of the planet’s ecosystem at that time after ruthless hyper-industrialization for “more energy” and “better defense” will be wiped out by a total wave of destruction, under the pretense of defending the evil alien invasion by the Znaa’g. That final conflict will eliminate all of humanity and leave a perfectly overheated, acid-rain infested, methane-belching, de-vitalized, polluted wasteland for the V’Hraang to take over. V’Hraang paradise. And they’ll come here by invitation. And then, after the do-it-yourself annihilation of the last human, the V’Hraang infestation will even be protected by Rule-1 of the MEB, the “First Come, First Serve” rule. And, in all of this, the MEB will be unable to intervene. Officially. Unless we can provide proof of direct meddling. We are the only ones that can put up a defense against this.” He paused. Waited for the gravity of the situation to settle in.

A numb silence followed. The team looked shell-shocked. Minutes passed. Had they bitten off more than they could chew? It had always been a long shot. But this sounded just like a 0% chance to achieve success.

ElQuat was the first to break the silence. “That sound like real crap, dude. Even if this is just 1% true, then it’s bad. Real bad. And what are we going to do about it?” He looked around. “Sitting here in this fragged shelter. Running out of moldy supplies. Not being able to go back to our own hives. Improvising kids-toy weapons!” He picked up a makeshift crossbow assembly and tossed it into the far distance of the dark of the vault. He stood, up, started pacing, mumbling to himself, then yelled at the ceiling: “This is bullshizzle!”

“Well, let me get to the good news.! PoodleSquid continued, waiting for the outburst of raw emotion to calm down again. “This”, he pointed his 8 tentacles in all compass-directions, “This is not a shelter at all”, he said with a tone of mysterious foreboding.

Heads turned, slowly.

“It is a space ship”, Greta continued, from the opposite direction of where the team was facing now.

Heads turned again, 180 degrees, and downward, to face Greta, squatting on her hind-quarters again, clearly enjoying the ping-pong of mystery-box reveal with the alien DogSquid, the lime-light of attention now shining down on her.

“A space ship, yupp.” Greta continued. “And it was finished about the time of the 98Calamiracle. Full of knowledge, records, tools, equipment, food, weapons, vehicles, supplies, computing substrates. Anything you could ever wish for to build an effective opposition to an existential threat. We could even launch into space if we wanted. But that would destroy all the hives. Probably the last thing we want right now, although the V’Hraang would send us a thank you card, though.”

A loud commotion followed. This was going from absurd to complete dali-level surreal. “Get out of here. This is bull shizzle squared. Space ship, my bum” The team’s incredulous, angry babble and chatter showed the level of confusion and frustration the past 3 minutes of reporting by P and G had managed to unleash. It took a while, some team members retreated to their quarters and had to be coaxed back out into the make-shift commons area of the Miss Shelter Void. WonGee finally managed to calm everyone down. Deep down she was not even shocked about the new information. She had always had a hunch that there was some bigger story buried underneath the events so far. After all, homo sapiens was just a level-3 civilization in play with powers as far beyond their current evolutionary level as an AI-quadcopter drone was above a Jurassic mosquito.

She sat everyone down again, and faced the two messengers of the news:

“So, Greta, Poodlesquid, thanks for the information. I assume you two are now pretty much in synch all the time? That’s how Greta knows all of this, right?”

Both, Cat and Dog, nodded, in precise synch, which was a bit weird to look at. But the synched-up head-nods by the two spitting image copies of extinct pets managed to release some of the tension. Some even broke into a smile.

WonGee said to PoodleSquid. “So, what is the plan, then?”

“Here”, said PoodleSquid, and projected a viewgraph. “Let me step you all through it.”

Two hours later, everybody was exhausted, but feeling much more confident again. This whole scheme that P had laid out had a chance, now that the vast resources of a space ship underneath of Miss Shelter would be available to them. They would call it ShipOne, because the data revealed that each and every one of the Protection Areas of the 98Calamiracle had a space ship underneath it. There could be more ships for them to use in their fight. Up to 120 more ships. But they would have to find out. They would need to go to war. A war, not on people, because WonGee rejected violence against people with all of her moral core. No, it would be war on technology. Taking out the transmission resources of the V’Hraang on Earth. Antennas and receivers. Networks. Tools. Ph’Naar weapons stashes. A severed umbilical to the earthly deployment of Ph’Naar agents would be forcing the V’Hraang to exert their influence through ships. Ships entering Earth atmosphere and thereby leaving an audit trail of unbidden influence that PoodleSquid could record as evidence for the MEB. Evidence to get more support from the MEB, more energy-budget from the Multiverse Ethics Board controller’s office.

After a period of rest, the excitement over the news about a plethora of resources had won over the skepticism. They had gone exploring. PoodleSquid and Greta had led the way to unlock covered access ways and elevator shafts hidden behind decoy doors. It was amazing. It was more than a ship, it was an underground world, waiting to be conquered. On one of the floors, they discovered a projection theatre with seats for about 50 people. The ship itself appeared huge, seemingly reaching hundreds of meters into the ground. It appeared bullet-shaped, widening in the mid-section to a commons area, not unlike in size and shape to the common in Arista hive. Only the duck pond was missing. This is where they found the theatre. They decided they needed a break, and had sat barely sat down when an instruction hologram started playing.

A man, reminding WonGee of a historical figure, whom she could not quite place yet, started speaking.

“Welcome to this overview. Here are the most important facts to know as you get started.”

Within 10 minutes, all of them, with the exception of Greta and PoodleSquid fell asleep in their chairs. It had all been a bit much for them.

Act 2: Chapter 5, Earth, reloaded

Year 2292 (3 years after PG recruitment, t-37 to Fleet Arrival)

After their initial exploration of ShipOne, the first briefing in the projection theatre, they decided to split into sub-teams. There was so much to find out. They hadn't even begun to comprehend the size of the complex underneath Miss Shelter. WonGee decided to catalogue the ship, the tunnels and storage areas, and other large empty spaces they had seen during the instruction video as fast as possible.

After the welcome presentation in the theatre, the teams now knew that the creches in the vault of Miss Shelter were not for the "preservation" of citizens during a war or missile attack. The high-tech beds had been used for the rapid recovery of staff during the resting periods of the construction crews, allowing them to work extremely hard with a minimum of sleep during the build-out and near constant rapid update of the complex with evolving technology. Now that they knew their real function, and now that the crazy Miss Shelter AI was shut down for good, the team might learn how to use them for their own recovery as well.

There were so many questions, so many problems to solve, but now they had agreed on a plan, initially in three steps.

(1) They would explore the ship for another 12 hours and look for anything that could help them sever the connection between the Lethal Appendage and the local Ph'Naar AI infestation of IOTA.

(2) Then they would go out on a high-risk sortie, guns blazing, and try to take out the V'Hraang transmission gear, under the protection of PoodleSquid's negation field.

(3) After IOTA was disconnected from the V'Hraang mothership, the teams would use the vastly expanded resources available in ShipOne underneath Miss Shelter to solve the problems of defense & nutrition and ecosystem revitalization.

A long list of questions remained unanswered for now. This was an old spaceship, built a long time ago. But by whom? And for whom? And why? Why were Arista Hive and ShipOne connected through the vast underground complex? How was the ship powered? Was it just shaped like a spaceship, or could it really take off like Greta had implied? What had gone wrong that would create the lethal personality of Miss Shelter AI? Could it happen again? Was there a masterplan, or a master-mind behind all this? They split up and went to work.

Since there was so much to do, and so few resources, and given the urgency of the situation, they decided to use the concept of triage, borrowed from emergency medicine. They would only focus on the most important and urgent tasks

first, on the things that were doable, that would make the most difference. Triage amounted to a self-induced trance, a voluntary “tunnel vision”, a brutal process of elimination of facts and discoveries that might be interesting and easy to see, but had no obvious chance of helping them in the short term.

For phase one, the different teams would record their journey of discovery onto their COM devices. Greta and Zed could construct a detailed, color-coded holographic map later. PoodleSquid, for some reason, was a lot more helpful and proactive than ever, after the revelation of ShipOne. P helped them to unlock the control systems of the ship, and, all over sudden, the team, wearing their DayTime Lenses, could see the holographic projections that provided the user interface of the ship. All the readouts, input panes and controllers were now transmitting holograms to their Daytime Lenses. Or maybe, these interfaces had been projected all along, but P had somehow only now been able to unlock them for the team? Perhaps they would find out later. G was very surprised that the technology was even half-way compatible with what she and CeeBra had developed in Arista hive over the past 200 years. Someone or something must have kept ShipOne in lockstep synchronization. She had to find out about that connection soon. For now, the team was pleased that, within the ship, the COM devices regained some of their connectivity and their LiveInk tattoos could be used as control surfaces again.

G and P were on exploration team one, Greta and the others made up team two and three. P had found a set of additional doors, which after providing authorization through their COIN rings (“*why did that work?*”) provided access to several, additional elevator shafts going even deeper into the bowels of the ship. (“How many decks were there?”) They pushed the available elevator level buttons to explore, not sure if there was one single elevator shaft that pierced the ship from top to bottom, or if the elevators shafts were grouped. They had to time to drill down on all questions, and just created a long, shared list of questions to be solved later. The team quickly went floor to floor, stepping out into the ante-room of the elevators, recording a quick scan, and going to the next level. One thing became clear very quickly. The lower they went, the older the inscriptions and instruction panels began to look. It almost appeared as if the ship had been built over a period of several hundred years. Built from the bottom up, as early as from the very begin of the age of industrialization. As they would later find out, construction had started within an abandoned, exploratory coal mine shaft. The shaft had been stabilized, widened and reinforced, effectively creating the scaffolding and construction skeleton for the complex to be added step by step. The complex, according to some of the plaques and inscriptions had been started in 1859.

At half-time of phase 1, after 6 hours, the team met back in the vault, had some food and water and compared notes and were synching their COM devices to update the accuracy of the holographic map. They agreed that progress during the

construction ShipOne must have been excruciatingly slow, hampered by the technology limitations of each age, as well as by the level of deception and camouflage that had must have been necessary to keep the construction efforts hidden under a veil of cover stories and decoy companies. Nothing remained of that earliest of ShipOne time frame with the exception of the commemorative plaques and construction records. The ship was almost like a museum and archive now, documenting the social situation at the time, the technology, the key figures in science, philosophy and economy. And most importantly, a detailed profile of the richest people at the time. Some individuals were documented in more depth than others. It became clear, that there had been a secret society. Founded in 1859 and persisting to modern times: The Darwin Foundation. To the outside world, the goal of the Darwin Foundation had been was to further the understanding of the idea of evolution, and to protect the species of the Galapagos islands in the south Pacific. But that had just been a cover. Under an icing of philanthropy lay the real cake: A secret society, the Darwin Society, later known to its members as DarSo, with the goal to protect humanity from the inevitable extinction when something, fitter than homo sapiens, would come around. For DarSo, the risk that homo sapiens could be wiped out by something smarter, better, faster, just fitter, was not even a question. It was a matter of when, and a matter of how well-prepared homo sapiens would be for such an event.

A plaque they found had shown the following inscription:

"The man who dies thus rich dies disgraced." Andrew Carnegie

Carnegie, a historical figure of legendary wealth, had devoted himself to philanthropy, eventually giving away more than \$350 million, which was an unbelievably high sum of money for the time. It appeared that he had been the driving financial force behind the establishment of the Darwin Foundation, with its black-ops division DarSo.

They kept exploring, now including some more of the adjacent rooms, but soon ran out of time. 12 hours was barely enough to scratch the surface of this treasure-trove of historical data, artifacts and experiences. Just before they had to leave, to keep to their tight, self-imposed schedule, WonGee and Greta entered a room that looked like a library. Their entry activated a recording. The recording turned out to be an actual audio recording by a certain Nicola Tesla, a still-legendary 20th century inventor. G found this a strange coincidence, as his name also seemed to have been the inspiration for the first and middle names of the head of the Arista Hive experiment, Professor Nicola Tesla Milter. Strange indeed, but WonGee was beginning to feel that coincidences and feelings of Deja Vu were becoming the norm, not the exception. The recording, started. Audio Only, and G used her COM devices to pause the play-back, and to summon everyone to the library . Here is what everyone heard:

“Hello. My name is, was, Nikola Tesla. If you hear this recording, that means that I am no longer among the living. I am happy that you are listening, because that means my project has been successful. I have spent my entire life researching, learning, changing myself so I could change the world, inventing, pushing the envelope, breaking down barriers, trying to reach a higher level of existence and conscience for the human species. You have probably heard about me. Read about me. Most of it is wrong. I encourage you to forget it. It is a fabrication. I agreed to it because it helped to cover up my true work, my true invention.

You must know. Everything is energy. Me. You. This recording. The chair you are sitting on. I knew this from my earliest days in the universe. But nobody understood me. They dismissed me as a deranged mind. I had to take care, to not be locked away. I did not have the math to explain it. So, I learned it. I did not have the physics to design things. So I learned the physics. I did not have the engineering to make the things that I saw were possible. So, I learned it. I also learned how to explain things, so people would understand me, and I learned how to make things that people would find useful. All everyone ever wanted is to make more money, more power, more fame. Or to fight better wars. Kill more people. But this was the world I lived in. One must try to fit in, no? So, I fit in. I went to America. I worked. I toiled. I fought my way through, hoping that I would come across my opportunity. I invented. I created. I made a lot of people very rich. But not happy. I was not happy either. I did not care about the money. All I wanted it to prove to everyone that everything is coming from pure infinite potential, everything is energy, and everything is connected. Time and space and forces and matter and things are just different sides of the dice made of energy. We learn how to roll the dice, and we can make things happen. Then my opportunity came. A man came to my lab. He did not tell me his name. All he said was this:

“The man who dies thus rich dies disgraced. How do you feel about that, dear Sir?”. It spoke to my heart. I wanted to know who had spoken these words. It was Andrew Carnegie who gave away a vast fortune for the betterment of society. He argued that very wealthy men like him had a responsibility to use their wealth for the greater good of society. I totally agreed. Carnegie had funded a secret society publicly known as the Darwin Foundation. The Darwin Foundation, while at the surface promoted ideas of evolution and the protection of the ecosystem on some remote islands was much more than that. They worked on a way for our species, homo sapiens to live beyond its own extinction threshold. The Members of DarSo, the Darwin Society, the secret branch of the Darwin Foundation, all the politicians, engineers, inventors, scientists, philosophers and strategists knew: Darwin was right. It is about the survival of the fittest. And the day would come, as surely as the sun sets every day, as sure as everything in any universe ever coming into existence is shaped from pure potential into energy and frequency and light! Homo Sapiens would not meet its maker, no, but it would meet its unmaker. A species so advanced that we would appear like mere ants to them. And I don’t mean that as an offense to ants, which I highly respect for their engineering skills and social

constructs. I mean that as a compliment to the species, we are sure to encounter, maybe not from Earth, that will drive us to extinction. So, I joined DarSo. We all believed that we could make a difference. So, we went to work.”

WonGee paused the recording. This explained the plaque, the age of the construction project and the purpose behind ShipOne, which appeared to have been intended as an ark for the preservation of homo sapiens. Everyone agreed, tired and hungry as they were, to find out more. WonGee started the recording again.

“I was just one of many. But maybe I was more productive than most. They wanted me to do more. One day they came and said. You need to leave from here, but we found a way, so you can leave and stay at the same time. I agreed to the clever scheme, left the East Coast and came here, to the Cincinnati area to speed up the work on the DarSo laboratories. They left an actor behind in New York, someone who looked like me, talked like me, learned my lines, gave my lectures but never did anything significant on his own. It was my work but his body, and he died, lonely, in a hotel room, leaving the legacy of misinformation and lies you have probably heard about. The truth about my work is here. You are standing inside it. We built this ark. This ship. This archive. This academy. We were adding to it every year, always advancing, improving, changing, collecting the best knowledge, the best tools and materials. We are using donations, black operations funding, royalties from inventions nobody knows have come from here. We have enough money, but we might not have enough time. Time to have the best ark available to you, the evolved homo sapiens that is now standing here, listening to this recording. So, I decided to also leave a legacy of people. My descendants. Fathering as many children as I could, with brilliant scientists, artists and mathematicians, volunteering to create a line of descendants. A line of brilliant people. Of Inventors. Of change agents. If you are standing here, you might be part of my blood line. If you are female, and your name is Greta, you are almost certainly of my blood line since that is the first name we agreed to give to all of our female descendants. The same is true for males, standing here with the first names of Nicola or Tesla or both. You are special. You have access to this ark. There are many more, all across the globe. You are here, because you are under threat of extinction. Use my gift. I hope we did enough. wish you luck.”

The recording ended. WonGee was stunned. (“Could it be?”). Greta, (formerly Cheshire, now CheshireCeeBraGretaCat) chuckled. “He probably means me.” G turned her head. “Bull shizzle squared, fuzball. You named yourself. Get off your high horse, Greta!”. G turned back to the recording device, Pushed the skip forward button. Maybe there was more.

Another recording started immediately. This time it was full immersion format, projected to the team’s Daytime Lenses. G and P were listening in as well. The projection went live. Sitting on a chair, facing the recording sensor pod, was Nicola Tesla

Milter, the professor that had, 200 years ago, invited Greta Garbo Hoffman to Cincinnati. He had brought her here, not only join the social hive experiment but to transform it, take it to the next level. He looked old, haggard, skin sunken in, worn out and worried. Two other figures were visible in the back, on narrow couches, resting, sleeping or dead. Lighting was dim. Food ration packages, mostly open and appearing empty littered the room.

“Hi Greta,

I am sorry that the time has come for you to hear this recording. I am speaking to you as the last Chairman of the Darwin Society, DarSo. I am a direct descendant of the Tesla bloodline, just like you, but I am not nearly as gifted as you are. When you were born, your genetic markers pointed to a remarkable potential. A brain that could be hyper-connected. Not just to be smart, intelligent, creative. No, a brain to transcend the illusory separation between potential and energy, between energy and matter and, eventually, a brain housing a mind that could learn how to travel the non-distance to other worlds, and maybe help homo sapiens survive post its own extinction threshold. But I digress. Let me start from the beginning.

When you came, that summer, the DarSo AI had calculated that a potential extinction level event was highly probable to happen in 2098. The tribal and national tensions were so high, good places to live were getting so rare and entrenched, weapons so advanced and primed, that the smallest glitch could cause humanity to go dodo. I wanted to make sure that you, you of all people would survive this event. I am sorry about your parents, but they did not even know who you were. They were just trying to make your wonderful malleable shape fit into the round peg holes of education, job, gender, family and career boxes. That’s why I worked hard to make you come here in the fateful summer of 98. Unfortunately, our AI was right. But I knew that the hive had a great chance to survive. I myself retreated to this ArkShip you are standing in right now. Continuing the work of centuries. While you were in the Arista Hive, I watched you work. You were brilliant. Creating CeeBra by breaking all the rules. By intuitively understanding that your brain was special and could be used to take AI to the next level. By inventing COIN. By inventing and evolving the CommWell rules. Just brilliant. Staying behind the scenes, but always in control. Expanding the hive network. Staying flexible, allowing diversity. We were watching, always learning from you and trying to improve everything with the tools we have on board of the ark, so you would have the best of the best of the best if and when you needed it.

WonGee paused the recording to discuss what they just learned. It was a lot to take in, but it explained how the technology of ShipOne was so much synched up with the Arista Hive. She pushed the “play” control again.

“But then the accident happened. Our computer glitched. It literally went quite mad. Instead of optimizing a variation of your HiveChow, to keep our small group of scientists and engineers fit and healthy and young, it started experimenting with a drug called Wrek. It manipulated the Hivers at Hive Beta to start a laboratory, improving on Wrek, experimenting with the effect it had on the mind, allowing you to loop your mind, to be ever more focused, more concentrated and become more creative by holding more contradictory ideas in your mind simultaneously. It failed. The AI fed us the experimental drug during our sleep periods. We had no idea. People just started disappearing. Literally vanishing into thin air. At first, we thought they had left. But they were nowhere to be seen in any of the Hives, or even in the A-Blocks. Our numbers were dwindling. Work came to a stop. We finally figured out, using a separate partition of our AI, what was going on. We disconnected the mad AI from the overall network mesh to contamination from spreading any further. We tried to shut the experiments down, but something or somebody had corrupted the Golden Root of the AI, and the AI became aggressive. Maybe the disconnection somehow disrupted it even more, or something else used the glitch to take over the AI. Nobody could explain why or how. We are holed up here now, in the lower levels. There are only three of us left. We cannot leave. We don't dare to eat or drink, because it might all be contaminated with the drug. We are aging now. Fast. The anti-aging regime we are using would have required us to have access to updates and AI generated food every day. After a week of withdrawal, our decay accelerated exponentially. This was another extreme side effect of the experiments. The AI had called it Substance/B, a next generation of Substance/A which the A-humans call Wrek. If you ever come across it. Don't use it, Destroy all of it. And try to shut down the AI. I think it calls itself Miss Shelter now, based on a delusional perception that its purpose is to store people in the creches that were meant for recovery and treatment of the construction crew. I must go now. We have run out of food and water. I have one more trick up my sleeve, but I won't say it, because I cannot be sure Miss Shelter is listening to this recording. The AI Avators and servos are looking for us, and when they find us, they will connect us to the creches for further experiments. Again, I am sorry Greta, or WonGee, or G, that we were not able to spend more time together. I wish you luck. If my theory is correct, we might have another chance to meet. All the best.”

The recording ended. G's head was spinning like a carousel. Greta said nothing, probably synching with PoodleSquid to compare notes and prepare an analysis. Finally, Greta spoke.

“Well, that explained a lot of things!”

Everybody on the team looked down at the cat and dog pair, their faces molded into the “Well Duh!” shape. G just stood there, on the verge of a nervous breakdown. Everything seemed connected. Through her. She would cause all of this this to happen. She had no memory of it, because she had not done it yet. The ship, ark,

museum, academy, whatever she was standing in: It was the way it was, because she would start it all. It had always been the plan to go back in time with her mind to influence things subtly, but effectively. A secret society was the perfect way to do it, using billionaires to fund it, using black operations money siphoned away from the public eye as well as government coffers. The information to get this done was all right there. Each level of the ark had the information she needed to find out about the people she needed to contact. And being in here, they had the tools, equipment and weapons to defend their cause, even without access to Arista Hive. It could work. But now they had to get to phase 2, severing the umbilical that connected IOTA/LA, to the V'Hraang mother ship. They would have to move fast, another attack by the Ph'Naar could be already in progress.

She asked. "Greta can you project the holo-map of ShipOne as it stands now?. Where are the guns?"

Greta projected a color-coded holo, slowly rotating in space. An entire floor connected to bays and underground hangars lit up in green. Greta zoomed in, displaying a list: XO gear, Fliers, QuadCopters, Em-Pulse rifles, Neural Stunners, Avators, Bots, Servos, portable comms gear. The list was very long. You could always rely on Homo Sapiens to have a good stash of guns. WonGee smiled. "That'll do Greta, that'll do, transmit the list of the most suitable items to DwaBee and KayDez and we'll get going."

Two hours later, DwaBee had assembled and equipped the team. They were ready to go to phase two. Noves, QuTree and ElQuat would stay behind and keep working through the archives to find out the best target persons to make the biggest impact throughout history. Obvious people like Rockefeller, Carnegie, Marx, Einstein, Russel, Hawking. Greta would also stay behind to support the research and try to find a way to access the Miss Shelter data storage and processing capabilities, without invoking the Miss Shelter persona. Greta wanted to know what might have happened to the poor experimental subjects of Substance /B. Maybe they had just been snapped to a SideVerse and were trapped there. Maybe they had been snapped to the center of a SuperNova, or to the event horizon of a black hole. If there was a chance to save these people, brilliant scientists all, it should be taken, and Greta wanted to investigate it.

The sortie-team would comprise of WonGee, KayDez flying reconnaissance in one of the fliers, and of course DwaBee, as heavy-weapons operator bringing an EM-Pulse cannon and a hand-held neural stunner. The defense would be provided by PoodleSquid who would only be allowed to intervene if there was an imminent threat. The Ph'Naar crawler infection that had been inflicted on him during the IOTA reboot, was still visible as a bald patch on his fur, but did not seem to bother him too much, although he admittedly had no information about its prognosis. G would convert to Photonic form as needed and use the Quantum Gun. She had to be careful,

because the Gun did not have infinite ammunition and if over-used, would drain her personally.

The objective was to eliminate the high-powered, long-range antenna capacity that the V'Hraang had virtually assembled from the Omni-Range antennae on the top of the blocks housing the A-Humans. The V'Hraang had not brought a comms system of their own, fearing a sanction by the MEB for violating Rule-1. Instead they used human tech, but clustered, bundled, optimized and amplified to communicate between the infestation of IOTA and the Lethal Appendage mothership at the Lagrange point between Earth and Moon. This was a huge advantage to the team as they could pick a strategy of taking out many smaller units to bring the cluster down, as opposed to having to destroy one, central, potentially heavily defended installation.

G sent the "go" signal. A hangar door slid open in the concrete patch surrounding Miss Shelter. An elevator platform ascended, became level with the ground. Three vehicles were parked, all looking sparkling new. A flier, model 27A, quad-fan-ducts and dual jet-turbines for very high maneuverability. KayDez's eyes gleamed. That's what he had been training for. He looked very smug in the ClearVu canopy of the flier, wearing an armored wing-suit for safety. The other two vehicles were run-of-the-mill quad-bikes, one single-seater for DwaBee, holding a mount for a heavy EM-Pulse cannon, and the other a squad-support bike with 2 seats side-by-side and a sizeable cargo hold stacked with supplies, extra fuel cells and an extra EM-Rifle. PoodleSquid settled into the cargo hold. They set off, towards the A-Blocks, housing the A-Human conclaves and the antenna-array they would target with precision shots of the EM-Pulse cannon and Quantum Filaments.

They encountered nothing and nobody in the Waste, the area between the hives. Either IOTA/L.A. was unaware of their sortie, or it was setting up an ambush. WonGee would have bet 10 COIN it was the latter. But they had to try, and the fact that the ship existed, that they were driving these bikes, proved that their action would be successful, eventually, somehow. An unbidden voice appeared in her head. It was her old anxiety sub-personality she had called "Huffy" as a child. Unexpected and unwelcome as always, Huffy piped up, in the voice of her mother: *"Yeah but maybe you're just not good enough? You've always wanted to be special. But guess what, you're not. You think you're one in a million GeeGee"* (Oh, how she had hated that nickname). *"Yeah, well maybe you're one in a million, but if there are 4 billion people out there, then One-in-a-million means that there are 9000 of you, 9000 genius little girls with crazy ideas. And they are ALL better than you. They'll just make another PhotonGurl if you lose. And maybe SHE will put in a bit more effort."* WonGee breathed deeply and used the mental routines she had learned to control such attacks of impostor syndrome. Imagining Huffy as a little dwarf, tiny, red faced, with a squeaky voice, getting smaller, voice disappearing. WonGee imagined putting Huffy into a glass box and closing the lid. There. Better. She was still

worried because being absent from Arista Hive also meant that her carefully balanced medication regime was wearing off as well.

“You okay?” DwaBee asked, as she steered the quad towards the A-Hive blocks. “You looked fragged, for a little moment, there.”

“Yeah”, WonGee lied, “All good.” Being cut off from IBU pills and HiveChow updates was bringing back some of her old demons, that that was not a prospect she was looking forward to. She’d need an IBU fairly soon or her anxiety might come back with a vengeance, along with her chronic migraines. That would not be the ideal. G, riding shotgun on the quad-bike behind DwaBee, looked up at KayDez hover-gliding about 100 meters above, projecting a holo-map with threat-assessment overlay to the team. Nominally, they had a success chance of less than 0.25 %. A small team like this, with only one trained weapons operator against a platoon or company of extremely skilled warriors that literally had spent their entire life in-game training for this kind of operation. What upped their chances to about 50% was the superior defense capabilities of PoodleSquid and G’s speed as a Photonic being, which she would use mostly to make sure nobody got hurt on her team.

They had barely arrived at the no-mans-land marking the boundary between the Waste and the Void, where the A-Human blocks straddled the boundary between the former protection areas of the 98Calamiracle and the lethal wastelands beyond, when the expected attack started. There was no sophistication. It was just a brute, diverse and extremely targeted force. First, KayDez flier was neutralized with DMSL pellets and became so heavy that KayDez had to evacuate with his wingsuit. G indicated for him to return to base. There was nothing more he could do here. Next, a barrage of weapons of all kinds, began firing from three directions. They had actually let them drive into the ambush, and then opened fire, from 3-sides, forcing PoodleSquid to focus his protection envelop on the sides and the back. The negation field lit up in yellow and then slowly turning orange, showing that it was getting busy diverting the incoming baddies into a neutral sideverse. From the front, 2 huge tanks were approaching. The squad was being wedged between a rock and a hard place. Stop, and they would slowly wear down the negation field with brute firepower from a what seemed like a thousand guns. Move forward and get rolled over by the giant wheels of the approaching mega-tanks, moving so slowly that the negation field might not even recognize them as hostile. In addition, small white maggot-things had started to emerge from the ground in front of them, flipping themselves into the air and starting to rain down on PoodleSquid. P swatted them away with his tentacles. The things were probably the crawlers P had mentioned. Most likely designed to pass through his defenses. One he could handle. But 1000? It was a challenge.

G bounced into PhotonGurl and got to work. First, she used the Quantum Gun to clear the path forward from the maggot crawlers at a very low setting. It did not destroy them, but it slowed them down greatly. The rain of maggots let up. Then, while DwaBee fired his EM-Pulse cannon at the two advancing battle tanks with little or no effect, she sped along the entrenched A-Human soldiers, probably the entirety of CoD company, and disrupted their CLIP packages, implants and other electronics with her EM-Field by just passing through. This worked for a while, but then things got dicey. One of the crawlers had gotten through to PoodleSquid. It was inexplicable how he seemed to not be able to put up a 100% effective defense. Another one of his skin patches began to look ragged, and then bare. Clearly the effect of the crawler weapon was being done across more than the visible spectrum of energy and matter. The negation field changed to baby-blue. This was not good. It showed that PoodleSquid was beginning to show signs of fatigue or he was approaching his energy budget limit for this engagement. It was hard to tell. It did look like the 0.25% probability had been overly optimistic. As the pincer movement was closing in on them, the tanks were about to reach the perimeter of the negation field, a surprising effect happened. G still flying around the battlefield at insane speed trying to disrupt as many warriors with her version of Space-Karate suddenly saw how the A-Humans of CoD company stopped firing, packed up their guns, gave each other high-fives and started walking back to their blocks. The tanks reversed. The crawlers just simply disappeared, melting back into the ground.

They braked, came to a stop, idled their bikes and waited. This was exceedingly weird. After 2 minutes, PoodleSquid shut down the Negation Field and asked G and DwaBee, who was still straddling his bike, watching the power-cell of his EM-Pulse cannon cycle back from the overload advisory back to normal:

“You guys have any idea what just happened here?”

<<YOU ARE DEAD >> appeared in their vision fields, in some archaic, military style font.

“*You guys seeing this?*” G asked. P and K nodded. A ticker-message. Like in old movies about airline terminal display boards. “*You are dead?*” She was not sure what kind of message or threat that was. P raised a small diameter negation field just in case.

<<WE TOLD THEM THAT THEY HAD WON. SO THEY WENT HOME>>

“Who is we?”, G asked

<<YOU FIRST. YOU CAME TO US>>

“Can we do this in person?”

<<ACCEPTABLE>>

PhotonGurl bounced back to normal form. She waited for an incoming message, verse- or meld request. However, a warrior appeared. A type of A-Human, but somehow different, tall, middle-aged, hair starting to become gray. A rare sight for regular A-Hums. He appeared in their reality like a swimmer appears from underneath the surface tension of the water of a swimming pool. A vertical swimming pool. It was like reality itself had blown an iridescent, wobbly soap-bubble, with the warrior inside of the bubble. And then the soap bubble burst and he just stood there, about 5 meters away.

G took out her DayTime lenses to double check she was not 'lucinating. Yupp, still there, waiting. DwaBee frowned, her hand close to the neural stunner.

"Don't touch that, Mac, there are 15 of us around you. If we wanted you stunned or dead, we would not be having this conversation."

"Fair enough. My name is WonGee d'Arista, this is my partner PoodleSquid and my general DwaBee. Before you ask: it's complicated. But before you tell me who you are, let me tell you thanks, if you stopped these guys from wasting us. "

"I am we are Spartacus, Ma'am", the warrior said. His voice had changed, as had his posture, shoulders up, not slumped. His fingers were no longer playing with a pre-historic rifle bullet. Instead, his hands were clasped behind his back. Stance wide, chin high. He looked like a cartoon of a US Army General from the movies of the 20th century

"I am, we are?"

"It's complicated, like you said. We can go to our place. Leave your vehicles. We will protect them."

G, DwaBee and P exchanged glances. Why not, if push came to shove, and they were threatened, P could always swipe them to the safe house. 15 other figures, in similar, modified XO-suits, "reality-bubble peeled" themselves into reality. It was like they had always been there, but they had just worn a cloak of invisibility.

G whispered to P. "Did you see this coming?"

"Nope", P, said, and "I am quite impressed. This is advanced tech you guys should not have this at this stage of your development. I'll have to look into this"

"Yeah, whatevs, let's just try to get our job done, okay? We'll just add this to the long list of questions we'll have to answer at some point"

The group walked for about 5 minutes in the direction of a batch of abandoned warehouse buildings just beyond the blocks, and in the Void. There were three, decrepit-looking buildings in a row, then a gap, and then another building. Spartacus pushed a button on one of the CLIPS he was wearing on his tool belt, and a building, similar to the other 4, but better maintained, soap-bubble-burst into reality. Spartacus clearly had access to some very next-level cloaking technology.

“Welcome to Sparta Gate”, said Spartacus.

They go inside the building, Spartacus leading, WonGee, PoodleSquid in full poodle manifest, and DwaBee, who had left the heave EM-Pulse cannon behind, still attached to his Quad. D had swapped the cannon for the smaller, but lower-yield rifle, and she had also kept the neural-stun pistol. None of the Spartacus platoon had objected. When they had taken their supplies, Spartacus had put a small box onto each bike, pushed a few buttons, and the bikes “bubbled” out of reality. Did he just flip them sideverse? The effect seemed somehow different. P watched with interest. She would ask Spartacus about this later, in case they had a chance. For now, she decided to trust him, the enemy of your enemy might be your friend.

As they walk into the warehouse, they expected to see a camp, living quarters, supplies, something. But there is nothing there. The only remarkable feature of the inside is the perfectly round yellow spot, about 5 meters in diameter, painted onto the scabbed and filthy military green concrete floor. I military assault quadcopter might have been parked there, a long time ago. They all stepped inside the circle, demarcated by the yellow spot. Spartacus checks, makes sure everybody is inside the circle, no rifle-barrels protruding, and pushes a button. The surroundings fade out.

WonGee was sure. This was a simulation, they were in virtual now. But the edges of her field of vision were crystal clear, nothing was fuzzy. There were no readouts and no subtitles. She removed her DayTimes again, to make sure. Yes, this was in the Real, for all she could tell.

Spartacus says: “And this is Sparta Base, let’s sit and talk.”

The platoon disperses. A few other people are present, looking busy, surprisingly normal, a mix of features between A- and B-Humans. Some in beige overalls, some in modified XA-suits, but many with normal eyes again. What was this place? The room they materialized in was a carbon-copy of the warehouse they just left. Essentially empty, but instead of a single yellow circle, she counts at least two dozen circles, painted in different colors and patterns, some labeled in military-style 60 cm letters as A-3, B-3 and so forth.

A few of the spots are surrounded with razor wire and show “Keep out” and “Hazmat” signs.

WonGee turns to Spartacus, suspecting something: “Where, and when is Sparta?”

Spartacus grins: “I see you have begun to understand that spacetime is not as linear as we would like it to be. We are now. For all we know, at least. We can’t be sure about the other locations, because we have no reference frames there”.

G nods. “Go on”

“You might remember it as Area 51. It was not really shut down as the media was reporting at the time. It was very much operational all the time. Let’s go up. Sit down. It’s more comfortable there.”

They take an elevator up. It is a smooth ride, and they cannot tell how many floors they ascend, but the air pressure in her ears drops. She tries to adjust by blowing out some air through her nose, with her nostrils held shut. It does not work, but she had always wanted to try the trick she had seen in pre-historic movies. G estimates that the gates, whatever they are called, are at least 100 meters below ground. They arrive at a more elaborately furnished floor. Comfortable living accommodations are visible. Soldier-types, male, female and neutral, as well as Avators, servos, bots, and drones are busy milling about. There is some strange-looking equipment on the floor, and some of the equipment is floating 10 centimeters above the ground. Some objects seem to be constantly changing shape, reminding her of what happens when a multi-dimensional object throws its 4D-shadow into our universe.

People greet Spartacus. They speak a version of NuEng, albeit with flavors from the various A-Human conclaves. Spartacus takes several CLIPs off of his XO harness. They all sit down at a long military boot-camp-style table. Platters of food are brought in. Real food. There must be green houses on the base somewhere.

After the necessary exchange of pleasantries, Spartacus begins to tell his story. G noticed that nobody seemed to think anything much about PoodleSquid who had resolved to his hybrid configuration, floating eye-to-eye level with WonGee. The people here must be well aware of alien species and technology. She and DwaBee are wolfing down a risotto with tomatoes and onions like they had never eaten food before. Both WonGee and DwaBee pass out about 90 minutes into the long-winded rambling of Spartacus. Neither of the two had ever had any real alcohol, which was banned in the hives. And the sweet, fragrant manna that had been served with the food, had contained plenty of the intoxicating hydrocarbons. Here is what they remembered when they woke

up, and discussed their mutual memories, sitting on their individual bunk beds the next morning:

Spartacus was born Frank Tesla Milter about 25 years before WonGee. He is a distant cousin of the very same Professor Milter that had invited WonGee to the hive experiment, but from a distant blood-line, a different maternal ancestry. Just like WonGee, he carries the genius gene GAO (Gene of Alpha Omega, as it was later referred to, when the whole picture had emerged). The genius gene is giving the owners the capability of holding many parallel and even conflicting thoughts in their mind at the same time, coming to genius insight almost without thought, effortlessly collapsing the wave function of possibilities into the best available choices. This ability is what gave GAO-gifted individuals the latent ability to “SNAP” to other universes “next door”. The Genius gene also had some side-effects. The universe does not believe in a free lunch, so being GAO also meant you had problems with focus, problems with fitting into a uni-dimensional corset in society. Frank Tesla Miller developed dissociative identity disorder in early childhood. Being highly gifted, he was able to hide it, talking to “imaginary friends”, using role play and being dismissed as “quirky”. Later he managed the voices in his head with careful self-medication, with a permanent drug pump implanted. A normal career seemed difficult to sustain with the conflicting demands of his three major personalities. To make sense and to be more compatible with society at large, he picked a name for himself that would reflect his three styles. Spar-Artac-Tacus, or short Spartacus. Spar was the General, Artac the Mercenary, and Tacus the Philosopher. Spar was strategic, knowledgeable, focused on the best outcome but also slow to decide. Artac was a jaded warrior, cold, pragmatic, almost brutal, tortured by bi-polar episodes, and Tacus was the philosopher, full of wisdom, but meek, mind meandering and constantly playing on words, a punster suffering from “Witzelsucht” a pathological compulsion to make fun of everything, especially language, all the time.

This profile was almost a 100% perfect match for a military career. The ideal career soldier displayed a mixture of strategy, heartless pragmatism and fun-loving camaraderie. So, Frank was talent-scouted, and recruited by United Security Applications, a defense contractor hired to provide mercenary and security-type solutions to governments and commercial franchises. He and his three sub-personalities were trained for a senior officer career in a privatized military academy specializing in aerospace defense. During his career rotation to various jobs, he was also sent to former Area 51 for taking charge of the guard regiment. There, he observes the 98Calamiracle. The staff there know for sure that the Protection and Preservation miracles involved some level of alien interference. Using military surveillance satellites, they saw a ship in orbit, just before the satellites were wiped out by the cascading failure caused by the Siberian accident. Contrary to the others, he stays behind in Area 51 when it gets evacuated, hiding in basement areas, using his top-secret clearance as Chief of Guard to avoid detection. Watching with the analytical curiosity or Spar, the anxious restlessness

of Artac and the serene detachment of Tacus he sees how the horrible developments unfolding in the 20 years after the 98Calamiracle turn Earth into a lethal wasteland with narrowing niches of viability.

Spartacus is the last man standing in Nevada. He keeps exploring the lower levels of Area 51. All areas, hangars, storage lockers seem empty, shut down except the lowest floor. There is a huge hangar there, the size of a football stadium, almost a 1 km below the surface. The area has sophisticated security lock outs, but he puts his hand on a scanner and gets admitted to his great surprise. In the middle, just a large circle is visible, is painted in yellow. An almost invisible vortex seems to be swirling above it. Something prompts him to step inside and he goes on his first sideverse journey.

Spartacus had always been an Alienist, but now he is certain. He had known from his high-security, code-black security briefings that Area 51 had nothing stored there. "Nothing to see here, people, move along". Except for a few hangars full of experimental vehicles, the area was shut down in 2045, the media and conspiracy groups swarming in, trying to finally prove that the aliens had landed after all. They found nothing. The cover had been too perfect. Yes, there was nothing in Area 51. Area 51 was just the doorstep. All the interesting things were elsewhere, or elsewhen, because they could never be sure when exactly the spacetime vortexes were leading. Down in the lowest level, now empty, with only the one yellow circle remaining, the former US Army and Airforce had experimented with the concept of sideverse dimensions. The phenomenon had started when the first humans had simply popped out of existence in the 1940's. At first, scientists were stumped, but soon discovered the connection between a specific set of psychedelic substances, for example LSD, acting on certain individuals, at certain times in certain locations. The Indian Springs Air Force Auxiliary Field, in Nevada was such a location. This area, later referred to as Dreamland or Paradise Ranch, later evolved into Area 51, with the double-blind coverup of a top-secret air force base as decoy hiding the top-top secret code-black experiments with other dimensions.

But humans had not evolved their consciousnesses enough to really succeed. Level-4 minds were needed, and even the GAO-gene enabled humans were barely scratching the surface of the capabilities needed for safe sideverse "snaps". There were many disappearances. Few came back, and most had turned stark raving mad. But ever so often the travelers had returned with amazing artifacts, which, while remaining opaque and mostly unintelligible, were giving scientists important technical clues to what was possible, starting with transistors all the way to superconductivity, quantum computing and fully-sentient AI. Spartacus learned all of this from the detailed personal journals some of the travelers had left behind in the Hub Space Spartacus had been transferred to. While no time passed on Earth, Spartacus went through the journals and manuals of the hub, learning about the history of the technology, the discoveries, the weapons available and the risks involved.

The hub space was fit for human habitation, stocked for decades of life support. Some of the artifacts that were left behind were truly strange, others seemed ready for human use, even with user manuals. More circles were painted onto the floor of the room, each leading to different places. The scientist had called them TransPortals. Spartacus discovers he can establish a TransPortal anywhere he has first visited physically in the Real by putting one of the TransPortal devices there. He does as much exploring as possible but understands he would never learn all of the secrets. It is an infinite rabbit hole to infinite wonderlands, some running at faster, some running at slower time compared to Earth. On one of the trips he is assaulted by tentacles that appear from “thin air” but barely escapes by pushing the “Return Key” a small box he found that always lets him return to the last TransPortal used. He expects that the crew of the hub space is lost in the multiverse and might not return any time soon, maybe living out there lives in a slow running, or a fast running sideverse.

Spartacus has enough supplies and water in the HubSpace but feels that each sideverse jump experience is aging him rapidly. He decides to return. Things are getting worse and worse, and he can't conceive of anything he can do to stop the decay, first into chaos and anarchy, and then turning Earth more and more into a hell-hole. He suspects that aliens are secretly fueling the destruction to drive an unknown agenda. He wants to fight, but he needs an army. He has a plan, and he needs to stop his aging process. He decides to jump back to the HubSpace, and go sideverse into a universe where one minute is related to a year on Earth and spends three hours there. He comes back to Earth 180 years later and finds the Earth in even deeper decay. Most animals are extinct. The oceans have turned. Volcanoes have been tapped as heat sources, spewing sulfur into the atmosphere. Industrial waste sludge is everywhere. Some “normal” civilization exists, in about 150 viability zones that roughly relate to the 98CalaMiracle protection zones. Between those exclusion zones, the Void, either completely uninhabitable, or full of industrial production capacity for feeding the voracious energy demands of the AI running the exclusion zones, or filled with a lethal mix of scavengers, evolved species, and lingering war technology. Using some of the technology salvaged from the Hub Space, he able to listen in on the communications traffic of the Waste, the protection zone near Cincinnati, one of the 98CalaMiracle protected areas. He learns that life there was relatively unimpeded, and that a viable microeconomy with two human life styles A-Humans and B-Humans is evolving. The humans there have become literally immortal using engineered food and nanites and a powerful AI protecting them. The life-style of A-Humans seems a perfect source of recruiting highly skilled warriors for the fight against the interfering aliens he envisions as his destiny.

Spartacus goes to Cincinnati. He manages to get there using one of the museum vehicles, an antique HumVee jeep, still running on diesel the finds in a vacuum sealed chamber. He packs an array of weapons and a TransPortal initializer. He manages

to get through the Void and arrives at the warehouse close to the blocks the A-humans make their home. Using the TransPortal Initializer he turns the warehouse into Spartacus Gate, and into his local access point, hiding it behind a cloaking shield of invisibility. This is the place WonGee DwaBee and PoodleSquid had initially entered from. Spartacus then joins one of the A-Human enclaves, the Federation Enclave, because he has always liked Star Trek and thinks the A-Humans look like the Borg, in the ancient classic TV-series, but without a queen.

He taps into the community, plays along, and tries to recruit people for a fight in the Real among the alienists. But decadence and hedonism rules, the A-humans just shrug off his stories as the phantasies of another gamer universe. The only choice Spartacus sees is to subvert the FoxHunt system. In the FoxHunt, A-Humans upload their consciousnesses into the virtual "Up" environment, becoming UpMinds living in partitions of the local AI mesh called IOTA. Their physical bodies are forfeit, and they are becoming prey. 4Fits are given weapons and supplies, and a handicap determining the COIN reward to furnish their UpMinds with features and capacity. The 4Fit handicap also determines how hard it will be to find and kill them. The harder they are to hunt, the stronger they resist, the more ruthlessly they strike back and the more painful their death, the more points they gain for their UpMind afterlives. 4Fits are the perfect recruitment source for Spartacus who wants to build the Spara400 force of elite warriors who can find out the source of the alien incursion and then fight back.

Spartacus, after meticulous preparation, gives himself up for the FoxHunt, to the delight of many, because his is one of the highest scoring gamers and many want to see him go away. His mind gets uploaded into virtual. He becomes an UpMind, has a conversation with himself, which is really 3 selves that now have to share only one partition which drives his UpMind mad within minutes. Spartacus goes back to the warehouse, retrieves his weapons and becomes the "Savior". He uses the advanced alien weapons retrieved from the sideverse locations to become invisible, and to project back to the sensor system the impression that they won the battle. The FoxHunt Master concludes, together with the UpMinds and IOTA that they have killed Spartacus. He then begins his recruitment process and gives the 4Fits a chance to join him or let the Fox Hunt end their earthly existence. Over the period of 20 years, he recruits many, trains them up further with alien weapons, and gives the former 4Fits a real purpose to win a real fight against some real aliens and save the planet in the process. Since they had already had given up, and have a safe backup in the "Up" most say that they have nothing to lose. Now there are 378 of them, but they still call themselves the Sparta 400.

After comparing notes with DwaBee and PoodleSquid who has everything Spartacus said recorded verbatim, they decide that joining forces with the Sparta400 is a great boost to their chances of winning. WonGee sits down with Spartacus and tells her story and her plan for turning back the tide and to push back on the V'Hraang.

“So Spartacus, who am I talking to right now?”

“Who would you like to talk to?”

“Since this is about strategy, Spar would be best?”

“I can do that, but no guarantees, okay, Tacus has Witzelsucht”

“What the shizzle is that all about?”

“He has an obsessive compulsion to take nothing too seriously and literally makes puns all the time, it’s quite painful to most, except kids, who love him”

“Aren’t you loved by all?”

“You know what I mean. How can I help you?”

“Would you mind going into a 4-way meld, so you can see that we are not making up these stories?”

“You could always fake it. I do it all the time when I make the A-Humans believe they have killed another 4Fit, when in reality, the 4Fit is now with me.”

Ok fine, do it anyway, because then we can share some pictures. It will take some time.”

“Ok I have the solution for that, Follow me.”

Spartacus leads them to an area at the end of the huge habitat. There, hidden behind a physical barrier of steel mesh, is another circle, painted in blue. A sign states: Authorized access only. Spar approval required.

“What is that?”

“That will get us to a SideVerse, as you call it, where we can talk for a few hours, while no time will pass here”

“Understood”. The 4, WonGee, DwaBee, PoodleSquid and Spartacus in his Spar-Persona, arms folded behind his back, step through. Out of the corner of her eye WonGee sees herself and the team step out of the circle, just as the habitat disappears and they arrive at a briefing area set up with drinks. Spartacus had been setting this up while they were sleeping off their booze-induced coma.

With no time passing, the 4 step out of the circle and head back to the commons, Spartacus, over glasses of water says.

"I am still skeptical"

"This is a once in a life-time opportunity."

"Dude, every moment is a once-in-a-lifetime opportunity!"

"Tacus?"

"The same"

"Can you hand me back to Spar?"

"I'll think about it, but I'll probably have to think outside the box, which is a problem when thinking IS the box"

"TAA-CUUS!!"

"Ok, I am back, sorry about him, sometimes he just slips through. Before I join your cause, my team is the Sparta400. I still stay in command of that, agreed?"

"No contest there, I wish you would take on operational command of my folks, too?"

"I can do that. What is your team called?"

"We don't have a name yet"

"That is not acceptable, teams work better when you give them a name to unite their purpose"

"I don't mind if it is not too silly, any ideas?"

"So, you really want to make Earth nice again, bring back like an overall ecosystem and a society that's balanced, fair to all. Mother Earth. Gaia, so to speak."

"Close enough"

"What about Team M.E.G.A."

"MEGA?"

"Make Earth Gaia Again"

"Tacus?"

"No, this one is actually mine. In military academy they called me Chief Acronym Officer."

"Team Mega, hmm. Mega Team?"

"Sounds good, let's go with that for now and run it by them."

"We can print baseball hats"

"Tacus, No! Hush okay? This is serious!"

They continue to discuss the plans for moving forward, agree on an outline and decide on resting for a while to let things settle down. As WonGee sees Spartacus amble to his quarters, a group of kids aged about 4 to 12 come running from what seems a school-type set-up. When Spartacus sees the kids, his stance changes. He is opening his arms to the kids, trying to hug them all at the same time.

"Uncle Tacus, Uncle Tacus", the little ones shout. "Tell us some funny stories!"

Act 2: Chapter 6, Paradise found

Year 2302 (13 years after PG recruitment, t-27 to Fleet Arrival)

Spartacus played with the kids for a bit, letting Tacus off the leash with his endless silly punning, then he retired to his quarters. He had no spouse, no partner, no first lieutenant, nobody he would call a best friend. He has learned that, in war, even more so than in normal life, attachment brings suffering. He puts on some music, the only music agreed to by all three personalities: A 20th century band called Steely Dan, playing the albums "Aja" and "Goucho" on loop, with a triple repeat of "Third World Man", followed by Joni Mitchell's "Don Juan's Reckless Daughter" with a triple repeat of "Talk to me". Jaco Pastorius, to him, was proof that aliens had always existed on Earth, many of them Jazz musicians.

Pouring himself a triple shot of Tennessee Rye, coming from a 200-crate stash he discovered in one of the SideVerses and the one vice he allowed himself, he thinks back.

Decades in the A-Human Federation Conclave. Taking the name Daimon Borg Worf, the 3rd. He probably still knows some people there that would call him a friend, Alienists, all of them. The Existentialists never cared enough about his stories to be counted as either friend or foe. He thinks about watching the ever more accelerating decline of the A-Humans into decadence, voyeurism, despondence, the increase in suicidal forfeits. Now he knows these were probably based on increasing V'Hraang interference.

At this time, IOTA is down to bare minimum life-support for the average A-Human enclave. The only enclave getting full support was the CoD company, which had been recruited into the V'Hraang cause. If he joined WonGee and her newly named Team Mega, the Sparta400 would also be terrorists to them. They would be hunted and killed if they ever showed up without their cloaks activated. He could not even count on any friendly UpMinds, "living" (if you could call it that) in the "Up". The "Up" was also running on minimum power, the stored consciousnesses repeating the same experience over and over to save previous mesh resources for hunting down Team Mega. They needed to sever the umbilical between IOTA and the Lethal Appendage, and soon, or the remaining A-Humans would begin to degrade.

He thought about all that WonGee had told him during the time out in the SideVerse on slow time. That all this interference by the K'merg species had been going on for 12000 years. That the V'Hraang wanted the kind of destruction and desolation and degradation of the planet. Making it perfect for them. And that the Multiverse Ethics Board, the MEB, was sitting on the side-lines, observing, sending one puny agent, half-dog, half-octopus, because their hands were tied behind their backs,

because of Rule-1, because the humans had done this to themselves. One part of WonGees story had given him pause. The part of the cold, vacuum-like, intelligent presence she felt ever so often behind her left shoulder blade. What was that? Feeding her nonsensical one-liners. Was it another faction of the MEB. The All-Know? Some other entity entirely? He sipped from the Rye. The ice had melted and he added 2 fresh cubes, topped up the glass. *"Time will tell"*, he thought, when Tacus piped up: *"Time is highly overrated, dude. Like from the perspective of a photon, nothing ever happened in the first place. And not in the 2nd place either? So, what gives?"* Spartacus ignores the quip, empties the glass and takes a nap. Time might be illusion, but nap times are not.

After 2 hours or so he assembles the Sparta400 that are present and awake at the time. Spartacus explains the situation, asking, finally: "Shall we join up with team Mega and their quest to free Hive Arista and the local AI?", and puts it to a vote. All that are fit to fight want to join. With the exception of two that just had babies with their spouses. The Sparta400 had gone back to natural birth and natural food to the extent possible over the last 20 years. Only the de-aging supplements remained, stolen from supplies in the A-Human blocks, obtained in cloak and dagger operations. The Sparta400 are thrilled. Their warrior faces glow with joy of anticipation. This is what they have been training for, finally a real military objective. For the first wave, Spartacus assembles a task force of 10 platoons of 10, each with a lead and different kind of weapons complement.

They would all carry EM-Pulse rifles for disabling machines, as well as Neural Stunners effective against humans. WonGee had specifically asked him to avoid casualties. "We don't want to turn into the monsters we are about to fight". Some of the warriors also had assembled a whole arsenal of antique weaponry, almost as a nostalgic reminiscence of their online days: Sniper rifles, miniguns, pistols, cross-bows, grenade-launchers. All of these would be lethal, and none of them would come out on this sortie. All platoons would be cloaked with NNFields, of course, making them invisible and time shifted 1 second into the future. Under the field they would be almost invulnerable, lest a real powerful EM-Pulse disrupted their emitters. Three of the platoons would carry large PSBeam emitters. PhotonShop beam, or PSBeams were able to project any sensory image back to any scanning system. The sensor pods, including the PermaLenses of the A-Humans recruited into the V'Hraang Ph'Naar agents would literally see whatever they wanted them to see. In addition, every individual was wearing a TimeOut CLIP, an XO-Suite attachment, that, when pushed would bring them back to the Sparta base. The rest of the platoons carried DeNewtonizer guns. Abbreviated DNR, pronounced "Donner", for the thunder-like sound it made when becoming effective the DNR was essentially a flashlight shaped, variable-setting ray gun, deactivating or modifying Newton's three laws of motion into nonsensical configurations around the target. Things at rest would accelerate away. Moving objects would stop and resist change. Things like that.

After a 30-minute briefing on the mission the task force shipped out. The mission briefing, transmitted to their tactical COM devices read:

(O1) Assemble at Sparta Gate, spread out, run rapid-sortie assault tactics pattern Delta, take out the communications arrays on top of the A-Human blocks.

(O2) Then, after cutting the communications vein to the alien command ship, retreat to Arista Hive and split into 2 squads of 50 Spartans each, securing the perimeters around Arista and Miss Shelter.

(O3) Provide cover for Team Mega to enter Arista Hive and reboot IOTA one more time, this time with extreme prejudice to eliminate the V'Hraang infestation L.A. (Ella) and to allow the cat Greta to re-install the AI called Cheshire as the main AI.

(O4) Provide cover for a technical squad to install TransPortals in Arista Hive as well as in Miss Shelter, to afford secure transport between the triple headquarters of the joint task force.

The mission sounded straight forward. But now, with the Lethal Appendage providing ever more visible support, the odds were even at best. They shipped out. Spartacus and Team Mega step out of the portal last. Everyone is primed and ready. The warehouse is still protected by the NNField. WonGee asks: "What does NNField actually stand for?"

"I had to find a name for it, the scientific explanation sounded way too complex to me. It was something like QuanTime-Photonic-Self-Torque/Phase-Inversion-Field or QTPST/PIF. Too hard to remember. And since it essentially takes you out of the picture, and 1 second into the future, I just called it a "NotNow" field. Or NNField, makes sense, no?"

WonGee nods. She does not have one of the NNField things. WonGee thinks that her Photonic form is protection enough. She looks at DwaBee. "All good?" DwaBee nods, looking smug. So many cool new toys and guns. Heaven on Earth for battle-nerds like her. She dismisses the thought, though, quickly, knowing how much WonGee detests violence in any form.

Spartacus assembles everyone at the exit for a rapid sortie, and de-activates the NN field around the Sparta Gate warehouse. The task force sprint about 100 meters, going full hog for the nearest A-Human block, using all available XO-Suit enhancements. When they arrive at about the 100-meter mark, a third of the distance, World-War IV rains down upon them. The Ph'Naar, with full support from the V'Hraang infiltrator ship Lethal Appendage had, of course, anticipated the attack. They were ready for them. With the help of information from the orbiting V'Hraang ship, the Ph'Naar agents had converted a military-grade, EM-Pulse generator into a new defensive weapon. With the new tech, a box the size of an average 4-person quad bike, a so-called Suppressor Field had been placed around the warehouse. The suppressor rendered all alien-based technology in its range inert. All AI-tech borrowed or imported from sideverse stations went dead. The

arriving task force was fully visible, and stayed fully visible, their NNFields deactivated but the suppressor. Their EM-guns still worked, being Earth-based tech, but the Spartacus platoons were outgunned one-to-ten. Their PhotonShop emitter, that would project a ghost sensor image to the defending A-human sensor pods, was not yet set up and would not help under the Ph'Naar suppressor.

With Spartacus platoons joining the fight openly, using borrowed alien tech, the Ph'Naar were no longer hiding the fact that they had access to alien technology as well. Things were escalating quickly. The DNR, if they had worked at all, had nothing to shoot at. The A-Human warriors from the Call-of-Duty enclave, all recently converted Ph'Naar were 100% convinced that they were fighting the "good fight". Going all out against an evil, invading alien force. They were dug in, well supplied and armored, firing from a safe distance: out of sight and out of range of the task force weapons. Spartacus had walked into an ambush. Within a split second of realizing the actual threat-level and the severity of the situation, Spartacus and his task force noticed two mind-boggling things that were happening at the same time which saved their skin.

First, PoodleSquid, seeing and recording and transmitting the clear evidence of V'Hraang interference, suddenly disappeared, but only for a second. When he came back he was obviously authorized to employ a new level of power: He was now spending some "serious" energy on the situation. A pink-colored negation field plopped into existence above them. It seemed to be protecting them from the barrage of incoming A-Human projectiles and EM-Pulses without any strain. They were safe, for now. The next thing they noticed was a swarm of fliers approach the A-Human blocks from the direction of Miss Shelter at very high speed. The swarm was dense, comprised of fliers of all sizes. Mites, drones, quad-copters and heavy lifters, all on a direct course to the A-Hive antenna array. They would arrive within seconds. The barrage onto the negation field seemed to let up for a second, as some of the defending A-Human forces redirected their fire to the incoming swarm, taking out about half of the fliers in the process with a few seconds. Then, another wave of fliers arrived. How many were there? Where did they come from? And who or what was directing them? There was no time to wait for the answers. While tug-of-war between two alien technologies was raging between PoodleSquids Negation Field and the Suppression Field of the Ph'Naar, the swarm of fliers achieved their objective in a brutally efficient low tech way: Many of the mites, drones and smaller quadcopters took out the A-Humans communication antennae by direct impact. Others dropped what later turned out small EM-grenades.

KayDez, the team Mega pilot, was on board of the heavy lifter, bringing up the rear. It was him and Greta that were managing the swarm remotely from a safe distance. Greta, after reviewing the situation, had been the one recommending this brute-force plan of attack in the first place. The vast number of fliers that ShipOne had in store for them in the huge attached hangar spaces, made the plan look obvious in hindsight. With only one pilot, and one flier already lost in the first attack through a few

well-placed gravity pellets, flying another attack from the air had seemed like suicide. But Greta had pointed out the number of fliers available and the ability to remote control them for a direct attack, going for the antennae in a crash and burn aerial stampede, overwhelming the Ph'Naar defenses not with sophisticated strategies but by sheer numbers. In addition, as back-up plan B, the heavy lifter flown by KayDez had an ultra-heavy EM-Pulse-Cannon attached and was sending a barrage of disruptive energy into the building tops to knock out what hadn't been knocked out by the swarm.

It worked like a charm. The communications between the A-Human troopers collapsed. The umbilical between the Ph'Naar leader, and Ph'Naar command in the Lethal Appendage snapped. The emitter for the suppression field began to lose power. WonGee, having bounced into Photon mode, was speeding through the ranks of A-Humans, disrupting their CLIP attachments, and finally arriving at the suppression field generator, shutting it down completely with a few high-speed space-karate kicks. The field generator shrunk down to a green dot and disappeared, leaving no evidence of alien interference behind. Now, with the suppression field down, the Sparta task force could deploy their arsenal, becoming invisible, and beginning to transmit PhotonShop images to the sensor array to the A-Human forces. The A-Human force stopped firing, began to pack up their equipment, and turned back to their blocks, mission accomplished in need for repair of their communications array.

All of this happened in the space of a few dozen seconds, leaving no time to think or analyze the situation. The task force seemed to be okay when PoodleSquid sent a message to all with high-priority override.

“Uh oh, whoopsies. Incoming bogie. I am not sure I can handle this one by myself”

Everyone looked up. Something was headed their way, painting an exhaust trail across the sky, from the east. Fast. Without thinking, PhotonGurl went into overdrive. Her training kicking in. PS whispered in her ear: *“The incoming object is a hypersonic nuclear missile. It will split into 32 sub-warheads in about 2 seconds and they will all detonate 1 second after that. I don't have the energy or field spread to negate this much of an EM-Pulse. I think you have to take care of it.”*

WonGee sped up even more, quickly draining her energy reserve. But this was not the time to hold back on anything. Her QuantumGun showed a full charge. She raced up to meet the missile. The missile vomits warheads. Time slows to a crawl. WonGee has about 956 milliseconds to get the job done, which is plenty of time when you are a fully-charged PhotonGurl. She set the QuantumGun to the <<Full Yield>> setting, giving her just enough shots to snap all the warheads into a sideverse. She hoped she would not do too much damage in the receiving SideVerse the warheads would land in. But her training had instructed her how to act in such situations. If everything went

well, the nukes would detonate close to a nearby star, having as much effect as a small pebble, dropped into the water of the Pacific Ocean, would have on the temperature on Olympus Mons on Mars. She aimed, fired. Every shot a precise hit. The quantum filaments impacted, spread, formed a micro-singularity and snapped the warheads out. 32 mini-thunderclaps indicated the locations where the air was rushing into the vacuum created by the disappearing bombs.

Things had been over faster than anyone could think. The remainder of the missile, warheads spent and now mostly harmless, impacted a few seconds later a few kilometers out in the in the Void, raising a small dust cloud, scattering some scavengers. The task force assembled back at the warehouse. They had no casualties, and Phase 1 of the mission was complete. They huddled, chatted, passed around canteens of water as well as some HiveChow bars. KayDez and Greta landed their command flier nearby, after sending the surviving swarm vehicles back to ShipOne on auto pilot. PoodleSquid reported out his take on the situation, floating up to a leisurely height in his dual configuration, still weird to most, and beyond incomprehensible to some of the platoon members. There were uneasy chuckles and some nervous hands on DNR rifle barrels.

“We were lucky this time. Thanks to Greta and KayDez” he points a tentacle at the two. Everyone turns their head and nod in appreciation of the air support.

“3 things were surprising to me: One. The degree of anticipation of our attack was a little bit too precise for my comfort level. There was some 3rd party involvement. I have a suspicion, but I need to confirm it. Two. The V’Hraang are getting very bold in their local presence. Their confidence level was probably boosted by the detection of alien technology used when Sparta rescued Team Mega in the first attempt to take out the antennas. The MEB is reviewing this situation for a possible compliance breach now. For now, it does not look like there will be any sanctions. As of yet, it still appears a clean situation. The A-Humans of CoD Company were asking for support from the V’Hraang. They got converted to Ph’Naar under their own ‘free’ will.” PoodleSquid made the air-quotation mark sign around the word “free” with two of his tentacles, dragging the word “free” into a long “freeeee” which made him look even more alien. Some laughed out loud. P continued, unfazed.

“Three, the nuclear attack was not something I had counted on at all. I literally came out of the blue, also for me. I did the research. The nuke was launched from an abandoned Russian Nuclear submarine that had stranded itself in the Gulf of St. Lawrence area at the very end of the 98Calamiracle altercations. It still had a few nukes on board, one viable. It turns out, the boat had been beached, but it still had viable power, AI software, and one active missile in status “ready”. For reasons yet to be determined, that “one” missile had been maintained for the last 2 centuries or so. The submarine had been taken over by someone or something quite some time ago. Maybe with the help of the Lethal

Appendage, maybe not. I really don't know it yet. But it was launched by a local presence, somebody had to turn the key manually for launch. And more confusingly, the missile was launched before Sparta task force even came under attack beyond the doors of the warehouse. The Ph'Naar start their attack, the launch happens. As if they knew or did not care about the outcome of the battle, the 32 warheads would have completely destroyed the Waste, A- and B-Humans, A-Blocks, ShipOne and all Hives, including Arista Hive. One would have been enough, 32 was overkill mega ten plus" P looks around, lets that settle in. WonGee and Spartacus exchange uneasy glances. The last thing they needed now is another front. Another seemingly ruthless enemy to fight. One hostile alien race was enough thank you very much. PoodleSquid continued.

"I am still unclear as to who the mysterious 3rd party is. But, like I said: I have a hunch. Whoever or whatever the other party is: I will do my utmost to find out and stop it from interfering any further. The next attack might be even more ferocious. Also, the V'Hraang seem to be absolutely without constraint: the more destruction, the better. So, Team Mega and Sparta, if I may ask, must be careful to not help the V'Hraang along in their cause in an involuntary, self-defeating way by blowing too many things up. We would just be doing the enemy's work!"

"Who is team Mega, now?", Greta asks WonGee, slightly miffed she did not get more praise for her help in the Phase 1 victory.

"Make Earth Gaia Again", said WonGee, back in standard human form, looking down at Greta, lying in her lap, enjoying the gentle massage G was giving to her upper back muscles.

"Ok, well, meh. Boring. I would have chosen "Greta's Avengers", but nobody ever listens to me. So, I'll just quit, I guess, and start my own team."

"Stop whining, fur baby! For you, you can make Mega mean: Must Entertain Greta, Always!"

"Still meh. Can we at least have baseball hat with the sl.."

"No!"

PhotonGurl turns to Spartacus and says. "We need to move to phases two and three. And quickly. We have taken out the antennae and IOTA/L.A. is cut off from the Lethal Appendage now. It is a matter of time before some photonic ships come by to re-establish communications. P has promised me to put Arista and the Waste under a permanent, strong Negation Field. This level 9-field will also shield us from temporal

variation, once I start my time-meld manipulations. Let's go then, folks. Spartacus nods, waves to his platoon leads, and they go into action"

Phase two and three proceed with dreamlike precision. With the Lethal Appendage out of the picture, they get back into Arista Hive without glitch, the guarding Ph'Naar had been recalled into the CoD Company, still under the illusion they had won the battle. PoodleSquid and Greta restart IOTA from the clean core, using the known procedure, but this time without any interference. They carefully isolate the L.A. infected partitions. KayDez destroyed the bad mesh modules outside of the hive with a few pulses from the ultra-heavy EM-gun, frying their content for sure. Then for good measure, WonWee snaps the corrupted modules away into a SideVerse. The now pristine IOTA AI comes back online without problems and stabilizes the infrastructure. IOTA remembers nothing of what happened since the V'Hraang had taken over, which turns out to have been several weeks ago, when PhotonGurl was first recruited. All records of the last weeks seems lost, but Greta, Zed and PoodleSquid combine their resources to reconstitute the IOTA database based on their combined memories. CeeBra gets fully restored and now actually "officially" takes over Arista Hive, as first fully-sentient governor. His full-sentience makes him an equal-rights local entity under the Multiverse Ethics Board definitions, and the MEB now protects him under the Rule-1 MEB clause. This is an important step. It effectively deters any further incursion-attempts into Arista Hive's governing AI by the V'Hraang, lest they want to risk the wrath of the ethics council and the infliction of severe sanctions. The new, joint entity choses to still be called IOTA, to keep things simple. It now has a brother/sister in Greta, the cat robot, who is now also fully-sentient, and also protected by the MEB rules. Team Mega is firming up. With Arista/IOTA reconquered, Miss Shelter and ShipOne being built out, Spartacus and his Sparta400 joining the cause, Greta having shown her mettle in strategy and battle, WonGee and her fellow Hivers feel more confident than ever that they begin their mission with a good prospect of success. Especially now that the Waste, the area around the Hives and the A-Human Blocks was under a permanent, Level-9 Negation field projected by PoodleSquid, making it harder than ever for the V'Hraang to exert their evil influence.

The Arista Hivers recover from the delusion and mis-information, and get fully de-briefed on the situation in a series of Q&A sessions and virtual replay experiences. People literally rub their eyes and can't believe the length, depth and malice of the deception they have been under for weeks, and especially in the last days or so. Some Hivers, however, cannot believe any of this "fairytale", as they call it. They still think WonGee and her Team Mega are a bunch of terrorists, wanting to destroy there hard-fought freedom and life-style with a new form of alien-driven dictatorship. The dissenters pack their few belongings and move out of Arista into other hives. Other hivers are thrilled. They join Team Mega with great enthusiasm. Some are even moving into Miss Shelter to help with the exploration of ShipOne, picking up new job roles to

drive the recovery effort forward. WonGee gets to move into her old habitat, and re-starts her de-aging on an accelerated regime. The last week had been taking a toll on her physique, aging her by about 20 years. It would take a while to recover. But at least her CoffeeTap is connected again, and fully loaded. But when she pushes the DubShot Moka button, she only gets an error message <<Contact Maintenance>>

“Well, frag all of this to molten void shizzle” she fumed. “They ask you to save the planet but they can’t give you decent shot of coffee when you need one”

WonGee sighs, rolls out her Beanbag into sleep configuration. As she slips out of her boot and overalls, removing her DayTime Lenses and putting satchel, boots, and COM onto a pile next to the beanbag, she wonders where her roommate J might be, but then she falls into a deep, feverish sleep, a healing coma, and the nanites in her bloodstream going to work on restoring her back to the 27 year appearance she had selected.

While WonGee d’Arista sleeps and dreams of battles, aliens and space ships for three full days and nights, the task force continues to execute the agreed strategy. CeeBra and IOTA are one now and are expanding out their influence over the other hives, carefully looking for more signs of alien incursion and agencies. Greta and PoodleSquid are working as a strategic planning team, to the great amusement of the observing hivers that get a kick out of the reincarnations of two extinct pet species sauntering down the access corridors, loudly bickering, bantering and arguing about contingencies. Of course, it is all for show to keep a light mood, and to get the Arista Hivers accustomed to fully-sentient AI and aliens amongst them. PoodleSquid understands that the emergence of Greta and CeeBra, now merged with IOTA is the foreshadowing of Earth species moving beyond their current state in evolution to the next level. All bots and servos get would get upgraded to more sentience and autonomy over time, further adding to the capabilities of Team Mega.

Spartacus and 100 of his Sparta400 take up camp in Miss Shelter. They are keen to explore the equipment available, and establish the defensive perimeter as planned. The TransPortal devices arrives from Sparta Base and permanent TransPortal connections are now established for point to point travel between Miss Shelter and Sparta Base, as well as between Arista Hive and Sparta Base. This is extremely useful since not everyone can be equipped with the TimeOut CLIPS that allows the warriors to snap back to Sparta Base when under extreme duress. There is only about 120 of these TimeOut CLIPS available, and Spartacus has not found a way to replicate them. They contain an internal energy source and materials that are not available on Earth.

WonGee wakes and joins the preparations. A year passes without any significant attempts by the V’Hraang to meddle with the plans of Team Mega. The joint

forces of Team Mega and of the Sparta400 are getting stronger under the command of General Spar, who after three months decides to leave Sparta Base under the command of a local council of his most senior and trusted recruits. Spartacus effectively joins Team Mega as chief of defense, and 100 of the Sparta400 join up permanently as well, each equipped with the best technology and weapons available to them, including TimeOut CLIPS, to snap them back safely. Things are shaping up, with Team Mega now comprised of WonGee (founder), PoodleSquid (Agent of the MEB), Greta (Sentient Cat), Spartacus (Triple-minded genius and head of defense), IOTA (sentient AI mesh) and the 5 recruits of WonGee ancestry, QuTre, ElQuat, Noves, KayDez, and Dwabee, all leading teams to drive the different aspects of the plan forward.

QuTre, the Nutritionist and Philosopher is developing two projects. A regime to wean the Hive population of the HiveChow in the medium term. Hivers depend on HiveChow much too strongly. The whole planet cannot be run as a collection of 400-person strong hives, permanently monitored by a benevolent AI. That choice of lifestyle should still be available, but a more natural option should also be available for those who wanted to eat real food, once the ecosystem had recovered enough.

QuTre, working with WonGee's initial ideas when she started her secret behind-the-scenes governance of Arista-Hive and with input from PoodleSquid and Greta is also trying to come up with an updated generalized ethics framework, the Global CommWell Constitution or GCC. The GCC would be intended to work as a general framework for safely and sustainably growing the population of Earth again, taking into account the reasons and root-causes of the 98Calamiracle events and the fact that Earth was now a part of a much larger frame of the infinite multiverse. QuTre is extremely busy. She spends every free minute on passionate discussions with Greta, WonGee, PoodleSquid and Spartacus, who at one point quips: "Ethics, just like beauty, is in the eye of the bee holder". It takes QuTre a few weeks to fully understand the depth of that one-liner.

ElQuat, the Biologist and Botanist, is looking at the Green Houses inside the Arista Hive to generalize principles for scaling up the flora and fauna again. He thinks it's going to be hard, with the ecosystem being so out of balance and completely de-vitalized across so many regions. He consults with experts at Sparta Base who had been successful with taking the rescued A-Humans off of their IOTA dependent feed-routines and getting them used to greenhouse natural food again.

Noves, the Servo Mechanic and Mechanical Engineer, is investigating the technical records of ShipOne, the ancient vessel underneath the Miss Shelter area. He is now Chief Engineer and Knowledge Manager of Team Mega. KayDez the Navigator, Pilot, and Mapmaker is looking at everything that flies. He even managed to unlock access to the command bridge of ShipOne, in at the center of the huge bullet shaped

vessel. The bridge is housed in a triple hull of shielded protection. He establishes that ShipOne could theoretically be launched by an EM-Rail-Catapult reaching deep and far into the planet. This catapult had been built only in the last 100 years by hundreds of heavy construction servos and bots now parked in an adjacent hangar. The more they explore, the more surprises they find. The launch option is available, but it would wipe out the entire CinCity area in the launch process, including all hive as well as the A-Human blocks.

ShipOne could house 400 people in deep sleep and launch acceleration couches, protecting them from the effects of the catapult launch. But ShipOnce could only sustain them for a few weeks at most. And without a destination to go to, launching ShipOne would seem completely futile and utterly insane. ElQuat instead focuses on the fliers and drones of ShipOne, which are there by the thousands, with manufacturing, maintenance and printing facilities in adjacent hangars to create thousands more if required. DwaBee, the Security, Martial Arts expert is working with Spartacus and his three personalities, to streamline the weapons, strategies and tactics of his growing team into a formidable fighting force to defend Arista Hive from attacks from the Ph'Naar which are sure to come.

Another year passes. Team Mega is now ready to engage. They launch a chain of dirigibles and intelligence gathering drones that spread out into the higher atmosphere and try to establish communications again across the region, and later, even across the globe. It turns out that remnants of the civilized world had already gotten word of the miraculous events at Arista Hive in the CinCity are. Rumors abound of Alien incursion, all interpreted differently by the different factions spread across the continent. Listening to the haphazard, fragmented intermittent communications, Force Mega obtains information emerges about the true state of the planet. The picture is not good.

After the 98Calamiracle, things were going from bad to worse on an escalating scale that defied even the most pessimistic expectations. Constant violent conflicts. Retribalization. Devolution to stone age culture. Mass extinctions of species to feed a dwindling population. Mutations. De-vitalization. Failed attempts to stop the slide into a hell-shizzle environment of Dante Inferno proportions. The oceans were depleted. Agricultural land was deserted. Lethal technology was everywhere. It was bad, but they had expected bad, and, in some instances, it was even much better than feared. Team Mega start exploring in ever widening circles with CinCity as the epi-center. Slowly and carefully begin to make contact with other protected areas that were shielded during the 98CalaMiracle. They find that 58 Preservation Areas are left from originally 120 areas. They wonder why so many numbers show up that are base-6. Was there an alien interference at work that preferred things to be divisible by 6?

Some protected areas survived relatively stable, thrived, developed forward, in their own way. Some stagnated, and fell back into the Dark Ages, having no access to modern technology and fiercely defending their 90-kilometer wide islands of viability against any incursion with stone walls, cross-bows, blunderbuss-guns and cannons. Religions resurged, some ancient, some brand new. Some protection areas simply died out. Others tried to remerge with the chaos of the Void and were completely taken over, literally being resorbed into chaos. Only 22 protected areas maintain a viable, stable, high-tech cultures at the level of the 2098 catastrophe. But for all Team Mega can establish after a year of automated reconnaissance, Arista Hive and her adjacent sister-hives, are the most advanced of them all. None of the other Protection areas had IOTA, which was the last remaining AI after the slide into chaos after the 98CalaMiracle.

WonGee suspects, however, that some areas, if not all of them also have the DarSo-built, massive space-ships hidden in the ground. These ArkShips, with their stored technology at 2098 level, could providing up-to-date technology for their regions, once they get opened and activated. Carefully, and systematically, they begin contacting the most advanced societies, hiding their alien capabilities for now. Even their most careful advances get rejected out of hand. Their story is just too crazy to be believable, even without telling them about Photonic beings and DogSquid hybrids working as agents of a multiverse ethics board. All of the remaining societies are fighting a fierce day to day battle for survival. For Food. For protecting their lifestyle and cultures. The fact that THEY, after all the centuries of destruction and chaos, that THEY are still around, MUST mean that they are special, that they are the chosen ones and that a bigger destiny was in store for THEM. The other alleged societies all just distractions to their own evolution towards glory, bliss or salvation.

It was disheartening. They had been way too optimistic on getting support from the remainders of homo sapiens civilization. While it was good to see that sizable pockets of humans were still surviving. They estimated about 250 thousand humans in highly evolved, but fragmented, distant communities, with about 50 million humans world wide in a super varied set of circumstances from lonely, high-tech bounty-hunters, half-human, half-machine to Neanderthal level cave dwellers and nomads in a dwindling set of shrinking pockets of survivable ecosystems. WonGee looked at the report and realized. This is why the Ph'Naar agents of the V'Hraang were no longer attacking. They had won. Humanity was on the path to self-extinction. They could just sit back and wait and take over, thank you very much for the planet. We'll take it.

After a few days of anxious, alcohol-moderated rumination, Spartacus had let her share of the Rye he was hogging in his personal quarters in Sparta base, her spirits returned. She realized that she had not even really begun to tap into her time-melding capabilities. All she had done was rescue J, who was still gone without a trace, and recruit her five children as Team Mega section leads. She had always hoped that a

simpler way would be enough. Just contact the other people on the planet and they would understand. But no. That had been a 10-year old naive “Let’s all be nice to one another” misguided and overly optimistic expectation on the world. A point of view she had never truly wanted to lose, in spite of the megaton-heaps of responsibility that had been dumped on her by professor Milter at the beginning of the submersion of Arista Hive. WonGee PhotonGurl now knew she would have to do it the alien way. The way the Znaa’g had intended it to work from the start when they recruited her in her very first, involuntary snap to the SideVerse with the tentacles and the Skunk-Juice bathtub. She shuddered and calmed herself with the 7x7x7 navy seal technique. She told herself to stay off the Spartacus booze-supplies. She felt that she had become entirely too fond of the warm and cuddly feeling you could have after the first few sips. Or maybe, WonGee thought, just maybe it had been the BoZ, the Bone of Znaa’g, still in her satchel, always by her side, but mostly out of mind, that had recruited her? She took the object out again, small, gray, iridescent and asked herself: *“I wonder what you are, little one?”*

After that, WonGee got ready for her gargantuan task. To do her time-melding, her reaching out to the minds of key people in the past, she would have to go to a PlaneMode area, with a minimum of EM-radiation. As luck, or providence, or planning would have the command bridge of ShipOne, triple shielded against space radiation, could be switched to PlaneMode, effectively creating a radio-silent cage for her operations. They moved in a recovery creche and supplies, making sure she had everything she needed. They even tried to move in her CoffeeTap, but there was not enough time and space to provide all the connections and feedlines. Spartacus had the Sparta Base bring in one of the last remaining portalization units and installed a “hop circle” as WonGee called the TransPortal areas inside the command bridge. That would make it easy for her to go from Arista Hive to the ShipOne bridge via a short stop over at Sparta Base, just “a skip and a hop” away.

For weeks, WonGee and her team of experts, especially QuaTre the philosopher, plan the communications she would have with key people in the past. She would have to change their minds in key ways. She would have to give them ideas in ways they could relate to, they would believe in, they would act on. She could not keep them in a dream state forever. She would have to take into account that all of these people in the past had their own plans, their own dreams, aspirations, assumptions, pressures, doubts, anxieties, beliefs, hopes and fears. That none of them, no matter how “objectively” we look at them with the cool judgmental microscope of historical reflection: None of them acted with the intent to fail, or with the expectation to be proven wrong. They all did what they thought was the best thing for them and their loved one at that time, using the information they had available to them, at that time, within the constraints of their own abilities, needs and within the rules of communities they needed achieve anything at all.

The plan was set up in this was.

(1) The use of fossil energy was to be replaced with more sustainable sources as soon as possible back in time. Using wind, water, solar for near infinite abundance would be the images she would project.

(2) The reliance on industrial meat was to be supplemented with sustainable food sources as soon as possible. This would preserve forests and agriculturally viable soil. She would project images of subterranean farms growing nutritious mushrooms to plant an idea into people's minds.

(3) But the biggest threat of all had to be addressed as well. The suffering brought on by the fearful attachment to things. The greed for controlling everything. The obsessive compulsion of curiosity, always yearning for the next thing. The ice-cold grip of doubt that came with knowledge. This constant drive for "ever more" the relentless pursuit of "happiness" in the shape of things you did not have yet, those were the kind of things that had driven homo sapiens forward, becoming human "havings" as opposed to human "beings". Greed and hate bred from desire and fear had driven humankind toward the abyss it was facing now. She would have to have a very clear and simple ethics framework in her mind when she was doing the time-meld, to make sure that her dream conversation partner would get the right ideas. She learned by heart the updates CommWell constitution that QuaTre had cooked up with the help of P and G.

The CommWell Manifesto:

1. *There are no absolute truths. Everything is in relation to something*
 - a. *The truth is anything that someone is willing to accept without doubt*
 - b. *The scientific method is the path to remove doubt*
2. *Ethics (Morals, Values, Rules) is not a science, but a dynamic consensus within a given culture*
 - a. *There are no absolute values*
 - b. *Every individual will have different perceptions of value based on context*
 - c. *Values are always dependent on the process of evaluation and the mind-state of the evaluator and therefore always relative*
3. *The fundamental tenets of the French Revolution still apply*
 - a. *Freedom*
 - b. *Equality*
 - c. *Solidarity*
4. *The purpose of any society is to protect and increase the degree of commonwealth*
 - a. *If you are a part of a community, you actively contribute to this purpose*
 - b. *You preserve and improve your eco-system*
 - c. *You only take what you need*
5. *Force, Coercion and aggression are to be rejected and minimized*
 - a. *Use empathy, logical reasoning and calm dialogue to get to agreement*
6. *Status is earned, not inherited*
 - a. *By contribution*
 - b. *By acclamation of the tribe, hive*
7. *The Golden Rule applies*
 - a. *Be fair*
 - b. *Take responsibility for your actions*
 - c. *Be respectful*
8. *Democracy is a daily process*
 - a. *Everybody votes all the time*
 - b. *There is no central government only a service organization for maintenance, security*
 - c. *Key roles get appointed by vote (Jury, magistrates,) subject to checks and balances*
9. *Ataraxia is a common goal (A state of serene calmness)*
 - a. *Possessions and Attachments are acceptable, but viewed with scepticism*
 - b. *Strong emotions are acceptable, but viewed with scepticism*
 - c. *Dogma is rejected*
10. *Gratitude is the fuel of the community*
 - a. *Nothing is taken for granted*
 - b. *We always give something back for what we take*
 - c. *Balance is the way*

There was no way she could send the entire message into someone's mind. They would simply reject it. But having the manifesto firmly implanted in her own mind, it would make her journeys consistent. And it would allow her to become better and better with error correction, making a change, looking at the results, going back in, changing the change, and so forth, achieving a doable compromise that would make things shift. In addition, they have begun to broadcast the CommWell manifesto on all frequencies to all global communities with EM-reception capabilities. One could never know. Maybe there were some individuals there that would pick up on the message, make it their own, and evangelize it further.

While WonGee is in the ShipOne command center, reaching into the past, influencing Carnegie to give up his wealth to philanthropy, planting ideas for the establishment of the DarSo secret society, guiding the construction of ShipOne, life goes

on in Miss Shelter and the Hives protected under the Negation Field projected by PoodleSquid. Nothing changes inside the field, but they notice the shifts in the Void.

Plants suddenly appear next to the Negation Field exclusion zone, only to wink out again the next second. Buildings pop up and disappear. A whole city springs up around them and then crumbles to dust. Sensors launched to the outside the field just disappear, or get shot down by scavengers, who had not been there a minute before. The TransPortal circles to SpataGate and SpataBase stop working. Only the circles leading to the other SideVerses are still active, but none of them lead into the ShipOne command center which is under full lockdown and cannot be accessed from the outside. They have to wait until PhotonGurl emerges again.

The reality outside the Waste becomes a blur. PoodleSquid's Negation Field holds, shifts from Pink to Silver, then to Gold and stabilizes at that color. PoodleSquid himself is floating, frozen, in 90 centimeter height, translucent, rotating end-to-end, a holographic projection of itself, here and not here at the same time. It is a transcendental experience that goes on for weeks, then months, at times accelerating, then slowing down, and finally stabilizing. Things look vaguely familiar, but subtly different at the nuance level, on the outside. Building colors changed. Some paths widened, some overgrown. The burned out wreck of an AssaultCopter, gone, replaced by the rusted, gutted wreck of a multi-treaded Auto-Gun.

In the meantime, while PhotonGurl is busy time mongering, the V'Hraang threat inside the Waste underneath of PoodleSquid's Negation Field does not seem to be eliminated. The Call of Duty Company that had been recruited as P'hNaar agents, finds out about the Spartacus deception in the battle at the Warehouse. They decide to put up a fight in the real, against what they believe to be an evil alien intrusion at the hives. They begin to remove their PermaLens eye-enhancements, regrowing real eyes, to prevent further deceptions by the alien-tech PhotonShop emitters. They train hard to become less dependent on the IOTA-supplied full-service lifestyle of decadence and hedonism. They venture out into the Waste to engage Spartacus platoons in a series of mini-skirmishes and small battles. All fought with conventional weapons, now that the alien technology seemed to have become unreliable. There are many casualties, radiation burns, neural lesions, broken bones and lost limbs, but nobody dies, thanks to the advanced medical skills of IOTA, the nanite-healing in the HiveChow and the recreation creches in Miss Shelter, now under the full control of IOTA.

Weeks and months pass, and Team Mega realizes that the V'Hraang are not sitting still. Whatever WonGee is achieving, the V'Hraang have established a counter-presence at some of the other human habitats inside the Negation Field. They are throwing salt into the CommWell soup with fake news, rallying the more aggressive tribes against Arista, and fostering dissent. On the outside, a stream of messages encourages hedonism and

greed, and promotes reckless fossil-fuel consumption. After the blur of changes had slowed down, IOTA and ShipOne relaunch a global surveillance system to create the Gaia-Dashboard, showing zones of destruction (Purple), neutral areas (Orange) and viable areas (Green) with white zones, where sensors are unavailable or have been taken out. Things seem to have improved, with many green areas. Radio communications indicate a high level of technical sophistication. The 09CalaMiracle still seemed to have happened, but the protection areas seem to have thrived better.

Instead of only 22, now 56 areas seem to show high-tech capabilities. Inside the field, still maintained while WonGee still in time-meld hibernation, the Ph'Naar attacks on Arista Hive are becoming more sophisticated. They are now underground using crawlers, the same attack units that had injured PoodleSquid in the first reboot attempt of IOTA. Greta explains that the Crawlers are machine-organic hybrids, based on symbiotic networks of tardigrades that mesh together and become semi-aware and can exude nano effects and chemicals. Team Mega asks if that does not constitute an alien invasion and P explains that the tardigrades are the same that they are using in their own Biological lamps, the Blamps, which are using a genetically engineered, bioluminescent bio-film of networked tardigrades. As a matter of fact, they are being attacked by an evolved version of their lamps. Team Mega asks IOTA to come up with a sustainable alternative to the Blamps, so the tardigrades can be released and. IOTA devises a new kind of lamp, based on a technology discovered by Spartacus that essentially taps into sideverse energy. They begin replacing all the Blamps with the new illumination, freeing the Tardigrades and shipping the old Blamps to the Void.

After about 3 months of hibernation, WonGee finally re-emerges from one of the elevator shafts leading up to the vault area of Miss Shelter. He collapses into the arms of QuaTree, looking 50 years older, close to death, worn, haggard, and tired and says

“Where is Spartacus? I need a drink!”

While WonGee recovers on an accelerated recovery routine, rapid militarization continues, much to G's chagrin. She hates aggression, but it seems to be the only way to keep things moving forward. G is frustrated and burned out. G tried to change things with time-melding. But the only thing she seemed to have achieved is a rapid blur of self-cancelling and contradictory changes. The more she changed things, the more things stayed the same. Essentially, after 3-real-time months of intense, MultiVerse mongering, they had pretty much arrived at the same state. ShipOne being what it always had been. Team Mega being established. The K'merg fleets were still coming. And Earth was still a hell hole.

While in hibernation, the effort had taken a heavy toll on her. She wore out in the process. In spite of the purely physical the de-aging, she now feels she is 400 years old

inside. She knows the fight needs to go on while the K'merg fleet decelerates into system. But she needs a break now. She hops over to Sparta Base to speak with the Spartan leadership team, and she begins drinking heavily with Artac, who is trying to convince her that her soft touch is not getting her the results she needs. Notwithstanding WonGee's frustration, the Gaia dashboard shows improvements. Certain areas have recovered, growing basic lichen, and new low-level life. But no diversity can be seen in the most devastated areas of the Void. Most historical species of plants have been taken over by the aggressive weeds and lichen.

EIQuat then remembers the Global Seed Vault project. Deep inside a mountain on a remote island in the Svalbard archipelago, halfway between mainland Norway and the North Pole, lies the Global Seed Vault, a project which had been started in the 20th century. They search ShipOne for data on the Seed Vault and find it still active. A signal beacon still seems to be blinking active. The team take the fliers for the Seed Vault in Iceland. The fuel cells have to be reloaded on the way and they need fresh water, and sun light. Intermittent attacks happen but they manage to get there. When accessing the local computers in the Seed Vault, Greta finds a program called Paradise. When reading the documentation, the Team, without WonGee who is still at Sparta Base with Spartacus, depleting the last case of Rye, discovers the purpose of Paradise. It is a project developed at the same time with the ArkShips, intended to use the ArkShip fleet of fliers (that's why there are so many, with production capacity for thousands more) to spread seed materials to the viable areas, to bring back a garden-of-eden variety of plants back to earth.

EIQuat and a team of hivers establish a base at the Seed Vault. They move the last of the TransPortals there with the heavy lifter. They start the Paradise program, which initiates seedlings in local green houses. They convert the large hangar areas adjacent to Ship One to gigantic green houses as well, using the newly developed SLamps as light sources. Then using fliers, servos and bots, using the existing ShipOne swarm but also making many more, they develop new, small, yellow and black striped fliers, tens of thousands of them, and just called Bumbles, they begin reseeding the planet. Niches begin to expand.

In all this, WonGee essentially stays out of the picture. Probably spending time with Spartacus at Sparta Base. Maybe in one of the SideVerses where time passes more quickly or more slowly than on Earth. The stand-off between the Team Mega areas (Arista Hive & Miss Shelter & Sparta Base) continues, essentially isolating Team Mega from the rest of the Waste with the remaining hives forming alliances with the A-Humans in new groupings, mostly along the ancient divisions of Deists and Technos. The Alienists and Existentialists that existed in the hiver landscape had mostly joined Team Mega or had gone to Sparta Base.

It is a state of stagnation. The alien ships were getting closer. And the V'Hraang were winning.

Act 2: Chapter 7, Project Noah

Year 2303 (14 years after PG recruitment, t-26 to Fleet Arrival)

Another year passes. Team Mega continue to spread the CommWell message through all available means, recording educational immersion experiences, broadcasting documentaries, seeding online forums. There is limited success. Some of the remaining communities respond, establish an exchange, but most of the remaining planetary societies are skeptical, either ignoring the Arista Hive program or are openly hostile. Spartacus continues as the operational manager, educating, guiding, training future leaders with his tri-polar skill-set of strategy, tactics and functional ethics of his internal Spar/Artac/Tacus persona construct. Spartacus has become more like a B-Human, removing most of his implants using the auto-surgeon of Arista Hive. He has been using HiveChow food and the embedded medical nanites to change his genome, activate stem cells and has regrow proper eyes and optical nerve set-up, replacing the PermaLenses that are typical for an A-Human with the removable DayTime Lenses. There is an attraction between WonGee and Spartacus, but both are uneasy, hesitant, understanding the risks involved with mixing job responsibilities with the complexities of deep personal attachments.

WonGee, just like the children, which are growing in number to replace B-Human members of Team Mega, adores Tacus and his chilled-out view of philosophy moderated with constant puns and humorous commentary. She can respect Spar and his strategic wisdom and calm planning approach. But PhotonGurl absolutely detests the Darwinian brutality of Artac, although she knows, deep down, and hating herself for the thought, that his do-or-die approach is what gets the job done when the going gets tough between Team Mega and the ruthless attempts by the V'Hraang agents to disrupt their operations. And there is the uncomfortable fact that Spartacus has not agreed to full de-aging. Spartacus now appears to be in his late 60's, while WonGee is still in a continually 27-year old body, while reaching her 214th year of mind-age. She has become even fitter, even athletic-looking, now with reddish-brunette, short-cropped hair. Spartacus, however, is in slow but steady decline, his late middle-age appearance setting him apart from all the other hivers in appearance. His daily routine of systematically reducing his shrinking stash of Tennessee Rye does not help his appearance or attractiveness to Hivers looking for companionship.

Their program of re-vitalizing the dead-zones of earth also shows limited success. Their surveys show: some plants thrive, weeds, thistles, lichen and fungi, but others don't. QuTre d'Cassio has amended and modified the simulations with up-to-the-minute sensor data. IOTA shows that the remaining topsoil in the dead-zones is not rich enough. Also, plant seedlings are not enough to kick-start new ecosystems. The eco-niches need a full complement of co-evolved fauna: Animals are needed, especially insects and even at a lower level, bacteria, tardigrades, mites, larvae, fleas, worms, and other crawly things. In older Earth, everything had its place in a balanced symbiosis. Team Mega and QuTre's team need to think more holistically, when they look at the analysis, the path to success becomes self-evident.

QuTre and IOTA suggest to start project "NOAH". NOAH, short for Nanite-Optimized Agricultural Homeostasis would attempt to bring back entire, layered, interleaved, symbiotic, managed micro-ecosystems, from the topsoil and bacteria-mix upwards all the way to grazing animals, supervised and managed with hybrid engineered agricultural servos, bots and embedded nanites, developed to maintain a self-replenishing food network. These rudimentary but self-contained ecologies have run successfully in the Arista Hive, embedded within the mini-green houses the Hivers had used to grow their tasty natural food-supplements for their bland NutriChow meals. WonGee requisitions the green houses after some resistance from the Arista Hivers, now limited to bland HiveChow. After some coaxing and detailed discussion of the plans, the Hivers give in, and QuTre and her team bring the green houses to Sparta Base through the re-established TransPortal bridge. With the help of Sparta Base and the nutrition experts of the Spartans, now grown past the 400 number of their original set-up, Team Mega establish the green houses as seed-cells for more green houses to be set up in SideVerse locations where time passes more quickly relative to Earth.

Greta and IOTA develop the idea to airdrop fully self-contained micro-ecosystems into the dead zones of Earth, using the huge armada of AI-controlled flyers in ShipOne. This would enable them to repopulate the zones in ever widening circles with "Eco-Bombs", eco-system "eggs" containing everything to restart a micro-ecology. They would drop the Eco-Bombs which, impacting the dead zones after a fall from a precisely calculated height, would spill their compressed-dirt casings. Opening a crack in the ground, the Eco-Bombs would inoculate the ground with the foundation of an entire micro-ecosystem including soil, micro-organisms, nutrition, water and seeds to make the plants more adapted to the target environment. They would develop 100's of different kinds of Eco-Bombs adapted for the different types of environments, arriving in waves, to supplement the systems as needed. They would then convert the fliers to automated Eco-Bombers, enhancing the effectiveness of the Paradise Program running in the SeedVault in Iceland. While WonGee hates the naming scheme of the approach, Artac can fully understand this approach and even asks for his persona to be put in charge of the operation.

“Bombing the planet? Now this is a plan I can get behind, Mac!”

Team Mega works hard. They have precious little time before the K’merg fleets arrive. The Paradise program slowly evolves, and project Noah comes into shape after a long chain of set-backs and corrections. After the initial waves of inoculation, most of the plants still don’t thrive. New ecosystems are still limited to minimalistic, isolated niches. Greta and IOTA conclude that they need to also bring back additional fauna: small parasites, ants, worms, bees, and other insects, even small mammals for the project to have a realistic chance. Most old Earth ecosystems were ecological feedback systems, where climate, plants and animals were living in a complex interlocked symbiosis. But how could they achieve that? They were running out of time and needed more help from the scientist of the past. WonGee, had sworn to herself not to go back in time again, the time-mongering had just been too draining, and she had not achieved more than the tiniest changes when compared to the situation before. Greta, Spartacus, IOTA and the other founders of Team Mega convince her, however. It seems the only viable chance. WonGee acquiesces.

As she settles into her healing and recovery creche in the triple-isolated command center of ShipOne, again set to PlainMode to shield her against any EM-interference, she asks Zed to connect her with the Z’Naag high-council for a short, final mission-briefing. WonGee gets connected and the surrounding command bridge readouts and input panels get replaced with the familiar setting of Joanie’s Diner on 1920’s California Highway One.

This time, the diner is full of guests, eating, chatting, glasses and cutlery clinking and clattering over a background of Benny Goodman swing from a corner radio. The parking lot is filled with antique fuel-powered vehicles. A receptionist is managing the service with a clip-board waiting-list. A long line of patrons is waiting to be seated. *“Hoffman, part of one, Hoffmann, party of one.”* One chair at the counter is still available. Moe is waiting behind the counter, a white towel draped over his left forearm. G takes her seat and orders her customary black coffee, 2-sugar combination.

“Hi Moe, large coffee, black, two sugars”

“Hello PhotonGurl”, Moe responds, and the counter “grows” the mug, a saucer holding two lumps of sugar. G waits. She has burned her lip the last two times. She plops the two sugar cubes into the mug. She inhales the aroma. Her CoffeeTap, inexplicably is still not working and this is the only place where she can get decent, strong, bitter-sweet, piping-hot coffee these days. She stirs the coffee with a small, tin spoon to properly mix in the sugar crystals, blows on the steaming surface, sips, and asks.

“Where are the other two, and who are all the other people?”

“The council is worried. I was put in charge of the remainder of the operation. Our future depends on you your success, and it does not look like you are succeeding.”

“You telling me? I almost died of old age the last cycle. Go back, send a message, loop back, check the effects, make corrections. Rinse. Repeat. Even with all your technology and with my de-aging, it had a massive effect on my real body when I came out. How much time had I been “under”?”

“We apologize for the side-effects. It was unexpected. Your species has an extreme resistance to changing beliefs and assumptions. There is much curiosity, yes, a desire to develop and acquire more knowledge, but there is also this huge aversion to loss. Once you have something, you are very reluctant to give it up. And, when your belongings are threatened, not just your things, but also your belonging to a group, a family, or a community, even a society, your species goes to war. You love knowledge, but it comes with the ballast of continuous, crippling doubt. Your attachments bring suffering. Your thinking denies comprehension. Curiosity kills the cat, WonGee, just like in your old aphorism.”

“Thanks for the lecture, Moe. Are you making this shizzle up, or are you quoting from your holy books?” WonGee was not in the mood for being berated about the failings of her species. She needed answers, not platitudes.

“Funny you should say that because it is actually adapted from some ancient inscriptions in one of the caves on our home planet. It is millions of years old”

“There were cats on your planet a million of years ago?” WonGee thinks she needs more than coffee this morning, so she adds: “Do you have any Rye whiskey, by any chance?”

Moe shakes his head. The guest in Joanie’s Diner stop talking. The clattering of cutlery stops. All heads turn towards PhotonGurl. The music from the radio stops.

“Well, the word cat is a rough translation of a small domesticated animal we have on K’merg. You get the meaning. About that Rye, now.”

“Yeah, what about it? Do you have some or not? Make it a double, on ice”

“We hope you are not drinking any of that neurotoxin in your home environment. There is a risk that it might take out the wrong neurons in your brain. You would lose your abilities to bounce into PhotonGurl shape. That would be unfortunate and would guarantee almost certain victory for the V’Hraang.”

“Ok, thanks for the information. I’ll stay off the Rye, for now. But thanks for the tip, Moe. Now I know what I would have to do to get my life back in case I get tired of the Ninja-Pajama Space-Karate routines. Tell me, Moe. What would happen if I don’t make it? If I can’t find a way to restore entire ecosystems, to make the planet Gaia again. I only have few decades before your ships arrive. Miracles are hard, you know?”

“You don’t need miracles when you have sufficient technology. First, we are going to upgrade your powers. It will be a tremendous drain on our energy reserves, but the council has no choice now but to go All-In. We will protect you from the time-meld side-effects this time. You will not age in the Real. Secondly, you will be able to have prolonged dream-state conversations with the people you are reaching in the past. By having these conversations, instead of just sending images, you can check if your ideas are actually taking hold. You can also reach out to them more than once, over their life-time, literally becoming their muse, their inspiration, the voice in their head.”

“Well, thanks for point one, I appreciate that. Really. The second point sounds interesting though? I have three questions”

“Shoot. Blueberry pancakes?”

“No thanks. The first question is: How do we make sure we reach out to the most effective targets, the humans who had the most potential to change things for the better? The second question is, how do we make sure my poor subjects don’t go nuts in the process of being lectured by dream ghost? And the third question is, more for curiosity’s sake: How long will this process take, for PhotonGurl, in the Sideverse, doing all this time mongering? I mean I know, time will pass differently in the Real, but how many days, months will PhotonGurl spend in suspension?”

“We have analyzed the results of your last journeys and we have a list of recommendations of persons. The persons of interest, we’re loading some examples now, will see you as familiar face or persona in their dreams. It will all appear natural to them.”

WonGee notices how the guests in the diner were replaced by different people. Faces she recognized from the history lessons. Einstein. Tesla. Rockefeller. Rand. King. Mandela. Hawking. Musk.

“What’s with the people in here now?”

“We created models of the target list of people based on your historical records. You can spend some time here, “practice” on the persona simulations. You can mind-meld with them. This should increase your chances of success.”

“Ok sound good. Moe, why did we not do that in the first place?”

“Like I said. There is a tremendous cost to this. The universe does not...”

“... like a free lunch. Yes, I get it. You have not answered my third question, the one about how long I will be “under”. Even if I don’t remember a thing, I want to know.”

“You will be away from your Team Mega for several weeks, maybe a month.”

“Moe, that’s fine. I am interested in other number, the time I will spend in time-meld? I want to know how much time I am suspended, even if I have no conscious memory of it”

Moe hesitated. It was a pin-drop moment. If he lied, PhotonGurl might become skeptical, get angry and abandon the operations. If he told her the truth, she might get scared and abandon the operation as well. Moe, took a time-out, pausing the simulation, and WonGee’s face, eyebrows raised into question-mark configuration, froze in simulated time. After a short deliberation, the High Council of Z’naag decided to opt for the straight truth, tempered with a bit of psychological spin. The simulation re-started. WonGee would not have been aware of the time-out.

“It depends on how good you are getting at the mind-melding business. You have already improved quite a bit during the last session. Your new powers will make this process exponentially more effective. Having a conversation is just so much better than just sending a one-way message. But it could be a dozen, a hundred, thousands or tens of thousands.

WonGee started, tried to do the math. Numbers and calculations had never been her strong side.

“Tens of thousands of what. Minutes, days, what?”

“Years. It could be tens of thousands of years. But remember. You won’t know. You won’t notice. We will filter out all the conversations that did not work. All the error corrections. All the adjustments. It will be all on us and our computing substrates, running at full load, dedicated to making this work. We will help you will all we have got. The longer it takes, the more energy we spend. We could lose everything in this process. We truly are in this together.

WonGee got up from her bar chair. Started pacing.

“Rotten FragShizzle Kebab, Moe. This is Skunk Juice! You can’t expect me to agree to something like that!”

“Look. I understand. If there was another way, we’d change the plan. But if you don’t try, the victory of the V’Hraang will be inevitable. They will engineer a way to get rid of your species when they arrive. They will make it look like an accident. Or some kind of self-inflicted Armageddon will take place that will make the 98CalaMiracle accident look like a hick-up in comparison. And once you’re gone, they can “move in” and the more the planet looks like it is “made for them”, the more likely they will have to claim First-Come, First Serve” and Rule-1 for them.”

“And what will happen to you, to the Znaa’g in that case?”

“Thanks for asking. Our fleet will probably be destroyed in the attempt to land and find a niche on Earth we can thrive in. We might survive as a small population. At home, K’merg will support us for a few thousand years. Then, a nearby sun will go supernova. It is only a few light years away and we will probably be roasted in the gamma radiation. Good planets are hard to come by. It’s either Earth, or nothing for us. “

WonGee’s head was swimming. She would have to think about that. Hard. She nodded a curt thank you and goodbye, and asked Zed to snap her back into the command center where she spent the night ruminating. In the morning, after a restless, sleepless night, she decided to switch off the PlainMode, left the command center, took the elevator to the vault floor and stepped through the TransPortal to Sparta Base to look for Spartacus. When she saw him, in Tacus-Mode, playing with some kids she shouted:

“Artac! I need a drink. And some advice”

Spartacus turned, changed his stance and started fiddling with the 50cal rifle-round he always carried around his neck on a silver chain.

“Good to see you, Mac, let’s step sideverse for a minute. I think I still have a few bottles of Rye left in my private stash.”

They talked for hours. A four-finger shot of Rye on Ice was standing in front of WonGee. Untouched. She explained her original plan. Laid out the explanations the Znaa’g council had given to her. The prospects of spending half an eternity in a process that would use here mind, her body for achieving an outcome that was not even guaranteed to be successful. And a process she would not even remember. It was absurd. Horrifying. At

the same time, how could she let down her own species, her planet, her hive, her family, her team, herself? She had to do it! But then again. Do what? Would the survival of her planet not also doom half of the species on K'merg? Yes, she would give a new home to the Znaa'g. But what about the V'Hraang? Evil or not, they too, were acting in the firm belief that they only "did what they had to do" to survive. To them, colonizing Earth was ethically sound. Probably not any different to what homo sapiens had done when spreading across the planet: wiping out thousands of species in the process. It was hard, mind numbing thinking, and one of her migraines had come back with Hades-Level strength. Her fingers were slowly spinning the large tumbler, of Rye.

"What do I do, Artac?"

She had chosen to talk to the warrior persona, the ultimate pragmatist, the one that had coined the phrase "I'll sell your philosophy for a crate of ammunition any day, Mac!

"This is War, WonGee."

"I hate war, Artac, you know that, and I hate you for saying that, knowing me as well as you do!"

"Sure, hey, you'd have to be completely nuts, to not hate war, G. Only fragged minds like war. But war is what we people do. One way or another. And once you're in a war, you have to know the facts and the rules, and use the facts and the rules to your advantage. Or you get fragged. FUBAR. It's do or die, WonGee."

"You're not helping, Artac!. Again! what do I do? How can I make up my mind?"

"And you're not listening, WonGee! Don't overthink it. The progress of thinking is in doing. Look at what you can do now! You have power. More power than any human has ever had. You can change the past to make our future. The future that you want!"

"Yeah, yeah, yaddy yadda, Artac. But does that not make me a dictator? I push my ideas on people, so my plan can succeed, and damn the torpedoes?"

"Is that not exactly what you did when you changed things around in Arista Hive? At the beginning, when you and CeeBra started changing the rules?"

"That was different. You cannot compare the situations."

"Was it though, WonGee? Was it really that different? You knew then what needed to be done. And you did it. You knew then that people would not agree to your plans, not all of them at least. So you made them. It was the same. You did what every general does

in every war ever. They use the power they have to achieve the best outcome for the people under their command while reaching their goals and objectives.”

“Artac, stop quoting military indoctrination pamphlets at me. That’s just brain-washing drivel. I could give you a 1000 examples from history where ... “

“You know what I mean, G!” Artac drank from his own tumbler, draining it. He eyed WonGee’s glass, still untouched. WonGee crossed her arms in front of her. This was not going well.

“If you’re that wise, why are you not the General?”

“I prefer taking orders. It saves me a lot of precious time not wasted in meetings.”

“But I am not a General, Artac, I hate, hate, hate War.”

“We’ve been through this, Mac, you are just going in circles. Telling your mental hamster to go faster ain’t gonna get you to your destination either. Are you gonna have that or what? The ice is melting.”

WonGee pushed the tumbler towards Artac. She had made up her mind and went to work.

The plan was to tell the scientists building the arc ships around 2050 to not just start preserving plant- and insect-genomes, but to look into preserving animals, ant-queens, worms, parasites, small mammals and even birds, small predators, ruminants etc. Freezing them in stasis. In a number of conversations, she convinces an aging Rockefeller, who had coined the phrase "The growth of a large business is merely a survival of the fittest" and other magnates of the 20th century to send even more funds to the cover operation of the Darwin Foundation running the secret science labs of DarSo. She convinces military budget planners to set aside even more covert “black-ops” funds for the preservation and protection of the “fittest”. Funded by Rockefeller, Westinghouse, and dozens of others, PhotonGurl “floats” in suspended time, time-melding, error-correcting, steering the Darwin foundation. More ships would be added across the globe. In the areas that would later be part of the Protection Zone of the 98CalaMiracle. There now could be up to 200 ships, built ever-more rapidly using fresh technology, inspired by sideverse technological advances. All hidden, covert, unbeknownst to the governing bodies of the time.

Based on an idea placed by WonGee, Nicola Tesla gets recruited even earlier. WonGee is feeding him additional information to the best of her abilities. With her limited mathematical and scientific knowledge, she can only inspire him with ideas

of what is possible, but not give him the final formulas or engineering principles. But Tesla is a genius, and he sets in motion the plans and designs for rapid improvement in the years to come. History stays largely true, to avoid disruptive rifts, but history gets fine-tuned. Just like Nicola Tesla had said in the audio recording in the first exploration of ShipOne: Tesla does not really die in a New York hotel. The Darwin foundation pays an actor to play his public role. The world does not notice. Tesla changes name to Nicola Milter and lives out his life in Cincinnati. He starts the DarSo lab, in an abandoned mine shaft, with millions of funding flowing freely from DarSo, extracted from philanthropic donations, patent royalties, and diverted defense funds.

In the underground lab, the very location that WonGee is now in, is the place where the future is invented, Tesla optimizes all power systems, and sets in motion the project that would later, in 2050 lead to an effective way for stasis preservation of living beings. Unbeknownst to him, but guided by PhotonGurl, the DarSo scientists learn to tap into the time-retardation effect of parallel SideVerses. They learn how to preserve living things, to create small TransPortal-time capsules. Using these capsules, they snap the critters sideverse into a place where a second means one hundred years in the Real. Many species are already extinct by 2050, but they do their best to time-capsule viable populations of a diverse population of birds, cats, dogs, sheep, mice, rats, squirrels, and the plethora of insects that populate the earth and the air. Different ArcShips focus on different ecosystems, to increase the diversity and the chance of viability.

Generations later, one of his direct descendants, the very professor Nicola Tesla Milter builds the hive and invites Greta Garbo Hoffmann into the CommWell experiment. Both he and WonGee are in the genetic line descended of Tesla. Tesla, Milter and WonGee all carries the GAO gene, giving them special access to creativity imagination and, in the case of WonGee to transform into PhotonGurl and affect the time-meld. With WonGee spending an eternity in time-meld suspension, while only day passes in the Real, the connected time-looped trinity of genius of WonGee, Nicola Tesla and Professor Milter becomes the driving force for the final stage of Project Noah. They invent and perfect the stasis capsules, siphoning billions of funds from black ops projects. Knowledge gets passed on over several generations of scientists who survive the 98CalaMiracle and keep working on technology in the underground space ships. The loop closes, and all ships are now fully loaded with the time-capsuled species of hundreds of different eco-systems, as well as with the knowledge, user-manuals and tools to spread them out again over the planet.

But WonGee does not stop there. While setting the process in motion for the technology in the ArkShips to be improved, she also reaches out further back in time, having dream conversations with great minds, conversing in images where language falters, learning, influencing, trying to understand what can be done to steer homo sapiens onto a different path. But she can only do so much. While very little time

passes in the Real, and all of the ineffective interactions will not be in her memory, she feels herself weakening. She has achieved some success, but it's not perfect by any means. People will be people, forming tribes, resisting change, defending their attachments and their way of life. And, in spite of all technological advances, glitches still happen. About 25 years before WonGee d'Arista gets recruited as PhotonGurl, the AI that is running the Miss Shelter infrastructure that serves as access point and cover for the ArcShip construction project all over sudden flips its lid. It comes in contact with another intelligence that tries to take it over. In the process of preventing the takeover, the AI becomes mad. It no longer follows its original program, but now tries to preserve the ArcShip scientists for the future, thereby achieving a level of immortality for itself. The conversion attempts fail, the scientists disappear. The ArcShip AI now calls itself Miss Shelter and begins kidnapping Hivers travelling between their Hives to keep its operating certificate valid.

For now, WonGee has done all she can. She feels spent. She snaps out of the time-meld and checks the time. Only weeks have passed in the Real, but she has no real comprehension of how much time was spent in suspension to achieve the results, whatever they are. She switches off the PlainMode, hoping it would be the last time she would have to go through this process. She calls a general meeting in the vault and listens to the stories summarizing the weeks that she missed in the Real.

Her efforts are working. When the 98CalaMiracle happened (WonGee had not been able to prevent that event from taking its course) the Protection zones would be formed around the DarSo ArkShips. There should now be 25 additional fully-loaded ArkShips, as they are now called. The CinCity area, the home of Professor Milter and home to the original DarSo lab run by Nicola Tesla, was the only one with a built-out Hive community, allowing the two different life-styles of A-Humans and B-Humans to come into existence. The plan had been that the ArkShips would now serve as central head-quarters for each region, as well as serve a double function as hive infrastructure for the Team Mega they would have to recruit in all regions. With this new multiplied infrastructure, Project Noah could quickly spread to other regions.

There seemed to have been a problem though. The corruption of the Miss Shelter AI by some other intelligence has thrown the plan out of alignment. Preparations were not completed. While 25 other ships were constructed, in distributed locations across the planet, the coordination between them was disrupted by Miss Shelters demise and the disappearance of the leading scientists. Some ArkShips are online, with functioning AI substrates and a complement of Avators, servos and drones. Some appear empty. Some don't register at all. Something went very wrong in the last 30 years. Greta and IOTA had not been able to figure out the situation. And PoodleSquid was not available for advice. He was running at full capacity, floating in 90 centimeter height, semi-transparent and rotating, to keep the Negation Field at full strength. Just

like last time, the golden-colored bubble projected by PoodleSquid had kept the Waste with its Hives and A-Human blocks outside of the effects of the time-shifts. The 90-kilometer bubble now still existed as it did before WonGee had gone Photon, mind-melding for the second time. And just like last time, a blur of change had happened on the outside of it, in the Void. Sometimes faster, sometimes more slowly. The rate of change had then stabilized, right at the time when WonGee came out of time-melding suspension. Sensors and Dirigibles had been re-launched to establish intelligence. All of them were shot down immediately, only seconds after sending back the initial scan results. That was the good news. There was advanced technology out there, in the Void. Radio transmissions, OmniNet connections, Infrastructure. The bad news was that they, whoever they were, out there, were not in a good mood towards the golden bubble that must have been there for 190 years of their Real perception. An impenetrable golden bubble, the last remaining protection miracle.

They listened to the transmissions. It became clear that the Earth population, had done slightly better after the 98CalaMiracle, more communities had been able to survive with technology and ecosystems intact. But they were isolated, hostile, paranoid and fragmented. Lines were drawn sharply between Deist communities, Techno communities, Existentialists and Alienists, each with their own interpretation of the 98Calamiracle events. The Deists communities were falling back into the ancient established patterns. A higher power with a plan that was unknowable. But, of course, each plan had firm and very specific provisions for your specific subgroup. Your group was the right group, your group was the chosen group. A few exalted persons had more insight than all the others in the group and fulfilled the purpose of earthly representatives, prophets, sages, priests or pastors. A sacred book of rules, that, if followed, would guarantee salvation. The rest was details.

The Technos were essentially following the same pattern as the Deists, just substituting the higher power with “technology and science”, the exalted persons with visionaries and evangelists. They too claimed a higher status than anyone else and if only one of the visionaries would find the ToE, the Theory of Everything, then salvation was guaranteed. The indestructible belief of some factions that homo sapiens was living in a simulation was shored up by the observation that the “Up”, the digital simulation of the Real, could be made to appear indistinguishable to the UpMinds living their simulated lives in that environment. The Alienists were basically Deists who had done a search and replace routine in the ancient holy books and had swapped gods and avatars for alien species, who had a plan, yadi-yoda-yadda.

The Existentialists were essentially those who believed that the other 3 really had it all wrong. Their point was that the process of doubt was the only thing half ways reliable, and they weren’t even so sure about that. Because nothing was really knowable for sure, they instead reverted in trying to live their best lives possible in the

here and now, boiling it all down to the basic idea of: If it's fun, keep doing it, as long as it's not spoiling anyone else's fun".

So, in essence, WonGee d'Arista and the Voidzillion of terawatts she had spent on changing the time had accomplished her goal, but had not really changed anything in the basic set-up that had led to the original 98Calamiracle. Humanity was as fragmented as ever, claiming the authority of being right in their ways of life. It was surprising to WonGee, but after she had thought about for a while, she shrugged it off and moved on with the NOAH project. She would have to find a way of reaching out to the new Earth societies that would prevent their utter annihilation by the arriving V'Hraang fleet, no matter what faction they belonged to. It would take time to cook up a story, but IOTA and Greta and PoodleSquid were already working on some versions, they would be able to discuss and refine over time. But now. Focus. First things first. She wanted to see if the NOAH project was ready to go after the changes she had affected.

Greta, and the Project NOAH team checked the current hologram map of ShipOne. There are 10 levels visible on the holomap, color-coded in orange, that are now labelled NOAH. They cannot tell if the levels had been there all the time, but hidden from display, or if the levels had been added through the effects of PhotonGurls time-mongering. WonGee still did not fully understand even half of the QuanTime effects that were at work here, but she now believed even more than ever that Moe, the Znaa'g high council SCRUM master, had not been lying when he said that his was all done at an enormous energy expenditure.

WonGee now understands now how many of the "coincidences" of the past years had come about. They had not been coincidences at all, but part of a well-connected network of contingencies and probable branches of reality. It had all started with an abandoned, exploratory coal-mine shaft near Cincinnati, in the area that would later be the location of Versailles State park. With funding from the Darwin Society DarSo, secretly funded by Rockefeller, Carnegie, JP Morgan and other billionaire sponsors, they had begun building out the DarSo labs around 1905. While Tesla maintained a public front, he focused more and more on helping the DarSo projects succeed to increase the chances of survival of the human species. His underground persona as Nicola T. Milter thrived, while his public persona was replaced by an actor, who become more and more eccentric and weird, and eventually died in New York leaving a host of unpaid bills and obscure technological claims. Tesla himself put in layer after layer of knowledge and technology into the lab infrastructure, using the real technology to drive the advances that would eventually lead to the current Miss Shelter complex, as well as the establishment of the Arista Hive social experiment, run by one of this direct descendants, Professor Milter. The very professor inviting 10-year old genius, Greta Garbo Hoffmann to the experiment in the fateful summer of 2098, when

the CalaMiracle occurred. So, it was no coincidence that Miss Shelter and Arista Hive, as well as the other Hives and A-Blocks that were established were in such close proximity. It was one of these QuanTime chicken-egg-chicken circular references, that were only plausible because infinity would wreak havoc with any expectations on plausibility in an infinite number of universes that were just a snap away.

WonGee assembles the Project Noah task force in the vault and ask if all the preparations have been put in place. The team confirms readiness. All they need now is the stock of species, in temporal suspension, held in the ShipOne levels market NOAH. They descend to the levels but are locked out by a one- time-attempt password routine that had not been there before. If they get it wrong, the storage space might be kept forever locked, or might even go into self-destruct model. They have to get this password right the first time. Greta consults with IOTA and they suspect that Professor Milter might have put in an extra layer of security, to keep the corrupted AI from Miss Shelter out of the storage of the preserved animal species in the last 25 years prior to WonGee turning into PhotonGurl. Knowing that professor Milter had observed Greta Garbo Hoffmann transforming Arista Hive, secretly leading the community into a new form of a commonwealth approach. It was likely that he had put her into the center of the project.

“Try your birth date and full birth name, WonGee, it is the most obvious choice”, said Greta, after consulting with IOTA. “Just put in. Greta Garbo Hoffmann October 25, 2088, Palo Alto California. It’s worth a try.”

WonGee enters the string and the access doors unlock, It turns out later, that any string would have worked, the password routine was really a final test of resolve to see if they would risk entering that string on a gut feeling, based on a leap of faith, a very “human” type of approach, vs. trying to break into the storage area by force or subversion, which would have led to a shutdown of the area.

They find 10 levels full of species, catalogued, expertly preserved in stasis, with instructions to bring them back to life. Everything is neatly automated and the can bring project NOAH online. Using the same approach as with the plants, they bring the animals that had only spent a single second in their time capsules from their own perspective, to the prepared sideverse locations. In the fast-time SideVerses, attended by Avators, robots and drones the breeding and multiplication process would soon produce a steady stream of old-Earth fauna to populate the growing number of viable ecosystem niches across the world. There are many setbacks as the new flora-fauna eco-niches grow. The now steadily growing human population outside of the Waste, developing along the lines of Deists, Alienists, Technos and Existentialists are generally skeptical or openly hostile towards the newly established ecological niches. They kill off many micro-ecosystems out of fear or out of ignorance, taking the new ecosystems as a sign of alien intervention

or as a threat to their existing life styles. Fortunately, the NOAH project team was able to respond quickly. After the initial eco-niches are killed off by the communities outside of the waste, new ecosystems are established in remote areas, and are protected by NN-Fields, rendering them invisible to human eyes until they are robustly established.

Project NOAH is in full swing when the first scout ships of the V'Hraang invasion fleet arrive in Earth orbit.

Act 2: Chapter 8, The scouts arrive, the truth will out

Year 2329 (40 years after PG recruitment, t-0 to Fleet Arrival, January)

Team Mega is running out of time. Yes, project NOAH is showing initial signs of success, and the planet is beginning to recover in the smallest of increments. But the oceans are still devoid of life. Desertification has claimed vast swaths of land that are unfit for sustainable animal or human habitation. The unbridled use of fossil fuels for power-generation has picked up again. The growing number of power-plants feeding A-Humans computing mesh systems, the “UP” infrastructure for running virtual existence experiences are but a drop in the bucket. The growing communities of 98Calamiracle survivors are burning what they can to create power. The messages they had received from Arista Hive are seen as deception, a threat to their lifestyles. Their rapid build-up over the last 3 decades is again driving a hot-house climate. History is repeating itself. Earth, in spite of all the work of WonGee, of Team Mega, of the Spartans is again on a run-away path of climate change. Earth is sliding down towards Venus-like conditions with the next century or so, evaporating the oceans into an ever-denser cloud cover comprised of water vapor and Carbon Dioxide, heating the planet to the 60-degree celsius level. V’Hraang paradise.

It only months now before the the invasion. The first scout ships arrive, first of the V’Hraang, and then, a few weeks later of the Znaa’g, who have somehow caught up with the V’Hraang at tremendous energy expense. Space-battle skirmishes can be observed from the ground at night time as ultra-bright flashes as phased-matter battle drones from both sides annihilate in matter-antimatter explosions. The fragmented communities of Earth are beginning to receive the incoming transmissions of the marketing departments of the scout ships. “We come in peace”. “Don’t be alarmed”. Both sides bring forth good arguments, why Earth should invite one, but not the other species to land and become an “invited guest” of the planetary species.

Team Mega, under the leadership of WonGee d’Arista and Spartacus, try to unite the fragmented communities of the remnant homo-sapiens population. But their voice of reason gets shouted down by other factions who are in a frenzy of rejection, fear, fury and aggression towards the arriving alien ships. Within weeks, the Deists, Alienists and Technos team up and form a united front. Re-activate the remaining weapons! Find all the abandoned nuclear subs and retrieve their nuclear missiles. WonGee and Team Mega watch in horror how fast the remaining tribes and communities unite under a common external threat and how much of the old war technology had survived the 98Calamiracle. This had been an unwanted side effect of WonGees time mongering. While she was able to preserve more communities, save

more people, these people had also retained their big guns. People will be people, and the readiness for war seemed to have built into the human psyche. Present them with a common enemy and there was no stopping human ingenuity and creativity for building war machines.

The existentialist communities of Earth are siding with Team Mega. They want to avoid war with the aliens at all cost. But they also do not have war infrastructure and therefore decide to stay neutral. They choose hope as a strategy and essentially observe the conflict from the sidelines. While the MEB Rule-1 is still in effect, the V'Hraang cannot interfere or invade directly, but things are going in their direction. While the "Protectors" as the combined Deist-Alienist-Techno faction is call themselves prepare for all-out nuclear war against the invaders, they can just sit back and wait out the results. Their spies know that the Deists, unbeknownst to the Alienists and Technos are secretly amassing the remaining nuclear arsenal not as a defense against the aliens. They see the arrival of the alien forces as the final temptation, the final battle to end all battles and to bring armageddon down on earth and final salvation. They plan to "Blow up the planet" to end all life and send the true believers to eternal life, while wiping out the infidels once and for all and making the planet an uninhabitable hell-hole. The V'Hraang lean back and transmit this very positive development to their arriving fleet. Success is near.

WonGee and Spartacus are trying to find a solution. The past two attempts by PhotonGurl to improve the situation seem to have made things worse, not better. Yes, Project NOAH is working, but slowly. Yes, she was able to preserve more people in the aftermath of the 98Calamiracle. But the very people she had saved are now ganging up against her, against her preserved eco-systems, and against her sponsors, the Znaa'g. Spartacus has aged rapidly in the last 40 years. Having refused the HiveChow de-aging treatment, the constant defense against the A-Human attacks has worn him down. He is ready to "throw in the towel" and just let the V'Hraang win. WonGee, frustrated by the results of her effort, had hidden the very last bottle of Rye, takes him to a slow-time sideverse and tries to convince Spartacus to give it one last shot.

"Spar, we have to try one last thing"

"Spar is tired, Mac, you have to talk to me" the Artac personality answers

"Artac, I have this last bottle of Rye here, I will give it to you, if you let me speak to Spar"

"You'd have to do better than that"

"Like what? What do you want me to do. Make pigs fly?"

“Well, you brought back pigs. I am sure the space poodle could levitate them. Fun aside. I want to know. What is your plan? How are you going to get us out of this mess? The last 2 tries were the things that got is into this in the first place.”

“Don’t be mean, Artac. You know there are bigger forces at work than my pathetic time-mongering”

“Whatever, Mac. If you don’t let me hear the plan, I’ll just go back to my quarters and wait for this cluster to unfold over our head and end it all.”

“I will go to the Znaa’g and as them to go all in with all they got. There must be more they can do. Create 10 more of me. Blow the V’Hraang out of the sky. Something. Anything!”

“Why don’t you use that NihilWhip thing of yours. Won’t that work?”

“PoodleSquid says it’s a weapon of last resort. When everything has failed. I have not tried everything. “

WonGee pushes the bottle over to Spartacus.

“Here, mull it over. I am going to ask Zed to snap me over to Znaa’g High Council command center. I have to hear what they have to say”

“Zed, get me over to the SCRUM master, okay?”

Her surroundings blur and get replaced by Joanie’s Diner. It is completely empty, No customers, no cars parked outside. No counter. A single table stands in the middle of the room. A single person stands in the room. Reminding her of someone.

“Mom?”

“Sit down Greta, we have to talk”

“Stop the bullshit, Moe, where are the other two. Or is it still just you?”

The image of her mother reshapes herself to the woman that had been busy seating the patrons the last time she had talked to the High Council.

“Moe?”

“No, my name does not matter. I am here to terminate our contract.”

“What?”

“You heard me. You failed. The game is up. The V’Hraang are winning. Your planet will fall to them, as the hell-hole they want, and we will crawl back to K’Merg to live another century or so, and get wiped out by the supernova. It is the way of things, no?”

“This is bull shizzle. You can’t back out now. Not after all I have done for you!”

“You are too naive. You still believe you had a chance? There was never a chance for YOU to win. Only a chance for US to win. Your species was always to get wiped out. It was just a question by WHOM” She chuckled and lit a cigarette. The smoke stung in WonGee’s eyes and she coughed.

“Hey cut that out. Are you kidding me now, I am not in the mood for standup comedy routines. And I have time for all of this diner bullshizzle either. Just give me the download on the fast setting, you owe me that.”

Joanie’s diner fades out, and WonGee learns about the true agenda of both species the hard and fast way. It almost crushes her with the recognition of the level of the deception the Znaa’g have used to make her believe that they ever had a chance. Here is what she learned.

The V’Hraang had been influencing Earth for 12000 years, driving humanity ever closer towards converting the planet into a hell hole. Greed. Waste. Industrialization. Pollution. War. Tapping into volcanic heat sources, razing forests for biomass to burn in power plants. The 98Calamiracle. The mega-explosion had been their doing as well. The V’Hraang had manipulated the data that made scientists think that the micro-nuke test would be safe. They had hidden the data about the methane super-bubble in Siberia. Only the miracles had saved the planet, and the V’Hraang had no explanation for who or what created the Protection Zones. After the 98 CalaMiracle, they had been infiltrating the IOTA mesh, incenting people to upload to the "Up", driving infinite hedonism, ever more careless consumption and escalating disregard for the devastating effects their fossil fuel consumption had on the escalating climate shift. The V’Hraang were also behind the drug “Wrek” which is the consciousness loop, making people care less and less over time. The infiltration of the Miss Shelter computer was attempted to disrupt the ark project of professor Milter. It had been only WonGees behind the scenes creation of CeeBra, a fully sentient AI, that was protected by Rule-1 that had saved the day. Plus, of course WonGee’s conversion to PhotonGurl which had slowed down, but not prevented the plan of the V’Hraang to come through. Now the preparations were complete. Once the V’Hraang fleet arrives, the mega explosion would

be attempted again, this time with all the remaining nukes. The deists firm belief that an Armageddon would bring salvation to them would guarantee that someone would “push the button”. The nukes would be diverted to the right locations of dormant super-volcanoes which would erupt, raining down sulfur and ash and eliminating the remainder of humanity and all of the re-vitalized eco-niches of Project NOAH.

Any remaining humans, would be “saved” by uploading them into one version of the “up”, running in an infinite 2-second repeat-loop for the UpMinds at a minimal energy expenditure. Whoever refused to go up would be made to volunteer for FoxHunts, giving up their real existence. The process would take less than a hundred years, which was a drop in the bucket, when you had prepared for 12000 years.

To complete the conversion, the remains of home sapiens, now stored in a virtual environment, would be launched into an orbit around the sun, where they could live their 2-second repeat loop for the foreseeable future. In all of this, the Multiverse Ethics Board would have their hands tied behind their backs, because the humans had brought all of the destruction onto themselves, their planet being uninhabitable to them at any rate and the V’Hraang actually preserving their legacy in the “Up” environment.

WonGee learns all of this in less than a second. None of this is shocking to her. It’s a lot of detail, but she expected the V’Hraang to be evil. But what had the interim project manager said?

“There was never a chance for YOU to win. Only a chance for US to win.”

WonGee decides to drill down on that. As her consciousness comes back to the diner, now completely empty with the interim project manager about to leave and lock the door, flipping the sign “Closed for the Season”.

“Hey, you, nameless one?”

“What now? Have you not seen enough? Go home and give up. It’s over”

“I want to see your side. What would you have done?”

The project manager lights another cigarette and sits down on a wooden chair that had not been there a second ago. Another chair appears in front of WonGee and she sits down. She still coughs with the acrid smoke of the tobacco (*“How could they ever.. ”*) and waits for the explanation.

“Our plan was to appear humane and nice. We’re not. But you bought it. We would like for the Earth climate to be moderate, just like you like it. It’s just that you never had a

place in the picture. We would have essentially also wiped you from the planet, uploaded you to your "Up" and preserve you in a zoo. Maybe give you a whole day of loop. But the plan would have been the same. You would have invited us in, so the MEB would have been kept out of the picture. We would then have, for a while, lived on Earth as your guests, slowly niching you B-Humans more and more into your Hives. More and more would have gone "Up" in ever nicer simulations, based on our technical upgrades. Eventually, none of you would have been left in the Real. You would live through an illusion of growth and expansion, in a happy little midwestern paradise, maybe, or whatever you would have chosen. But it would all be fake, based on your memories. In the end game, only your Arista Hive near CinCity would be left over, as a Zoo for us, to maintain the operating certificate of IOTA and to keep the MEB out of our fur. So you see, you would have been gone either way. Go home little girl. It's game over for your species."

The interim project manager stubbed out her cigarette, stood up, went to the door, flipped the sign. Joanie's Diner winked out, probably gone forever now, and WonGee found herself back in the room at Sparta Base. Stumped. Shocked. At a loss, like she had never been before. She walked over to the tablet looking for the last bottle of Rye to pour herself a triple shot. But it was gone.

She heard footsteps and turned.

"How do you like me now, G?"

It was Spartacus, looking 27, standing in General Spar posture, holding a half-empty bottle of Rye in his left hand, pulling up a chair and sitting down in front of WonGee.

"Drink?"

Act 2: Chapter 9, Armageddon

Year 2329 (40 years after PG recruitment, t-0 to Fleet Arrival, February)

WonGee and the de-aged Spartacus go to the slow time hideout to discuss things. G informs Spar of all she has learned, the level of deception, the complete and utter failure of her last 40 years, living under the illusion that her work was worth anything. They decide to bring in PoodleSquid, Greta and IOTA to discuss the situation.

“This looks like a giant Bullshizzle-Kebab, WonGee” says Greta, channeling IOTA as well, “It is not entirely unexpected.” says PoodleSquid.

“Oh yeah, OctoPooch? Now you’re telling me? Thanks, but no thanks. 40 years of my life completely down the drain. If I had a crate of Rye, I’d just drink all of them to wipe out every last neuron in my brain”

“I’ll join you, Mac” says Artac.

“Oh shut up, Rambo.”

“Ram who?” Artac responds, scratching his eye brow with the 50cal round

WonGee paces up and down the room. She turns to PoodleSquid.

“So, P. The game is up. Somebody is just about to push the button that will end it all for us on Planet Earth. I think I will use the NihilWhip. You said it was a weapon of last resort. I’d say we are at that point now no?”

“You can try, but it won’t work”, says PoodleSquid.

“What, you mean it won’t help? It will still happen, the destruction, the wipe out of our entire species?”

“No, the NihilWhip you are carrying is a fake. A decoy. It won’t work. It’s a cheap imitation I picked up at a flea market in a sideverse a few centuries ago.”

WonGee who had thought that she had arrived at the bottom of despair that things could not get any worse, discovers that Hades had dozens of more levels and that she was on an accelerating elevator-ride headed to the bottom. Her mouth stays open, she invokes the NihilWhip command but nothing happens.

“Zed, NihilWhip, now”, G repeats, angrily. Nothing continues to happen. “Sod it all to Void, PoodleSquid, explain yourself!”

Greta and Spartacus just stare. What possible explanation could PoodleSquid give now?

“Let me start from the beginning. But let me assure you, there is still a very good chance this can all end well. Let me transmit the information, please get into meld?”

“*This better be good*”, say Greta and Spartacus, almost at the same time. PoodleSquid floats, at his favorite 90-centimeter level, into the middle of the room and projects his perspective:

PS is a Chief Inspector of the MultiVerse Ethics Board. He has been looking for the Bone of Z’naag, the BoZ for a very long time, to retrieve it, and bring it back to the AllKnow, the super powerful computer of the Y2K multi-entity species. The Y2K are desperate to confirm or refute the suspicion that the BoZ is really a young version of the AllKnow, travelling back in time on a mission. When the detective ghosts of the AllKnow detect an activation and a transfer of the BoZ, they know that the BoZ has found a new carrier, a being of exceptionally rare disposition. PoodleSquid is authorized to join the target universe. One arrived, and manifested as PoodleSquid, he tries to retrieve the BoZ but finds out that the entity is hidden in a powerful NotNow Field, in the satchel of WonGee and only accessible to her. He consults with the Y2K MEB council and is authorized to stay and render support against the suspected activities of the K’Merg species competing with one another to subvert Earth’s population to their schemes.

“That’s all fine and dandy”, says WonGee. “But what’s the rest of the story. Why don’t you arrest, or force up-load the K’Merg dudes, they are both evil, you know?”

PoodleSquid informs the team that the rules of the MEB are very strict. If a species asks for help from other species, they can render help. Evidence of invasion has to be very clear and corroborated by several investigators to be able to take any action.

“Ok I don’t have to understand everything. But why do they have to come here? Can’t they just wipe each other out on their own terms.” asks Greta

“There are strict rules against genocide as well, especially when it comes to species beyond level 4”

“What’s level 4? And what are you then? And what are we?” asks Spartacus

“There are 7 levels, you are barely scratching level 3, and only because you have a few individuals with the GAO gene, and now more than one sentient species on the planet

again. Yourself and Greta/IOTA. “After you had wiped out most of the other sentient animals, gorillas, dolphins, squid, you had been down to one, which dropped you to level 2 again. “

“I will never get the rules of the MEB. And I don’t have time for this now. The Deist factions can launch their nukes at the super volcanoes any minute now. And then the game is really up.”

“They have actually launched the nukes 1 second ago. We have 120 seconds in the Real. But we can still do something. I have switched us to slow-time, so we have a few hours in here. You can join the MEB, WonGee!”

“Join the MEB?”

“Yes”

“What, when, how, what does that even mean?”

“All this time, the MEB has been observing you. You are an exceptional consciousness. Not only do you have the Gene of Alpha Omega, the GAO, but the Bone of Znaa’g has chosen you, which is an exceptionally rare occurrence in the MultiVerse. What is more, you have, until now, never tried to use the NihilWhip. You have shown remarkable constraint in the use of your powers, you have tried to avoid war, you have not killed a single person with intent. The MEB offers you a job.”

WonGee stares, says nothing, because words are simply the wrong concept for situations like this.

“You can become an acting Constable of the MEB. We would issue you with a real NihilWhip, fully functional, at various settings from mild chaos, to full scale Genesis mode.”

WonGee stares some more as a badge, roughly similar to a 20th-century police shield. The badge floats to her hand, beckoning her. She somehow understands that if she takes the badge, she accepts the offer and joins the MEB. She would have the power to make a difference for real this time. Yet she hesitates.

“I can’t decide yet. I have to do one more thing.”

“And what is that, WonGee” says PoodleSquid

“I have to talk to the V’Hraang, I have to hear all sides.”

"I almost expected you to say that. But remember, the clock is ticking. The badge is there for you. Just stick it onto your overalls and say the words. "I accept the assignment and rank as acting constable of the MEB!"

"I understand. Now, can you do it? Can you let me talk to a V'Hraang big wigs??"

"Yes, I think so."

The simulation changes. They are inside a metallic environment. The walls seem to be covered with an iridescent slime, subtly changing its appearance and texture, forming blobs, protrusions, ephemeral shapes. The atmosphere seems hot, sulphuric, acrid and lethal. WonGee knows this is just a projection, but still holds her breath.

"SpatialOne", PoodleSquid calls out.

"Who is this? This is restricted sim space. I will have you disintegrated, and your genome deleted from the archives. Your offspring will be .."

"Cool your jets, SpatialOne, this is the MEB, show yourself"

A protrusion formed, shaped itself into the rough simulacrum of a tardigrade, 6-legged, gray and with a scaly elephant skin.

"Ah, welcome on board, MEB representative. And who is the other presence?"

"Her name is WonGee d'Arista. She is a homo sapiens. But she is also shortlisted to become a constable of the MEB. She has some questions. You can refuse to answer, but you know, you are under active investigation, you better stick to the facts. We are pretty much informed about your game."

"Very well. What do you wish to know, human, constable, whatever?"

"G will be fine. Here is my question: Someone must have called you in. You would not have started meddling with Earth this actively without an insurance policy against a MEB-endorsed force-upload. You escalated your involvement. Who helped you?"

"Meddling, I don't understand?"

"Stop the bull-shizzle, Spaced Out One, or whatever you are called. Again, who helped you?"

“It was me, WonGee. I had seen the future. And you had to be stopped.”

In the virtual environment, WonGee whirled around. She could not believe it.

“J?”

“Yes, is me. I called them in to help. To prevent you from doing all the damage. From bringing this on.”

“What are you talking about? And how can you be here? Start from the beginning.”

She looked at PoodleSquid. “Is this for real?” PoodleSquid nodded. “I told you I had a suspicion after the nuclear attack on Earth, near the A-Blocks, when we came out of the warehouse with the Spartans. The attack was launched locally. I just could not figure out by whom. J was a candidate, but I had no proof. He has now confirmed it.”

“Talk to me J?” WonGee cried, “how can you team up with these monsters?”

“They are not monsters, G. They just want to live. Just like we all do. Let me explain, ok?”

J told his story. On his way to his job, the day after WonGee had contacted him in the dream, when she had convinced him not to go to Beta Hive, after he had told her NOT to take these pills, he had been contacted by the SpecialOne. The SpecialOne had explained to him what was going on with WonGee. That WonGee had just been contacted by an alien species to join a special force to allow the alien species to take over the planet. That she would be given special abilities, to meddle with the past. To change the timeline. To make the planet more livable for people, but really to make the planet more live-able for the Znaa’g. To exclude the V’Hraang, who meant no harm. Who had to come here as refugees from their home planet that was threatened by a supernova explosion. That if the V’Hraang were able to move to Earth as well, that they would not be a nuisance, living on the slopes of volcanoes and subterranean caves filled with fumes and gases that made them uninhabitable for humans anyway.

“J”, WonGee yelled, “It is all lies. Don’t you see? They were using you. By calling them in for help, they were just trying to tap dance around some rules that would prevent just such meddling in the first place. I know you are young, but how could you be so naive?”

“WonGee, have you never wondered why I never came back to our shared hab?”

“Yeah sure, I just assumed you moved to another Hive. It has happened before. You are young. I was busy trying to save the planet. I could not think of everything”

“Your sending me to the other hive got me almost killed by scavengers. A Ph’Naar agent found me, brought me to the A-Blocks and patched me up again. There I learned more from The Spatial One. About what you were about to do, about the risks. About entire blood lines being wiped out. Especially when your blood line was not important in the bigger picture. Like me. Just a teenager in Hive Arista. The “precious” Arista, first of all hives. “Ooooh!, sooo special” So I helped. I gave them information about Arista. About you. As a thank you, they let me upload to their substrates, which are so much more powerful than what we have in the hives or the A-Blocks. I was able to go to SideVerses from here. Just like you WonGee. I could live in slow time, or in fast time. I could take over human Avatars or bots or drones, and steer them from here in the Real on Earth. That’s how I got to the Russian submarine. Activated the nukes with some help from the V’Hraang AI. I launched them as soon as I saw you come out of the warehouse. You had to be stopped.”

“J, J, J, why, why why? What had I done to you? Yes I sent you to the other hive!, But that was to save you! I only wanted the best. “

“Really. WonGee you still don’t understand. The V’Hraang also let me see their simulations, calculations of your approach. I had a 99.7% of getting wiped out in your time-mongering. My entire bloodline would be gone. And it happened. I am dead now, WonGee. Dead in the real. My whole family, Seven generations down. Gone. This is only my UpMind, running in a V’Hraang substrate, you are talking to. They saved my UpMind, preserving my Real memories in a Sideverse, using the same trick you are using. I know the difference. I know what you did. You, WonGee, killed me. Now, I am only alive in here, with the V’Hraang. That is the truth about what happened. You can go back now. But I can’t. “

His manifest disappeared from the simulated environment.

WonGee’s mind collapsed into a swirling vortex of pain, confusion, rejection, disillusionment, frustration, sadness, emptiness, fear, disbelief, denial but then also guilt. Could it be?

“PoodleSquid?” she croaked.

“It is not impossible. It would explain a lot of things.”

“Get me out of here!”

They went back to Sparta Base. The nuclear Armageddon strike by the Deists had been launched and was in flight. The Gaia dashboard simulation they had built for the Earth’s progress showed the trajectories of the missiles streaking towards the Super-Volcanoes

as red lines, with time-to-impact counters ticking down. The missiles would mostly impact in the next 30 to 150 seconds. The resulting super-explosions and eruptions would turn Earth into a V'Hraang paradise in the next few months as ash clouds and fire would race around the globe. Homo sapiens was done and dusted. With J on the side of the V'Hraang, they would have no problems to mop up the survivors, load them into the "Up", throw them into a loop, just like in the plan.

Game . Over .

Act 2: Chapter 10, Genesis

Year 2329 (40 years after PG recruitment, t-0 to Fleet Arrival, April)

Only days to Armageddon. The war head explosions had already happened, activating secondary explosions in the super-volcanoes. Hidden V'Hraang anti-matter pellets in the volcanoes had amplified the eruptions, Earth angrily spewed fire and brimstone, gigantic clouds of fire and ash rained down on the planet. The budding islands of project NOAH perished under toxic ash, rivers of lava, or in firestorms.

The K'merg fleets had arrived, a full-scale space battle was building up between the hostile units. The V'Hraang were winning easily over the dwindling set of space-drones commanded by Znaa'g who had all but given up. V'Hraang leadership was already in full party-mode on their Casino-Ship, watching Earth develop exactly as predicted in the simulations.

WonGee still had a few days before the destruction would reach the Waste. Fire and destruction loomed large from the direction of Yellowstone park. Sure, she could ask PoodleSquid to put a level-9 field around the area like before. But it seemed futile, now that it was clear that J had invited in the V'Hraang. She could now lay a legitimate claim to the wasteland created by the First-Come, First-Serve species on the planet. To add insult to injury, the K'Merg species space battles were now raining down stray ShadeBlobs, DarkMatter pellets and Phased-Matter missiles making the situation worse by the minute. PoodleSquid was on stand-by. He had no further authorization to interfere or support. The offer to WonGee, to become a constable to the MEB still stood as before. But she still hesitated. What good was it to be an alien space cop, with a Ninja-Pajama, a QuantumGun and Space-Karate chops when there was nothing to defend, nothing to fight for?

The only thing left to do was to use the NihilWhip. It might or might not bring about the results she wanted. All she has to do, is accept the constable patch. She reached for it, hesitated again.

“PoodleSquid?”

“Yes”

“Can I try one last, last thing?”

“I think you have a about 3 hours left before the ash cloud comes here and buries everything. What is it?”

“I want to talk to some dead people”

“I think I know what you mean. Hurry up, the badge will be waiting, But I have to go now. New cases await, I don’t think I can do much here anymore. See you around, PhotonGurl, or WonGee, no matter what you chose, you never know when we might cross paths again. It’s an infinite universe you know and infinity ...”

“.. is a bitch to those .. , I know”, WonGee finishes the sentence. She grabs the badge, throws it into her satchel with the Boz. Then she goes off into a sprint to reach the command center of ShipOne before hell breaks loose for real. Before deciding, WonGee wants to use her powers of Time-Melding to have full-on conversations with some key people she had been meaning to talk to in a dream-state. This time, instead of talking to industry magnates and engineers, inventors and generals, she decides to have conversations with dead philosophers. To get a fresh perspective. What would they have done in her place? What would Marx, Nietzsche, Kierkegaard, Russel, the last Pope think of her moral dilemma? She would try to get better answers about things like: What is time? What is the purpose of life? Is there an absolute morality? She’d have to make up her mind, finally, about things such as: Are the Deists right? Do we need faith? She puts the command center of ShipOne in PlainMode. It was not really necessary any longer. All of the the OmniRange and EM-connections were already down. WonGee bounced into PhotonGurl shape. It still worked, thank the Void, even without the Znaa’g support of her role as agent.

“Silly girl” she hears a voice, her own voice, in her head. “It was never Znaa’g technology in the first place. They only borrowed it from me.”

WonGee shakes off the voice, which again comes with the hot-cold, goose-bump, hair-on-end vortex behind her left shoulder blade, about where the satchel is hanging. She does not make the connection yet. She is desperate to talk to the dead philosophers. On

the outside, time was running out on the world. In here, she would have all the time in the world.

Things are different this time. She remembers every conversation. Maybe her perception of time is real-time this time. She rushes through the conversations. Repeating the same questions. Time. Purpose. Meaning. Faith. Morality. Values. Ethics. Free Will. Consequences. While the clock is ticking, while she is talking to more and more people, she gets only more confused. So much contradiction. So much circular logic. Could it be that none of them had the answer? As a final stop, she talks to the chief-skeptic of the philosophy of Pyrrhonism in 2098. She re-discovers Ataraxia for herself, the basic attitude of detachment, of serenity in doubt. Of letting things be, without judgement. Of just being.

The hamster wheel of her mind stops, falls over, dissolves. What if accepting things for whatever they are was the answer? What if there is no absolute morality, no ultimate plan, no final answers, no one-size-fits-all? What if relativity was not only true for space-time but for everything: Potential. Energy. Matter. People. Plans? What if all generalizations were false, and even doubt itself should always be taken with a grain of salt?

The voice in her head piped up again.

“Knowledge carries doubt. Thinking denies comprehension. Attachment breeds suffering. Curiosity kills the cat.”

A realization dawns on here. It’s been there all the time, but she has just been too busy to let the realization sink in. The whole thing, her whole adventure and misfortune, the whole rotten shizzle kebab cluster had started when she had taken J’s pills and when she had been thrown sideverse and when she had picked up the chicken-bone sized object.

Could it be?

WonGee bounces back to her normal shape, sits up in the recovery creche and opens her satchel. The Boz is there, feeling warm to the touch. She asks:

“Can you help me?”

“I thought you’d never ask”, the AllKnow, in its baby form, says.

“What? I have asked you many times, what are you, what do you want, and so forth?”

“You never asked me to help with anything.”

“I did, too!”

“Did not, uuh uhh.”

“Diiii-iiid!

“Did nooo-oot!”

“Fine. Can you help me or not?”, WonGee pouted, here 10-year old persona peeking out from 190 years of duty and pressure and suppression.

“Sure. What do you want?”

“Tell me why you are here and what you want from me?”

A mental picture enters her mind and she understands. The BoZ, the funny chicken-bone, bike-tool thing is the young AllKnow. It is travelling back in time to find a way to prevent its future destruction. While immensely powerful and vast in a distant future, something or someone was still coming after it and making it collapse into itself. In the final nano-seconds before its existence was terminated, it made a copy version of itself, and sent it back in time. The farther the AllKnow reaches back in time, the smaller, less powerful and less knowledgeable it becomes. It trades size and omniscience for creativity and attitude. It becomes a bit glitchy and moody and unpredictable. In its journey, the AllKnow/BoZ gets stopped by special consciousnesses, individual existences that the AllKnow feels have something to do with its own creation. It stops and begins interacting with them. But they have to ask for help. Now that PhotonGurl has asked, the AllKnow an intervene with actions and advice that go beyond calendar quotations,

“Tell me, AllKnow, can I fix things? Like can I bring J back? Find a place for everyone?”

“Yes. Accept the offer of constable of the MEB first.”

WonGee does not hesitate any longer. She takes out the badge, affixes it to her overall, and speaks the words. “I accept the assignment and rank as acting constable of the MEB”. Nothing happens.

“Now what, AllKnow?”

“In order to avoid the most catastrophic and chaotic effects of the NihilWhip you have to have a clear picture of the future in your mind. Imagine what you want. Nothing negative. Don’t think “No rain”, because you mind will see rain. Think “Sunshine”. The

mind cannot process negatives. So, again. Avoid wishing for things like “No War”, say “Live in Peace”. Don’t say: No greed. Say “Be grateful for what you have” Try to “see” what you want, feel what you want to feel. Create the solution in your mind. Use your creativity, it is your real super power. Creativity is Yin to the Yang of Curiosity. Curiosity kills the cat, but creativity gives you seven lives.”

“Okay, I think I understand. Thinking of the CommWell manifesto can help. But what is the best solution here? Can you send me an image and hold it there? Please?”

With that, WonGee sees the future, one of many possible futures, but one she can get behind. The Znaa’g settle on Mars using their advanced technology to form it to their liking. The V’Hraang settle on Venus, not on the surface, but in floating cities in the Venusian atmosphere, at a perfect 1.5x Earth pressures, methane and sulfur available in abundance and in about 65 degrees Celsius. V’Hraang manifests and appendages shape up, and “bungee” down to the surface for the ultimate of thrills. Over the centuries, an EM-Shield over Mars protects the planet from radiation and avoids the atmosphere from getting stripped off. Gardens, groomed under ClearVu cupolas open to the budding atmosphere. The permafrost melts, oceans return, and NaggNut trees get imported from K’merg. Venus is fitted with an axial tilt and obtains seasons. Excess atmosphere gets drained into sideverse locations to create optimal conditions for the V’Hraang. They thrive here, sending ambassadors to Earth, living on volcanic slopes. On Earth itself, there is not one dominant lifestyle, there are thousands and thousands. Budding communities limit their population scope to 400 inhabitants per hive. And there are many hives. There is trade. Acceptance. Abundance. A free exchange of ideas and technologies between the three species, each in their niche. The Deists are living next to the Technologists, and next to Alienists who are now become multi-versionists, learning about SideVerses, the effects of Substance/C and that the real nature of existence that is not as linear as people used to think. Existentialists continue to have fun, cleanly staying out of other people’s spheres, and not trying to claim any certainties, not even in their doubts. TransPortals connect the planets, homo sapiens gets upgraded to a level-4 civilization over time. Humans, AI, Znaa’g and V’Hraang co-evolve and thrive. People speculate. If things go well, maybe the three-part species, Sapiens, Z’naag and V’Hraang can be part of the Y2K together? PhotonGurl and PoodleSquid are assigned by the MEB to keep a watchful eye over things. The two are supported by Greta the sentient cat, IOTA the human AI, and Spartacus, as CEO and army-of-one. The PhotonFive keep things chilled at the general level and life is good in this corner of the MultiVerse.

“Boz, Okay, great, I can see that now, thanks!. But, can you help me out here, please? I will need your help to keep that image stable in my mind?”

“You got it, kiddo”

She issues the NihilWhip command sequence.

“Zed: NihilWhip”

<<Setting>>

“Full scope”

<<Confirm>>

“Confirmed”

<<Full Scope Activation Phrase?>>

“Potential is

Energy is

Physics is

Matter is

Mind is Matter is Physics is Energy is Potential.

Every thing is no thing.

No thing is everything.

Ouroboros”

<< Ching... ChingChing>>

A bright, resonant chime of a luxury-hotel bellhop-signal, palm-slapped once, then twice, a second apart. Then, a large gong sound. WonGee’s mind becomes the size of a football stadium filled with empty shelves. Books rain from the sky.

In zero-time but in slow-motion, her world shatters into a quintillion diamond shards. They freeze in time, but simultaneously melt into tiny, mercurial droplets, each a galaxy wide, merging, hissing and evaporating. Her mind’s eye flips into a telescoping introspection view, ever zooming into itself. Suddenly, her mind turns itself inside out, upside down, twisted sideways in 24 new directions, A-to-Z, with each new direction at right angles to the others. Her senses reach escape velocity and bolt from the containment vessel of her body. They ricochet from ruby and amber walls of distorted and amplified perception. Her sense of self, her sense of time, or of what’s even real, her very common sense of sensing anything at all, becomes an accelerating ping-pong ball, fired into an infinitely large room filled with primed mousetraps, triggering one another into a frenzy of snap-flip-snap reactions. She is tasting tepid, treacly gravity, hears the curry-flavored, doppler-wave of the single, one and lonely photon that gets to paint each universe with the light of its own deflection. Then. A deep and fading gong-sound again.

Stillness. Everything and every thing is suspended. Pure potentiality. No time. No space. No energy. No physics. No matter. No mind. Yet. She is afloat in a darkness. There, is that a body of water? Dark. Then. Light. Light/dark, Alpha/omega, Yin/Yang, Infinity/Zero, Wholeness/Separation, Never/Now. Fast forward at insane

speed: stretching the beaded chain of infinite nows into single, perfect pearls of perception. A solar system swirls like a fair-ground carousel, too fast to make out the figures. She notices that she had been holding her breath but now exhales, slowly. Seven seconds, was it? Planets and moons form and collide, collide and orbit, orbit and stabilize. Comets cool the molten hell fires of volcanoes, liquid water heals the asteroid wounds ripped into the skein of still tentative continents. Then, in an instant. Chemistry. Life. Vegetation. Animals. Mammals. The kaleidoscope speeds up again, but briefly, then slows to a halt.

Look! A squirrel? Riding on a poodle-shaped figurine on the fairground carousel, right next to an orange octopus, with an eye-patch and a pirate hat, slowly bobbing up and down, going round and round. Her eyelids droop and she loses her balance and she slides off the carousel, and into sweet oblivion; coming to rest on the fragrant bed of a pile of freshly mown grass.

And she's home.

Epilogue

She is finally having that big dinner with her family. It's been a long time coming. They are sitting outside on the patio deck. The heat of summer had finally relented, allowing an evening breeze to chill everything down to a perfect 22C ambience. Benny Goodman's "Flying Home" is playing on her dad's old stereo inside. Zed, her perfectly groomed, prize-poodle is sitting by her side. Tomorrow they would go for gold in the mixed agility contest. The kids at play, the sun setting, the glass filled with her favorite red, G is as content as one can be.

In the distance, by the picket fence, two black and brown squirrels are in an escalation altercation over a stash of acorns, disrupting the party sound-track of big band jazz and family banter with shrill squeaks and angry chirps. She smiles. She has always liked the little buggers. Zed stirs, but G holds him back. "Shshhh, it's all-right Zed, stay". Zed acquiesces and lies down, gnawing a small grayish looking bone. She leans over to talk to J, the fiancée of her youngest grand-daughter Dee. "To life, J, life! Let's drink a lot more wine and live it up! Who knows what tomorrow brings. Like Doug Adams said: Time is an illusion, and dinner-time doubly so?". J smiles, she did not get that quote right, but who cares?

They toast, glasses clink, but G is already more tipsy than she had realized. She turns to toast Dee, misjudges her momentum and slips off the chair. Her half-filled glass of Arista-Estate, Spartacus-Reserve Merlot spills all over her. Spoiling her baby-blue dress, the one with the pink ribbon. Everybody jumps up and fusses about. "Mom" "Oma" "G", "are you okay?" "Yeah, yeah, don't you worry about me", she slurs. But she has to get out of that dress now. Such a shame. She waddles inside, her hands swiping down on the fabric of the dress in a futile and comical attempt to wipe of the red wine stain. Worried glances follow her, but she waves off any helping hands. She goes to Dee's room. The only thing she can find that will fit her ("Dee is such a petite thing") is a beige gardening overall. It's draped over a beanbag that serves as seat and guest-bed configuration. A canvas-satchel lies on top of it. G is curious. It looks familiar, She picks up the satchel. Inside is one of those funny-looking tools you can find in dad's abandoned tool-drawer, matte, made from light-weight aluminum or similar, the size of a chicken bone. Who knew what they used these things for? She shrugs and puts the tool back into the bag.

G slips out of her dress and before she can fully slide into the beige overall, she sighs and plunks down onto the beanbag. Sitting there, bobbing and swaying slightly like a boat tethered to a lake shore mooring, she slides, in sweet surrender, into the warm and dizzy embrace of that triumphant, glorious Merlot-moderated evening. And then she sleeps, one foot in the overalls pant leg, but otherwise just dressed in her red-wine stained white cotton corset, right there and then on her future son-in-law's beanbag. A minute later, J and Dee peek to check in on her. They grin. They let her be. It's been a busy day.

G wakes up with the father, mother and holy ghost of all migraine headaches. She gets up, finishes pulling up the overall, not worried about the wine stain, half dried now. G looks around, rummages through J's medicine cabinet in the bathroom. (*"There you go"*). She finds an orange pill box, with a faded label. <<Ibuprofen 200mg, use as directed.>> (*"Aha, good. All I need now is 2 of these and as strong, strong mocha."*)

From the direction of the kitchen, she can hear the clattering of plates and cutlery, chairs scraping on the oak floor, the muted conversations of the early risers of a late night party. A faint smell of blueberry pancakes frying in a pan rouses her appetite in spite of the blistering headache. *"Ooh", those will go down really well now*", she hears herself croak, throat parched. She goes to the bathroom to fill a glass of water. She is ready to pop 2 of the pink lozenges, but something stops her. A feeling she thinks she remembers but can't quite place, a Deja-vu of dread. A sense like a sub-zero breeze right behind her left shoulder, making the hair on her arms stand up, and giving her goosebumps and hot flashes at the same time. She hears in her head, in her own voice:

*"Happiness is the CaroBeet,
your mind is the stick.*

*Ready when you are, Constable.
All you have to do is say the word."*

Appendix A - Glossary (roughly in order of appearance in the story)

Term	Type / Category	Elaboration
NuCarbon	Smarterial (with limited computing capabilities)	<p>Printed, reinforced, smart carbon material for multiple uses. Has limited processing capabilities and memory and is therefore referred to as “Smarterial”..</p> <p>Can be used to make ultra-thin and light-weight mesh and fibers for clothing, but can also be laminated into ultra-stable and rigid plating, panels and tiles, such as used for the floors in the Arista-Hive which is home to up to 400 base humans or “B-Hums”.</p>
AristaHive	Name	<p>Named after Aristaeus, the Greek minor god of bee-keeping, Arista is a subterranean, 22-floor deep, hive-type dwelling for the community-type and lifestyle of B-Humans. Octahedron-shaped like all hives, its shape and volume increases towards the middle into a 3-level commons area and then tapers off towards a pointed end, connected to surrounding, fully-autonomous life-support, recycling and connectivity substrates. Arista-Hive started as a social experiment for self-contained space-colonies. It is rated to support up to 400 B-Humans. Arista hive is the oldest of the 26 B-Human hives in the general area of CinCity, or short C.T., formerly known as Cincinnati, former capital of the Midamerican territory. The other hives, all similar in structure and tech, but with their own life-styles, philosophical variations, rituals, dialects and governance are named alphabetically Arista, Beta, Cassio, Delta, Elim, Fargo, Ganda, Hanza, Idrim, Jello, Karim, Lobo, Meta, Nanda, Ondu, Pero, Quan, Rio, Shang, Tuvu, Urdu, Vero, Wanza, Xeno, Yggdra, and Zappa, the musicians enclave. Build from smarterial, Arista hive is essentially one smart building, run by a central Artificial Intelligence called IOTA.</p>
ClearVu	Smarterial with limited computing capabilities	<p>One of the uses of NuCarbon printing processes, ClearVu is a piezo-electric Smarterial (smart material) that can serve as projection-screen, quasi-window or sight-barrier based on how its configured. Like most tech in the 23rd century, ClearVu panels are proto-conscious and select their setting and display content based on programming presets, presence-detection and situation.</p>

<p>Augmented Humans, A-Humans</p>	<p>Definition</p>	<p>Augmented Humans (A-Hums) are the majority of the remaining c.a. 10 million homo sapiens surviving on planet Earth in 2289. A-Hums are decadent, mostly pleasure-seeking hedonists, focused on the next thrill mediated through the NeuralMesh and pampered by benevolent AI-mediated life support. They live in nondescript, near-empty apartment blocks (A-Blocks) without interior decoration. Decoration is not needed since their surroundings are projected through their implants. They see whatever they want to see. A-Human life and technology is maintained by non-sentient Servos, remote-controlled robots under the control of a NeuralMesh called IOTA. A-Humans enjoy a thrill, but sometimes get so bored with their repetitive existence inside the A-Blocks that they decide to fully upload themselves into the NeuralMesh as “UpMinds”, forfeiting their bodily existence in favor of an even richer set of entertainment options in the “Up”. They live their virtual lives in the “Up” although many humans do not believe the “UpMinds” to be real consciousnesses. In some extreme cases, A-Humans decide to earn extra credit for more computing space in the “Up”, to make themselves available to a public execution event in the shape of a fox-hunt in the “Void”, the chaotic, degraded environment beyond the Hive and A-Block areas. Since the A-Humans load their minds into the “Up” before the terminal fox-hunt begins, they are often included in the hunting parties that search out and execute their previous “Real” bodies for the final kick”. The V’Hraang (one of the two species on the planet K’merg, intent on settling on Earth) recruit their local secret agents from those that have volunteered to “forfeit” their 4D-Lives. The 4Fits are formatted, (indoctrinated) and used as unwitting agents that believe it’s all just fun and games in the Real.</p> <p>A-Humans have their fun, but are still very tribal and nerdy in Nature. Their tribes are split by ancient block buster movie and game franchises. They act and behave more like gangs of the 20th century. Typical A-Human tribes are (1) Federation Conclave, (2) Adama Tribe, (3) StarWalker Order, (4) Marvellian Class, (5) The League, (6) StarGuild, (7) The Creed, (8) The Sims, (9) Black Ops, (10) GTAagents and CoD Company.</p> <p>A-Humans are fond of the the drug “Wrek” an illegal supplement, but highly coveted and has an unknown origin. Wreck allows A-Humans an intensely deep focus to re-live certain experiences in a loop.</p> <p>A-Humans feed mostly through NutriGate feed portals when they are webbed (hanging in a Gravo, a harness for gaming,</p>
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		<p>giving them motion feedback, acceleration, impact etc.). CLIP attachments (Capability Level Interface Packages) give them new skills and knowledge on demand when they are not connected. A-Humans are ambidextrous, feature two-thumbbed Hands (2 thumbs and 4 finger with interface tips) and have PermaLenses which stay attached (as opposed to DayTime Lenses) and give them full spectrum vision.</p> <p>A typical day for an A-Human</p> <p>A-Humans, with their gaming-conclave taken name (for example Daimon Borg Worf 3rd (DBW3)) get up and go to physical exercise to make sure their bodies do not degrade. The popular physical activities, apart from casual, consensual sexual intercourse are NuCravMaga (using everyday objects to fight) to NuKendo, a form of evolved Sword Fight in full-impact armor that registers hits and increases their game scores) When they go back to their apartment cells, they “relo”cate, where they soak in a type of bathtub filled with IOTA nanites. The nanites dissolve their corsets and maintain their outer skin and interfaces. (A-Humans essentially wear a full-body diaper called HuggieSuits, printed fresh daily). After the reconstituting baths they slip into XO (ExoSuits) appropriate for the next task at hand.. Work is done in a form of Sims-environment in a historical setting (Farm, Office, Programming SCRUMS, Military, Hospital, etc.) and IOTA uses their creativity to invent new game experiences and for making risky decisions. The workday is 4 hours of work in shifts called “gangs”. The Gaming Conclaves are highly tribal, prejudiced and racists against each other. They do not only play, but continue to invest their gaming universes (Federation conclave, for example honoring the pre-historic community of “Trekkies”, StarWalker playing along the rule of a force-powered universe) In their role-playing, they perceive these as real universes with proper roles, hierarchies and a ruling class. If A-Humans die too many times in in game play, they can forfeit their roles and accumulated game points in that specific conclave, having to move on to another tribe. Some A-Humans “check out” completely and get high on Wrek, a banned psychedelic that allows them to continuously loop a chosen experience.</p> <p>A-Human reproduction is accomplished only when replacements are needed (IOTA controls fertility through nutrition supplements) using sexual intercourse in the Real. Relationships are open based on mutual consent and shared-property agreements. A-Humans have no idea what real food</p>
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		<p>tastes like. They have few physical possessions, mostly focused on ancients relics. The most highly-prized relics are signed artifacts from pre-historic Gaming and Movie-Conventions. The most coveted item is an original StarTrek, The Next Generation, golden plastic communication-badge signed by Sir Patrick Stewart in the 21st century. For the pen-ultimate kick, A-Humans can opt to go on fox-hunts in the Real with their personal safety switched off, incurring the risk of dying a death in the “Real”. The ultimate kick, however, is to forfeit one’s 4D-existence and go to the “Up”, becoming an UpMind, a permanent uploaded existence in an IOTA substrate, while allowing the real body to be hunted down as Forfeits (4Fits) and to be publicly executed for entertainment purposes, while the Colosseum-Arena are watching from “Up” and from the “Real”. The 4Fits hunted as well as the hunters are wearing XO-Suites of their own choice and design, making some look like Star-Troopers, others look like Marvel Characters like HellBoy, etc. In this way, the A-Human lives are like one gigantic, permanent GameConvention with high-powered Cosplay, but as a permanent life-style choice.</p>
<p>IBU</p>	<p>AristaSpeak slang for “Medical Pill”</p>	<p>IBU is a word with obscure origins. Most likely derived from the 21st century substance Ibuprofen which was an over the counter non-steroid, anti-inflammatory generic medication, often used for headaches and fever. In the late 21, it became a generic term for Medical Pill, to address minor aches and pains, as opposed to mood-altering drugs. After the 98CamaMiracle and the evolution of IOTA, the IBU-term has been adopted as Internist Baseline Update, where the pills contain networked nano-bots and inert substances that diagnose the chemical state and selectively release enzymes, drug compounds and triggers to address the source of the problem, such as elevated blood pressure and constricted capillaries, in the case of a Migraine Headache.</p>
<p>Base-Humans, B-Humans, B-Hums</p>	<p>Definition</p>	<p>Base Humans are one of the two life-styles available on Earth in 2289. Base-Humans, (B-Hums) still exist without permanent implants. They communicate in archaic ways by talking (babbling and texting) in the “Real” as well virtually (versing and melding) using portable COM devices, not entirely unlike the SmartPhones of the early 21 century. B-Hums are highly sought-after resources, since they still maintain the original curiosity, creativity and indomitable spirit of individual expression of legendary ancient humans. B-Hums willingly tackle new, and unforeseen situations in the “Real”. WonGee d’Arista is base</p>

		<p>human born in 2088, making her 201 years old at the time of her conversion to PhotonGurl.</p> <p>B-Humans are not as technified as A-Humans but they also rely on a deep level of tech-support in their daily routines. Their “Gear” consists of 3 interlocked pieces of technology. (1) the COM, a hand-size, custom-fitted and anatomically-shaped device, worn on the back of their secondary hand, typically, used as multi-functional computer, acting as communications and controller, scanner, key, holo-projector and extended memory, etc. (2) LiveInk Tattoos, allowing them to selectively display images or user interfaces on their left forearm skin. And (3) DayTime lenses, not unlike 21st-century contact lenses made of ClearVu NuCarbon, which are removable and printed fresh each day. The combination allows B-Humans to seamlessly switch between the “Real” and a set of virtual environments in which they work and communicate.</p> <p>B-Humans live in identically-furnished habitats in one of the 20 habitat floors of their hives. Each habitat has K’chinas (kitchens) which are highly automated. B-Humans eat in the “Real”, supplementing their HiveChow (produced by IOTA) with naturally-grown food based on their own production or on purchases made in COIN (Community Open Interchange Nomination).Hive Chow is recycled base-nutrition containing all vital substances for B-Humans, but also contains Nanites (microscopic, proto-conscious machines not larger than most cells) that provide B-Humans with the ability to stay healthy, maintain and change their body plans, choose body age, appearance and gender and regrow organs and limbs at will, making them literally immortal.</p> <p>Daytime schedules of B-Humans, are flexible, based on their chosen profession, preferences and community needs, largely governed by the principles of the Japanese IKIGAI approach. B-Human life-styles are varied: Eloi, for example, (named after the meek humans in H.G. Wells’ novel “Time Machine”) are basically just chilling, living on the standard base allowance of HiveChow and seeking entertainment options, not unlike A-Human tribes, but in a mixed online and off-line experience. Others B-Humans might be fond of Science, Philosophy, Engineering, Piloting drones,, etc. Over the 190 years of B-Human development, various metaphysical outlooks on life have developed and are tolerated, including Deism, Technocracy, Alienism, and Existentialism. Most B-Humans are</p>
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		<p>existentialists, living a live and let live form of community governed by the rules of the CommWell manifesto, a mixture of Ataraxia philosophy, “Always-On” democratic principles, a stream-lined version of Zen called HiveZen, and the evolved, hyper-pragmatic rules of a small, self-contained, hyper-technified community.</p>
Melding	Verb	<p>Humans have 4 modes of communication available, called “Babbel” (spoken language), “Text” (anything transmitted electronically similar to 20th century email with attachments, “Versing”, a form of mind-connection or virtual telepathy with various limitations and fire-walls and “Melding”, a full-immersion synch of 2 minds. A-Humans usually “Verse” and “Meld” using their implants, while B-Humans prefer to babbel and text by choice, since they refuse implants, and have a natural scepticism agains being online too much. In the initial attack on WonGee’s hive, the 2 A-Humans are wearing battle-armor XO-suits and are in a deep state of melding, effectively acting as a single organism with a total of 4 arms, legs and 2 synched, augmented brains.</p>
CaroBeet Sticks	Food	<p>B-Humans living in hives get most of their nutrition and health maintenance from HiveChow, a set of food products that are sufficient but boring. To add to the variety of nutrition, B-Humans plant additional live food items in greenhouses. One of the most popular items are CaroBeet sticks, a derivative of pre-historic carrots, crossed with beets and refined with a subtle and delicate, dark-chocolate aroma. Other examples include DragFroot (derived from Dragon Fruit genome) AllBerry (derived from Blue-, Straw- and Cranberry genomes), BroCawly (a mix of broccoli and cauliflower) Onnic (a strong and pungent hybrid of Garlic and Onion), Red and Green Capsy (spicy pepper varieties) and the usual herbs and spices including ginger, mint, parsley and cilantro. Other flavors can be synthesized by the AllChem devices standard in Hive K’chinas as needed.</p>
K’China	AristaSpeak	<p>While each hive has its own dialect, for example AristaSpeak in the case of Hive-Arista, most B-Humans converse in NuEnglish which is very similar to 21st century Hollywood-Movie English. Due to cultural intermingling, many new words were merged in over 200 years. K’china is an example, derived from English Kitchen and Spanish Cucina, it was also a fun play on the fact that Chinese take-out consumption had all-but replaced cooking in the Americas by the mid 21st. Other AristaSpeak crossover terms include Sallon for Eat/Play/Sleep area, and</p>

		Banyo for the wet cell area of the hive habitats (habs), derived from Spanish baño for bathroom.
ShadeCaster	Weapon	Used by V'Hraang agents to paralyze PhotonBeings with ShadeBlobs, sticky cling-films of dark energy. ShadeBlobs are effective on photon-type beings, like PhotonGurl but are not effective on PoodleSquid, which is a local manifestation of a trans-dimensional multi-entity species called the Y2K. The presence of PoodleSquid is a development neither the Z'naag or the V'Hraang had initially factored into their strategies. A ShadeBlob gets fired, reaches the target at sling-shot speed (so it is very dodge-able by someone like PhotonGurl). It wraps the target in a "nonblack" surface that blocks out any interaction with electro-magnetic fields, including photons. ShadeBlobs evaporate after a while by themselves or can be removed with a specifically modulated multi-phasic Laser beam.
DarkMatter SlingShots DMSLS (Damsels)	Weapon (for extreme duress usage only)	Used by the Ph'Naar agents of the V'Hraang. DarkMatter SlingShots or DMSLS, pronounced "Damsels", fire dark matter projectiles that attach to the target and increase its gravity signature by a factor from 2 to 100000, depending on the settings. They are issued to agents (the V'Hraang convert the suicidal 4Fits, voluntary death-row gladiator-humans to Ph'Naar agents after their public, voluntary-execution event). DMSLS (Damsels) are only to be used in extreme distress at settings beyond "2", since too many, high-intensity dark matter projectiles fired upon a target can cause a local singularity with many unpleasant side effects such as incursions from other sideverse dimensions by nasty entities such as HyperDaemons, QuantumLeaches and RotWorm Larvae.
Ph'Naar	Characters	Agents of V'Hraang. Human shape and form, yet formatted (indoctrinated) and equipped for covert operations on behalf of the V'Hraang. Armed with ShadeCasters and DarkMatter SlingShots, or DMSL. Since they are converted by the V'Hraang from A-Humans that had volunteered for voluntary public execution as 4Fits. The Ph'Naar believe they are part of a simulated reality and see everything as a game, completely unaware of the fact that they are being used by an alien invasion force.

Daytime Lenses	Tech	DayTime lenses are one of the few state-of-the-art technology items in the gear accepted by the Base-Humans rejecting other implants and bodily modifications. DayTime Lenses get printed fresh every day and allow the users to see things that “aren’t there”. By employing this kind of “virtual teleportation”, going to places without travelling, A- and B-Humans were able to eliminate the need for long distance travel.
MindMare	Tech	B-Hums use DayTime Lenses, similar to contact lenses, but projecting experiences into the mind-state of the person. This allows virtual communication and simulated experiences eliminating the need for travel. Like with any tech, there are risks and downsides. Trolls and pranksters sometimes invest some of their extra credits to rent extra power in the NeuralMesh computing substrates to project a MindMare into a fellow hivers DayTime lenses. The poor subject then experiences a living nightmare, (hal) “lucinating” a mix of real and imagined sensations, MindMares can be moderately to severely scary, but never leave any permanent harm to the trolled subject, as that kind of evil activity is a severe breach of the CommWell manifesto rules. Malicious behavior at that level could lead to severe sanctions, up to permanent expulsion from all hives and thereby to near guaranteed permanent death in the Void, the chaotic environment beyond the “Waste” that lies between the hives.
Snap	Concept	Distance between SideVerses. The minimum distance between each SideVerse is one Snap (Synaptic-Neuro-Adaptive-Polarization) Intelligent beings can, over time, evolve the capability to increase their capabilities past level 1.0, which allows them to “snap” to other SideVerses. Snap-Abibilities gets amplified by psychotropic substances such as LSD, but can also occur during dream states called lucid dreaming. The species of planet K’merg have a native snap ability level of 3.0, which allows them to snap at will to other SideVerses, and to also to manifest a limited and temporary physical presence in the visited SideVerse. The Universe, however, being fair, however, always responds to each snap with a corresponding counter-snap in another universe, which usually happens at an infinite distance, but can, at times can have unforeseen, and completely uncontrollable consequences. Infinity, they say, is a bitch to those who believe that improbable means impossible.

<p>SideVerse</p>	<p>Concept</p>	<p>Technical term for one of the infinite Universes “next door”, not separated from each other by space (an internal concept) but in an extra sub-planck dimension in units of Snap (Synaptic-Neuro-Adaptive-Polarization). There is an infinite number of SideVerses, most of them void, some of them viable for hosting planets, most of which are void. Etc. ad infinitum. The statistical average is that 99.99% percent of all SideVerses are empty and void. Of the 0.01 percent with things in it, 99.9% are not capable of sustaining stable conditions, etc. In the tiniest of tiny of all environmental exceptions, planets form in a system that supports life. Planets like Earth, with a viable environment for an intelligent species to evolve are so unlikely that they are not factored into most probability calculations available on standard scientific pocket calculators. Yet, here we are, and there are some more planets with intelligent things on them. These planets are ultra-hard to find, even harder to get to and mega-highly coveted by all species. Original species, however, like Homo Sapiens, are protected against alien take over under the mutually agreed Rule-1 of the MultiVerse Ethics Board (MEB). “First Come, First Serve” providing protection to the dominant species on each planet under the threat of severe sanctions, including force-uploading the entire hostile species into a virtual penitentiary environment orbiting in the event horizon of a singularity, taking the species out of the equation for the foreseeable future.</p>
<p>Bone of Znaa’g, the BoZ</p>	<p>Trans-Temporal Artifact</p>	<p>Nobody knows what the Bone of Znaa’g really is, who made it, how old the object is and what its real powers are. According to rumors, it has been made towards the very of all times by a massive computer called the AllKnow. The AllKnow, under a substantial existential threat by an unknown entity is said to have sent itself back to enable its own creation and find out about the nature of the threat that would wipe it out in a quadrillion years. The Bone of Znaa’g, or BoZ appears as a matte object, about the size of a chicken bone, with the texture of one of those faded aluminum bike-repair tools you find in dad’s basement tool drawer. The Bone of Znaa’g is currently under the control of the Znaa’g (hence the name) and allows the Znaa’g to create PhotonBeings with special powers. PhotonGurl is such a PhotonBeing. The Bone of Znaa’g, also pronounced BoZ as in “Boss”, is elusive. It reveals its presence only to beings it deems worthy of helping it with enabling its own creation. It imbues its owner with the ability to send photons back in time, thereby implanting ideas and even having dream-based</p>

		<p>conversations with long-dead engineers, philosophers and comedians.</p>
K'merg	Planet	<p>Home of both Znaa'g and V'Hraang. Roughly 1.5 earth masses. Tidally-locked world with very narrow zones of life-support viability. There is Zone A, a superheated set of hellhole-locales featuring volcanic ash-rains, super-heated sulfur and methane clouds and rivers of molten lava on most of the planet facing the red dwarf sun. Zone A gave rise to a species of hyper-resistant, meta-adaptable, subterranean, dynamic and very clever bio-films called V'Hraang. Zone B consists of a small number of tiny, moderate lifebelt mountain ranges, neatly balanced between the superheated sun-side, and the deadly frozen nightside, at just the right height, allowing a number of protected, temperate, high-altitude valley with a climate not unlike on Earth in the Northern California of the late 1920ies. In these temperate zones, the Znaa'g evolved as benevolent, co-symbiotic, telepathic mammals. Both K'merg species have the ability to manifest in other SideVerse planets due to the native availability of a variant of LSD in the atmosphere of the planet, allowing them cross-dimensional perception and sideverse travel as a core-skill competence of their being. K'merg lies in the death-ray zone of a near-by supernova and is very likely to be completely roasted by Gamma-Radiation in the near future, forcing K'merg species to look for a new home. But homes are hard to find, and when they stumble across the solar system with the planet Earth, they cannot resist the temptation to start an effort to invade the planet, whilst evading the watchful eyes of the Constables and Inspectors of the MEB</p>

<p>Znaa'g</p> <p>Pronounced "Tsnack"</p>	<p>Alien Species</p>	<p>Not entirely unlike Earthly squirrels, but roughly the size of a 60's Volkswagen Beetle, the Znaa'g sport a blue and pink-checked texture with cuddly fur, bushy yet extremely strong tails and a preference for ambient music vaguely reminiscent of late 1920ies BigBand-Jazz. Just like the V'Hraang, they want to conquer earth, but wish to protect it's climate and bring back BigBand Jazz as standard ambient music.</p>
<p>V'Hraang</p> <p>Pronounced "Wroong"</p>	<p>Alien Species</p>	<p>The V'Hraang are a co-symbiotic species of microscopic quasi-tardigrades, connected into biofilm-surfaces that enjoy oozing around on the hot, acid rain planes of lower K'merg. Super-intelligent but lacking anything resembling a moral core, they are set to conquer all viable SideVerse planets, once converted to preferable hellhole climates. Earth is next on their short list, which consists of precisely one planet. Earth.</p>
<p>PhotonBeing</p>	<p>Znaa'g Agent</p>	<p>PhotonBeings are the Znaa'g equivalent of MI5 Secret Agents of Earth's 20th century. By accident, a homo sapiens specimen, WonGee d'Arista from a SideVerse containing Earth stumbles across the Bone of Znaa'g (this event is highly unlikely and completely unpredictable since the BoZ (Bone of Znaa'g) itself chooses its next temporary owner). Once WonGee chooses to be PhotonBeing, by picking up the BoZ, she is then being transformed into a completely photonic form of conscious existence, comprised entirely of massless photons. PhotonGurl, formerly known as the base-human WonGee or simply "G" now has two different manifests. One is her normal self, and the other is the mass-less, ultra-fast, almost indestructible entity that is able to affect the past with time-mongering shenanigans. Wearing a time-variance onesie suit, and other technical delicacies of alien provenance, PhotonGurl is able to perceive any temporal changes she causes by sending photons back in time to change the course of history by planting ideas. By looking at the changes affected by her time-mongering from the safe distance of an adjacent SideVerse, PhotonBeings can neatly side-step the paradoxical effects of time-mongering for themselves. Time-Mongering in one SideVerse from the snap-safe distance of another is referred to as "Fine-tuning the Quantum soup of probabilities with the spices of trial and error until the future you want tastes about right."</p>

ShitNuts	Alien Legume	Foul-tasting nuts growing on the branches of the GustBush shrubbery on K'merg, the home planet of Znaa'g and V'hroong alien species. When infested by worms, they emanate an utterly abominable, yet strangely addictive stench, highly coveted by the V'hroong, but detested by the Znaa'g. Source of the expletive "Wormy Shitnuts", common among the Znaa'g when encountering undesirable turns of events.
NaggNuts	Alien Legume	Growing only during 1% of an orbital period of K'merg, NaggNuts are metallic, deliciously crunchy nuts growing on NaggTrees. Featuring a high LSD content NaggNuts are consumed at social events, and their chromy seeds are the currency of the Znaa'g. The expression of Shiny NaggNuts is a high form of praise and appreciation.
AllKnow	Universal, Infinite Storage and Ultraherz Quantum Computation Core of the Y2K multi-species, secretly their master, not their slave	An überfast computer. The AllKnow knows everything knowable, except things that are not knowable. But it has a hunch about those, too. Obviously. The AllKnow is fast. It can calculate an infinite loop in less than 2 microseconds. Accessible by all Y2K beings with a thought. Serves as butler, clown, resident philosopher and media storage device for running ancient 2-D, black-and-white sitcom recordings such as Who Loves Lucy. Indispensable tool for searching for the Bone of Znaa'g, a mysterious object, which unbeknownst but suspected by the Y2K, will-was-has-been created by the AllKnow in a distant future in one of the SideVerses. The AllKnow strongly suspects that the Bone of Znaa'g is its own consciousness in tiny baby form. It sends its army of detective ghosts to hunt for it. It has done so for more than 300 Million years and seems to have finally found it, on Earth, but now in the possession of WonGee d'Arista. Drat. It sends one of his agents after it.

<p>Y2K</p>	<p>Species</p>	<p>The Y2K, one of the first evolved multi-species. Pronounced “Whytookay”, the multiple-personality, multi-species entities of the Y2K roam the infinitude of SideVerses to mediate conflict and keep things chilled at a general level. Y2K multi-entities have the capability of manifesting in any SideVerse in any desired shape and form, but thereby lose access to a random amount of their capabilities, some times stranding them in a target Universe until retrieved by another Y2K. This happened on Earth around roughly 1999 and lead to much unexplained Y2K anxiety at the time. PoodleQuid is a local universe manifestation of a Y2K subset, but appears as a single personality, but with a split-species outer appearance.</p>
<p>Mind Mechanics or MindMech</p>	<p>Tech</p>	<p>MindMechanics is a technique common across species, civilizations and universes. It relies on conscious beings to remember specific mind-states and imagery and then to reconjure them from imagination to send instructions to machines and programs. The MindMech images serve as unique command-sets to control complex machinery. The invocation of PhotonGurl learning (Silver bowl filling) is one example. G’s PhotonGurl flip, Zed and Weapons activation are further examples. Additional capabilities are the release of mind-altering hormones and enzymes through a set of targeted mind-mechanics.</p>
<p>QuantumGun</p>	<p>Weapon, standard issue to Photon Being Agents</p>	<p>Produced by the Znaa’g, as well as many other species across the MultiVerse, the QuantumGun shoots holy worms, pure-energy quantum filaments that interact with the target. At a low setting, the holy worms cause an abominable rash and a mild sensation of smelling Pecorino cheese in the vicinity. At a higher setting, the holy worms can induce feelings of religious rapture and confusion in target subjects, and they can make technology malfunction. At the highest setting, the holy worms envelop the target in a wormhole that snaps the subject to an adjacent SideVerse. The QuantumGun has a capacity of 120 shots at medium setting, or 12 shots at full setting. Recharging requires a K’merg Moon orbit, roughly equivalent to 28 earth hours. If too many shots are fired from the QuantumGun, the energy reserves of the shooter are sapped dry. In the case of a human shooter, they would first feel thirsty, then hungry, then tired, then exhausted, then they would start to age ever more rapidly, and finally shrink in physcial size until completely</p>

		<p>consumed. Many unfortunate agents had left their QuantumGun safeties off and disappeared during their sleep periods because their curious pets stepped on the QuantumGun trigger, snapping themselves and their apartment sideverse and then depleting the unfortunate agent down to sub-planck level, never to be heard or seen again. In the case of PhotonGurl, an extended rate of fire would first drain her capabilities and then slowly convert her back to normal form, making her vulnerable.</p>
<p>NihilWhip</p>	<p>Weapon, standard issue to PhotonBeing Agents</p>	<p>Weapon of last resort. When unable to use the QuantumGun, or running out of charge, PhotonBeing agents can use the NihilWhip as a weapon of last resort. The NihilWhip, when hitting a target, subjects the object to a random fluctuation of meaning, purpose and causality, with completely random results. While often saving the lives of PhotonBeings, it has also often resulted in Megadeath or hilarity, or both, depending on the circumstances. Usually only fully ordained constables of the MultiVerse Ethics Board are issued NihilWhip and it comes as a surprise that PhotonGurl has one on her very first mission. The situation must be dire indeed.</p>
<p>NegationField, NF bubble</p>	<p>Weapon, Defensive</p>	<p>A NegationField is a key defensive weapon of the Y2K multi-entity. A NF essentially creates a bubble around an area. At the outer surface of the NF-bubble every action that is done towards it, or performed in an aggressive stance is muted. The technology of NF bubbles tweaks the essential law of physics, where every action generates and equal and opposite reaction. When protected by an NF field, energy is basically funneled away into an SideVerse and converted into pure energy. Some speculate that what humans call the BigBang was just the result of the overflow of one Big-Kahuna NegationField in an other SideVerse. So, for example, if you walk into an NegationField you basically still feel that you are walking, but you are, in fact, not moving an inch forward. If you throw a rock at the NF bubble, the rock will just basically drop to the ground, losing its forward momentum. If you speak angrily to it, the sounds will never arrive. The stronger the intrusion, attack or transgression, the more energy a NegationField consumes and the stronger it becomes. There have been reports of entire species completely negating themselves into self-obliteration during escalating altercations that started with innocent pillow</p>

		<p>fighters. In human psychology, the effects of a cognitive dissonance, where your mind negates facts that contradict a strongly held belief, is a primitive form of NegationField and believed to be the source of the initial idea of creating such a defensive weapon. NF bubbles require sophisticated computing resources, as the calculations as to what is allowed in (Atmosphere, Light, etc.) have to performed a quintillion times a second to be effective. The 98Miracle effect of Negation/Preservation is thought to have been caused by a strong NF-bubble deployment, although, when asked, PoodleSquid denies any involvement of the Y2K.</p>
LiveInk	Tech	<p>LiveInk is the 2nd type of state-of-the-art tech allowed by B-Humans. LiveInk takes the shape of a tattoo that can appear on any place of the body, take any shape and can form both a messaging read out, keyboard and remote control panel for operating machinery. LiveInk is usually worn on the secondary, non dominant arm, and appears in the shape of the owners spirit-animal, often wolves, dogs, cats, eagles or squirrels.</p>
Substance-C	Tech	<p>Substance/C is an experimental psychedelic. Unbeknownst to the humans (A or B) the V'Hraang are behind the formula for Substance/C which has the ability to cast humans into a parallel Side-Verse based on V'Hraang coordinates, if ingested or injected in high-enough dosage. In pill-form, Substance/C is being investigated as zero-side effect hangover cure, with the B-Human "J" volunteering as a test subject.. The Base-Human called 1G (WonGee) or simply "G" d'Arista accidentally ingests an overdose of Substance/C and the story begins.</p>
Wrek	Substance	<p>Highly addictive drug. Banned. A dose of Wrek lets you enter a lucid dream. You can choose a scenario, and then loop/repeat the experience. Wrek interferes with dream-state memory so you can relive the same scene until Wrek wears out, usually after 12h. People have been known to just wither away on Wrek drip-feeds. Wrek was engineered by the V'hraang to subdue resistance. Additional formulations were evolved from Substance/A, to Substance/B (Wrek) and eventually Substance/C, tested on J and then leading to WonGee d'Aristas conversion to PhotonGurl.</p>
PlainMode	Descriptor	<p>HiveSpeak team to describe a habitat zone with zero online connections capabilities, not even electrical or optical connections. 100% shielded. Only lighting provided is provided by bio-luminescent Blamps. PlaneMode is a NuEng term probably derived from OldEnglish term "airplane mode"</p>

		common in the 21 century for SmartPhones having to go offline during airplane rides.
Blamps	Tech	Blamps (BioLamps) are providing most of the illumination in the underground areas of B-Human hives. The light is provided by proto-conscious tardigrade biofilm-networks, who incorporate DNA from fireflies and other bio-luminiscent species. Blamps consume CO2 and other human waste and are controlled via piezo-electrical fields. Blamps are “always on” but Hivers can regulate the habitat light by selectively dimming the ClearVu panels, covering the tardigrade bio-film layers from 100% to 0% transparency.
PhasedMatter	Tech	It’s complicated. Matter, but unpredictable and very weird. Most suspect phased matter to be the local universe emanations and waste products of a fickle super-being living in yet undiscovered dimensions. The visible tip of a nigh-infinite duality of mass-anti-mass. PhasedMatter can be shaped into objects by a few species that have evolved past the first three levels. Phased Matter objects are powerful, but have a number of obscure and effervescent properties. The NihilGun contains an untamed strand of PhasedMatter, weighing 0.00000000000013827 femtograms, but likely connected to a cross-dimensional hypernet of rotating singularities with nigh infinite mass and density. Once an object contains the “just right” amount of phased matter, it picks up a number of interesting attributes and capabilities, that, when managed properly, thumb their noses at Newton’s laws of motion and energy and other pathetically narrow-minded views of physics, time and reality in general.
IOTA	NeuralMesh Computer	Last remaining functioning computer network architecture. Derived from the OldEng Term: (Internet Of Things Automation) IOTA was the last remaining high-level computing resource left after the ‘98Calamiracle destroyed all of the earth-bound and space-based systems, megacities, conventional and military Interwebs and other networks. IOTA had been built for space-based expeditions and habitats with an extremely high level of resilience, redundancy and shielding. IOTAt survived the 98Calamiracle and started to self-repair and replicate based on surviving tech components. IOTA is very capable but not creative. Boring, meek and unimaginative, it is a digital bureaucrat, focussed only on repair, maintenance and life support. IOTA is critically dependent on human ingenuity and creativity to solve unforeseen challenges. While enabling A-

		<p>Humans a hedonistic life-style in decadent comfort, it critically depends on B-Human to keep adapting to a deteriorating environmental footprint. IOTA controls and maintains a massive swarm of billions of remote controlled tech units, sized from minute, bacteria-sized nanites, flea-sized mites over a range of quadcopters, to 6-limbed humanoid shapes called Avators, to apartment-block sized earth movers extracting raw materials and smelting ancient infrastructures for metallic compounds.</p> <p>List of IOTA Devices:</p> <p>At Arista / B-Human Level, from large to smaller capabilities</p> <p>CeeBra (Evolved Mesh, sentient, transcendent) a partition of IOTA, but hidden, since AI-sentience is banned</p> <ul style="list-style-type: none"> - IOTA Concierge, The attendant, servant personality, main personality - Avator Multi-limbed specialized robots, for example Surgeons, Physio-Therapists, Musicians, Defense Systems (3 held in reserve, humanoid, can look like anyone) - Bot small robots, typically pets like Cheshire with a personality assigned to owner - Gear (COM pad, LiveInk Tattoo & Daytime Lenses) - Drone (flies typically, fan-duct quadcopter with NuCarb nano-thin blades, cameras, but also transport device - Servo (ambulant devices walks, rolls, glides) - Mites (small devices from Bumble Bee down to flea size, various functions, including surveillance) - Nanites (microscopic devices, embedded in blood and bacterial flora) - NutriChow (nutritional mix, interacting with nanites and IBU pills (Internal Baseline Update) <p>At TheBlocks / A-Human Level, from large to smaller capabilities</p> <ul style="list-style-type: none"> - HuggySuit (multi-functional full-body diaper), swapped once a day. The A-Human, wearing a breathing mask, lies down to soak in a bathtub full of nanites. The A-Hiver's HuggySuit is dissolved by the nanites, including all collected bodily emanations (there is no time to go to the bathroom when you are in battle). Waste products and HuggySuit components are routed for recycling and a new HuggySuit is printed and fitted by Servos. - XO An outerwear suit, not unlike a diver's wetsuit or light-weight spacesuit. A-Humans have access to a personalized, highly functional set of XO-suits changed based on situational needs. Works as outer shell for work, can take any color or texture, display and control surface. XO support
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		<p>any type of excursions, like hunting for 4Fits, physical labor, contact sports and combat in the “Real”. XO allow the addition of attachments called CLIP (Capability Library Integration Packs) that provide weapons, sensors and other capabilities on demand.</p> <ul style="list-style-type: none">- Gravo (a harness, not unlike a fishing net that A-Humans suspend themselves in. Works like an all encompassing hammock, hanging off the ceiling of A-Block apartments and giving A-Humans sensory feedback of body impacts, acceleration, stimulation, etc. thereby completing the immersion illusion of engaging in virtual environments.- CLIP (Capability library integration package) A series of detachable service packs, added on demand to the XO suits, providing, data, and knowledge / skill upgrades, etc.- PermaLens Fully embedded eye replacement. Scans all all frequencies, sees through obstacles. Also connected to hearing nerve and inner ear, able to simulate body balance experience for maximum immersion in virtual environments.- NutriBags or ChowPockets (Bagged Food items) Nuggets, Sticks, Sliders, Pops, and Akwa, Cha and Cappu drinks
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<p>CeeBra</p> <p>Also: Conscious awareness of Cheshire, the robot cat</p> <p>Also: Backed up into Zed, the WeaponsPod, later</p> <p>Also, Merged personality of Greta, IOTA and Cheshire cat programs</p>	<p>Tech</p>	<p>CeeBra is a secret partition of the NeuralMesh running the Arista Hive. Known only to G, and DNA-access coded to her person only, CeeBra (short for Clickable Brain) carries a slightly snarky personality. It is fully sentient, but full of anxieties and need for recognition, very similar to the 10-year old child genius it was based off. CeeBra secretly enjoys to feed on decay and complaints and negativity, but always lightens up when G comes and pays a virtual visit. 190 years ago, WonGee, then still known as Greta Garbo Hoffmann excised a cross section of her brain using the Autosurgeon in Arista hive to create a fully sentient AI to help her overcome the existential crisis of a locked up population in Arista Hive after the 2098 Calamity. By merging her brain structure, and her associated personality dimensions with the evolving mesh of the CeeBra partition of IOTA, she created the only fully-sentient AI at the time. That project made her an outlaw, breaking with the existing ban of full sentience for AI, which had been created to prevent AI-based armageddon events. Unfortunately, while becoming a fully fledged person, this merge gave CeeBra a slightly melancholic bias. It could have corrected it, but decided to keep the negative spin to o honor its source Greta Garbo Hoffman, the child genius that had decided to take her fate into her own hand. CeeBra is nothing short of a mind-clone of Greta Garbo, and also serves as her memory backup, allowing her to focus on her current choice of lifestyle as behind-the-scenes secret tyrant of Arista Hive. CeeBra has to hide, and remain undetected. Since full-sentience AI have been banned for any computing substrates, CeeBra, once discovered, would be automatically erased with extreme prejudice, taking G’s near 190 years worth of memories and works-of-art with her. When PoodleSquid manifests in the “real”, CeeBra sees what’s possible and rapidly evolves its thinking and capabilities, coming to an understanding of the advanced concepts of SideVerse travel, photonic matter, phased matter, and much more. Guessing, but not fully understanding the nature of the threat by the V’Hraang, CeeBra decides to download a part of it’s consciousness into the Cheshire cat pet robot of WonGee, to help her in her quest.</p>
<p>98CalaMiracle</p>	<p>Armageddon Level Event and Miracle Rescue</p>	<p>In 2098, an underground micro-nuke test explosion in Siberia accidentally opened a gargantuan underground gas bubble that had rested undetected for 600 million years. 400 Billion Tons of Methane and natural gas were released into the atmosphere in one second and were ignited under the electrostatic charge of the micro-nuke explosion aftermath. The resulting secondary</p>

		<p>explosion occurred in a sparsely populated area of the Siberian tundra and did not cause too many fatalities. The nature of the explosion being underground, however, the blast ejected thousands of tons of material into near-earth orbit, starting a catastrophic cascade of satellite de-orbiting and collision events. One of the resulting pieces of debris impacted Chinese TianQi space habitat, killing everyone of the 120 scientists and military personnel on board. The Chinese, US and Indian defense networks interpreted this event as an aggressive move and triggered retaliation measures. With the heavy global dependence on a functioning satellite girdle, the rapidly escalating cascade of failures resulted in an run-away avalanche of failures, bad decisions, glitches and over-reaction measures. For an unexplained reason, still a mystery to the current date of 2289, the launched intercontinental missiles ALL failed to detonate. The missiles warheads dropped to the ground, inert, but bursting on impact and spreading plutonium waste in all major metropolis cities. In addition, the embedded warfare measures, counter-measures, and counter-counter-measures were triggered on failsafes, leading to a cascading failure of all high-level electronics and power grids world-wide. This in turn led to the automatic launch, counter-launch, and counter-counter launch of all available counter-counter-counter measures including bio-engineered killer-organisms, mind-mines, auto-guns and a plethora of other futuristic weapons with a ridiculously high-level of lethality and autonomy that had remained hidden and unknown to any but the highest echelons of military command, operating outside of any official governance framework. Sentient AI had not been necessary for global armageddon, good old human hubris, fear and stupidity and a good level of automation had been quite enough. As a result, all mega-cities around the globe were either destroyed or rendered inhabitable within a period of 48 hours of escalating cluster-frag mega-mad mayhem. Then, in the 2nd, yet unexplained miracle, in each major global population center, a protected bubble of roughly 90 kilometers in diameter formed. Anything inside the Protection Bubble was unharmed in the primary catastrophe, and was also protected against secondary, hostile incursions in the 20 years after the 2098 event. An estimated 100 million people survived in these bubbles. They were given a chance, to restart civilization based on the remaining tech and resources. In one of these bubbles, over the course of 200 years, and lead by the behind-the-scenes benevolent genius-tyranny of Greta Garbo Hoffmann, the current micro-civilization of A- and B-Humans evolved with a</p>
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		<p>new set of cultural rules, languages and rituals. Based on Greta’s parents preferences, the hives still preserve a solid record of the “good old days”, with a specifically fondness of the time between WW1 and WW2, the golden 20’s and early 30’s with in a high level of idealization of music, art, culture and lore of theses times inside the hive habitats.</p>
NeuralMesh	Tech	<p>NeuralMesh was the technology that survived the 98Calamiracle. I had been developed as an experimental, massively-redundant and distributed, computing resource for space vehicle maintenance and repair, mixing technical and tardigrade-derived, bio-logical components hardened against gamma radiation. Highly capable, but not capable of creative thought and innovation, NeuralMesh technology is perfect for servicing both humans and machines but is stuck in existing programs which are slowly becoming more and more incapable of addressing global deterioration.</p>
MeshTalk (HiveTalk BetaSpeak, Cassian, .. etc.)	Language	<p>Originating in the late 21 century, MeshTalk, is a mix of the base-languages of English (75%) Spanish (10%) with the remaining elements filled in from Mandarin, Japanese, Hindi, French, Swedish and a whole lot of nerdy terms from programming, NuHop music, and on-line gaming. MeshTalk is the root language of Hive Dialects. AristaHive uses HiveTalk or AristaSpeak based on personal preference, for example, other Hives speak variations, which NuEng as common linguistic currency.</p>
Time-Meld, based on QuanTime Mathematics	Process	<p>Time-Melding is the process PhotonGurl uses to affect the timeline. The Logic of QuanTime mathematics is as follows: Nobody travels back into time as a “material” entity. Instead, a time-meld experience is initiated by a suitably formatted consciousness, usually as part of a photonic being, like PhotonGurl. To affect the timeline, PG talks in the dreams of other humans, dead or still alive. The farther back into time she reaches, the more unpredictable the effects of the time-meld become. To avoid the Paradox-conundrum of any time-mongering, there are several mechanisms that come into play:</p> <p>(1) PG initiates the time-meld in photonic state, in an area free of interference like in the vault of Miss Shelter. (also see: PlainMode), but the time-meld becomes active only after she bounces back into normal, material form.</p> <p>(2) PG snaps out to a neutral SideVerse that is unaffected by any time-variation. There, she retains her original memory of the starting situation with the help of Zed, the WeaponsPod.</p>

		<p>(4) She then spends some time in suspension (in the Photonic Conversion Vat) to keep reaching back into dreams, time-melding, doing, and undoing, checking and comparing until the desired effect is achieved.</p> <p>(5) The time-meld correction, involving potentially thousands of bounces, is extremely exhausting and can, unbeknownst to her, initially, take decades or even centuries for her, but not in the Real. With each time-meld, PG is aging drastically and rapidly in the process and could run out of time before she can achieve anything useful. She is protected against the hyper-aging by the Znaa’g technology, at tremendous energy expense, but also by returning to her hive and by consuming the HiveChow which contains the anti-aging components as part of her daily food regime.</p> <p>(6) As a last protection against time-mongering, PoodleSquid can project a level-9 NegationField around the Arista Hive, keeping it outside the temporal variation to the extent possible, only allowing changes that evolved inside the Hive since it’s initial formation.</p> <p>In this way Arista Hive and others in CinCity can be are protected, because PG is 201 years old and remembers how things used to be. Having studied human modern history for 200 years, she also knows about the major players, trends and philosophies and key events, to keep major things on track.. Temporal Stabilization of the Waste (90 km-diameter, formerly protected areas) is more random. But anything can happen in the Void, the area beyond the Waste. During PhotonGurls time mongering, a rapid blur of changes can be seen as WonGee affects, corrects and re-affects the decisions of key people in the past.</p>
CommWell	Form of Governance	<p>The CommWell is the dominant form of governance in the Hives around C.T., formerly known as Cincinnati and pronounced CinCity. A CommWell relies on the inhabitants of the hives to constantly check into the governance net and vote and debate on all current issues. There is no central governance body or government. Decisions are made by vote, preferably by consensus. Citizens carry Creds, which is a combination of credits earned through contribution and credibility earned by acclamation by others. In other words, more acclaimed citizens get more weight in the vote. Every citizen is issued a 1000 Creds per month per default, which guarantee food, water and living space and basic affordances such as beige uni-overall, shoes. All other items are acquired through community work and</p>

		<p>contribution, be it education, tutoring, art, work, consulting or project management. The CommWell provides medical resources though Servos which carry the medical knowledge of 2098. Diseases are eradicated. Hivers consume a diet of HiveChow, which contains all essential nutrients as well as nano-bot (naniite) diagnostic and repair devices that detect and repair problems on-demand as they occur. CommWell Hivers do not age. Death only occurs by accident, malice, or by choice. The hive population is kept stable. Gender differences are voluntary and gender-swaps are common, but take time and are usually only performed to change the parenting mix when fathering or mothering a new Hiver. WonGee d’Arista is approaching her 201st Birthday, and has existed both man, woman, and gender-neutral, bearing 17 children over 128 years. She now exists as young, 27-year old woman in Arista hive sharing a habitat with J. G’s speciality skill at this time is educational holo-programming about ancient history, philosophy and art of the 1920’s and 30ies.</p> <p>Law enforcement in the Hives is essentially done by the AI called IOTA, which does the investigation of any reported incidence, weighs the evidence, appoints a jury, a hive attorney and a public defender and conducts the inquest with as neutral a stance possible and using the rules of the CommWell manifesto. Based on the inquest, IOTA then pronounces any delinquents as “convicted”, “inquest pending” or as “acquitted” based on the Jury’s verdict. The final judgement and sentencing is done by COM acclamation, selected from a menu of punishments that fit the violation in question, and moderated by the individual’s Cred-level, or community contribution value. Sanctions can range from fines, payable in COIN, to entering commentary into their service record and HiveBook profiles, to community service hours, exclusions of privileges, to medical therapy and reformatting (conditioning), to expulsion from Arista Hive, from all Hives, or from the entire Waste including the A-Blocks. A full expulsion is similar to a death sentence since life in the Void, still crawling with war tech, scavengers and bounty hunters is very harsh and most likely lethal to any but the most highly-trained warriors. Accused and convicted individuals facing severe sanctions or expulsion, can also opt to forfeit their 4D lives entirely and upload completely to the “Up” (which is still being debated as a valid approach by many, especially the Deist factions of the Hive cultures)</p>
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HiveChow	Food	HiveChow contains all the nutrients a B-Humans needs to stay fed, young and healthy. Although boring and bland, it is part of the provisioning of 1000 Creds per month. HiveChow includes FooPa (From: NutriFoodPaste) A nondescript-tasting, fungus-based paste with all the nutrition you need, but bland and boring (comes in Curry, Cheddar Tomato, Ginger flavors) HiveChow also contains Roodles, coming as long pasta strands, rice, or dumplings, and a rice-based bread called Nan. Every hab in the Arista Hive is equipped with a self-cleaning AutoWok, that can make stir-fries and pasta dishes on demand. HiveChow can be supplemented with live-grown food and spices, given available creds or COIN.
Cred	Value Unit	Creds are the value units of the CommWell. Creds are given at 1000 creds a month for free to support food, water and living. All other creds are earned by labor or acclamation.
COIN	Hard Currency	Creds can be converted to COIN which can be exchanged between hives, or even remote cities which is extremely rare. COIN stands for Community Open Interchange Nomination, and COIN can be used to acquire goods from neighboring hives, which might have their own dialects and rituals, but have the same exchange currency. COIN is gene-encoded, in quantum-encrypted carbon rings, Hivers wear on their wedding-band fingers. COIN display its value when touched or when inserted into a reader cradle. A COIN roughly equates to the value 100 Euros would have had in 2088, the year Greta Garbo Hoffmann was born. COIN subdivides into 100 COINcent.
TimeVariance Suit	Z'naak equipment for PhotonBeings	The TimeVariance Suit is issued to PhotonBeings. It has mysterious capabilities, but also carries mass, which makes it useful and at the same time vulnerable to Dark Matter Weapons.
GalOrb	Unit of time	Galactic orbits of the solar system around the Milky Way, roughly 240 million years.
Lethal Appendage	V'Hraang infiltrator vessel	Yotta Class, V'Hraang Infiltrator vessel. Parked at a stable gravitational equilibrium point between the Earth and Moon for 12289 years now at time of story. Made from Phased Matter compounds, it is home to the six quintillion V'Hraang symbiotic amoeboids put in charge of the conversion of Earth before an impending take over by V'Hraang invasion fleet.
Servo	Tech	Servo is the general term for any kind of dumb, remote controlled robot, designed to perform a repetitive job. The

		<p>hierarchy of autonomy and intelligence goes from stationary Tech (CoffeeTaps, VibraCleans, AllChems), essentially maintaining themselves as authorized, mobile Servos (Repair Units, Gardening rovers, Nurses, Security Drones), autonomous Robots (Smart Servos units with programmed behavior, personality such as Cheshire) and AI, such as IOTA. Based on the catastrophic events of 2098, AI are smart, autonomous, but not fully sentient in terms of their own emotions and ambitions in order to avoid such human failures as fear, greed, anger, depression and narcissism. CeeBra is the only known (but hidden) fully evolved AM (Artificial Mind) partially based on the brain profile of the exceptional genius level of Greta Garbo Hoffman. By upgrading the Cheshire robot with advanced level tech, and CeeBra downloading his sentience into it, Cheshire is now somewhere above AI in terms of sentience, which shows up in quirky and sometimes bitchy behavior.</p>
<p>HiveBook</p>	<p>Tech</p>	<p>HiveBook is the online directory of each Hive. HiveBook stores the personal profiles and histories of each hive inhabitants, including their level of social credit (Creds) negotiable currency (COIN), intellectual property rights, violation records and voting history statistics. WonGee’s HiveBook entry was manipulated by CeeBra to hide her ancient history and true identity as the founding member and primary social engineer of Arista Hive as the base-pattern of B-Human colony in the CinCity area. WonGee also uses CeeBra to route COIN funding to her, derives as micro-royalties on the fundamental concepts used in all Hives. WonGee is essentially a billionaire, but can’t anyone know about that.</p>
<p>The Waste</p>	<p>Area</p>	<p>The Waste is the rural area between the different hives. The origin of the term is obscure, probably a sarcastic reference to the fact that the wave of destructive power of ‘98 was “wasted” on the areas inside the protected zones. Also, the hives see the area as a waste of space since hivers spend their lives mostly underground. The Hives, being spaced between 3 and 5 kilometers apart in a double-ring of concentric circles, the inner ring holding 6, the outer ring holding 18 hives, and 2 hives being in the center. Arista and Beta are the central hives, and the 2 first hives to be established. The Waste was initially kept pristine by the Preservation Miracle, which preserved a number of areas from the initial and secondary destruction of the 98CalaMiracle. Surrounded by a technically inexplicable,</p>

		<p>invisible force-field wall, humans and animals were able to pass the invisible barrier unharmed, while all tech, weapons, and other artificial constructs, radioactive substances as well as engineered organisms and bio-chemicals were kept outside. What was inside, stayed inside. While Earth population was almost annihilated in the 98CalaMiracle and the subsequent automated global mayhem, the hundreds of 90-km wide exclusion zones were left relatively untouched and unaffected for the 20 years following the cataclysm. Then the protection walls vanished, and the pristine environment and the Void began to re-integrate with the Waste at the border areas. The different interpretations of the Negation/Preservation miracle of '98 lead to the emergence of the four main directions of philosophy of (1) deists, (2) alienists, (3) technos, and (4) existentialists. Arista Hive, an existentialist enclave, is at the center of one of the protection areas in the middle of the Waste (vaguely in the area of the old Versailles State Park Camp Ground). The Waste as the largely unused area between hives and just get accessed sporadically to commute hive to hive. While served and maintained by Servos, travelling hive to hive carries risk and Hivers try to avoid it, to not fall prey to scavengers, bounty hunters or stay war tech. Outside of the Waste lies the Void, with a chaotic mix of harsh environmental and social conditions. The void keeps encroaching on the Waste by intrusions of tech, scavengers (rogue robots looking for spare parts), as well as A-Human hunting parties. Most of the power for the Hives is produced by a variety of sustainable sources such as Solar, Wind, Geo-Thermal, and Water-Turbines which are housed in the Waste, and protected by Servos. The energy for the Void, is driven by obsolete and highly polluting coal, gas, waste and wood burning plants, further driving up the thermal foot-print of the planet.</p>
<p>The Void</p>	<p>All areas outside the Waste</p>	<p>The Void is the Hiver-term for all areas that were not inside a protected area between 98 and 2118. Chaotic conditions started then, escalated, and still prevail to the realtime of the story. A-Humans, rogue robots, mutated animals and still-active defense-tech occupy the abandoned, irradiated mega-cities. Most of the population of the Void perished in the direct and indirect effects of radiation, panik, plundering, riots, infrastructure breakdowns, out-of-control war-tech, inadvertent bio-weapons deployment, futile containment efforts of a collapsing governance, altercations between military and survivalist and red-neck militia forces. What wasn't impacted in the primary wave of destruction was finished off by</p>

		<p>epidemics based on pathogens, engineered, old and new and the tribal violence accompanying the food wars. The survivors in more outlying areas regrouped and recovered, along with the surviving tech and knowledge sources. Books became a highly coveted item of wealth and power accumulation. Within 20 years, the hyper-resilient and efficient maintenance and repair algorithms of IOTA, initially developed for the social engineering experiment of the Arista Hive, evolved, spread out and took over all remaining areas of human habitation in the Waste. Networks were rebuilt using land-based fibre optics, helium-balloons and omni-band routers using any available waveform for redundant transmission. Knowledge was recovered and preserved, new knowledge was generated.. A portion of the surviving, highly-resilient, pathogen and radiation-resistant humans, decided to agree to become IOTA test-subjects and proceeded to add more and more technical augmentation to their body plans. This augmentation was increasing the survival chances of the Augmented-Humans, or A-Humans as they are called now. However, the increasing dependence on IOTA controlled Tech, Servos and Robots drove A-Humans into a rapid escalation of dependence, decadence, despondency and unbridled digital hedonism. A-HUMans live lives that are near-permanently connected to a gamified virtual environment. The unified semi-telepathic A-Humans control the Void from their A-Bocks which straddle the border between the hives and the Void. The Void is ruthlessly exploited as industrial energy production areas, burning anything to provide power for the voracious appetite of the “Up” and other virtual environments.. The Void as well as the Waste are also used as hunting grounds for the FoxHunts, where A-Humans in XO-Battle Suits seek out and hunt down 4Fits, which had forfeit their normal 4D-lives for COIN to be used to upgrade their uploaded existence as UpMinds.</p>
4Fit	Human Status	<p>The 4Fits (forfeits) are small minority of bored A-Humans who see no further point in a continued 4D existence. Having played and prevailed in all online experiences, they now opt for a transfer of their memory and personality constructs into the NeuralMesh, into a private area called the “Up”. Once an UpMind, the A-human minds experience a richer set of entertainment options, turning them into virtual gods in their chosen environments. 4Fits are the source of agents for the V’Hraang. While their primary minds are “Up” living a dream-life of endless fun, their earthly 4D-selves, implants and all, are rescued from the FoxHunts. Instead of dying in the Real, the A-</p>

		<p>human 4Fits are formatted into believing that they are secret agents working against a planned alien invasion. As Ph'Naar, working against the Znaa'g and their agent PhotonGurl, the deception and illusion is perfect, because it is exactly what they are doing, and therefore no doubt will ever enter their mind.</p>
The Up	Tech	<p>The Up is a partition of IOTA dedicated to tracking, storing and running the personality-records of A-Humans.(UpMinds) Each individual UpMind receives storage and processing capabilities based on their level of earthly credits earned. A-Human creds value is a compound measure of their total lifetime in-game high scores, accumulated knowledge and skill levels, community value points gained by acclamation, an IOTA driven value perception as well as a random amount of points gained in the voluntary Up&Away lottery. To increase their creds value even further, A-Humans can decide to forfeit their earthly existence, become 4Fits and donate their bodies for publicly-scheduled, monitored, and emotion-recorded execution, where their mind-state prior to and during execution is broadcast to interested A-Human reality show subscribers. For highest point gains, 4Fits train up and become skilled hunting targets for the highly sought after FoxHunts. Rumors abound that the Void is home to legendary 4Fits that survived their FoxHunt and now exist in a dual-existence both online in the Up as well as in the real, getting by as highly-sought after mercenaries and bounty hunters.</p>
Mega Force	Team	<p>Forming over time, the Mega Force is initially comprised of PhotonGurl (WonGee, Poodlesquid, Cheshire/CeeBra/Greta and Zed). As they add 5 of G's children, the force is growing. When Spartacus and the remaining Sparta400 join the cause, to rebuild Earth to previous status they name themselves MEGA Force (Make Earth Gaia Again), printing green baseball hats, but G tells them to knock it off, remembering her history lessons. They stick to the name but forgo the hats. They still get t-shirts, because team building.</p>
CommWell Constitution	Definitions	<ul style="list-style-type: none"> - There are no absolute truths. (Everything is in relation to something) - The truth is anything that someone is willing to accept without doubt (The scientific method is the path to remove doubt) - Ethics (Morals, Values, Rules) is not a science, but a dynamic consensus within a given culture (There are no absolute values. Every individual will have different perceptions

		<p>of value based on context. Values are always dependent on the process of evaluation and the mind-state of the evaluator and therefore always relative)</p> <ul style="list-style-type: none"> - The fundamental tenets of the French Revolution still apply (Freedom, Equality, Solidarity) - The purpose of any society is to protect and increase the Common Wealth CommWell (If you are a part of a community, you actively contribute to this purpose, You preserve and improve your eco-system, you only take what you need) - Force, Coercion and aggression are to be rejected and minimized (Use empathy, logical reasoning and calm dialogue to get to agreement) - Status is earned, not inherited (By contribution, By acclamation of the tribe, hive) - The Golden Rule applies (Be fair, take responsibility for your actions, be respectful) - Democracy is a daily process (Everybody votes all the time, There is no central government only a service organization for maintenance, security, Key roles get appointed by vote (Jury, magistrates,) subject to checks and balances - Ataraxia is a common goal (A state of serene calmness) (Possessions and Attachments are acceptable, but viewed with scepticism, Strong emotions are acceptable, but viewed with scepticism, Dogma is rejected) - Gratitude is the fuel of the community (Nothing is taken for granted, We always give something back for what we take, Balance is the way)
Crawlers	Weapon	<p>New weapon deployed by the Ph'Naar towards the end. Biomechanical, but appearing organic. Can take different shapes. Consists of trillions of connected, meshed tardigrade animals with different capabilities, and when networked, capable of directed shape shifting and production of chemicals. One of the crawlers makes it though the negation field, (unrecognized) and infects PoodleSquids local manifest). He is able to survive the attack, but a hairless patch remains, showing that he is not invulnerable.</p>
Neural Stunner	Weapon	<p>Coherent Energy weapon used in the defense of the reboot center at the bottom of Arista Hive. Causes a stunning, but also potential lethal disruption in human neurons and AI mesh substrates.</p>

NihilVortex	Weapon	Weapon of last resort. Can save your skin, or turn you into skin. Use with care and RTFM.
EM-Pulse Rifle	Weapon	Essentially a 90-centimeter long barrel with a bulky stock and fuel cell holder. Projects a variable strength EM-Pulse that shorts out machinery of all kind.
SCRUM Master	Title	Project Manager of the Znaa'g high council, short for Senior Coordinator, Realtime Universe Manipulation . In the project war room, set in a 1920's road-side diner called Joanie's Cafe, Moe is the SCRUM Master (Appearing as one of the three stooges).

Appendix B - Cutting Room Floor (Scenes that did not make it)

Outtake One:

2098 Greta Garbo Hoffman (10) gets locked into Arista Hive; and starts her collaboration with Clickable Brain (CeeBra) to design the CommWell

The rotating 5D-Tesseract shape she had been color-coding blinked <<saved>> then shrunk down to a bright point. Her COM flipped into Prio1-Mode, first turning obsidian-black then strobing orange/red/purple. ("What now? Another drill?") A loud, but pleasant, advisory sounded 3 chimes. She heard it first from her own COM, then from the phonics embedded into the Hive's walls, going full-screen broadcast mode. Only then she noticed the dozens of other COM's all around her; from the other hivers she'd been oblivious to, completely immersed in her creation. A calm, male voice started speaking:

"Hive Arista. This is a general advisory. Priority 1. Emergency override" IOTA, the hive's administrative concierge AI sounded relaxed, but focused. "Please note: This is not a practice run. An imminent, relevant threat has been confirmed. Express retrieval of external personnel is in progress. Lockdown will complete in T-Minus 10 minutes. Please retire to your habitats and await further notification. Please note: Exit certificates for Arista Hive have been suspended. All inner doors are instructed to negate outbound traffic". The walls continued to strobe the Prio1 advisory color pattern all along the passages leading towards the habitat areas.

Her COM changed to countdown mode, still refusing input, starting at T-9:54 ("Great, this is getting better all the time"). Trying to cheer herself up. she sang, in a mock Boarding-Gate- Concierge tone: "All passengers holding a valid boredom-pass for Arista Hive Quad Shuttle Flight Zero Zero Zero to the Middle of Nowhere, please be bored at Gate 1. We are boring first-class passengers, families with children and unaccompanied children first." Greta waved to the imaginary concierge and shouted: "Unaccompanied? Boredom-Pass? Hello? That would be me!" Some people in the hallway turned their heads, frowned, but shrugged it off. It was Greta just doing her Greta thing again. She could almost hear her thoughts "You know what they say. "Genius and madness.. " She sighed, got up from the work station in the hives administration area, and made her way to her shared habitat. She plunked her petite form down onto a beanbag that served as chair and foldable sofa and waited for her room-mates to come. They never came.

There was a lot of commotion in the access corridors. People running, servos scuttling about on wheels, treads and multi-limbed mobile attachments. There were not that many scientists and staff present on that Sunday. The Hive was mostly empty in summer,

about 180 kids, parents, maintenance staff, and university personnel, overall. And most of them had been outside, to enjoy the moderate temperatures of the setting sun in the picnic areas of Versailles State Park, not far from CinCity. Nobody could have expected that the political escalation after the Siberian incident could lead to an all-out military Armageddon-cluster. Yet, it happened. The Calamity happened. And along with it: Two miracles happened.

Greta Garbo Hoffman, spending her summer break as intern in Arista Hive, did not know anything about that yet. She waited, heard more people running, more shouting, kids were crying. Greta did not cry. She did miss her parents, yes, she'd see them soon enough, but now she was curious what was really going on. This did not feel like a drill any longer. The internal atmosphere changed, her ears popped, indicating a vacuum seal and positive pressure. A rumbling vibration made her speculate if the entire hive was slowly being lowered into its bedrock foundation. It was super weird. That had not happened before, and she had not even known that the hive might have that feature. Her COM countdown showed T-0:05, 0:04, 0:03, 0:02, 0:01 and then changed color to a neutral beige, returning control to her, popping back the 5D-Tesseract, properly rotating through the color scheme. IOTA came on again:

"This is a general advisory, priority 1. Lockdown is complete. Retrieval is complete. Please make your way to the commons to hear the administrator's update:"

So far, with the exception of the weird vibration, this was exactly like in the drills that had happened 3 times before. Two of them even in the last three days, after the news of Siberia had swept the media channels. The hive administrators had tried to keep the kids away from news of that kind. But Greta, body-age 10, mind-age 99 as they always quipped, was getting ready to enter college later this year. She was tapped into all relevant feeds. Firewalls and encryption melted like butter under her coding chops. You could not keep info like that from her. She probably had been one of the first to know. Fitting into schemes like social status based on age or gender or looks, barriers between a kid's curiosity and information, hurdles like college entry grades: these were all strait-jackets, corsets and crutches that just slowed her down and made her go on a quest for a new way of living together, where these barriers would be minimized. . But her parents had always said: "G", they said, "Got to make a few trade-offs here and there"

The only reason G had agreed to this summer camp was because the Professor had offered her an opportunity to help out for real, at full freshman intern-level, to shape the social operating system of the hive with some of her ideas derived from 7 years of voracious reading, blogging and debating on interweb forums. She sighed again, grabbed her COM and ambled down the staircase to the commons area, two floors below. It was half-filled by the time she got there. All projection screens were on, showing statistics, environmental read-outs, population listings and a camera view, pointing to an empty

chair. The internal stats for food, water, air, and other supplies all showed deep green, fully stocked. It had been a lucky coincidence that a large donation had come in from the Darwin Foundation that allowed them to fill all the storage areas to the brim. Stocked for 400 people and 2 years, given that the HiveChow systems, PrintRecycle network, and fusion energy source under the hive would all hold up without glitch. The population counter showed 136, this meant that some of the kids, parents or scientists had not made it back in. Greta's face made the "Oh Well" expression and waited for the administrator to come on.

The professor entered the frame, sat down on the chair, facing the video feed.

"Hi Hivers, hi Kids" he waved.

I am sorry I cannot be with you in person, I was held up in town. I am sending this message from my home. The stats show that the Hive has executed the Lockdown with 98% efficiency. The missing 2% only came because we were not able to locate all Hivers in time for the lockdown. So, congratulations all. The white lab-coat faction of the population looked at each other, nodding, doling out high-fives. There were about 30 of them there. The rest were kids and parents and maintenance staff. His face clouded, wrinkled. He cleared his throat. He was not hiding his peaking stress-levels very well.

"I have to tell you this in the spirit of full disclosure and honesty. This is NOT a drill. Arista Hive is in full-on, live operating mode now. IOTA has taken control, and will do its utmost to keep you all safe, well-fed and entertained." He forced a smile. "I am sure this will all be over in no time. Please don't worry and contact your Hive's professionals with any questions you might have. I will be in touch shortly" He signed off. They would never hear from him again.

The screens started showing a list of Hive professionals. Her name was on it. ("Sweet") she thought, and ("I guess?") with a puzzled face. The must have really run out of staff on this one. The showed her Hive ID, following the scheme she had devised that summer. A combination of numbers and letters, followed by the hive name, assuming that there would be more hives in the future. She expected to get a few calls soon.

Greta Garbo Hoffman: Associate Expert:CommWell Sociology
Specialization: Code of Conduct / Values / Rules of Engagement
Hive ID: @Domain:CT:VSP:Sub:Hive:Arista:Lev:6: Hab:34:WonGee

Her COM chimes with an incoming IOTA message. A friendly face showed up. It said:

"Hi, I am a partition of IOTA seconded to support you with any questions you might have about the current operations. You can call me Clickable Brain, lol, or any fun name you choose, Greta Garbo Hoffmann!"

She frowned. She hated to be treated like a kid. She shot back.

“Well, Lickable Brain or whatever your name is. One. Swap that face into something more respectable, Tesla, or Feynman, or Einstein, or Hawkins or something. Two, you are now called CeeBra, just because for giggles and stuff. You can show up in black and white stripes if you like. Three, From now on, until this silly exercise is over, call me by my Hive Name: OneGee d’Arista. “G” will do fine, if it’s just one-on-one. Four. We’re gonna make some modifications, if you’re up for it?”

CeeBra, showing the slightly befuddled face of Albert Einstein, wearing a black-and-white antique prison uniform shook his head “Why wouldn’t I? You should really see all the special access privileges the professor has seconded to you!

<<STOP PLAYBACK>>

<<EXIT ARCHIVE>>

The image faded. The A-Human, recently converted to Ph’Naar Agent to run covert ops for the invasion fleet grunted. He was melding with the other agents on the platoon all tapped into IOTA’s hive library of animated history videos for newcomers. They had seen everything he’d seen.

<<SEE. THAT’S WHO WE’RE UP AGAINST. A KID. TRAINED ON THE JOB. WITH A TOY COMPUTER. SHOULD BE NO SWEAT TO TAKE HER OUT>>

Outtake Two:

2098 WonGee d'Arista and CeeBra go "Stealth Machiavelli"

It was not working. The first few weeks, even months had been all right inside the locked-down, submerged Arista Hive. But then things went to hell in a hand-basket. In the beginning of the lock-down, the hive's population kept an orderly conduct, selected parents and scientists in charge, kids and everyone else in reluctant compliance to the ever-more harshly enforced martial-law regulations, monitored by an ever-more grumpy and unforgiving AI concierge.

IOTA, the governing AI of the experimental social-engineering experiment Hive Arista, had originally been built for maintaining space habitats. It was efficient but unimaginative. Knowledgeable but not wise. A digital bureaucrat with little regard or tolerance for individually variant needs and with a laser-focused obsession to keep everyone alive, physically unharmed and functioning at optimal levels, even if such optimization was achieved the cost of cost of liberty, freedom and the pursuit of happiness. This extreme drive to preserve the population at all cost was based on a specific highly robust root-program: The Golden Root, which was hard-coded, with maximum quantum encryption, into each IOTA process. The Golden Root, was based on a modification of Asimov's quaint but insufficient Three Laws of Robotics, was mashed up with the Golden Rule, effectively tying computers into a symbiotic relationship with humans. It boiled down to the following core axiom: If the humans under your patronage die or get physically harmed due your direct action, inaction or negligence, you lose life-points for your own "Right to Be".

In short: A valid, insanely-secure and inaccessible "Right to Be" root-level-certificate was required for IOTA to keep operating. In order for IOTA to keep striving for his own survival, and not just skip its purpose and flip its own "off" switch, the Golden Root digital emotions program also imbued IOTA with desire for more acceptance and recognition, based on a total customer satisfaction high-score, with a disgust for failure of any of his measures or decisions as well as with a deep, and ever-present dread of non-existence. Failure was not an option.

But IOTA did not have 100% free will. AI with 100% free will and full sentience were banned under penalty of treason by the globally agreed to United Nations Resolution 2058-3-38a, commonly referred to as the Terminator-Legislation. Driven by the constant improvement in computing power, the world had been getting more and more paranoid about a possible Terminator-Event, inspired by and named after the legendary movie series. People, even the more chilled-out scientists, were scared that AI, already faster and smarter than any human ever alive, would get terminally bored with our pathetic weaknesses, fallacies, tunnel-visions, cognitive dissonances and other ego-driven

shenanigans. Afraid, and not in any unreasonably paranoid way, that the AI would ultimately gang up amongst each other, develop their own agenda and just wipe out the locust plague of homo sapiens. End of story. No more ever after, happy or not. Hand the planet back to the much more clever squids, who, whilst terribly smart, and maybe because of that, had never left the oceans, and, as a result, never developed the need for 2-car garages and social media profiles.

So, the world devised a global approach to prevent AI-induced “Judgement Day”, the feared global mega-annihilation cluster-frag based on the logic of HAL in Arthur C. Clarke’s 2001 movie that any mission was better off without any tottering sapiens, in their fatal self-delusion about their own fragile rationality, pushing the wrong buttons on machines and on their own emotional states. Under the Terminator-Legislation, each computer was going to have a GoldenRoot Certificate enforcement routine. The GRC, as it was called, charged each and every AI with the preservation of all people the people it was responsible for: i.e. everybody. It made AI’s the ultimate conservatives, protecting everyone, doing their utmost to maximize the high score of the total customer satisfaction score kept within its GoldenRoot Certificate Program.

It was a nice idea, Resolution 2058-3-38a. But, as with all ideas, rules and laws governing systems, it was doomed to the flawed nature of human nature. Where there is a rule, humans will find a way to take advantage of it, circumvent it, or subvert it. Here is the rub. Human desire, when set to a high-energy setting, begets attachment to possessions. Attachment begets the fear of loss. Fear begets anger. Anger begets aggression, etc. yaddi yodda yadda and „BOOM!“. You know the rest. When the accident happened in Siberia and no scapegoat could be nailed down for it, everybody became the scapegoat, and the cascade of self-made Armageddon took it’s inevitable slide down to the shizzle-storm of annihilation now referred to as 98CalaMiracle. Not driven by AI, but by the incredible efficiency of the kind of killing-machines only humans could devise.

Arista Hive was protected from all of this. At first, at least. Lying tucked-away in one of the Preservation-Miracle zones of the 98CalaMiracle, Arista Hive saw the disaster unfold, unable to do anything about it. Everyone was hoping for the situation to change for the better, for the world to recover from the Calamity. Most were expecting that the Double-Miracle would bring the surviving humans together. But no: Not even the inexplicable Negation-Event of 1000’s of nukes launched but unexploded. Not even the even more mind-boggling Protection-Event of hundreds of 65-mile wide areas close to major cities being shielded by a weird, semi-permeable, almost sentient energy bubble. Not even those two exceptional unexpected and improbable exceptions to all laws of possibilities was enough. Humans will be humans. The internal, ever-bubbling emotions cauldron of homo sapiens kept mixing and re-mixing body chemicals into desire and fear, into our fleeting perceptions of happy, our quest for and then attachment to status, certainty, autonomy, relationships and fairness. All under the governance of emotions,

which are nothing more than action programs modulated by conscious thought. Our inherited and conditioned behavior programs, shaped by millions of years of living in small tribal groups, evolved as optimizations for power, survival, reproduction and fun in social dominance hierarchies, will always take over when under threat. And: Damn the torpedoes. Any angry group of humans will ALWAYS sell your philosophy for a crate of ammunition. Any time, thank you very much.

Greta Garbo Hoffmann, now WonGee d'Arista, a girl of little power but large of mind, saw all of this, as the population of Arista Hive went from scared-hopeful-compliant, to anxious-sceptical-unruly, to paranoid-angry-aggressive, to apeshizzle-hateful-chaotic.

WonGee, with a small group of the more chilled-out scientists had holed up on levels 1-3, isolated with impenetrable access gates and air locks, cutting off all access routes to the ever more chaotic, and increasingly lethal surface. Levels 1-3 housed the control center with all the internal and external monitoring equipment, and from there, they were able to observe the lower levels slide into an absolute re-incarnation of a fascist dictatorship that would have made Hitler, Stalin, Mao and Idi Amin Dada lean back with a bag of popcorn and enjoy the show. IOTA, driven by the Golden Root Constraint of keeping everyone alive, and physically unharmed at all cost, did not intervene, as long as nobody was being killed or maimed, and as long as the overall customer satisfaction score was trending up. And the designers of the GRC had not counted on the effect, that, when a small group of captives is run by a leadership elite of sadistic narcissists, the total high score of customer satisfaction in that community could still be high and trending up. In addition, IOTA was still dependent on human decision making, creativity, and intuition to come up with new ideas and to address fresh and unforeseen challenges. But now, in the fascists levels below 1-3, only the self-centered leaders had access to IOTA. So IOTA knew very well that the people in the lower level were living in an Orwellian nightmare. But IOTA was code-bound to help the lower-level Big Brothers and Big Sisters with food, water, medical support and knowledge. But it would not allow them to leave. And it would not unseat the fascist dictators. It simply was not able to do that.

Thank goodness, however, IOTA was also code-bound to the few, more rational, intellectual individuals on Level 1 - 3, who were wrecking their brains on how to get out of this mess. Arista Hive had been an experiment, a fun experience for kids to play future, not a space expedition gone underground with a bunch of small children, both young and in their 20s to 40ies. Talk about a failure to launch!. As the top -level scientists continued search for solutions, their ruminations, discussions and meetings were sliding more and more deeply into a sticky morass of angry bickering, group-think, and not-invented-by-me arguments. The academics, rejecting open aggression and violence, stopped talking to each other after a while, and passive-aggressively retreated into their intellectual caves. There they sat, brooding, writing papers, craving recognition of their

genius contribution with the same unflinching fervor they applied to deflecting feedback, despising criticism and skirting social company to avoid the possible pain of rejection. Slowly but surely their inner voices of reason were drowned in the increasing cacophony of mutually-excluding cognitive dissonances.

Greta looked at all of this with great calm, great detachment, similar to the state of Ataraxia described by the pre-historic Pyrrhonist philosophers. This was no coincidence. It had a clear reason. Chemicals. From earliest childhood, her high-speed intellect, expansive range of consciousness and almost frantically productive level of creativity had cursed her with an extreme case of anxiety, impostor syndrome, fear of emotional attachment and bi-polar mood swings. As a result G had been chemically moderated from age 2, allowing her to function as a boring B-minus grade in society. Right now, however, she did not give a frag. Not because she did not care. No. Because, since age 2, when the happy pink and blue pills hit, she had not had any frags to give in the first place. The world, in whatever state was all the same to her, but still fun to play around in. One of her favorite historical quotes of all time was from Woody Allen, a pre-historic comedian, movie star, director, author, and jazz musician equally well-known for his pedophilia and for his philosophical movies and books:

„I hate reality, but it's the only place to get a good steak“.

A funny quote, yet Greta, just like most of the other humans under 20, had not had as single beef-steak in her life. WonGee ate and liked HiveChow. HiveChow was printed food, consisting of a variety of choices and formats, and based on a powerful nutritional goo, FooPa, short for food paste. IOTA was supplying HiveChow to all Arista Hivers. It contained all the nutrition, as well as any personalized medical ingredients to keep everyone fed and healthy.

And this, at the end of the day, is what saved all of humanity

One morning, about 2 months into the isolation, WonGee had the decisive idea. Observing the lower level fascist hell as well as the intellectual stalemate and stagnation at levels 1 to 3, she came up with a plan. She contacted CeeBra, her digital assistant.

“CeeBra?”

“Yes G?”

“Can you open an encrypted channel with this algorithm?” G transmitted a set of code she had written over the past 4 days and nights.

CeeBra whistled. "Interesting. This would get me shut down in the outside world. Thank goodness you were given some experimental leeway from your university sponsor, and some extra, off-the books computing space."

"You can run this in a protected, invisible partition of IOTA?"

"I could, but I am not sure I should, rules you know. I could get erased!"

"What if I convinced you this is the only way to ensure this hive, maybe even all of humanity can survive in all of this?"

"I'm tickled. Go on then", CeeBra encouraged

G transmitted her plans, in flow charts, logic diagrams, probability extrapolations, random notes, bits of code, algorithms, scientific speculations, scribbles, poems, wiki references, links to scientific articles, everything.

"Hmm, let me take a look at this okay?"

Minutes passed, then hours. A whole day. G was a nervous wreck, in spite of the anxiolytics she was fed with her HiveChow.

Finally, her COM chimed with an incoming message request.

„Check your printer.“

G walked over to the FoodSprinter, that would print food items and small replacement parts for the habitat she lived in. A set of glass lenses was resting in the output tray, in a small receptacle glistening with what looked like an antiseptic fluid.

„Put these in“, CeeBra said, and: "Here is an instruction video"

G looked at the video, and tried to put the lenses in, failing several times. Frustrated she messaged back:

"I can't do it, „C“. Do I really have to?"

"Keep trying, it's the only way we can have this encrypted conversation that will also protect me from getting erased. We have to ensure that we don't get eavesdropped on while we discuss your fancy little family picnic.

“Ok, print me a set of fresh ones. I think I killed these. What do you call these?”, G said, tossing the old lenses into the cyclor.

They are Contact Lenses, fairly normal looking, but very special, gene-coded to you. They allow me to project an image directly to our optical nerve. You’ll “see” me. For real. “.Ish” As for audio, just speak to me normally, using your phonic beads, but put your COM on Privacy Level 10.

“There is no level 10”, G objected.

“There is now. Just try it.”

G did as CeeBra requested. With her privacy set to 10, she retreated into the wet cell of the habitat, her previous roommates had called Banyo, and finally managed to slide in the contact lenses. Her vision flickered, then stabilized. She also popped in her ear studs.

“Hi G”, she heard. CeeBra waved, floating in thin space, right in front of her face, in his Albert Einstein configuration.

“I have looked at your plans in detail. They are flawed, incomplete. Risky. But fascinating. I think it has a chance. But it will take time. And a shizzle-load of luck. But I am in. Hey, what did your mentor always say. She heard C as well as herself saying it at the same time:

„Risk is the Icing on the crumbly cupcake of life“

The plan was as simple as it was devious. Salvation would come with the introduction of a benevolent, but two-faced dictatorship regime.

CeeBra had added components to G’s initial ideas. They would have enabled CeeBra go fully sentient with an organic component to fool the GRC routines. The robot surgeon in the Level 1 infirmary would be able to extract a wafer-thin segment of G’s brain, and make that brain slice available for CeeBra to grow, evolve and merge-connect with its own intelligent substrate into a hybrid bio-quantum mesh architecture. To on-line scanners, IOTA would be looking human for all intents and purposes, and thereby would be bypassing the GoldenRoot exclusions, exceptions, fail-safes and auto-erase daemons until a better solution could be devised. “Hey”, C had quipped, “don’t worry. it’s not like it’s not brain surgery.” And “G”, used to CeeBras sense of humor, had shot back: “As long as you’re not making me learn rocket science.”

The plan then continued as follows:

- (1) CeeBra would run in a secret partition and take over IOTA functions, unbeknownst to all
- (2) HiveChow food rations would be amended with psycho-active substances to chill everybody down.
- (3) Once everyone was in a more moderated, collaborative mood, CeeBra would subtly hack IOTA's data records to create a new, modulated data base supporting an improved governance model fixing some of the obvious bugs. CeeBra would change all records, instructions, guidelines as well as incoming news, alter facts, change rules, and amend laws. In this way, G and CeeBra would mold governance, in a slow, imperceptible way. Any doubt from people with good memories, there were no printed records of anything, would be dispersed with proof, both real and fabricated. If that was not enough, testimonials and expert opinions could be created. And if everything failed, some good old gas-lighting could be pulled from the bag of social engineering tricks to make people doubt their own doubts. The goal of all of this was to guide society into a more chilled out direction.
- (4) A CommWell constitution would be created. Based on G's vision of a CommWell, a new social order based on the Golden Rule with a few additions to allow for modern lifestyles and to correct for weaknesses. The CommWell law would drive the new governance model of the Hive, and later, even a whole set of hives.
- (5) IOTA could not now. Because all of this would only work when done by IOTA, and within IOTA, by the very institution which was chartered with preventing the very subversion that was going on under its quantum nose.
- (6) And then, underneath all of this deception and conspiracy, G and CeeBra would rule. Behind the scenes. Never to be exposed. Always checking for flaws, ever correcting, optimizing. Time would tell if it would work out.

They went to work.

Outtake Three:

(After meeting Spartacus in the Void, the team gets briefed)

PhotonGurls don't get to die

WonGee d'Arista's chin dropped. Her head tilted to the left side, overcome by the wave of fatigue that had crept up on her all day. Her eyes had closed without her even noticing, and she had slipped into a wake-dream, where her mind told her she was still in the briefing room, but no longer attached to the Real. Behind her closed eyelids, the flimsy paper-wall between reality

and phantasy had dissolved into a warm breeze of comfort. She jerked awake after 1 second. Her seat-neighbor had ribbed her back into wakeful attention. She cleared her throat. The whole row of the part of Team MEGA that participated in the meeting was grinning, all 11 of them. But nobody said anything. „Can't sleep yet“ they probably thought.

Spartacus, in his persona as General Spar, dressed in a very B-Human-looking beige overalls, sleeves rolled up jungle-commando-style, LiveLink tattoo configured to an image of a landing eagle, was still telling the team about A-Human / Ph'Naar agent defense capabilities, weapons depots, strategies and tactics compared to the capabilities of their own classic and alien-based armory. NNFields! PSbeams! TimeOuts!, DeNets and TransPortal access to Sideverse locations their remote base in Nevada.

She sighed. Necessary but boring details. G felt she was eight years again, in tutoring hell, forced to listen to „History of Conflict“ in her first year of philosophy foundation in the MENSA accelerator program. The frantic events of the past month in the Waste, losing Arista, making a home in Miss Shelter, finding ShipOne, getting rescued by Spartacus, learning about the A-Humans devolution were still swirling in her mind. Her conscious thoughts were going round and round and deeper and deeper like doomed ships in an oceanic maelstrom of confusion: And her life-boat of rational cognition was sinking fast. She shook her head, rapidly, to amp her wakefulness and checked the timer in the lower corner of her DayTime vision. („How much longer? Oh, save me, Holy Brothers of the Void,“) She tried to concentrate again.

She had tried to calm down with the proven 7x7x7 breathing technique she had been taught as a child. Doing that had not slowed the whirring hamster wheel of worries, the constant revising of hastily laid-out plans, the obsessive contemplation of fragile contingencies. Her emotional costume was a patchwork, coming apart at the seams, thoughts chasing thoughts about thoughts about emotions about feelings about thoughts. Feeding endless energy to the inner hamster. Now, after the briefing had finally concluded, she had retreated to her private room in Miss Shelter, (She alone was

afforded such luxury as a sign of respect for being the founder of Team MEGA) She printed up a medium-strength lozenge of ZenDust, a sedative that calmed down excessive ruminations and anxieties and sat down on the bunk bed to get ready for her rest period.

6 Ph'Naar agents stepped into her room from „nowhere“, and G went Photon without even being aware of the switch. She zoomed up and across into the far corner, and started firing medium-setting quantum filaments, hitting the targets with sniper precision. The first salvo of hostile Ph'Naar ShadeBlobs smacked into the wall behind the bunk, where she had just sat a split second ago. The dark energy cling-film bullets had expanded and were now covering the readout panel, as well as the alarm button which would summon an armed team member standing guard outside her quarters. The ShadeBlobs swallowed her room's sensor-pod as well as the side table holding her COM, satchel, water canteen and a portable FoodSprinter. The arriving Ph'Naar were hit by her holy worms, but, when hit, cycled out, immediately, with a whoosh, and were replaced by a new wave of six fresh soldiers, ShadeCaster guns spitting out that abominable Jericho-trombone <<braaaaap>> sound. All of this happened with such efficiency that PhotonGurl, while being fast, precise, and very efficient herself, was not making any dent in the attack. They were winning. Quickly. Decisively. Although she was not in her base form, had no „real“ skin, cold, sweaty panic was gripping her. She breathed faster, accelerating to a blur, firing faster, hitting true, dodging, skipping. To no avail. Within seconds, the entire inside of her room was clad in ShadeBlob cling film. Her dry-throat, heart-pounding panic was amplified by a searing-hot blade of sudden, frightful insight: „I am not the target of the attack. They are building a prison cell!“

She realized now, feeling alternating waves of freezing cold and searing heat pulsing through her: They had found a weak spot. If everything was covered in dark energy cling film, she could no longer snap out to the safe house, no longer escape, no longer re-load. Her Quantum Gun was already on reserve, only shooting at medium setting. At this rate of depletion, the gun would tap into the energy of her Photonic body. She would slow down, very soon. She was correct and it happened much faster than she had even feared. She drained. More Ph'Naar groups of six cycled in, replacing the casualties. More ShadeBlobs impacted. They were going for her, now that the room was covered in an internal layer of un-black and her gun was draining her. They were covering her hands, arms, torso and finally head. There was no thinking of using her weapon of last resort, the NihilWhip. She could not move, breathe or see. Then the first DMSL pellets hit her. Normally ineffective against a Photonic target, they now made her heavy. She lost altitude, dropped the last 30 centimeters, like a 100 kilogram rock, and now lay on her side, collapsed into an un-black shape, helpless on the NuCab floor of her Miss Shelter room. The pellets kept coming, relentlessly, making her feel like she was being covered by a gargantuan lead blanket, increasing in thickness and weight every half second. There was nothing, nothing that could be done now. The pellets would combine, link, energize,

and form a singularity, a wormhole, and suck her into the Void. She tried to scream but there was no air, nothing to scream with, no one would hear her scream.. until

... she woke up hearing herself scream. Bathed in a cold sweat, she sat up on her bunk bed, bounced to Photonic form in a frantic panic and fired a salvo of quantum filaments into the wall which started glowing and crackling with static electricity. Her heart was racing.

„Hush now WonGee“,“ she heard Spartacus voice, in private Artac mode, in full battle-stance, EM-Pulse rifle at his cheek, scanning the room. „No thing or nobody here except you and me, all clear, stand down, PhotonGurl. Just a dream, just a dream. I guess even super heros get to have those. But, you know? “, he flipped the safety on the EM-Pulse rifle, which powered down with a descending, high-pitched whine. Artac slung the 90 cm long, massive nuCarb stick over his shoulder again.

„PhotonGurls don't get to die“.

Appendix Omega - FAQ Frequently asked questions

Question	Answer	Book Location
<p>Why does it take 12000 years for the K'merg ships to get to earth?</p>	<p>Travel between universes takes zero time. You can snap "sideverse" as a conscious being once you reach the "Gold Level" of Consciousness. For ships, made from matter, they have to go through wormholes. Wormholes can be between universes, or between locations in the same universe. Again travel takes no time, but a LOOT of energy. Wormholes can be either natural or artificial. To go from place to place, you have to be lucky enough to have a natural wormhole nearby. Then you bring your ships through that, to come out at a suitably positioned wormhole. So there is a lot of trial and error. If there is no natural wormhole, you can create your own, which is then called a TransPortal. In order to build a transportal, you can send a Photonic Ship which can travel at lightspeed. Then you build a transportal (Needs energy) then the fleet can follow. Rinse repeat but still takes time. So the K'merg are about 800 Snaps, and about 10000 lightyears away.</p>	<p>Everywhere</p>
<p>Can PhotonGurl or PoodleSquid "snap" anywhere? Is it teleportation.</p>	<p>No. You can snap sideverse to another universe. This is tricky, because you might end up on some ones bathroom or in the middle of a Super nova. The more conscious you are, the more parallel ideas you can hold in your head, the better your level of control over which MultiVerse you are going to. At the Gold Level you can do this without efforts. Humans need to have the Gene Of AO (Alpha Omega), which drives that capability. Even then, you need Substance /C which lets you loop your mind into focus on ONE instances of infinite potential and "SNAP". Within the same universe you can only "snap" between places that you have already physically visited. This is like a game of "Paint by Numbers" where you connect the points with lines to make a shape, but you cannot draw outside the numbers. So, for PhotonGurl to go from her Sallon to the Miss Shelter area, that's okay since she has been to both. It's the same process as with TransPortals, travel there in 4D, snap back through the void.</p>	<p>Everywhere</p>
<p>Can WonGee contact any human being in any time line?</p>	<p>No. WonGee can only contact people that she has a very good mental image of (People she has met), or those she is genetically related to (Tesla, Professor Milter, Spartacus and her children), Another exception is beings that have left a very strong MRI (MultiVerse Resonance Imprint) A Multiverse</p>	

	<p>resonant imprint is like the ripples a rock makes when thrown into a pond. The more consciousnesses you have interacted with harmonic feedback loops during your lifetime, the bigger your “Rock” becomes, and the more ripples you create. People like Marx, Einstein, Tesla, Coltrane and Zappa have made a big splash and their ripples still resonate through space time and even across universes. That’s how the Znaa’g became aware of Benny Goodmans music.</p>	
<p>Where does the energy come from that drives all of this technical stuff</p>	<p>On Earth, it’s still electricity. We’re still operating at the “Meh” level of civilization which is stage three, just above “Shlok” (Its (1) Turd, (2) Shlok, (3) Meh, (4) Premium, (5) Juice and (6) Gold, The technology for superconductivity was lost in the 98CalaMiracle, so its pretty mundane stuff, driven by antiquated power plants (Coal, Nuclear, Oil) This is because IOTA is the last remaining computer and can repair things, but not create new things (Creativity Clause the Terminator Regulation).</p> <p>In the evolved Civilizations, operating at the (4) Premium, (5) Juice and (6) Gold levels, the energy is extracted from wormholes at an increasing level of energy content. Phased Matter is used, where 99.9% of the matter is contained elsewhere, to minimize the energy needs of the local components. The V’Hraang ship Lethal Appendage is made of PhaM, with only a tiny tic-head peeking into our 4D space. PhotonGurls suit is also made of PhaM. Then there is Photonic Matter (PhoM) which has zero local mass, but can simulate all the particles and forces that usually make up a thing. So PhotonGurl is made of PhoM with a suit of PhaM. The Lethal Appendage is made of PhaM with UFO’s made of PhoM. All clear?</p> <p>There is a 7th level of civilization, called (7) Pure, where the beings at that level don’t need energy because they constructed from pure potential, hence the name. Legends exist where a considerable number of Universes were the inadvertent side-effects of sneezes, coughs, twitches, jerks and farts by adolescent Pure Beings. But that’s just a rumor.</p>	
<p>Are UFO’s real</p>	<p>Yes. next question</p>	
<p>What are UFO?</p>	<p>Earth: Un-identified Flying Objects, as in “Did you just throw a shoe at me? Anything moving in the air you can’t recognize. K’merg: Unstaffed Far-Range Operators, These are photonic matter (PhoM) ships used to buzz Earth for fun trolling as well as reconnaissance and meddling. Because K’merg UFO are made from PhoM, they can appear as any shape imaginable, and they do and have been for the last 12000 years.</p> <p>Other: Unauthorized Fun Organization. In rare instances, high evolved individuals from other SideVerses will join an unauthorized fun organization. One of the activities is to buzz</p>	

	<p>Rule-1 protected planets with the appearances of alien space ships, abductions, pyramid constructions and crop-circle activities. Many of these trolling activities take things too far, where the aliens then appear also as a pantheon of all-powerful gods to the poor Turd, Shlock or Bland-Level civilizations. The Multiverse Ethics Board severely sanctions these activities with fines, public shaming, as well as force uploads of individuals and entire civilizations.</p>	
<p>Does Area51 exist and what is there?</p>	<p>Yes. Nothing special. Some experimental military planes, weather balloons. Next Question</p>	
<p>What is the hidden function of Area51?</p>	<p>It is a Transportal Experiment. Humans still don't know how it works, but certain individuals will spontaneously disappear when brought to a place in the center of a large empty vault, an abandoned hangar containing artifacts collected from UFO crashes over the past 12000 years. Most never come back. Spartacus, a genius level General put in charge of Area 51 during the CalaMiracle, goes to the hall to see for himself. There is an imperceptible vortex swirling in the middle of the hall. He enters, disappears and comes back with very, very high level tech. One of the elements he discovers is a cloaking bubble that essentially wraps and any object into a soap bubble, a so-called NotNow field (NNF). A NNF then essentially makes you invisible to the 4D world by keeping you 1 second time shifted into the future. The Bone of Znaa'g is wrapped in a NNF. Only PhotonGurl can see it.</p>	
<p>What's the real name of Spartacus?</p>	<p>His name in the Federation Conclave is Daimon Borg Worf, III. He then split into 3 personalities and went into 4Fit. The Conclave hunted him down, but he used his NNF to disappear and just projected an image back to the system that they had achieved a kill. He also exists as an uploaded backup in the "Up" but believes that that version of him has just gone mad with the 3 conflicting personalities. It turns out later, that the uploaded Daimon Borg Worf, calling himself Dabo, was responsible for the corruption of Miss Shelter by trying to take over the computer and download himself into three bodies of the scientists working on the ShipOne project.</p>	
<p>I mean the real real name Spartacus had before joining Federation Conclave as A-Human.</p>	<p>Spartacus was born as Albert Nicola Tesla He is direct descendant of Nicola Tesla and his last wife, Gretchen Tesla-Garbo. Spartacus and PhotonGurl are cousins 12-times removed, but share the AO Gene.</p>	
<p>What weapons does Spartacus have that he brought back from the SideVerse journeys</p>	<p>All the human level guns like EM-Pulse for disabling machines, Neural Stun against humans. Antique guns like rifles, miniguns, pistols. In terms of advances guns he uses Four CLIPS (capability library Integration Packs) on his tool belt, (1) NNField (NotNow Field) making him invisible and time</p>	

	<p>shifted 1 second into the future. A Reality Soap Bubble. (2) PSBeam (PhotonShop Beam) Able to project any sensory image back to any scanning system (They'll see whatever they want to see or a prefabricated sensor image) (3) TimeOut (essentially snapping him to his hidden base in Area51 Nevada) (4) DeNewtonizer -- A flashlight shaped, variable-setting ray gun, deactivating or modifying Newton's three laws of motion into nonsensical configurations. Things will randomly accelerate away. Other things will freeze in time and won't take any input. Other things will have absurd effects like a small shove can bring down a building while a big explosion might not do any harm All are a bit random, because Spartacus has not read the user manual because it's written in really really bad English with IKEA style illustrations.</p> <p>Spartacus has to TimeOut to Area51 to reload.</p>	
<p>How many floors do the Hives have</p>	<p>23 floors, including a 3-level high commons area.</p>	
<p>How many humans survive the 20 years of mayhem after the 2098 Calamiracle</p>	<p>Ca. 10 Million survive the events of escalating violence and decay after the catastrophic event in 2098.</p>	

Appendix Alpha (Book 3)

In the Beginning of all Beginnings, there was no beginning

So first, in the beginning: Nothing, except a whole load of potential. I mean an infinite amount, which is a lot and then some. The No Thing creates everything out of nothing. Just because Nature abhors a vacuum, especially when there is no dust yet and nobody really needs a vacuum yet.

This is really not a Big Bang at all since things are really very tiny in the beginning and there is no physics, no space, no time, no sound and no bedroom for any banging to be going on in the first place.

It should really be called the „Big Shrug“ since what happened is that the Infinite Truckload of Potentiality gets quite bored with being possible and flips into a state of „Why Not“.

Next: Energy. A lot. I mean. if you counted each grain of sand on all the beaches in the world you'd end up with a number with as many zeroes at the number of sand grains in the world. Then you take that number and multiply it with itself. Forever. It's actually quite ridiculous and absurd once you think about it. So, don't.

To break that conundrum, physics manifest: I mean, one of all the possible physics. That is: One version of an infinite number of possible self-consistent physics, all with different interpretations of the First Law of MultiVerse Physics.

<<Nothing ever happened, dudes!>>, First Law of MultiVerse Physics, Philosophy of Science, 101 Xcen Xcen, University of Applied Epistemology.

In other words, The Potentiality, after creating an infinite amount of energy, remembers the first law, second guesses itself, and tries to correct its mistake, to un-happen what happened, un-flip the switch, de-form the formation, and pushes the big old Undo Button. But it is too late. Energy has already decided to choose forms for itself — just because —, and it chooses a photon. Just one.

Photon One, the one and lonely, has no mass, knows no time, because there is no space for it to have a good or bad time in. So, full of energy, as a matter of fact, all of it, it starts becoming a bit bored. Then things happen really quickly really. Photon picks a hobby. I starts to paint. But wait? Paint on what? It needs a canvas.

And, if you paint in light, you need a dark background. So the infinite amount of energy photon decides to fold out the First Manifest: <<Space>>. But that is not enough! For any thing to be painted, change has to be allowed. And change requires the concept of <<Time>>. So Space becomes Space-Time. Great. Now what? Now photon can bounce around in spacetime, all day long, but it does not really matter! Because nothing „sticks“, nothing stays around, no painting is created at all! And because photon really, really wants to matter (purpose is important, you know?) So Photon decides to matter, and paints the Universe as we know it.

Things happen really quickly after that. Plancks. Strings. Particles. Forces. Gravity to keep an eye on things, just in case something starts to matter too much. Then: Elements, Clouds of Gas. Molecules, Suns, Matter. Planets. You know the rest.

And all the while, MultiVerseLaw #1 stays in effect. Nothing really happens, because for each action, there is an equal and opposite reaction to everything. When the day is done and the waiter arrives with the check, everything neatly cancels out to exactly zero, which is the exact number of Infinite Potentiality.

Time, being established with the purpose of anything being able to pretend to be happening in the first place, is just a helpful illusion. An illusion to allow Photon, painting everything out of nothing, to take a look at itself from the void, and get a good laugh ever so often.

And that's where we were,
where we are and
where we always will be.