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Stuart A. Jackson

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Water

A Science Fantasy

Book One

The Koyculture

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Novagaia

## **Chapter One**

Tennys had had his doubts about his transport when it had arrived, and now it felt as if those doubts were justified. The Bus was falling out of the sky, completely out of control, its long legs dangling. To make matters worse, its belly had become transparent allowing him to see the toy landscape of Novagaia, upon which he was soon going to be a protein puree.

He screamed.



He had arrived at the Hub complex at the centre of the Novagaian orbital only an hour previously, aboard a small reaction shuttle from Memecast. The view of the approaching structure through the vehicle's imaging systems was spectacular.

The Novagaian Hub was ellipsoidal, 10 kilometres in length along its greatest axis. Innumerable docking spines sprouted from both ends of it, many more than a kilometre long. Looked at from directly above, the Hub was a spiky, squashed disc. Seen from the side, in line with the inner surface of Novagaia itself, it was a spiky, flattened lozenge, three kilometres thick, studded with ports, blisters, lights, windows and shadows. The volume above and below this central section was transparent, flecked with green and blue, apparently unprotected from vacuum.

After disembarking from the shuttle, his first proper look at Novagaia through the long transparent wall of the docking spine revealed a world not just ostensibly open to vacuum, but *actually* open to vacuum. Having been raised on a sealed Austerity micro-orbital, and being used to the closed environment of Memecast, the concept of living on such a potentially *leaky* structure alarmed him greatly.

He must have stood gawping for longer than he thought when he arrived because when he turned around at the sound of a noise behind him, he was alone. A hoop of striped black was rolling toward him. It stopped a few metres short. Ivory coloured graphics flowed across the thing's black surface.

**I am Hub courtesy**, the words spelt. **Can I do anything for you?** Secondary scrolling requested his preferred mode of access, while the machines grew flexible manipulators with small hands. The machine offered the hands, palms open, in a curiously polite gesture to accompany the silent graphics.

Ah, thought Tennys, *a porter*. He adopted his usual condescending tone when talking to constructs. 'Verbal access. I am Tennys Smolensky. Tell me how I get down to the orbital surface and how I find Chapel Halls.'

'A Bus can take you to Chapel Halls direct, Tennys Smolensky,' replied the machine smoothly. 'Hub courtesy will provide your internal resource with the necessary directions if you wish?'

'Yes. I do.'

'Complying. Thank you.'

With that, the machine folded its hands quickly, in the manner of a ritual bow, its appendages intruded back into itself, and it rolled away. Tennys was left, his mouth hanging slightly open, staring after the machine as it moved around the curve of the corridor and disappeared. He was used to a little more deference from constructs. For a moment, he felt a little silly.

Tennys accessed his resource. It interfaced his visual cortex and a map appeared, apparently hanging in the air in front of him. Black and grey graphics wriggled into position showing him his position and route. He began walking and the map stayed with him, a little over 30 centimetres from his nose until he backgrounded it. His route took him, via a lift, to the other side of the Hub complex. He emerged into a wide, deserted corridor, very much like the one that he had left. Movement caught his eye as he was passing the big curved window.

Something was approaching the Hub.

Tennys was reminded of pictures he had seen, of the kinds of invertebrate insects that had abounded on Earth before Water. A dark, bulbous body trailed two enormous legs, monstrously thick where they joined the body, tapering to broad, flat feet. The thing was drifting in towards the Hub feet first, its legs slowly retracting, drawing into its body. When its feet touched the outer surface of the Hub wall, the strange form began to shuffle sideways towards an access port, whilst its body continued to move, its legs telescoping until it was squatting over the airlock blister. It extruded part of its belly, and smothered the port, and then was quiescent. Curious, Tennys queried his resource.

‘Comm, do you have access to the Hub?’

‘Yes,’ said his internal resource, tapping his auditory nerve.

‘Well then, could you find out what the hell *that* is?’ Tennys asked, pointing.

‘One moment.’

Tennys looked again at the thing suckling the airlock blister. It was mostly black, overlain with stripes and whorls of a lighter brown shading. It looked like it was made from dirty coal. *Must be a construct of some sort*, he thought but it did not look like any kind of machine that he had ever seen. An icon blinked in front of his nose.

‘Proceed.’

‘Summary: The construct is a choo machine, a species of organic, sentient agent unique to Novagaia, engineered by the orbital ecosphere. Its designated function is transportation within the confines of the orbital. This form is known colloquially as a Bus.’

Tennys absorbed this information for a moment and gave a little high-pitched harumph of pleased surprise. Then, belatedly, his mouth dropped open, and his eyes became a little wild. This was also his transportation!

‘Comm, confirm please: This *particular* Bus is here to take me to Chapel Halls?’

‘Confirm.’

Tennys reluctantly hoisted his bag onto his shoulder and walked toward the port. When the inner lock doors opened onto the interior of the Bus, the first thing that he noticed was the smell. Or rather the smells. He wrinkled his nose, trying to identify the spicy, unfamiliar scents of cinnamon and cloves and lime. He selected a seat from the dozen or so spaced evenly in the fragrant belly of the machine and sat down tentatively, wondering if anyone else was catching this Bus. He smelt liquorice and pine - twice - quiet strongly, causing him to sneeze. Abruptly, the opening through which he had come closed and a portion of the wall to his left became transparent, allowing him to see the exterior of the Hub. He felt a trifle heavier for a moment, and the Hub wall began to fall away.

The Bus was in transit.

He sat and let his thoughts drift before asking: ‘Comm, how long is this journey?’

‘The journey will last just over 23 minutes.’

He stared out of the Bus window as the Hub slowly receded, resolving into a spiky ellipsoid.

‘Comm, tell me about the Bus. What is it made of? How does it work?’

‘The machine is composed of synthetically innervated carbonsponge,’ replied the resource. ‘Molecular pockets within the material are innervated by a network of viral nchoo agents with which the machine is infected. The nchoo are able to effect local expansions of these molecular pockets. The executive control of the nchoo infection belongs to the Bus’s choo Host.’

He harumphed. ‘I get it. The Host - that’s the "brain" right? - sends a command to its "muscles" to flex, and it pushes away from the Hub, just like I would push away from the side of a swimming pool.’

‘This resource believes your last statement to be a visually useful, but mechanically inaccurate, analogy.’

‘So how does it get from being up here, to being down there? It just falls out of the sky, does it?’  
Tennys laughed at the thought.

Pause.

‘Yes.’

‘What?!’

‘What?’

‘It just falls to the surface? That’s crazy! I’ll die!’

The resource made no reply, its linguistic performance capacities stymied by irrationality. Tennys looked round the interior of the Bus wildly.

Wait a minute! This is a sentient construct. I can just talk *to it*.

‘Uh, hello, uh Bus?’ He cleared his throat. ‘Bus, I am telling you to stop!’ There was no response. ‘Bus, turn around! Take me back to the Hub!’ Nothing.

*How can a construct be sentient if it can’t fucking speak?*

The Bus continued to give no indication that it heard or understood. *Or had it?*

The Hub appeared to be moving, sweeping away to his left. No, the *Bus* was turning. It was orientating itself, pointing its legs toward the surface of Novagaia.

*How did it do that? It must have reaction mass! Enough to brake its fall?*

‘Comm, can you interface the Host? Ask it to turn around?’

‘No. The Host and this resource speak different languages.’

Tennys groaned. He was only 21 years old. He didn’t want to die, yet this smelly machine was about to impact the surface of the Novagaian orbital at some monstrous speed and splash him all over it. He

wondered how fast he would be travelling when he died. He queried his resource, feeling slightly giddy.

‘One moment.’

Tennys watched as more of Novagaia began to become visible, a broad swathe slicing across the Bus’s transparent side from the upper left. He could make out patches of colour, browns and greens, through white, wispy clouds.

An icon winked. ‘You will be travelling at...’

‘Stop.’ He had forgotten his macabre request. ‘How much longer?’

‘Is what?’ whispered his resource, after a short pause.

‘How much longer is this *journey*? And why are you being so dense all of a sudden Comm? Anaphoric processing is supposed to be one of your specialities isn’t it?’

‘Your journey will last another seven minutes.’

Pause.

‘Comm, how come you and the Bus speak different languages?’

The icon winked open again. ‘The Host of the Bus is choo. This resource is choi. These two different types of computational mechanism do not communicate easily. It may be possible for this resource to construct a rudimentary common working language, but that would take several days.’

He was about to frame another question when, abruptly and simultaneously, the walls of the Bus became opaque while the floor of the Bus became transparent.

He shrieked.

Through the transparent skin of the machine’s belly, he could see the Bus’s dangling legs trailing away into thickening vacuum directly below him. Far below, on the moist inner surface of Novagaia, distinguishable features were rapidly gaining in resolution. Hills and valleys, bodies of water, clusters of structures.

‘How much longer Comm?’

‘130 seconds.’

He let out a small wail.

‘How much longer Comm?’

‘110 seconds.’

He gave another small wail.

‘How much longer Comm?’

‘90 seconds.’

He began to feel strangely calm.

*OK, so I won't get to meet any Cardinals. Never mind. Could be worse.*

Then he thought again.

*Yeah right, like dying a horrible impersonal death in the belly of a smelly machine.*

He looked down. Beneath his feet he saw a circle of lumps with little blue lines wriggling around their bases. Hills and rivers. He saw structures and colours and little moving objects that he couldn't make out. His nose began to twitch as an incredible range of citrus, spicy smells began to assail his nostrils.

‘60 seconds.’

The Bus grew flexible black restraints from the seat and strapped him in across his chest. He decided to close his eyes. The Bus lurched suddenly sideways so he snapped them open again. He looked down. The huge legs hanging below him were attenuating quickly, stretching like hot toffee, the broad pads at the far end probing the air ahead of the descending Bus.

The surface of Novagaia was now so close that he could make out individual structures, and both it and they were getting bigger and flatter every second. He wailed again and began to feel sick. His stomach churned and his bowels began to loosen. He farted and whimpered and as he looked down, the surface of Novagaia rushed up to meet him at a hideously fast rate. He felt a scream begin in his throat, which warbled up to a full-throated roar as the Bus plummeted downwards towards destruction.

The huge feet-pads hit first.

Just before they did however, the machine's viral nchoo infection became active, expanding the carbonsponge in the lower portions of the legs at an enormous rate: for just an instant, the broad feet actually travelled faster than the rest of the Bus. The enormously attenuated legs of the machine - over 200 metres long at the end of its descent - damped the great velocity of the machine's descending mass. The viral nchoo agents effected the contraction in peristaltic waves. The previously thin appendages telescoped and grew into two enormous stanchions, whilst the bulbous body of the machine decelerated rapidly, and came to rest some 50 centimetres from the orbital surface, hanging between legs that were now 10 metres high, and six metres across at their lumpen top.

The Bus had landed.



Tennys only opened his eyes when he became aware of a change in the air. The spicy warmth of the



machine's interior was being replaced by a green coolness wafting through the open hatch in the side of the Bus. He looked down. Two small vestigial horns on the arms of his seat were all that remained of his restraints. He looked around him. He was alive, though he didn't know how. He smiled, shook his head and then quickly paled. His hands flew down to his genitals. Finding them safe inside his trousers, he cuddled them ferociously. Next he checked his head, then his torso, and then his legs. He was intact.

'Comm, did you know that was going to happen?' He paused, frowned. 'In point of fact, what *did* happen?'

'The Bus landed.'

*The Bus landed, he thought. Heavy shit.*

The Bus was perched at the flat top of a conical hill. Perhaps half a kilometre away in either direction was another, identical hill, smooth and chopped off. And beyond that, another. And beyond that, another and another. They formed a line curving off into the distance.

Tennys invoked an optics tool and his apparent visual acuity leapt by a factor of 50. There, 20 kilometres away, he saw an identical truncated cone. Diminutive figures sat on an identical wall. He saw one of the figures point upwards with a matchstick arm. He looked up, past the boundaries of the acuity window and saw a tiny black speck plummeting downwards, seconds away from impacting the top of the hill. He returned to the acuity window, re-focused on the matchstick figures climbing into the belly of the distant Bus. The side of the machine closed up and it vanished. With unaugmented eyes after the grid-work of the optics tool melted away, Tennys thought he glimpsed a black dot arching away from the distant hill, moving incredibly fast, before he lost it against the glare of the sky.

*Bus stops.*

A ring of them spaced equidistantly around the circumference of a 20 kilometre circle.

'Comm, where am I?'

'You are on the outer boundary of Chapel Halls.'

'You mean *this* is Chapel Halls?' Tennys swept his arm across the view. All he could see was thick wood. 'Where are the structures? Do the Cardinals live in the tress or something?' The thought struck him as funny, and he sniggered to himself. There was a pause as the resource searched the download it had received from Hub courtesy.

'There are structures within this valley but they are presumably hidden by the larger resident species of flora.'

'Oh right. So where do I want to go?'

'Is that an epistemological question?'

'*What?*No, it isn't. And just tell me how to find the Cardinals.'

'Following this path will take you to a significant population of Cardinals. Would you like a map?'

'No.'

He brusquely disabled the auditory tap and looked out across the landscape of greens and browns rolling away from him. He turned his head to the left. In the distance, he could see a large body of water, sparkling in the sun. He became drawn to the distance, and found that he had to raise his head to take it all in, his eyes having to constantly track somehow - curiously - *upward*, as if he were looking up the face of a mountain from its base. He did a double take, realising what he was seeing. He looked to his right. The same. Of course it was the same.

This was an *orbital* .

The inner surface of Novagaia rose away up into the sky, went up and up and over his head, going all the way around, and came back down on the other side. Tennys felt humbled all of a sudden.

*How could Water possibly have built such a structure?*

No one knew. No one knew anything about the builders of the Koyculture. Except the Cardinals.

*And that's partly why I'm here.*

He drew a large breath, and another, quietening his fearful exhilaration. Shouldering his bag, and with a last look at the unbroken expanse of green that stretched away from him, he turned and walked towards the gap in the wall. Halfway down the path, he stopped and knelt down to examine the surface. What he had thought was a chalky compaction was in fact a natural weave of fine branches, sprouting from roots at the edges of the path. Tennys realised that miniature tress, growing horizontally instead of vertically, were actually co-operating in small scale civil engineering. He straightened and continued walking until he reached the outer margins of the greenery.

He peered into a natural cathedral, vaulting 30 metres above his head. There was bird song, strange squeaks, whistles and clickings and dark forms moved in the higher reaches of the canopy. Breathing deeply, he felt cool, moisture laden air fill his lungs and he strolled into the outer margins of Chapel Halls.

The path turned lazily this way and that in the forest, the vegetation stopping short a uniform couple of metres from its borders, as if maintained by fastidious gardeners. He recognised none of the species that he saw. Which was no surprise, because he knew nothing about botany at all. His home for the last six years had been the closed, sterile torus of Memecast and his only other experience of natural flora had been the marsh grasses and gnarled ambiguous bushes that grew around his parents morose, windswept home on Austerity. Thoughts of his distant birthplace, always cold, mostly always raining, made Tennys shiver.

*What a contrast to this!*

The quality of the light around him changed as the path's variegated roof thinned. A faint spicy tang reached his nostrils, and he suddenly had the curious feeling that he was not alone. He fought an irrational desire to turn around and walk rapidly back the way he had come. He stood, uncertain how to proceed.

'Comm, access the milliradar. Is there anything ahead of me on this path?'

'One moment.'

The millimetre-wave radar and its micro-mesh antennae - one of the augmentations to his resource - sat unobtrusively behind the bone of his forehead.

‘Millirader active. Object detected.’

He squeaked.

He accessed his resource and keyed for a graphics window. He looked at the ghostly see-through image from the radar. A tall, bulky shape stood 20 metres ahead around the next bend in the path. The wall of the forest next to the shape kept swaying violently, as the extension leant in toward it. Tennys watched as, again and again, the shape moved, and the forest wall quaked.

‘Comm.’ He backed away down the path. ‘*What is it?*’

‘What is what?’

*Shit, this resource was being cranky!*

He keyed the control window for the milliradar and the amorphous shape became outlined in thick yellow lines. ‘Analysis! What is *that?*’ He waited for machine to probe the image, swaying from foot to foot.

‘Object not recognised.’

He snorted violently. ‘Is whatever it is likely to want to *eat* me?’

‘No.’

‘So why didn’t you say so before?’

‘Is that a rhetorical question?’

He disabled the machine’s auditory tap with disgust.

*Well, it isn’t going to eat me, but all the same...*

He darted over to his left and fell into a semi-crouch. He made his way slowly along the path, hugging the forest wall. He could hear vegetation ripping and rustling as he approached. Then the shape became visible. His eyes went wide and his jaw dropped.

It was a charcoal and mahogany-striped giant, easily four times his height. It possessed three huge legs, a barrelled midsection, a flexible extensible neck and two bundles of appendages where arms might once have been. Tennys watched as the long neck extended and swayed in a small circle about the vertical, like a snake triangulating a petrified mouse. Then it reached up, stretching to almost the very roof of the artificial cathedral and pulled away some loose vegetation. It sank slowly back down and the monstrous legs shuffled the thing down the path.

*Fastidious gardeners indeed.*

It was a choo machine, another different species of organic Novagaian construct. Tennys laughed at his own timidity and shook his head.

The effect of so innocuous a sound was profound.

The neck of the machine whipped around and down toward him. He found himself looking into a serrated maw twice as big as his head from a distance of two metres away. Warm, sappy air assaulted his nose, carrying a sharp citrus tang. Then the long neck shot upwards and backwards and intruded into the machine's mid-section. The giant machine gave a mewling squeak of fright and ran off down the path, its huge legs moving incredibly quickly. In seconds it had disappeared, leaving Tennys alone, his heart thumping.

*Fastidious gardeners who spook easily.*

Someone laughed.

Tennys stopped, almost shocked. He stood in the middle of the path, listening

*There it was again!*

After walking for some minutes, he found the source of the laughter. It was coming from a strange pod-like structure floating in the middle of a small lake. Two people were splashing in the water next to it. A partly submerged platform was attached to the underside. He began walking around the lake. As he got closer, he could see where a portion of the far shore had an almost perfect hemisphere cut into the surrounding forest. Towards the front of the clearing was a squat cylinder, sprouting a thick arch that lead out to the floating pod.

As he approached, he heard a cry. Two small arms rose in greeting from the water. He waved back and saw the figures pull themselves onto the partly flooded platform and disappear inside.

Then the pod began to *move* .

He realised that it was not floating at all. It was *suspended* . He watched, astounded, as the cantilevered arm swung the pod round to bring it to rest hanging suspended over the solid ground of the lake-side clearing.

*Amazing*, he thought, marvelling at the simplicity. *What a place to live*. As he got closer, he realised that the pod was bigger than he had originally thought too: it was at least six or seven metres high and more like 20 metres long. The path ran straight up to the edge of the platform and then stopped.

'Hello.' The greeting came from the woman. She was leaning on the platform railing, drying her hair with a towel, wearing a fluffy cream-coloured robe. The man emerged from the insides of the pod behind her, identically dressed.

Tennys stopped at the foot of the platform, and stared up at the two people above him. The woman was the most beautiful person he had ever seen. The man was the most beautiful person he had ever seen too. Yet he couldn't decide *why* he thought this. They were not youthful gods: the man particularly was greying, with a slight paunch. They did not have flawless features: the woman had a slightly crooked nose, and a *huge* mouth.

The woman stepped down from the platform. 'I'm Carys.' She smiled warmly.

Tennys felt as if the sun had come out and felt a stupid grin spread across his face.

'Tennys Smolensky.' He extended his hand, because he did not know what else to do. Carys' eyes

crinkled in humour and she shook hands with a small laugh. At her touch, Tennys was acutely embarrassed to feel a surge of blood to his genitals.

‘Welcome to Chapel Halls.’ The man stepped down from behind Carys. Tennys watched, amazed, as his fingers were engulfed by a pair of the largest hands that he had ever seen. Despite their huge size, the hands clasped his in a firm, unthreatening embrace. ‘My name is Brock. And welcome to Novagaia too, yes? You have the look of a new visitor.’ Brock stood, clasping Tennys’ hands, looking gravely down at him from a height advantage of at least 20 centimetres.

Tennys felt an almost palpable energy radiating from the man through his hands, a relaxing, healing potential flowing into him in calming waves.

‘Pleased to meet you Brock.’ It felt like the most sincere thing he had ever said. ‘And you’re right, this is my first time here.’

The gravity of Brock’s face vanished, his eyes twinkled like a small child’s, and he grinned. Tennys had the curious feeling that a second sun had just come out, and he found himself grinning too.

‘Splendid.’ Brock dropped Tennys’ hand. He became grave. ‘Would you excuse me please, Tennys?’ Tennys was surprised to note that he seemed genuinely interested in the possibility of an answer in the negative. ‘Only I have some baked potatoes in the oven, you see, and I very much think if I don’t rescue them soon, then all that we shall have to eat this evening is salad.’ Brock smiled again, and rubbed his hands together briskly. ‘Carys my love, would you take charge of our young traveller?’ Brock seemed passionately interested in Carys’ answer. His eyebrows arched up in twin questions and he reached out to stroke her bare elbows.

‘It would be my pleasure.’ Carys touched Brock’s cheek with her hand.

‘Splendid.’ Brock then whooped, jumped into the air and ran back into the pod waving his arms, hooting furiously.

Carys and Tennys looked at each other. Tennys with a bemused look on his face, Carys smiling knowingly. She resumed rubbing her short black hair.

‘My partner is a wonderful man Tennys, but he occasionally has unflattering *pongid* pretensions.’

Tennys reached up under his armpits with both arms, and scratched, letting off a few small exploratory whoops. He didn’t usually indulge in play (he was too old for *that* kind of thing), but something about these people, or this place, suddenly made him feel that it was entirely appropriate. Carys’ eyes went wide with surprise, and a belly laugh escaped her. Tennys could not help but join in, which only made Carys laugh even louder. Suddenly, the image of her in his mind dissolved, as she jumped into a crouch, scratched her armpits and hooted at the sky. He was too astounded to be shocked and so he joined in. They stood there, the two of them, hooting and scratching and laughing until his ribs ached and his throat felt sore.

‘I like you Tennys.’ Carys rested her hands on her hips. ‘You have a good aura.’ Tennys felt the impact of her words as a sudden constriction in his throat: he was not used to people paying him compliments. At least, he supposed it was a compliment.

*Aura? What’s that?*

‘Umm... thanks. I like you too,’ he felt obliged to add, and then felt embarrassed by the clumsy reciprocation. Carys sensed his discomfort, he felt sure, but chose to ignore it, for which he was glad.

‘How about a cold drink?’ she asked. ‘We can swing the pod over the water if you like. It’s really quite something.’

‘Umm, yes. I think I would like that.’ He allowed himself to be led up onto the pod’s platform. ‘Did you build this structure yourself, Carys? I mean, did you and Brock build it yourselves?’

‘After a fashion. We *helped* to grow it really. Would you like alcohol in your cold drink, Tennys?’

Tennys considered it. ‘Yes please.’ He heard a roar from within the pod and an ominous crashing. He heard Carys’ bubbling laugh and Brock’s sonorous chuckle.

Carys reappeared shortly, with two tall glasses. ‘Root beer.’ She raised her glass. ‘Cheers.’

Tennys sipped his drink. It was faintly sparkling, slightly bitter and utterly delicious. ‘You said you *grew* this pod?’

‘Uh huh. Took a lot of work too. But it was worth it.’ She clenched the glass to her chest and breathed deeply. ‘This place is beautiful isn’t it?’

Tennys felt an overwhelming desire to answer her as honestly as he could. ‘It’s the most beautiful place I’ve ever seen.’ He felt unfamiliar emotions course through him as he uttered the words. For him, aesthetics on Memecast had become an abstract adjunct to life, limited to contrived, mathematical sculpture, or the empty precision of holo-plants, no more and no less than that deemed necessary for psychological well-being, like exercise or food. He cleared his throat. ‘So, how did you... *grow* all this?’ He indicated the pod and its support, which had begun to swing out into the lake as he spoke.

Carys looked at him. ‘Where are you from Tennys?’

‘Memecast. But I was born on Austerity.’

‘Memecast.’ Carys looked thoughtful. ‘Yes. I know it. Sterile place.’ Carys breathed deeply before replying further. ‘Well, Brock and I came to Chapel Halls 10 years ago. We wanted to build a life together, and both of us wanted to live the ecopoesis. So we came to Novagaia, and we found this lake. There is a Tree copse just behind the clearing...’ Carys pointed over her shoulder, at the forest wall receding behind the moving pod. ‘We selected a Tree, and entered the consensorias. We gained its trust if you like, and asked it to help us. Took a long time, many months. We had to spend long sessions overseeing the construction in consensorias, watching as the Tree gestated the first choo machines that did the building...’ Carys paused and smiled, remembering. ‘And this is the result.’ She swept her hand around to indicate the pod.

Tennys didn’t really understand what she was saying: *Trees, gestation, consensorias*. He was about to start asking more questions when Brock stepped onto the platform carrying two plates, each piled high with an enormous jacket potato and a multicoloured salad.

‘Here we are Tennys,’ he said.

‘Thanks.’ Tennys accepted the plate of food with relish. Brock handed the second to Carys and went back to fetch his own. When he returned, the three of them sat eating in silence for some moments.

The light faded abruptly, as if a line of night had been drawn over them, plunging them into darkness. The lake responded, becoming serene and still. Small lights, recessed in the platform railing, came on unbidden.

Tennys looked over at Carys and Brock. They had set down their plates and were standing, linked arm in arm, gazing out across the lake. For Tennys, the force of their bond was tangible, exciting the air and making it quiver.

Carys beckoned for him to join them. He set down his plate and went to stand by her side. They stood like that for many minutes, the three of them drinking in the silence.

Brock turned to Carys and kissed her tenderly on the lips then looked across at Tennys. 'Welcome to the good life,' he said, and his voice came from the living heart of Novagaia.

So it was that Tennys spent his first night on Novagaia, sleeping in a hammock on the platform of an improbable structure dangling centimetres above the waters of a lake in the outer margins of Chapel Halls.

It was a memory he would cherish for the rest of his life.

## Chapter Two

From across the small square, Kirsty-Ann looked up at the big letters etched into the mock-stone above the dark entranceway of the bar. The *Oil Burner*. She grimaced. *Surely Melie didn't mean that place?* Kirsty-Ann wasn't sure. She could have checked the mail that she had received, but that would mean talking to the Ghost and Kirsty-Ann didn't really like having the Ghost talk to her. The machine thing whispering in her ear felt to Kirsty-Ann like she had a wasp trapped in her hair. She was sure that was the name though. The *Oil Burner*.

Kirsty-Ann walked across the square, weaving in and out of tables, carefully avoiding the predatory eyes that followed her, to the recessed entranceway to the bar. She peered inside, through the rents in the shredded piece of fabric hanging across the doorway.

Blackness.

The fabric was abruptly pulled aside. Two figures emerged, engrossed in conversation. The one nearest to Kirsty-Ann noticed her. He flicked his eyes, like busy flies, up and down her. He pulled aside the long overcoat he wore with one hand. He took a step toward her, emphasising his crotch from which hung a large, cybernetic phallus. He smiled at her, to reveal sharp yellow teeth. The phallus stirred.

'Farm girl looking for some fun?' He placed his hand on his thigh and licked his lips. He smelt of yeast and Weed.

‘I’m sorry, I don’t know what you mean,’ stammered Kirsty-Ann. She attempted a smile, which died as the man’s eyes became small and disinterested. He snapped the long coat closed, and swept up past her without another word.

Kirsty-Ann, like her sister Melie, had been brought up on the arboreal orbital of Sesquioia on the Newpageant oneil. She was 17 years old, and had only left her home once: this once, and already she was beginning to regret it.

*Melie had said Godsfollice was a good place. Or maybe she said it was a happening place? Are they the same things?*

Kirsty-Ann blinked rapidly several times in the man’s wake. She realised she was scared.

*Right, that’s it! I’m going to sit here until Melie turns up and apologises for bringing me to this horrible place!*

Kirsty-Ann marched over to a nearby table. She was about to sit down when she saw the man that had come out of the *Oil Burner* sitting a couple of tables away. He was staring at her. He rose out of his seat, and began to come toward her. ‘Oh my goodness.’ Kirsty-Ann turned quickly around and almost ran into the entrance of the *Oil Burner*, flinging the tattered fabric aside and stumbling into the aromatic interior.

For a moment, she was blind. When her eyes had adjusted to the gloom, she found herself in a long, dark archway. A bar stretched the length of the cavern down its left side. She selected the nearest empty table and scuttled over to it, sinking down behind its potential anonymity. She pulled out a book from her bag - *Arboretum Design* - and stuck it in front of her face, pretending to read.

‘Customer.’ A metallic voice startled her. Kirsty-Ann peered over the edge of her book and saw a machine standing by her table, dirty plastic appendages folded into a depression on its sides. ‘Do you want a drink?’

The machine looked old and battered with a cylindrical body resting on a single smart-wheel. It exuded a faint tang of burnt rubber.

‘A pineapple juice, please.’ Kirsty-Ann returned to her book.

The machine appeared to deliberate for a moment. ‘No.’

‘Oh. Orange juice?’

‘No.’

‘Lemonade?’

‘No.’ The machine clacked internally.

Kirsty-Ann frowned. ‘What *do* you have? Maybe then I can choose?’

‘Menu. Yes.’ A flat membrane folded out from the machine’s cylindrical torso and became rigid. The screen fizzed white for a moment then a series of images flashed across it, too fast for Kirsty-Ann to make out. The sequence finished, and the membrane folded away. ‘Customer. What do you want to



drink?’

Now Kirsty-Ann was annoyed. ‘A glass of water please. And hurry!’

The machine swivelled around on its single smart-wheel, clacked internally and wobbled away.

*The people are nasty and the machines are stupid.*

Kirsty-Ann would have a lot to tell her friends when she got back to Sesquioia. Thoughts of her forested home made Kirsty-Ann very homesick. She flexed her long arms, and felt her tail coil in response. Her thoughts drifted to her beloved forest and she imagined herself jumping through the upper reaches of a thick green canopy. She was so caught up in her daydream, that she didn’t see the man approach her table and slide into the seat next to her.

She smelt him though.

‘Excuse me?’ She indicated the seat. ‘That’s taken.’

The man smiled a reptilian grin, and spread his arms along the back of the seat. He was chewing something black and sticky. Two irregular trails of it stained the front of his chin, dribbling from the corners of his mouth, like some bizarre, misplaced moustache.

‘I don’t see no one fem.’ The man spread his hands open. He looked about him, his eyebrows raised. ‘Your friend stood you up, huh?’ He grinned again, showing brown stained teeth. His tongue shifted the sticky ball in his mouth from one side to the other. He stared at her and his nostrils flared. ‘You look like you need some company. Pretty little thing like you.’

Kirsty-Ann was not quite sure what revolted her about the man most. She decided that it was his teeth.

*What must his breath be like? Yuk.*

‘I would prefer to be alone, thank you.’

‘Ho ho.’ The man straightened his shoulders and cocked his head to one side. ‘Listen to that pretty shit.’ He scratched his nose with his hand, and pointed across the table at Kirsty-Ann’s book. ‘Hey, you read?’

‘No.’ said Kirsty-Ann, with all the sarcasm she could muster. ‘I just look at the *pictures*.’ She raised the book to obscure the man’s face, which grew hard.

‘Hey!’ He snarled and pulled the book roughly away from her grasp. ‘I’m *talking* to you. You don’t want to talk to Vasili? Vasili could be good for you, little sister, you know what I mean?’ The man’s anger evaporated, and his face re-assumed its mask of geniality. He reached across the table and his fingers brushed away a strand of hair from Kirsty-Ann’s face. She froze, spiders crawling up and down her back. She watched, locked rigid, as the man’s hand dropped away. Leaning forward, his breath washed over her, sickly, like putrefied fruit. ‘You want to earn some?’ He showed rust streaked enamel in a lewd grin. Kirsty-Ann cringed and tried to wriggle away from him without actually moving. The man leant back in his seat, and flicked his eyes up and down her. ‘You from Sesquioia, yes?’

‘No. Yes. None of your business.’ It sounded pathetic even to her.

‘I heard you tree-huggers got tails in those woods, that right? Could give a lot of pleasure with one of them, no shit. People pay a lot for that. I could sort it. You like mals? Fems?’

Kirsty-Ann couldn’t quite believe what she was hearing. *Was he offering to buy my tail from me?*

The man quickly slid round in the seat and attempted to put his arm around Kirsty-Ann’s shoulders. She tried to slide away from him, her back to the *Oil Burner*’s shrouded entrance, but he came after her. He grabbed her arm and held it pinned to his side. She felt hot breath on her neck, and a strained voice sounded in her ear. ‘You gonna perform for me monkey girl, huh? You furry down here, huh?’

Kirsty-Ann felt a hand begin to slide up her leg and was about to scream when the man did something quite strange. All at the same time, he jerked his head back from her ear, buried his face in his chest, gurgled and began to rise out of his seat, clutching his head. Then he rose further and, while his free hand flew down to his crotch, began screaming. Kirsty-Ann screamed too and flew to the far side of the table, her eyes wide with fright. The background buzz of conversation in the bar dropped and faces turned to see what was going on.

The man was hanging, suspended in mid-air, screaming at the top of his lungs, hurling obscenities. Something stood behind him. Kirsty-Ann couldn’t see it properly, because near to it, the light seemed to become confused about what it was reflecting from. Kirsty-Ann half glimpsed movement, but there was nothing to focus on.

‘*Fuckingbitchfuckyoucuntmonkeygirl...*’

At the last component of the insult, the man actually seemed to bounce in mid-air and Kirsty-Ann saw the material of his trousers stretching tight across his crotch.

‘That’s my *sister*, asshole,’ said a voice. Kirsty-Ann’s heart jumped in her chest.

*That was Melie’s voice!*

The ambiguous space behind the man began to collapse in on itself. A figure became visible, tall and thin, arms, legs and torso covered with a thick black tracery. One of the figure’s hands had grabbed a handful of the man’s hair, and the other was holding him between the legs. The man was crying like a baby. ‘Go suck shit!’

The figure hoisted the whimpering man around, walked him towards the exit, and threw him through the door of the *Oil Burner* like a sack of old rubbish. The buzz of conversation resumed around the bar.

‘Yo Melie.’ A stocky woman in dungarees raised her hand. Melie slapped it. ‘Good job.’ The woman laughed wickedly. ‘That Vasili is *such* a worm.’

‘Alright Bea. Yeah. Slimemold was hitting on my sister.’

‘Your sister? No shit.’ Bea turned towards Kirsty-Ann. ‘Hi girl.’

Kirsty-Ann was too stunned to either move or speak.

‘Yo Cuty!’ Melie sauntered over to the table. ‘Sup fem?’ She picked her sister up in a bear hug and span her around, laughing.

Kirsty-Ann laughed too, and she returned her sister's hug. 'Melie, how did you get so *strong*? ' She gasped through her laughter. 'You threw that man like he was no heavier than a *feather*!' ' She banged on Melie's arms. 'Put me down!'

'Been working out. Hey it's *good* to see you Cuty.'

The machine that had taken Kirsty-Ann's order wheeled up to the table. One of its appendages held a grubby glass of water.

'Water. Pay now.'



The *Oil Burner* was situated in one of the oldest parts of Godsfollicle. If Kirsty-Ann had taken the time, she would have seen imprinted into the mock-stone, in much smaller letters below the name of the place, the legend, *Est. 35 AK.*. Melie had chosen the *Oil Burner* for her meet with Kirsty-Ann simply because it was the closest place she knew to the reaction shuttle terminus, and she hadn't wanted her little sister to get lost: Godsfollicle was not the kind of place that you bought maps for. Besides, the Weed you could get in the *Oil Burner* was just *amazing*, and Melie wanted to stock up before she went to Novagaia.

Godsfollicle was the smallest, ugliest, most dilapidated of the structures making up the Koyculture, unique in being almost entirely human-constructed. Godsfollicle was not a neat, tidy place, more a chaotic agglomeration. Like a chocolate truffle rolled across a plate of drawing pins, cubes, globes, ziggurats and rings sprouted in all directions from the mountain of reconstructed lunar material.

The earliest structures, adhering like clams to the stony tip, had been added to over the centuries since, sprouting improbable forms on flimsy metallic fronds. These in turn had spawned their own peculiar progeny. Like some monstrous plastic and ceramic coral, Godsfollicle had grown with a bewildering diversity, slowly expanding to accommodate the hordes of people which had flocked to it after the metacetaceans of Water retreated behind their wall of silence, 450 years ago.

Godsfollicle was also the geosynchronous tether for the monstrous thread that dangled from it, the 70,000 kilometre long *Hair of God*.

To many of the first dispossessed citizens of the Koyculture, the *Hair of God* was a potent symbol, representing the only remaining, tangible connection with humanity's old home. Godsfollicle attracted the kind of person who was not yet willing, even after four centuries, to believe that Earth was gone, and that Water had taken her place. Maybe they thought that if they sat at the top of the Gaian gravity well long enough, they might be there when the wrath of Water cooled and the oceans retreated. Maybe they thought that they would live to see Earth live again, coughing the saline from her lungs and accepting her banished children back into their garden. They had been waiting four and a half centuries for this resurrection, and would wait another four, if necessary, but deep down, everyone in the Koyculture knew that their patience was in vain.

Earth was dead, and drowned.

Her death had been slow and remorseless. During it, human kind could only watch as the metacetaceans of Water gouged at her protective epidermis, peeling it away like so much blubber, leaving her to blister and burn in the harsh UV. They could do nothing as Earth wrinkled and shrivelled and her breathing became more and more laboured. They could only watch helplessly as her two frozen mammaries of saline warmed and pooled and began to fill her lungs with fluid, drowning her from within. They could do nothing as Earth become spiteful, spurning those of her children who tried futilely to help her, sending storms to batter and torment them. And finally, impotent and unable to intervene, they could only look on as Earth moaned in despair and sank slowly out of sight beneath the encroaching oceans.

The Gaian mother, suffocated by the liquid embrace of Water.

As the garden was slowly inundated, human kind scuttled to higher ground. From there they witnessed 200 years and more of magical construction as the fragile forms of the Koyculture took form above their heads. Earth's lunar companion became smaller and more jagged as mysterious metacetacean forces took it apart and re-assembled it in new forms. Orbitals, tori, spinning oneils and crazy, architectural clouds of structures blossomed in the vacuum and the impossible thread, the *Hair of God*, dropped slowly out of the sky towards the Himalayan plateau.

In the end there was little choice.

Like ants climbing a blade of grass to escape the rain, humanity began the long climb up this improbable cable. Escaping the Gaian mother's fierce embrace they emerged, blinking and uncertain into the sparkling new worlds built by the metacetacean builders of Water.

The remnants of humanity left alive after the metacetacean cull, after centuries of sterility, watched the final death throes of the planetary mother from the lip of her gravity well, peering down at her from their new home of the Koyculture. The usurpent metacetacean race might have murdered the mother, but it kept her children alive, for what reason no one knew, except the Cardinals possibly, but they weren't saying.

The name, the *Oil Burner*, was a relic of the older, more embittered generation that had watched from Godsfollicle, when it was little more than a pimpled lump of rock, as Earth had spluttered and died. This generation had mourned the loss of the Earth mother with angry resentment toward her murderers, but they could do nothing. Insults were their only weapon. Naming a bar the *Oil Burner* was kind of like the verbal equivalent of sticking two fingers up to Water.

*Fuck you!*

The name was a reference to the time when the incomprehensible minds of the metacetacean citizenry were trapped in handless, streamlined bodies, and they were speared from the sea with steam propelled harpoons. To the times when the great ancestors of the new *meta* cetaceans were skinned alive and peeled like a fruit, helpless with wretched agony, forced to experience the ablation of their own tissues by cruel, snickering things with long knives. To the times when their warm blubber was scythed from their living sides, boiled in vats to provide oil, and then burnt for light.



‘Golly,’ said Kirsty-Ann, when Melie had finished telling her the aetiology of the *Oil Burner*’s name. Kirsty-Ann didn’t know much about history. Ask her which species of arboreal monkey gestated its young for the longest, and she was right on the button, but *history*?

*Wasn’t history what they kept on Novagaia?*

‘That’s the *Histories* , bimbo.’

‘Oh!’ Kirsty-Ann giggled into the pineapple juice that Melie had procured for her. All of that stuff about Water and Earth being drowned had happened centuries before she had been born. Nonetheless, Kirsty-Ann felt a sympathetic sorrow when she tried to imagine what it must have been like for all those people in fear and pain. And what used to be done to those poor Water people!

‘Piss on that! Those fucking fish *destroyed* the whole fucking Earth! *Drowned* it. Turned into one big fucking lake. Spearing a few of them out of the water is no reason for genocide, is it?’ Kirsty-Ann grudgingly accepted that it was probably not. ‘And *then* they disappear, and you don’t hear so much as a squeak out of them again, for the best part of 400 years! Kirsty-Ann agreed this was impolite. ‘Impolite? Ha!’ Melie drew a deep breath. ‘But anyway, anyway, I didn’t come here to talk about the name of a *bar* ...’ Melie reached out and placed her hand fondly on her sister’s arm. She smiled sweetly. ‘I’ve come to see my favourite little sister!’

‘No you haven’t Melie!’ Kirsty-Ann’s eyes widened in exasperation and surprise. She set her glass. ‘*I’ve* come all the way from *my* forest to see *my* rebellious older sister, who just happened to get *thrown off* Newpageant by...’

‘I wasn’t *thrown* off. I was asked to *leave* .’

‘...for burning down a sacred birch grove single-handedly, and no-one still knows why or how and who hasn’t been heard from in over *four years* Melie!’ Kirsty-Ann finished on a decisive, triumphant squeal.

‘I think that’s the most I’ve ever heard you say in one go?’

‘Oh. Oh... Oh you *pig* , Melie!’ Kirsty-Ann burst into tears. She had been only 13 when Melie left Sesquoia, and at the time, couldn’t understand why her sister would desert her. Kirsty-Ann had cried herself to sleep for weeks, desperately lonely without her big, rough and tumble older sister there to coax and guide her through.

‘Hey.’ Melie was suddenly appalled by her sister’s tears. ‘Oh, hey, come here Cuty, don’t cry.’ Melie slid around the table, and hugged her sister to her, stroking her hair.

‘You left me, Melie. All alone with Sally. Why did you leave me?’

‘I didn’t want to, Cuty but they forced me to. Said I was a filthy arsonist, with no respect for life.’

That wasn't entirely true. Melie *had* wanted to get away from Sesquoia. She had had a belly full of other people telling her what she should believe and how she should live her life.

Plus, there was the Blit, but Melie didn't like thinking about that.

'I missed you *so much!*' said Kirsty-Ann, snuffling through tears. She rubbed the back of her hand roughly across her wet cheeks. She burst into tears again. 'Oh Melie, it's so good to *see you* . '

'Doesn't look like it to me. Look, you've blubbed all over your book.' Kirsty-Ann laughed despite herself. 'Listen, how about if I tell you a story, like I used to, yeah?'

'I'm not a *child* you know.' Kirsty-Ann wiped at the wet end of her nose.

'I know, I know, but this is a good one. D'you want another drink?'

'Yes please.'

Melie moved to get up from the table. She paused and looked down at her sister. 'You OK?'

'Yes, I'm fine.'

'Back in a tick.' Melie sauntered over to the bar.

Kirsty-Ann looked at her sister as she leant against the thick plastic counter. *No senile machine is going to serve my sister anything to drink* , Melie had said when the service machine had presented Kirsty-Ann with that grubby glass of water. Melie had sat Kirsty-Ann down, and stomped over to the bar, and proceeded to hammer on the dark, slippery top until a fat woman with enormous breasts and a huge mane of frizzy hair had emerged from a recessed doorway, and demanded to know what Melie thought she was doing. Melie had leant across the counter, and whispered something to the woman. The woman had initially shook her head, but eventually smiled, and wobbled away back into the door behind the counter. She had re-appeared moments later, with a carafe of pineapple juice, and a small package, which Melie pocketed quickly.

Kirsty-Ann watched a replica of the scene again now, and this time, the woman greeted Melie like an old friend. 'Do you know her?' she asked when Melie had returned with a fresh carafe.

'Not really. Well, sort of. Nice enough fem. Anyway, I was going to tell you a story.'

'Yes!' Kirsty-Ann leant forward eagerly in her seat.

'OK.' Melie sat back in her chair, collecting her thoughts. 'Well, I've been working recently with a bunch of mals who take a show around Koy in a couple of old reaction shuttles. We do tricks and do tightrope walking, that kind of stuff. The outfit is called, get this, the *Cunnycarnival* . '

Kirsty-Ann's eyes went wide. 'Really?'

'Yeah, and they were looking for someone to come in on a high-wire act, you know, and they were well impressed with my tail too, as you can imagine.'

Kirsty-Ann thought back to the man, Vasili, who Melie had thrown out, and she nodded her agreement.

‘So I’d been working with these mals for a while, and it was alright. Except for this really fucking *odd* bossman actually, this *huge* neomorph, but you know, I could handle that. But the weird thing was, like, that not one of them had come on to me at all, you know? It wasn’t like I was really into any of *them* or anything, but it just would have been nice. So, anyway, I was just finishing up a practice session one night with these two mal, Jurgen and Fist - should have figured it out with names like that - and we were all hot and sweaty after pounding wires, and Jurgen and Fist took off for the showers. I must have forgotten something, or *something*, and anyway, I doubled back, and walked in on Jurgen going down on Fist like there was no tomorrow!’

Kirsty-Ann looked at her sister blankly. Melie explained. Kirsty-Ann blushed deeply and Melie laughed. ‘Goodness,’ said Kirsty-Ann. ‘What did you do?’

‘Well, I just kind of backed out of the room real quietly - the guys were really into it, and didn’t notice me at all. But I tell you what, seeing that got me feeling a bit horny you know, all juiced up!’

Kirsty-Ann squeaked excitedly, nodding her head. ‘Then what happened?’

‘Well, I cruised out of there, feeling all tingly and kind of nice you know and came down here for a juice and something to eat.’ Melie indicated the *Oil Burner’s* gloomy interior. ‘Well, I was just sitting, kind of minding my own business, when I felt these eyes on me.’ Melie paused to take a sip of her juice. ‘I was looking around and saw these two mal sitting a couple of tables away, all done out in these big flowing robes, with their hair tied back in pigtails, yeah? One of them looked a little older than the other, more ugly, but the other one!’ Melie whistled, and rolled her eyes.

Kirsty-Ann grinned at her sister. ‘Then what happened?’

‘Well, I was just sitting starting on some bean salad, when these two mal started really shouting at each other, right? The older one got really angry, right, shaking his fists, and looking over at me, and pointing. Then he stormed out, and gave me the *nastiest* look as he passed. Well, I thought, "Huh, Jurgen and Fist all over again", else why would he have looked at me like that, yeah? and I just stared back at him sweetly. Then the other one comes over. He’s maybe ten cees smaller than me, oval faced with all this black hair and these sweet brown eyes but he looks really nervous. He looks down at me, and I can see he’s pretty scared. And *then* guess what?’

‘What?’

‘He sits down, and looks at me, and says, "Hello, my name is Gervane. I’m being taken to Austerity". And he’s twisting his hands like he wants to pull his fingers off, and he doesn’t want to look at me. "Hi" I say, "I’m Melie". He smiles at me, and suddenly, it’s like his whole face changes. I was thinking that maybe the mal wants to hit on me, but when he smiled, it was like he was saying, "I want to be your friend". Does that sound weird?’

‘In this place, yes!’ The two sisters laughed. ‘But anyway, this Gervane had just smiled at you?’

‘Oh yeah.’ Melie sipped her juice again, recollecting her thoughts. ‘Right, so I was there, you know, thinking, "What is this mal about?", when he suddenly slides round in the seat, and kind of cuddles against me, like a little mouse or something!’

‘No!’

‘Yeah. You know, normally if a mal did that, I would break his fingers, but there was something about

this one which made me stop.'

'Maybe his eyes. Nice mal have nice eyes, don't they?'

Melie looked at her younger sister with a sudden insight. 'Yes, they do don't they? Umm. Where was I?'

'Gervane was nestling up to you.'

'Oh yeah, right. Well, I'm just sitting there, when this mal sits right up straight, and takes my hands and says, "I'm going to Austerity". I don't know what the mal is talking about, so I say, "That's nice". "No, I don't think so." he says, and his little face all creases up, and he looks like he's going to cry or something. "I think I will hate Austerity, Melie." he says. "I've heard they sit and eat soy porridge all day, wearing long scratchy robes and you can never..." and then he trails off, like he's embarrassed or something, and looks up at me with those brown eyes. Then I get what his problem is: no fems! Like I reckoned he was going into a fucking *church* or something you know, being forced to spend the rest of his life using his hands.'

'Oh how terrible for him! What did you do?'

'Well, you know what I'm like, sucker for a sweet face. I took his hands, and said: "Gervane, tell me what you want". And he goes all embarrassed again, and won't look at me, and kind of mumbles into his hands. And this is all very sweet, I'm thinking, but sometimes you kind of want the mal to do *some* of the work at least, so I get a little stern, and say, "Gervane, tell me now!". And he does, stuttering and mumbling, but he does.'

'What did he want?'

'What do you think? He wanted to taste the real honey!'

'Oh!'

'Now usually, you know, a mal like this just turns me right off. But there was something about this one...'

'His eyes?'

'More like his hands, I think,' said Melie, after a moment's reflection. 'Really fine and long, like they could be really gentle, you know? And you know how good gentle feels Cuty.'

Kirsty-Ann dropped her head a little and grinned, looking up at her sister over the rim of her glass. 'Don't know what you mean Mel.'

Melie laughed, 'So anyway, this mal Gervane, once he susses that I'm not going to laugh at him or anything, gets a little bit more forceful, which I kind of liked. He says that he is staying in a place nearby and he starts pleading with me to go with him. "This is more like it" I thought, and play the tart a bit, stringing him along, and he gets *really* excited about that.'

'Did you go with him?'

'Yeah!' Melie gave a wicked grin. 'And *oh wow*, the mal was just *amazing*! There was I thinking that he would be like, a little unsubtle, you know, like all young mals, but he wasn't at all.'



‘Goodness.’

‘And before I knew it, there I was, with this mal’s hair spread all over my tummy - his hair was longer than *mine* you know - with his tongue doing the most *incredible* things.’

Kirsty-Ann tried to picture the scene: her own experience was not extensive, but she had a good imagination. ‘Ooo! Was it nice?’

‘Oh Cuty!’ Melie wriggled on her seat. ‘*Nice* is not the word fem! You want to try it with your mal on Sesquoaia. And don’t be embarrassed to ask him either. And if he’s not into it, find someone who is.’

Kirsty-Ann grinned at her sister, and did a little shimmy, smoothing her hands down over her small breasts. ‘Yo. I hear what you’re saying.’ They both laughed. ‘But then what happened?’

‘Now we come to the scary part. Gervane was doing all these *incredible* things to me, and I was just in bliss, when *suddenly*, the door to his little room crashed open, and there was this huge mal standing there, looking at Gervane’s naked bum wriggling between my legs. I don’t know who was more shocked, him or us!’

Kirsty-Ann burst out laughing at the picture that Melie was drawing for her. ‘What did you do?’ she asked.

‘I did what anyone would have done! I started screaming, at the top of my lungs, like the fucking world was ending or something. The big mal picked Gervane up by his hair, and began slapping at his tool, you know, which was deflating pretty quickly by this time, as you might imagine, and started saying all these weird things about mills and duty and stars and stuff. Gervane started screaming back and punching at the big mal’s stomach. I kind of figured that maybe this was Gervane’s *father* or something, right, the one that wanted him to sit in a cell on Austerity and masturbate for the rest of his life? *Not* a person that I would like to sit and have a chat with, ‘*specially* not after having his precious son between my legs. So I kinda snatched up my clothes, and tried to squeeze past them. I was mostly there, too, when the big mal suddenly broke off from slapping Gervane’s tool, and grabbed me by the arm. "You cannot leave," he said, in this really creepy voice, like he was enjoying himself but angry at the same time. "Watch me." I said, and landed him one between the legs and just fucking ran, pulling on my clothes as I got outside. I ducked into this doorway as the big mal came storming out. He didn’t see me and went back inside, so I took myself home for a hot shower and a smoke.’ Melie took a long swig from her juice. ‘Speaking of which.’ She took the package out of her pocket. She unwrapped it, and peeled off some dry green leaves, which she packed into the bowl of a small pipe, and then lit. Green, aromatic smoke drifted over the table.

‘*Goodness*, Melie!’ Kirsty-Ann had become more and more alarmed as the story had unfolded. ‘That must have been really *scary*.’

‘It was. I was just about to come too.’

‘But have you seen Gervane again? Or that horrible mal? Was he Gervane’s father, do you think?’

‘Dunno.’ Melie gestured towards Kirsty-Ann with the pipe. ‘Want some?’

‘No,’ said Kirsty-Ann automatically, then: ‘Yes.’ She took the pipe and sweet, almond-scented smoke filled her nostrils. She felt a warmth spread across her face. She coughed, but only a little. ‘Hmm. That’s

nice.'

'I'll get you some before you go. When *are* you going anyway? We've just *got* to do some stuff together before you go back to Sesquoia, yeah?'

'Oh *yes!*' Kirsty-Ann became excited at the thought of spending some time with her big sister again after so many years. 'When are you going to Novagaia?'

'Don't know really. Whenever. Supposed to be there in a couple of days, I suppose.'

'Why are you going there Melie? For a holiday?'

Melie's face, usually so open and friendly, became a little closed, a little hard. Most people wouldn't even have noticed it, but Kirsty-Ann did. She was Melie's sister, after all, and she knew her very well, even after a separation of four years.

'No.' Melie dropped her head a little, scratching behind her ear. 'Not a holiday.'

'Oh. What then?'

Melie was silent for a while. 'Listen Cuty,' she said slowly, and when she looked up, her eyes were hooded. She was scared.

'Melie! What's wrong?'

'Nothing. Listen, I can't really talk about it, alright? I don't want you to worry, but I can't talk about it, OK?'

'Can't talk about what?' Kirsty-Ann became a little scared herself.

Melie desperately wanted to tell her sister why she was going to Novagaia.

*The Blit.*

But how do you explain something like the Blit? Melie didn't even know what it *was*. All she knew was that, every once in a while, more frequently recently, something happened to her.

*She Blitted.*

It was her own private name. Like everyone in the Koyculture, Melie had her own resource and so was familiar with the disorientation that using the nchoi machines could sometimes effect. But the Blit was something else. She had no control over it. She could not tell when it would happen. It was simply that, every so often, she would suddenly see things that weren't there, and hear things that weren't noises, and... she couldn't even describe it. When the Blit happened, it was not really like *seeing*, exactly, nor like hearing either. If she looked at something, she could see it as it was, or as it was going to be, or what it might be, was that it? Things became different somehow, that's all she knew: Fucking *really* different. She knew no more than that. She had told no one about the Blit, because they would probably laugh at her, or worse, and because she couldn't even describe what it was that *did* happen to her. Melie did know one thing though: the Blit, when it happened, scared her shitless.

'Melie!' Melie heard Kirsty-Ann's concerned voice, and it broke her reverie. She saw her sister's lower

lip tremble slightly. 'You're shutting me out again, aren't you Melie? Just like on Sesquoia, when you left. Shutting me out.'

Melie became irritated. 'Listen!' She saw Kirsty-Ann recoil from the harshness in her voice. 'I *did*, am *doing*, nothing of the kind.' A sudden frost developed between the two sisters. Kirsty-Ann's face became hard, set in a frown, and she pouted angrily. Melie was suddenly inspired. 'OK, OK, don't get all upset on me again. Thing is, I've got a *disease*. No one knows what it is, or how to cure it. Some weird kind of virus or something, but I reckon that the Cardinals will be able to help me, OK? That's why I'm going to Novagaia.' The best lie was the lie that was half-true.

'Oh Melie, why didn't you *say* so? Is it, you know...' Kirsty-Ann indicated down, towards her crotch.

'No it fucking isn't!' Melie didn't have to fake her indignation.

'I'm sorry, I just thought that...'

'You just thought *what*? '

'I'm *sorry*!' cried Kirsty-Ann. 'So I'm stupid, I know that. *Everyone* tells me I'm stupid, always putting my foot in it, always missing the jokes. Even *you* think I'm stupid.' Kirsty-Ann pouted and scowled disconsolately into her pineapple juice.

'Oh Cuty!' Melie's antagonism fell away. 'I don't think you're stupid. You're a wonderful person and I'm sorry, I didn't mean to get angry. Please, let's not argue, not now.'

Kirsty-Ann harumphed. 'OK, we won't argue. But you've got a *disease* Melie, you might *die*! '

Kirsty-Ann wailed and tears appeared in her eyes.

*Shit*, thought Melie. She had forgotten her convenient falsehood.

'Listen, I'm going to be fine. I'll go to Novagaia, and see a Cardinal, and they'll cure me. It's no big deal. Honest.' Melie looked at Kirsty-Ann, and felt a sudden wave of affection for her sister. *She's only worried about me*, she thought. *Been a while since anyone did that*. 'Hey, what about if when I come back, I visit you on Sesquoia, huh?'

Kirsty-Ann immediately brightened. 'Would you? I would *really like* that Melie.'

'Yeah, I'll see if I can steal that young mal away from you, yeah?'

Kirsty-Ann's brow furrowed. 'You are horrible to me sometimes, Melie.'

'Only because I love you. Right, shall we make a move? We can go visit a little market I know if you like, sells some really *beautiful* stuff.'

'Yeah, OK.' Kirsty-Ann finished off the rest of her juice in a gulp. 'All set!' She laughed and stood up. As she did so, Melie saw past her to the shrouded entranceway of the *Oil Burner*.

A huge, dark form stood peering around in the gloom.

'O-oh.' Melie pulled Kirsty-Ann back down into her seat.

‘Melie! What you doing?’

At the sound of her name, the head on top of the huge form snapped around, searching for the source. It put his hand ominously into his jacket, and began walking slowly into the *Oil Burner’s* smoky depths, coming towards the two sister’s slowly.

*Shit, shit, shit!*

‘Cuty!’ Melie sank lower in her seat. ‘That’s him!’

‘That’s who?’

‘That mal Gervane’s pervert father!’

‘Oh my goodness!’ Kirsty-Ann went a little pale. ‘What are you going to do?’

‘I’m going to get the fuck out of here is what I’m going to do!’ Melie looked around her quickly. ‘Hey Bea! *Bea* , you fat bimbo!’

The stocky woman who had congratulated Melie earlier swivelled round in her seat two tables away, and glared around for the source of the insult. ‘What?’

‘Bea! Over here!’

The huge mal had gone over to the bar near the entrance, his back to them: the woman with the frizzy mane of hair was wobbling over to him. Bea came over to the two sisters’ table.

‘What’re doing slouched down like that? Piles givin’ you grief?’ She guffawed.

‘Shut up! This is Kirsty-Ann, my sister. Anything happens to her, I’ll sew up your fanny with a blunt needle. Make sure she gets safely on the next shuttle back to Sesquoia.’

‘Seeing’s how you asked so nicely...’ Bea replied, ‘...it’d be my pleasure.’

Kirsty-Ann began to protest. ‘No, you can’t let that nasty man bully you Melie. And I’m not going back to Sesquoia either.’

At that moment, the mal turned round from the bar after conversing briefly with the large women and saw Melie. The pale, lumpen face did not register shock or surprise but he reached ominously into his pocket.

‘Shit!’ Melie quickly accessed her resource. An icon appeared, a tiny billowing cloak. She stabbed at it and pulled the hood of her short jacket up over her head as the nchoi machine activated the camouflage polymers enmeshed in her clothing. She became an ambiguous chameleon-figure, the camouflage polymers straining to make her appear like her surroundings. She dived under the table, a ghostly ripple.

‘Heavy shit.’ Bea’s eyebrows shot up in surprise.

‘Goodness!’

The large mal pulled a wispy microfactory weapon from concealment and fired. The portion of the seat

that Melie had just vacated erupted in a shower of foam and plastic.

‘Melie,’ cried Kirsty-Ann. ‘*Melie!*’

‘Yo.’ The small voice came from the ambiguous emptiness, which was emerging from under the table. ‘Relax, he won’t be able to see me now.’

The mal pointed the microfactory weapon downwards and fired again. The base of the table collapsed, sending its top spinning up into the air in a fountain of debris.

*Bitch*, Melie thought, *he’s got to have some kind of optics tool on-line. He can see me!* Fortunately, Melie had a few tricks of her own up her sleeve. One of which was Bea. The stocky woman had cowered from the mal’s first shot, and screamed, like she was really scared. Keeping her head low, she ran past him waving her arms. Then, when she got past him, she stopped screaming, took a small blade from a sheath on her arm, and plunged it up into the mal’s back, aiming for his kidneys. The knife penetrated the loose fabric, and then slipped on something hard just underneath it, cutting a twenty-centimetre vertical rent in the material, to the top of the mal’s neck. There the blade drew a small glob of blood.

Bea tried to alter her grip on the knife for another attempt, but was a fraction too slow. The mal turned, and back slapped her across the bar, turned back quickly to where Melie had been.

But Bea’s assault had given Melie the time that she needed. The black tracery that she wore was not cosmetic. It was a micro-hydraulic exoskeleton: The *Cunnycarnival* used them for loading and unloading their circus equipment. When it was active, like it was now, she could haul five hundred kilo crates around like they were so much cotton wool.

Melie had rolled away from the table, and ended up crouching next to the bar, hidden temporarily by the legs of the stools clustered around her. The *Oil Burner* was undergoing riot. People were screaming and crying, and the air smelled sharp and acrid. Melie’s eyes stung.

*Alright needleprick! This is for Bea. And Gervane.*

She braced her legs against the base of the stool behind her, and tucked herself into a ball. Then she jumped, the micro-hydraulic exoskeleton propelling her in a flat parabola at thirty kilometres an hour. Melie hit the mal’s midsection, and heard things snapping as he flew backward under the force of the impact. Melie felt a blinding pain stab her in the neck, and she cried out, rolling away, the camouflage polymers in her clothing cycling quickly through a chaos of colours before they gave out.

The mal was on his back, blood coming from his mouth, and Melie gave a grimace of satisfaction. Then he raised and twisted his head, saw her, and without moving, fired the weapon that he was still clutching in his hand. The noise was ominously muted.

*Fuck this for a game of squireys,*

Melie staggered to her feet and headed for the exit. A portion of the wall next to the door exploded in a cloud of stone debris as she dove through it and out into the small square. She regained her feet quickly, and used the exoskeleton to propel her at a supra-human pace, leaping over tables and astonished people as she turned to look behind her briefly.

The mal was still after her.

### *Not for long*

She ducked into a little alley, plastered herself to the wall and then edged herself up to the corner, risking a small peek. The mal was moving along the corridor, holding his stomach, curiously mechanical in his movements, his face a blank. As he was about to pass the alley, Melie locked her hands together, and stepping out, swung both arms as fast as the exoskeleton would drive them, up and into the mal's face. Melie felt pain explode in her shoulders and arms, felt blood and spittle spray her on the cheek. The mal's head snapped up and backwards, his nose smashed, slivers of bone penetrating through to the softer neural tissues behind. For a moment, the mal was horizontal in mid-air, then he crashed to the floor on his back, his face ruined.

### *Have I killed him?*

One part of her wished she had, another part wished she hadn't. She stood over the comatose form, uncertain how to proceed, when the mal raised an arm, a wiry, globular thing attached to his hand. Melie flung herself backwards, but too slow to stop her already painful shoulder being violently jerked back and up by an incredibly powerful force, lifting her off her feet and propelling her backwards. She landed on her back, and grunted, her hand flying to her shoulder, pulling away thick, crimson blood. A figure materialised out of the red haze of pain that passed for her sight. She was jerked upright, and she smelt sour breath in her face.

'You have violated the venerable Millstar.'

'Fuck you.' Melie tried to spit but her mouth was dry.

A bright red smear appeared in the middle of the huge mal's forehead. He gurgled and tightened his hold on the front of Melie's shirt. Then he fell forward and to the side and lay still, face down with the back of his head missing.

With all the rest of the energy that she could muster, Melie raised her head and saw the woman from the bar. She held a weapon almost as big as she was, and it squashed one breast as she lowered it from her shoulder.

'Fucking Austerity *fish!*' She hurried over to where Melie lay spread-eagled on her back. 'No respect for us fems.'

## **Chapter Three**

In the dream, he was standing at the top of a small cliff, sloping down in a wash of loose gravel to a wide beach, of the same, black gritty rock. There was no wind, and the sun shone strongly out of a clear sky. He looked about him, and all around it was the same: the shallow even drop of the cliff, the green water, the dark, crystalline rock. He took a step forward, and the ground underneath his feet crunched and popped, little sparkling shards flying up around his feet. He became aware of someone behind him,

speaking in a low voice. He turned but there was no one there. The voice continued, behind him still. He frowned, and turned again, but there was only the rock, and the sun and the water. The voice was insistent. *He must. He must* . A wind sprang up, bringing with it a sharp, iodine smell. *Now, you must go now. You know you must* . His frown deepened, and he pursed his lips. He began walking down the cliff face, slipping and sliding over the pulverised rock. He reached the beach, and began walking toward the water. The ground became hot under his feet, and he felt the first hollow emptiness of fear, like hunger, gnaw at his insides. He looked around him, and called out. The slope had got steeper. It didn't seem possible now that he could have climbed down it. He saw a figure at the top of the cliff, a stick like thing, jumping and screaming, pointing at him. He called out, but his voice was a whisper, and it carried no distance. The stick like figure at the top of the cliff bent down, and lifted a portion of the cliff, and snapped it down. Like a wave travelling along a rope, a portion of the cliff came away as a solid sheet, folding down and collapsing onto the beach. He cried out, and felt the ground under his feet shift horribly. He fell, and tasted the black gravel of the beach in his mouth. He looked up, and saw a naked figure. She was rolling in the sand a couple of metres away, and he could see black crystals gathering in the crease of her buttocks. He cried out to her, warning her, and she turned dark, dancing eyes on him. The ground trembled again, and he saw the figure unrolling another portion of the cliff, saw its solid wave come toward him. The ground grew hotter still, and he struggled to rise, but it was like walking on water. The woman had disappeared. He retained an image of her eyes laughing at him, and felt his mouth begin to fill with a gritty, earthy taste. The wave of gravel was travelling slowly towards him, sucking the ground ahead of it, and him, down and then up. The wave of gravel was about to engulf him, when he found his strangled voice, and shrieked in fear and bafflement.



Flocanalog awoke, his heart clamouring in his chest, and gave a long, trembling breath, feeling the medical emulsion in his lungs bubble. The viscous medical gel around him flowed turgidly as he squirmed and tried to sit up. *Always the same* . He relaxed, knowing he couldn't move, and felt the nightmare horror begin to fade.

He was surrounded by a low, ambient lighting, filtered ambiguously through the pale blue of the medical emulsion. The soft whisperings of the Transition facility reached his ears distantly. He tried to move again, unconsciously sending motor commands through now defunct pathways to the Shell's magnetohydrodynamic limbs. A spiked ball appeared in his vision, pulsed twice, and vanished.

### *Interdiction.*

He felt a great despair well up inside him, familiar, like an old friend's hand on his brow. He had been warned that the transition from the Shell would be a physically and emotionally draining process. He thought he had been prepared, but the reality was far worse than he could have imagined. Detached from his symbiosis with the choo Host of the Shell, he felt amputated, as if he had lost parts of himself. Which was true.

### *Amputation.*

He could think of no other word more fitting.

Flocanalog had arrived at the Transition facility two weeks ago, and for many hours, had swam back and forth in front of the access gate to the facility pool, open to the ocean, reluctant now that he had come this far to take the final step. He could sense the agitation of the Shell: the Host of the machine knew what was coming, and its fear and trepidation were palpable. Finally, he had swam inside, and been taken from the ocean pool, from his home and his life, and put in a fresh water holding tank.

Over a course of four days, the medical facility bled a steady stream of molecular machines into the tank, infecting him with a variety of medical nchoi. The tiny machines spread throughout the Shell, forming interfaces with the choo Host. They had then moved deeper, and recognising his distinctive physiology, grown new strains of themselves, slipping through his skin, passing through subcutaneous fat, seeking out arterial highways for their commerce. Burrowing their way into his flesh, they quickly infected the tissues of his brain and central nervous system, setting up temporary buffers and connections. The preliminaries accomplished smoothly, the nchoi had then set about cutting and dismantling the myriad of connections from his own primary and secondary neural systems with the choo Host of the Shell.

He had gone blind first.

Circling slowly in the holding tank, he had felt his perception grow dim and grainy. Encased in the carbonsponge body of the Shell, free living in the oceans of Marineris, he had once had access to the senses of the machine: the machine's eyes were his eyes, the machine's ears were his ears. The information from the machine's senses was synthesised in his re-wired, marine-adapted visual cortex, enabling him to perceive the beauty of Marineris like no human ever could.

For Flocanalog and all the other symbionts of Marineris, an analytic separation of language and perception quickly became otiose by necessity. No longer was the environment perceived, and then described: perception and description blurred, and became part of a grander cognition. Losing his sight for Flocanalog was thus more traumatic than for a human, because he lost his means of describing the world also. As the medical nchoi dismantled the neural pathways linking the primary visual cortex to the Shell's senses, so they also spread to his interpretative cortex, chopping minutely at Broca's area, Wernicke's area and the arcuate fasciculus. Flocanalog found himself in the grip of a remorseless, encroaching aphasia, and his conceptual understanding of his world began to fail.

He became paraplegic next.

The medical nchoi moved to other regions of his brain, infecting the motor cortex, sinking lower into the cerebellum and basal ganglia, fastidiously dismantling the motor pathways linking him to the magnetohydrodynamic limbs of the Shell. It all happened slowly, and painlessly. Physically that is. Flocanalog had steeled himself for the experience, but was unable to fight off the feeling that he was losing himself, piece by piece. He had felt control over his body, which was the Shell, falter and slide away. Conceptual understanding became difficult: thoughts became absurd.

After seven days, the medical nchoi withdrew, their task done, and Flocanalog was left, a disembodied, mutilated consciousness floating in a dimension-less void, without perception or motion or volition. He had cried non-existent tears, torn out non-existent hair. He had moaned and wailed without noise, a mind without a body, and felt hot needles of desire lancing through him: not a physical lust, but an emotional need so strong it felt like he would die without it being satiated.

*Let me go back! Oh, let me back!*



After the first wave of nchoi had withdrawn, Flocanalog was cut physically loose from the Shell's carbonsponge body. The Host of the machine had acquiesced to his wishes for the forced separation, and was decanted into the facilities resident choo resource, where it would remain, sharing the machine-dreamtime, until such time as Flocanalog would return, and they would be rejoined, once more becoming a single individual. Mercifully, he had been spared the pain of that separation: he could no longer understand the alien mind of his symbiont, and he had been deaf to its forlorn, imploring cry. He did not need to hear it, though, because he knew. He retreated inside himself, grief and fear and confusion threatening to overwhelm him.

The Transition facility extracted his pasty white body from the fatty interior of the Shell, slicing away at the thin tendrils of carbonsponge, ablating those areas where it had grown and fused with his own tissues. In places, the carbonsponge had replaced several centimetres of skin and fat. Despite best efforts at anaesthesia, Flocanalog had felt the hot touch of the coherent light as it burned his skin, and had shrieked in silent, incommunicable agony.

His limp, raw body had been immersed in a tank of an oxygenated polyfluorocarbon emulsion. Nchoi introduced into the emulsion had then set about breaking down the organic component of the gel, using liberated proteins and fats to rebuild Flocanalog's atrophied musculature. Under the direction of the facilities sentient resource, the delicate task of regenerating long dormant perceptual and motor pathways began, in an attempt to re-calibrate the neural machinery for function in a non-aquatic environment.

The regeneration of Flocanalog's language capacities was more tricky still: immersed in the oxygenated emulsion, he had heard ghost-whispers in his ears, felt his tongue and throat contract and move without his consent. Strange, half-remembered concepts began to fill his mind, structures and processes he had not used for twenty years.

Slowly and surely, guided by the Transition facilities machine sentience, the efforts of the molecular-sized nchoi machines reconstituted Flocanalog as an air-breathing, gravity-sustainable, bipedal life-form. Throughout, Flocanalog cried silently in the empty loneliness of his own mind, trying to flex magnetohydrodynamic limbs that weren't there any more, straining to see with senses that delivered information he no longer had the necessary neural machinery to understand. He ached for the fluid joy of a language he could no longer speak. He vocalised with bursts of coherent sound that would have emerged from the Shell, if it had still been there, calling his wife, his friends, anyone that would hear. But there was only silence, and darkness and crushing grief.

He thought of his wife often, but the images he could recall seemed remote. *Stapjeekha, forgive me*. She had been unable to understand why he had chosen his course at first. He remembered that they had made love for the last time, twisting and rising through two thousand metres of ocean, her Shell dancing with light, reds and blues and greens pulsing in a dizzying kaleidoscope, as the sensitive exterior of the Shell, her skin, responded to his caresses. He had entered her, and she had entered him, the bodies of the Shells folding into one another, and he had felt the touch throughout his whole being. Where his physical body stopped and the interface with the Shell's Host stopped was not possible to distinguish: all was pleasure and a sharp sense of urgency. They had ridden the high plateau of sensation, circling up and up towards the distant ceiling of light, climaxing again and again, and broke the surface of the water, eight metric tonnes of symbiotic human and machine, pressed together in desperate, glorious release. If his original body responded with an ejaculation of salt water, Flocanalog did not know. For a moment he wished would go on forever, he and his wife were one being, with each other and with existence. There was nothing else.

Then the little death had passed, and they had sunk slowly down in the water, still enfolded in each

other.

‘Why Floc?’ she had asked him, a quick sweep of sonar brushing his Shell, and he had looked at her. She had asked him many times, and he had struggled to explain. ‘Why must you do this?’ She pushed herself away from him a little. The vibrant pulsing crimsons and oranges of her Shell had faded in the fall away from bliss, and she was languorous, spots of jade circling slowly around her circumference. She spoke briefly, but it was not in any human language, it made use of no referent that *Homo sapien* would be able to recover. She described/saw their life together for him, drawing a picture in sound. It was beautiful, peaceful, centred.

‘You know why love,’ he had replied. She knew why, but wanted him to explain again. She was in pain, and it was because of him. She pulsed a harsh yellow, and a furious *soundworldpicture* arose around him, full of monsters and cruel stick things.

*This is what you have chosen!*

She disengaged and flew away from him. He rocked in the fierce backwash from her and felt himself tear a little inside. He sent a burst of sonar after her, an imploring sequence of clicks and whistles, painting *soundworldpictures* of his return, but she was not listening. He watched through the augmented senses of the Shell as she plummeted away from him, falling through layers of water, sinking down the temperature well, until she was lost from sight.

He had not seen her again.

Now, Floccanalog was almost whole again. Whatever that meant. The nchoi had done their job, the resource sentience was satisfied that the regeneration of the appropriate neural machinery was complete, and so he waited for the oxygenated emulsion to be drained from his lungs and to be birthed again to the world of air and earth. He suddenly felt a rush of revulsion for the clumsy, limited body that he would have to call his own for the duration of his trip to Novagaia. He thought back to his youth on Memecast, another life, 20 and more years ago. Trapped in a Simian shell, fighting every second against the monstrous pull of the simulated gravity of the orbital. His revulsion turned into despair, and he cried again inside, feeling pins and needles all over his reconstituted body.

New sensations, but his body remembered.

He thought back to the encounter with the Old One, trying to recall details of the enormous, fluked shape that had loomed out of the darkness to address him. He could not. But he remembered the *soundworldpicture* that had held him enthralled and exhilarated and entranced. It was no dream, he was sure, but he was not convinced that it was entirely real either.

*How could I have met an Old One? On Marineris? Impossible.*

But real enough.

*Else why am I here?*

He felt the injustice of his situation like a sudden weight of rock collapsing on top of him. All his life he had sought the answers that the Old One had hinted would be his.

*If.*

If he gave up the Shell and walked the green of Novagaia. There had been no answer to his question of why. Why must he do this thing, so repugnant and painful?

*A course has been set. Maybe now, at last, I shall find answers.*

He drew a deep breath, feeling the emulsion flow into his lungs. He tried flexing a magnetohydrodynamic limb, knowing it was useless, waiting for the spiky interdiction icon to appear. None did, and instead he felt an alien movement as his hand clenched into a fist.

*His hand!*

He recalled the dream and relived the moment when the curtain of solid gravel had overarched him, sucking him up into its belly, wondering what it meant.

## Chapter Four

Tennys awoke, the hammock rocking gently underneath him. For a moment, he was disorientated. Unfamiliar sounds reached his ears: clacks and squeaks, and the sound of lapping water. He stretched and threw off the thick duvet covering him, noting with interest the moisture gathered on it. He recalled what it was called, *dew*.

He heard the low murmur of conversation from within the pod. He turned and mounted the two short steps and went inside. A large space opened up ahead of him, dominated by a large staircase to his left, spiralling up through the roof to the second level of the pod. The floor was a mosaic of different woods, warm under his bare feet. An easel stood in a corner, covered, and from the walls hung paintings, watercolours in browns and greens, abstract landscapes plucked from the unconscious. Three doors led off this room, and Tennys heard voices from the door to his right. He smelt eggs and toasted bread, and his stomach churned.

He walked across the warm wooden floor, and paused at the threshold of the door. Carys and Brock were sitting at a table by a large window overlooking the lake, engrossed in conversation. Brock was shovelling scrambled eggs into his mouth, pausing between mouthfuls to listen to his wife, who was sitting across the table from him, cradling a cup of something hot.

‘...would be best, I think. It’s tough stuff to work with, but it’s just *so* beautiful.’

‘I agree. There’s a grove a couple of days walk from here, isn’t there? Near Malvern’s house. He’s always been keen on your work, so he would be only too glad to help, I’m sure.’

‘Oh yes,’ said Carys delightedly. ‘Good idea!’ She reached across the table, pinched some egg from Brock’s plate and popped it into her mouth.

‘Morning,’ said Tennys, stepping down into the kitchen.

‘Good morning to you Tennys!’ Brock grinned at him, sending a small piece of egg flying over the table. ‘Did you sleep well? You just dozed off last night, so we thought it best to leave you where you were.’

‘I slept really well thanks.’

‘Good morning Tennys. Would you like some breakfast?’ Carys rose and came over to him and, to his mild consternation, kissed him on the cheek. ‘We have eggs or bread or some fish, perhaps? No meat I’m afraid.’

‘Oh, uh, the eggs sound excellent, thanks.’

‘Eggs it is then.’ Carys turned and busied herself at the cooker.

‘Sit down my friend,’ said Brock, finishing the last of his breakfast and pushing his plate away from him. ‘Carys and I were just discussing a project.’

‘A sculpture actually,’ said Carys from the cooker, where she was pouring a thick yellow stream of egg into a pan. ‘We’ve decided on *Yohunga*. It’s a very hard wood, almost like a metal, but it has such a sensual feel.’ She turned to look at him briefly, and smiled. At the mention of the word sensual, Tennys felt his heart beat a trifle faster, and he dropped his eyes. For him, the word sensual was associated with the top of women’s thighs, and the smooth plumpness just before... He felt a warm pressure in his crotch and dragged his eyes away from Carys’ bare ankles.

‘Sensual, yes.’ He coughed. ‘I’ve uh... I’ve never heard of a piece of wood being described that way before.’

Brock became animated. ‘Ah, it’s not the wood *itself* which is sensual you see but the *experience* of running ones hand over a sculpted shape, at one with the *grain* of the material, which is sensual. Would you like some coffee? It’s really rather good.’

‘Oh. Uh. Yes. Yes please.’

Brock poured steaming black coffee into a mug. ‘Yes, so we’re going to see a friend of ours. A Cardinal. Have you ever met a Cardinal before Tennys?’

‘No, I haven’t actually.’ Tennys was glad to have a chance to shift the conversation away from sensuality. ‘But that’s why I’ve come to Novagaia really. To meet with some Cardinals, that is.’

‘Indeed,’ said Brock delightedly. ‘Perhaps you would like to come along with us? That way you could have a personal introduction.’

‘Yeah, excellent.’

‘Carys, what do you think about Tennys joining us on our little expedition?’

‘I think it’s a lovely idea.’ Carys turned from the stove, and set down a steaming pile of egg and toast.

‘Thank you,’ said Tennys, tucking into his breakfast.

‘Splendid, that’s decided then!’ Brock beamed and belched. Tennys, startled, let a portion of egg drop into his lap.

‘Brock,’ said Carys, in mild admonishment, her face placid.

‘Oh, I’m so terribly sorry Tennys.’ Brock’s face showed mammoth concern. ‘I do apologise.’

Tennys laughed and picked the egg up out of his lap. He popped it into his mouth, swallowed and belched himself.

Brock threw his head back and guffawed.

‘This male bonding is all very touching,’ said Carys rising, a smile on her face. ‘But I think I’ll go for a shower.’ Carys walked around the table, and kissed her partner on his forehead. ‘Enjoy your breakfast Tennys,’ she said, turning to him and smiling. She placed her hand on his shoulder as she walked out of the kitchen.

‘Marvellous woman,’ said Brock, as Tennys turned back to his food. ‘Amazing, beautiful, glorious woman, don’t you think so Tennys?’ Tennys agreed with a vigorous nod of his head, not in a position nor so inclined, to disagree. Brock’s face lost some of its joviality and he became serious for a moment. ‘I would be utterly lost without her, you know,’ he said solemnly, his eyes deep grey pools.

For the first time, Tennys had a glimpse of the man behind the easy humour. He chewed his mouthful of egg slowly, not quite knowing what to say.

‘I, uh...’ he said and cleared his throat. ‘I’m not really very, well, you know...’ He waggled his fork, searching for the words. Brock glanced up at him, his face attentive and Tennys cleared his throat again. ‘I guess I’ve never really had a relationship that meant that much to me. Or... or a relationship at all really, I suppose,’ he finished lamely.

Brock smiled. ‘You are young my friend.’ His eyes suddenly sparkled. ‘You don’t want a relationship, you want some *fun*, yes?’

‘Uh...’ Tennys felt his face grow hot. He was not used to having this kind of conversation. His life on Memecast had been quite solitary and he had thought about little else other than his work for several years. The women that he had had contact with had shown little interest in anything but his ideas, which he had accepted without a thought at the time.

‘I’m sorry Tennys,’ said Brock suddenly, leaning forward in his seat, his face grave. ‘I did not mean to embarrass you.’

‘No, it’s OK, I’m not embarrassed.’ Tennys felt a sudden affection for Brock and his sensitivity. ‘I’ve been very caught up in my work for many years, and, well, relationships haven’t been high on my list of priorities.’

‘What about sex?’ Brock smiled conspiratorially, to blunt any offence. Tennys looked at the older man, caught between irritation and laughter. Brock’s eyes sparkled, and his eyebrows rose in comical questions. Humour won out and Tennys laughed too.

‘Well, yes, sex is a different matter.’

‘It’s great isn’t it?’ Brock rocked back on his seat. He regarded Tennys kindly. ‘You’re an attractive young man Tennys. I think that you will enjoy your stay on Novagaia very much.’

‘Yeah?’ Tennys felt himself drawn to the openness and honesty of the man. ‘Know any available women, then?’ he asked brazenly, rising his own brows quizzically.

Brock laughed loudly. ‘Tennys, you have been on that sterile torus too long. Time for you to experience some *sensuality*, yes?’ He looked at Tennys with penetrating insight.

Tennys shook his head a little. ‘Too right.’ He picked up his fork again, attacking his egg. ‘So when do we set off? I’m keen to see some of Novagaia.’

‘And it’s women,’ said Brock, still laughing.

‘And it’s women,’ echoed Tennys. ‘Hurrah!’



They left that afternoon. The pod was swung onto the lakeside, and they began walking through the forest, drinking in the air and the light. Tennys felt gloriously happy. They chatted as they walked, Carys and Brock pointing out interesting species of plant and animal as they came across them.

‘Look at this, Tennys,’ said Carys, at one point. She was crouched down at the edge of the forest wall, her face flushed and excited. He crouched down next to her. She pulled aside a section of greenery, and pointed into the forest. ‘See that?’ He followed her finger, but saw nothing except more plants.

‘See what?’ he asked.

‘Here,’ said Carys, and came closer to him, taking hold of his arm, and using it as a pointer. He smelt jasmine and the clean, washed smell of her hair. ‘There, do you see that sort of cone shape?’ He followed his arm, and then saw it. A break in the greenery, a dull pink and blue flecked bulbous shape, sprouting from the ground. ‘That’s a Tree sapling,’ said Carys.

‘What are they?’

Brock crouched down with them. ‘Ah yes. Shall we take a closer look?’

They pushed their way through the forest wall, clambering over fallen logs and skirting dense, spiky growths. Carys explained as they walked.

‘Trees are the factories of Novagaia,’ she explained. ‘Part of the Novagaian ecopoiesis means living in harmony with the sentient ecosphere, and the Tree is like a small component of that ecosphere.’

‘The ecosphere is *sentient*?’ asked Tennys incredulously.

‘In a sense.’ Carys said. ‘It’s hard to explain. If you ever get the chance, you must enter Tree consensorias, because then you are actually able to communicate with it.’

‘With the Tree or the ecosphere?’ Tennys asked.

‘Both,’ said Carys, ‘They are one and the same thing.’

‘Heavy shit.’

‘Much to learn on Novagaia eh, Tennys?’ said Brock, from behind them.

Tennys turned and grinned. ‘Absolutely.’

‘Here we are.’ Carys crouched down next to the Tree. It didn’t much look like a tree. In fact, it looked a bit like a spongy lump of ceramic, eaten away by acid. Its surface was pockmarked, and it was irregularly coloured with blotches of pink and blue over a dull cream. ‘Oh Brock,’ she said, turning to look up at him, her eyes dancing. ‘It’s pregnant!’

‘*Pregnant?*’ squawked Tennys. ‘A pregnant tree?’

‘Not really pregnant,’ said Brock, crouching down next to Carys, and turning up to look at Tennys. ‘In its first stages of growth, the Tree saplings construct a number of small, well, workers or carers I guess you could call them. They tend the Tree during the first couple of years of its growth.’

‘You mean to say...’ said Tennys slowly, ‘...that this thing is a *machine* ...’

‘A choo machine, yes,’ said Carys.

‘...which grows in the ground, and produces little baby trees with legs, that look after it? You’re pulling my leg!’

‘No. Here, look at this.’ Brock beckoned Tennys to join them. Tennys squatted down and Brock pointed to a dark swelling at the base of the Tree. ‘I think it will sprout soon. Shall we stay and watch? I’ll make some tea.’

Tennys looked at the swelling, then at Brock, and then at Carys, who was looking at the Tree sapling with a joyous rapture. *Am I missing something?* he wondered, rising to his feet.

So they waited. Brock pulled out a tiny stove from his backpack, which snicked into life at the touch of a button. The blue flame hissed quietly, and Brock poured water from a canteen into a small pan, which he placed over the flame.

‘Tennys,’ said Carys quietly, and looked up at him. ‘It’s *moving* .’

‘What?’ he said incredulously, and crouched down next to her again. He watched the dark swelling carefully, but saw nothing. He looked at Carys closely, wondering if she was going a little mad.

‘There!’ she said suddenly, and Tennys looked. The dark swelling was indeed moving, like there was something inside trying to escape. The pockmarked surface pulsed and stretched slightly, and Tennys fought down a sudden revulsion. His experience of machines on Memecast had not prepared him for this... this organic *lumpiness* . He shivered and stood up.

‘Yuk!’ he said.

‘That’s the Memecast in you talking,’ said Brock, filling three cups with the water the tiny stove had efficiently boiled. He glanced up at Tennys.

‘Thanks,’ said Tennys, feeling suddenly disgruntled.

Carys accepted the steaming cup that Brock handed her, not taking her attention from the swelling, which was moving more vigorously now. Then the swelling stretched, and a little tear appeared.

‘Oh!’ said Carys, ‘Tennys! Brock! It’s happening!’ She turned her face up at them, and there was an expression of delight on her face. Despite himself, Tennys could not help but be infected with her excitement, and he crouched down next to her, Brock leaning his large arms over their backs.

‘Hello little one,’ he said gently.

The tear became a rent, and then split the opening wide. A tiny, dark shape became visible, and tumbled out of the opening. The little machine fell the scant few centimetres to the forest floor, and then lay still. Tennys’ eyes went wide. It was coal black, striped with mahogany. As he watched, the tiny lumpen form extruded two appendages, which it used to lift itself up off the forest floor. Carys bent down, and gently picked the little machine up in her cupped hands. It was no larger than her thumb.

‘Hello little one,’ she breathed, using the same words as Brock, and turned to Tennys, offering her hands. Tennys cupped his hands, and accepted the diminutive construct. It pulsed slightly, its surface dry and smooth, like warm wood. As he watched, amazed, the machine extruded two more tiny little appendages, and stood shakily on his palms. He caught a hint of turmeric and lime, and the machine took a few faltering steps, colliding with his fingers. It shook itself, and Tennys smelt liquorice as it bunched its tiny appendages under itself, and leaped. Tennys cried, afraid the thing would damage itself, but it fell the fifteen or so centimetres to the forest floor safely, and then was still for a moment. It turned once or twice, testing its appendages, and then it leapt again, to the top of the Tree saplings bulbous cone. It sat there for a moment, bouncing slightly on its tiny legs, and then it leaped again and disappeared.

‘Heavy shit,’ Tennys breathed. He felt curiously awe struck. *What had he just witnessed? The birth of a baby machine? Preposterous.* He stood, and Carys and Brock followed him.

‘Does it get any bigger?’ he asked, expressing his unspoken thought, ‘I mean, was that a baby machine? God, what am I saying?’

Carys answered his question. ‘No, it won’t get any bigger. The Tree will construct other, bigger workers as it gets bigger itself, but that little one will stay the same size.’ She turned to him. ‘What are you feeling, Tennys?’ She touched his arm, the question insightful and gentle.

‘I don’t know,’ he answered truthfully, and shook his head. He smiled, and scratched his head ruefully. ‘Amazed? Astounded?’

Brock slapped him on the back. ‘At least you didn’t faint. We’ve had visitors do that before.’ He took a slurp from his tea, sniffing the air. ‘Well, my love, we should be on our way. Thank you for that: well spotted.’

Carys turned to her partner, and smiled. ‘Quite made my day seeing that little machine,’ she said, her



face flushed and excited. 'Did you see how *small* it was?'

After finishing their tea, Brock packed away the little stove and the cups, and the three travellers strolled back onto the path.

'Malvern and his Yohunga, here we come!' Brock took Carys' arm and set off down the path. Tennys followed, shaking his head. *What other oddities would Novagaia have to show him?* he wondered. He was not entirely sure that he wanted to find out.

## Chapter Five

When Salisbury had began running, 45 minutes and 19 kilometres ago, she had started with an advantage of two minutes.

Her pursuit was now less than 30 seconds behind her.

For the first ten kilometres, they had played a cat and mouse game, testing each other's concentration and response time with quick, random bursts of speed. The pursuit was faster than Salisbury, but it had not got closer than 35 seconds in those first 22 minutes. She was running at eight and a half metres per second as she cruised past 15 kilometres. She settled at that pace, noting the gap between herself and her pursuit: 107 seconds.



Salisbury was not human although, like all of the Cardinals on Novagaia, she could be mistaken for one - albeit a diminutive, eerily coordinated and mechanically strong one. But the huge, hidden differences between her and a human being were so profound that she could not possibly be called human. Her mind was too exotic to be called that.

Human minds are the result of evolution. Salisbury's was not.

Human minds exist in a dynamic tension between logic and intuition, between rationalism and sexuality, between the conscious and the unconscious. Human minds are coalitions and clumps of virtual machines, of *neural* and *symbolic* software machines. Human minds are *choo* and they are *choi*.

Salisbury's was not.

Salisbury was more. She was neural, symbolic and *teleological-symbolic*. Engineered by the metacetacean citizenry of Water like all of her kind, Salisbury's mind was a designed thing, her consciousness unhumanly expansive and detailed.

Salisbury was choo, choi and *Third*.



Salisbury checked the gap with her pursuit.

*74 seconds!*

Her pursuit had accelerated rapidly, and had gained on her. It was moving at over 25 metres per second, far faster than her top speed. *Sneaky*, she thought. *Scare tactics*. Salisbury flicked her eyes down and to her right, to the ghostly alphanumeric of the monitor window tracking her performance stats. She was moving at six metres per second. A slowish lope. She had lost concentration. She chastised herself, and began to pick up speed again, pushing her legs faster and further. She accelerated to just under 11 metres per second, and then settled into her running again.

Salisbury licked her lips, realising she needed fluid.

'Hilary, some metabolic compensation please,' she said, her breathing fast and even. Hilary was how Salisbury accessed her nchoi resource. Upon the voice command, the resource did two things. First, it activated a system of nchoo agents spread throughout Salisbury's muscular system. These tiny machines wriggled into life and began enthusiastically going about their various purposes: guzzling lactic acid, other metabolic toxins, and repairing minute muscle trauma. Second, a thin tube protruded from a small pocket of her running suit, perched on her shoulder blade, and snaked its way across and down to the corner of her mouth. It ejected a measured quantity of a nutrient solution, which she swallowed hungrily. The tube withdrew and Salisbury felt renewed strength flow in her limbs, in the pump of her blood, and in the powerful expansions of her lungs. She grinned, her body working efficiently.

Salisbury loved running.



The metacetacean-designed Third component of her mind allowed Salisbury to access the Cascade. That's what the small Cardinal race called their unique, exotic means of perception-understanding: Accessing the Cascade. The Cascade is what a Cardinal uses the Third component of their tripartite mind to observe. The Cascade is what a Cardinal "sees" when they "look" *teleologically*. The Cascade is the informational continuum underpinning the Mayan illusion of physicality. It is the silk from which is spun the interstices of reality. Underpinning the quantum universe is the ordered Cascade universe of information that causes matter and energy to exist and have the properties that it does. Third augmented, Salisbury could look at this incomprehensible, exotic, informational universe. She was able to run pseudo-perceptual simulations of this hidden order. And she was able to understand it, and learn from it, after a fashion.

Before she had began running, Salisbury had caused her complex mind to spawn a Copy of itself. Assisted by her powerful nchoi resource, Salisbury had propelled this simulacrum into the Cascade, plunging a semi-autonomous part of her into the Cascade.

It would report back to her if it found anything useful.



The path ahead made a slow turn to the right. Salisbury took the corner at 10 metres per second and accelerated into the straight. Ahead, she could see Tooktah, the majestic Tree of Trees, standing like some great, slender cactus three kilometres distant in the centre of the Chapel Halls.

The path turned back to the left, brushing a 200 metre drop on her right. A scant metre and a half from the drop off, the path led for two kilometres along the edge of this cliff. She could see all the way along to where it disappeared into the forest again. *A straight sprint*, she thought. She checked her performance stats: The gap between her and her pursuit was down to 57 seconds. *Was it now?* she thought, and pushed herself faster, really beginning to move. She accelerated to 11 metres per second, then 13, then 15, moving at over 50 kilometres an hour, her small, powerful legs a pumping blur.

Salisbury required 105 seconds to cover the two kilometres in total, and when the path veered back into the forest, was running at over 60 kilometres an hour.

Her resource blinked a warning icon. Nchoo agents were 30 seconds away from a drastic drop in efficiency: they had gorged on toxins too fast. Salisbury slowed, but only slightly, to 15 metres a second. She was only two kilometres from sanctuary. She glanced at the alphanumeric of the monitor window, noting the gap between herself and her pursuit with satisfaction. It now stood at a comfortable 80 seconds. She counted down the remaining distance. Two thousand metres. Nineteen hundred. Eighteen hundred.



Salisbury heard a simulated chime. The auditory tap was active. The Copy, the spawned Third simulacrum of herself, had found something interesting in the Cascade. Routing its request through Salisbury's nchoi resource, it had signalled its wish to communicate with her.

Salisbury pursed her lips. *Must be quite important. No time now though.*

Salisbury instructed the Copy to stand by and a tiny, whorling icon appeared, pulsed once, and snicked to the edge of her peripheral vision to confirm that the Copy understood.



Salisbury checked the gap.

20 seconds!

She gasped, and snapped her head round, looking over her shoulder for any sign of pursuit. The awkward manoeuvre caused her to lose speed. Nothing. Salisbury chastised herself. *Of course not, you dolt, it's still 200 metres away. Concentrate on your running!*

She gritted her teeth. Sucking air into her powerful lungs, she accelerated rapidly, quickly reaching seventeen metres a second. The path turned to the right, and back to the left rapidly, and Salisbury didn't even slow down. The warning icon for the nchoo agents snicked open. Salisbury ignored it. She was less than a thousand metres away. *Fifty eight seconds*. She checked the gap. *Eleven seconds*. She snorted in amazement. She fought to stay relaxed, to keep her hands limp. Then she was out and clear, and running across open grassland. She was less than 700 metres from home.

*40 seconds.*

She wasn't aware of her pursuit until she was 200 metres from finishing. One moment, the only sound was her own breath hissing in and out, and the next, the distinctive sexapod gait of the choo machine sounded right behind her. Then the machine was nudging past her, pushing 19 metres a second. Salisbury felt her lungs begin to burn. A familiar tightness developed in her quadriceps: a sure sign that the metabolic nchoo were struggling to cope.

She responded by forcing her legs faster. She reached eighteen metres a second. Then she reached

nineteen. Then twenty. She flashed passed the old Persian Iron wood - her designated finishing line - at seventy two kilometres an hour, only point one eight seconds ahead of the straining snout of her choo machine pursuer.

She took 150 metres to slow down, her chest heaving, sweat pouring off her face. She had not beaten the machine as such, because its running was designed to push her own personal best. It was easily capable of beating her. She had previously run the 25 kilometre course in 43 minutes, eight seconds dead. She had now run the course in one eighth of a second less.

Salisbury was delighted.

‘Indigo!’ she said, when she could speak clearly. The pursuit machine ran up to her, and leaped in the air. Hot cloves and cinnamon wafted off it as it bounced in front of her. ‘Pushed me well and good didn’t you?’ She quietened the machine down, running her hand along its smooth coal and teak snout and down over its back. The machine was hot to the touch. She could feel the bunch and quiver of carbonsponge expanding randomly, as the viral nchoo powered down. ‘Good girl. Good girl.’

Salisbury placed her hands on either side of the machines sinuous frontal extension, feeling for two moist depressions. In each of her index fingers, Salisbury had a small subcutaneous pocket of viral nchoo, the infection enabling her to access the choo machine. Her fingers found the depressions, and an icon blinked. Choo machine and Cardinal entered a shared computational space, the consensorias. Nothing verbal passed between them: the communication possible in a consensorias was emotional or empathic in nature, not linguistic or symbolic. Consensorias possessed none of the sharp, strictly perceptual, clarity of a Lifeswork maintained by choi resource.

In consensorias, emotion was conveyed, not information.

Cardinal and machine shared in each other’s mutual exhilaration for a few moments before Salisbury dropped her hands. She opened her eyes and stood up, putting her small hands on her hips. The machine bounced once in the air, and then raced away, heading for the forest. Salisbury smiled, and turned towards the cluster of structures behind her.

*Home*, she thought. *Bath. Food.* She began loping towards the buildings, stretching down, feeling her heart begin to slow.



The whorling icon of the Third generated Copy darted from the periphery of her vision and pulsed insistently, twice. Salisbury was intrigued. *Hmm*, she thought, *wonder what that’s all about?* The Copy obviously thought that it had got something really interesting to tell her.

‘Hilary,’ she said, and an icon blinked. ‘Could I have a *long* drink please?’ The tube snaked over her shoulder and she sucked sweet saline greedily down her throat.

## Chapter Six

Melie stood listening to the two men, a bored expression on her face, her arms crossed over her chest, clutching hands under armpits. Her companion was quiet by her side.

‘No way mal,’ the taller one, Mikhail, was saying. ‘No way the skirt having my jets mal, no way.’ Mikhail was shaking his head vigorously, his pronounced widow’s peak rising and falling as his forehead creased and uncreased in agitation. He put his arms on his thin hips, and looked sullenly up at Melie from under stray wisps of blond, greasy hair. ‘No way fem,’ he said, his throat bobbling. Then he looked scared and turned to his companion. ‘Ain’t that right Shub?’

Nanashub was the neomorph leader of the Cunnychcarnival, his tailor-made musculature the work of body artists from Verest. Less than one hundred and forty centimetres tall, Nanashub was the most truly *monstrous* individual Melie had ever seen. His shoulders were 250 centimetres wide. Around his chest, Nanashub measured seven metres. The circumference of each huge thigh was almost two metres. Melie would have struggled to put her arms, let around her hands, around just one of them.

Nanashub did not answer. He placed his hands on his hips. Melie goggled at the site: from one monstrous elbow tip to the other, Nanashub had got to be pushing three and half metres wide. She had never really got used to how *big* the neomorph was.

‘Melie.’ Nanashub’s voice came echoing out of the cave where a normal persons chest should be. ‘Girl.’ He tried to smile. Nanashub’s head was more ellipsoidal than most peoples, and it made his features look a little crushed. A wide horizontal slit served him for a mouth, above flat nostrils twelve centimetres wide. Two dark depressions contained black eyes under naked eyebrows. The black eyes glittered as Nanashub moved his neckless head, and peered up at Melie. He shrugged his 250 centimetre wide shoulders. ‘What is it you want exactly?’

Melie choked back on a snort. ‘I *want* to borrow a *shuttle* for a while Shub. Just one shuttle, one of the tiniest, for just a few days, because otherwise...’ She tried to put some drama and urgency into the request. ‘...If I don’t get to Novagaia within forty eight hours, I’m going to *die* of a particularly contagious little virus. A water borne virus, as I understand...’ She stared down at Nanashub, who had not shown any reaction at all, and was suddenly inspired. ‘...As in *transmittable* through, just for example...’ She threw her arms wide in illustration. ‘...A fucking *shower*, Nanashub. And what do we all do when we’re jetting from one place to another? Shower? And is that water recycled, or am I missing something? Is that recycling unit *verhad* a biological filter? You think "virus", you think "filter", two kinds of things to put together, but not in the Cunnychcarnival.’ Melie looked at Nanashub carefully. His neomorph face was unreadable. ‘Do you get me Nanashub? If I’ve got this virus, then all of the rest of you could be infected too.’

Nanashub’s huge flat face lost its neutral mask, and his brow furrowed. ‘Eh?’

‘Yes,’ said Melie slowly, nodding her head. ‘So you see, it’s in your own best interests to let me take the shuttle, because then I can get all fixed up, and come back, and do you guys too, no problem. What d’you say Nanashub? I won’t be gone more than, ooh, say two weeks?’ Melie smiled her most winning smile, her eyes wide. *If the virus is as virulent as I’m making out*, she suddenly thought, *then the Cunnycarnival would all be dead before I got back*. ‘Or even sooner, a couple of days maybe?’ she added pleasantly. It seemed like a perfectly reasonable and legitimate request to her: Mikhail was a spiteful little toad, but Nanashub, usually, had a good head on him. Besides, she and Nanashub were fellow neomorphs, almost. She had her tail, he had... the body of a troll monster. ‘Us neomorphs have got to help each other out, right?’

Nanashub clenched his hands into enormous fists the size of watermelon, and seemed to actually expand as she watched. His neck bulged and his dark, mottled face grew red.

‘Fucking *infected*?’ he grated, and his voice shook Melie in her boots. ‘What kind of fucking *infection*?’ Nanashub pointed at her with one monstrous arm, and a finger the size of a small aubergine poked her in the ribs. ‘Fem, if you’ve...’

Melie’s companion gave an exasperated snort. ‘Oh piss on this nonsense Melie,’ she said, and reached out with her hand, popping a small capsule under Nanashub’s huge nose with the sharpened tip of her thumbnail. There was a minute explosion of gas. The neomorph snapped his head back and gurgled, becoming rigid. He rocked, once, back on his heels, oscillated forward, and then crashed over backwards. Mikhail jumped back from the descending mass, and began swearing loudly, in a kind of whiny voice, his widow’s peak doing double time on his forehead. He was ringing his hands compulsively. Melie’s companion sauntered over towards him, smiling and nodding her head, beckoning him with open arms.

Mikhail swore at her.

‘Yes, I know,’ she said, and reached for his shoulder gently with one arm. The other she propelled up and into that particularly vulnerable spot just between the top of the ribs, stabbing with three stiff fingers. Mikhail rose briefly on her hand, whooped, gurgled and then hissed horribly. ‘Scary isn’t it?’ Melie’s companion lowered his hissing, groaning body to the ground. She turned to Melie, who was standing open mouthed, just beginning to smile. ‘Shall we go?’



Melie’s companion, and her rescuer, was named Aileeni Hirosiko-na-Giajust, presently owner and occasional operator of the *Oil Burner*, Est. 35 AK. previously combat mercenary, nurse, ice miner and shuttle pilot, amongst a number of other things. Aileeni had come into possession of the *Oil Burner* via the death of her brother, she explained as she sprayed a sticky medical solution on to the area of Melie’s wound, watching as simple medical nchoi became active, reacting to liberated haemoglobin, foaming quietly. Very early in his life, Bortal Hirosiko had set himself on a self-destruct course resulting in rampant

malignancy blossoming throughout his entire respiratory system when he was still only twenty nine, spilling over into his blood, and spreading to his bones.

‘By the time he realised what was happening, it was all too late,’ recollected Aileeni, peering to inspect the coverage of the white, foaming spray. ‘He wasn’t much else *but* cancer by the time he died.’ Aileeni stood up from her stool and retrieved a roll of dressing. ‘It was not so much the pain that got him down, you know,’ she said, pausing as she unwrapped the dressing, ‘but the fact that he had to have his throat taken out and replaced by a plastic tube with a hole in it.’

Melie glanced up at her. ‘Yuk.’

‘Yuk is right Melie, but drastic measures had to be taken, y’see? His throat was all choked off with these growths and nodules and the poor bugger couldn’t even breath, let alone smoke. Piss on them cancers.’ Aileeni finished unwrapping the dressing, and sat back onto the stool, leaning forward to manipulate Melie’s right shoulder.

‘What did he do?’ Melie winced as Aileeni began wrapping the dressing over her wound. ‘About the cancer, I mean?’

‘Nothing. Well, nothing *medical* anyway. He threw a party is what he did.’

‘He did what?’

‘For his own death, right here in the *Oil Burner*.’ Aileeni chortled, her breasts bouncing up and down, recalling the incident. ‘There were loads of people, from all over Koy. Lots of arty types from Helicon, and mal and fem from Plenty and Ascii and all over, people I hadn’t seen in years. Bortal said he wanted his friends to remember him in death as in life.’

‘And which way is that?’ asked Melie, intrigued.

‘Lots of drugs, lots of friends, lots of fems, bless him,’ said Aileeni. She smiled with the memory. ‘I remember he told me he wanted to go out, “climbing the silken ladder to glory”.’ Aileeni came off her stool, lifted up her big skirts, and squatted down by the side of Melie’s chair. ‘Suckling a straddling fem, if you get me.’

‘Oh right,’ said Melie. ‘Each to their own, I guess.’

Aileeni resumed her seat. She picked up the dressing and continued wrapping. ‘He always was a bit of a sick bastard, though,’ she said after a moment’s reflection. ‘I mean, really. Could have wanted something a little more *dignified*. I like fems as much as the next fem, but I’m not into seeing all this...’ Aileeni paused. ‘*Licky business* in public, you know?’

Melie agreed. ‘So what happened at the party?’

Aileeni finished wrapping the dressing, and sat back to inspect Melie’s shoulder, now securely encased in a slowly hardening support, as the dressing bonded with the nchoi spray. Whatever weapon Gervane’s minder, or father, or whatever he was, had used, its firing had left no residue in Melie’s shoulder, passing through tissue and grazing the top of her collar bone. The muscle was traumatised, but there was no serious damage. The nchoi Aileeni had applied would repair the superficial damage to the tissue in a matter of days.



Aileeni began humming. She waddled over to a sink and proceeded to wash her hands.

‘Well?’ asked Melie after a moment.

‘Well what?’

‘What happened?’ asked Melie. ‘At the *party* .’

‘Oh,’ said Aileeni expansively, turning to rest on the sink. ‘Well we were all, you know, doing the party thing, I was with some poor frightened neomorph from Helicon, afraid I was going to crush him in my passion, I think - and poor Bortal, he was just sitting, you know, resting his head for a while, and he passed out right there in the middle of all of us. Plunged headfirst into a *Gridansk* . We were all having such a good time, we didn’t even notice. Drowned in three centimetres of his own cocktail he did, choked on his own tongue, even as we partied for his demise. One moment he’s the life and soul, next it’s *gurgghh* and he’s just the soul. Oh we did cry.’ Aileeni ran the back of her hand across her nose, and turned back to the stream of water behind her.

‘Did you really?’ asked Melie suspiciously. ‘Did you *really* cry? Sorry like, but the mal sounded like a loser.’

The sound of splashing water reached Melie’s ears. Aileeni hummed a bit more. ‘ *Well*, no we didn’t really. There!’ She rinsed off her hands, and turned from the sink. ‘How is it?’ She indicated Melie’s shoulder with the spotlessly white cloth she held in her hands. ‘It was just a little scratch really, wasn’t it?’

‘Pretty fucking big scratch,’ said Melie, feeling aggrieved.

‘Tush and nonsense.’

‘Tush and what?’



That had been thirty six hours ago.

Now, Melie watched as Aileeni stepped onto the comatose form of Nanashub: Literally. Melie watched as her feet sank into the prone monster dwarf’s stomach. Aileeni bounced experimentally.

‘Bugger this one is *ugly*, ’ she said. ‘I’ve seen some weird neomorphs but I think this mal has got to take the biscuit.’

‘You said it. What did you down him with?’

‘Micro gas grenade.’ Aileeni crouched to examine Nanashub’s nose. ‘Little mal I know knocks them

up. Stings your thumb a bit, but guaranteed to knock a fucking *whale* over at close range.’ Still perched on Nanashub’s stomach, she began fishing through the vast pockets of his jacket. She grunted, finding nothing interesting. She turned her attentions to Mikhail’s crumpled form, which had been sick. She searched his pockets too. ‘Ah hah!’ She pulled a thin slice of plastic from one of them. ‘Keys!’

Melie stood looking at the fat woman with amazement. Aileeni grinned, showing huge, clean front teeth. Aileeni looked like she must weight over a hundred and twenty kilos, if not more. She positively wobbled when she walked. Yet she carried herself like she was an amazon, or something.

‘You’ve been a soldier Aileeni, yeah? That’s how you know all this kind of stuff?’ Melie indicated the prone form of Nanashub, and the small mewling form of Mikhail. ‘So...’ she didn’t quite know how to put it, some fem were sensitive about such things. ‘So how come you’re so... so *fat*?’ she asked. ‘No offence, like.’

‘This?’ asked Aileeni, rising from the form of Mikhail, and clutching her paunch with two hands. ‘Or this?’ turning and showing Melie her large buttocks, hands clasped. ‘I should have fat hands too, yes?’ She gave Melie her hands. They were large, well muscled, sculpted and disproportionately *thin*. ‘Or this?’ She wobbled the fat on her upper arm, ‘Shouldn’t I have double chin, too?’ She traced a hand up a smooth, slender neck. ‘Or fat cheeks?’

Melie looked, and indeed, what had been obvious since she had first seen the woman, now jumped into prominence. Aileeni’s face, whilst large, was smooth and tight. There was no antagonism in Aileeni’s tone at all: she was showing a lot of teeth in a grin, and her eyes glittered playfully. Melie began to feel like she was about to fall into a trap.

‘So,’ she said slowly, and scratched at her head, behind her ear. Her tail flicked quickly. ‘So... you’re not really *fat*, you just...’ Melie looked at Aileeni, who was looking back at her, an expectant look on her face. ‘Just *look* fat. In places,’ she finished, baffled.

‘Correct,’ said Aileeni, her eyes sparkling. She took Melie’s arm, leading her down the line of airlock blisters in front of them. She swept her arm down the line. ‘Which one?’ Three of the nearest blisters led to the large, lumpen tug, *The Ugly Bastard*, operated by the Cunnycarnival, and another four to additional, smaller, reaction craft, all moored to one of Godsfollicle’s numerous, slender docking spines.

Melie pointed to the far end of the line.

‘That one.’ They began walking. ‘So, you’re not going to actually *explain* what the fuck you’re talking about then?’ she asked. ‘You’re fat, but you’re not, even though you are.’ She turned to look at Aileeni as they walked along to the blister.

‘That’s right.’ Aileeni paused as they reached its threshold, her arm leaning over the top of its circular iris. The fat on her upper arm hung heavily. ‘Oops,’ she said squeakily, ‘can’t have the skinny one seeing fat, dear little thing might just faint from revulsion.’ She made a mock fuss of covering up her arm.

‘Ha ha!’

Aileeni was smiling broadly as she pressed the small card she had taken from Mikhail into a small slot above the blister door. It opened noisily. ‘Fucking *card* reader,’ said Aileeni with contempt, and sniffed the air of the lock. She grimaced. ‘I smell *mal*.’



‘His father?’ queried Aileeni from behind the counter of the bar. She was working at shoving celery into the spout of a small whining appliance.

‘Yeah,’ said Melie. ‘Least I *think* so. The big mal was the *father* of another mal I was, you know, *balling*. Or would have been, if he hadn’t of burst in on us.’

‘He couldn’t have been,’ said Aileeni matter-of-factly, placing two glasses under a different spout of the machine. Green fluid began dribbling into them. ‘That big mal was some bishop, or vicar of *some* shit from that Austerity hole. The young mal he had with him, he reckoned was the reincarnation of some holy prophet or something.’ Aileeni began chopping and feeding a small pile of apples into the whirring device. It crunched and zinged.

‘Oh right.’

Pause.

‘So how do you know all that?’

‘Basically because he *told* me at the bar, right before he saw you and went fishshit crazy. Really creepy voice, sort of dead sounding. What did you *do* to him, anyway?’

Melie absorbed Aileeni’s words, and gave a lopsided grin. ‘I reckon he thought I deflowered his virgin prophet.’ Melie giggled, recalling the sight of Gervane’s gyrating bottom.

‘Did you?’ Aileeni laughed. Green fluid finished dripping into the two glasses. She dusted them from a spice shaker, and stirred them. ‘You are some fem Melie,’ she said, walking out from behind the bar, carrying the two stunningly green drinks. ‘Young and stupid, but you got lots of promise.’ She grinned and chuckled sonorously, breasts swinging, as she handed a glass to Melie.

‘You some fem too Aileeni.’ Melie laughed and took the drink. ‘Fat arse.’

‘Ho ho!’ Aileeni put down her glass. ‘Where are my breasts, where are my breasts?’ she squeaked, parroting Melie’s accent, her hands plastered to her chest in mock consternation.

Melie was surprised when, later in the conversation, Aileeni offered to come with her to Novagaia.

‘What about the *Oil Burner*?’

‘Paff.’ Aileeni waved a hand.

They were sitting at the grubby bar counter, sipping from tall glasses of the same celery and apple juice mix, laced generously with chilli and garlic. A bowl of cereal crackers lay between them, and the fleshy

remains of plump green olives filled another. Melie had her pipe out, and was loading a small bundle of leaves.

‘What do you mean, paff?’

‘Paff,’ repeated Aileeni. ‘I *own* the place girl. I can do what I like.’

Melie nodded as she tried to apply a light to the small pipe. At her third attempt, she succeeded, and sucked sweet herby smoke into her lungs. ‘Wee!’ she said and coughed.

Melie handed the pipe to Aileeni, who inhaled in long whoops, sending fiery sparks leaping from the bowl of the pipe. She sat for a moment, looking at Melie with wide eyes, and then smoke erupted from her nostrils, like a snorting dragon. She handed the pipe back to Melie.

‘Wee,’ she said and coughed.

‘Why?’ asked Melie, her hand weaving around the outstretched pipe in smaller trajectories until she finally grasped it. ‘Thanks.’ She began to knock the dead ash out over the olive remains. ‘Oh.’

‘Well, why not?’ Aileeni took a sip from her celery and apple juice, smacking her lips over her large teeth. ‘I haven’t had a holiday in...’ She paused and her brow furrowed. ‘In *years*.’ She took another sip of her drink. ‘Novagaia is a wild old place. You ever been there?’

Melie had become extraordinarily interested in a small thread hanging from her jacket. ‘What?’

‘Have you ever been to Novagaia?’ Aileeni pronounced each word carefully. ‘You know, the place where all those weird little mals hang out.’

‘Cardinals. And they can be fems too.’

‘Cardinals, yes.’

Melie roused herself from her investigation of the thread, and time sped up again. She licked her lips and ran her fingers through her hair, resting her head on a hand.

‘No actually.’ Her elbow slipped off the counter. ‘No, never been. But I’ve got this... this *thing*, you know, this *virus*, and I reckon, right...’ She wagged a finger at Aileeni. ‘I reckon right, that these Cardinals are good people, yeah, and that like they’ll be able to help me with the Blit. Coz I need help with that.’ She felt her humour suddenly drain away at the mere mention of the word.

‘Blit?’ asked Aileeni politely, questioning.

Melie suddenly realised what she had said with a mild sense of horror, and struggled to revive her ailing mental faculties. ‘Uh, *bit*, help me a *bit*, is what I said.’

‘You said "blit", I heard you quite clearly.’ Aileeni searched Melie’s face. ‘But I shan’t press you seeings how you seem unwilling to talk about it.’ Aileeni sounded a little disgruntled and Melie felt suddenly guilty.

*This fem has really helped me, she thought.*

She felt a familiar longing well up inside her, like a physical ache. The desire to talk, to tell someone, *anyone*, about the Blit. Someone who would listen, just listen, and not think she was crazy or mad or something. But she quashed the dangerous longing.

‘It’s not something that I can really talk about Aileeni,’ she said quietly, looking up at the older woman’s face. It was attentive and concerned. Melie drew a deep breath. ‘I could really do with talking to someone about it.’ She felt a bubble of pain rise up inside her but fought to suppress it. ‘But I don’t even know what it is!’ She choked back on tears. Aileeni’s face grew watery. ‘It’s not a virus,’ Melie wailed miserably. ‘So you don’t have to worry, I’m not going to infect you or anything.’

‘No one said you were,’ said Aileeni and her voice was very soft. ‘Oh, darling, come here.’

Melie - to her own amazement - crawled into the overhang below Aileeni’s heavy breasts, and sobbed until she could feel the dampness of Aileeni’s skirts on her cheeks. Aileeni sat, stroking her hair and talking to her softly and eventually Melie pulled away and resumed her stool, her head hung low.

‘Thanks.’ She sniffed and smiled through a tear stained face. ‘Sorry about that, I just... I needed...’ She didn’t finish but gripped Aileeni’s hand instead.

‘Lot of pain in you girl.’ Aileeni looked at Melie closely with gentle eyes, probing her. ‘Anytime you want to talk, you just come to me, I’ll always be there for you.’ Melie felt a great affection for the older woman suddenly blossom inside her and she reached out and flung her arms around Aileeni’s neck, hugging her tightly.

‘Oh, you’re like a little monkey,’ said Aileeni with a fond chuckle, her hand cupping Melie’s head.

‘Thank you Aileeni.’ Melie pulled away, still holding onto Aileeni’s hands.

‘Maybe you should get some sleep girl, hmm? We can sort out some transport tomorrow.’

‘OK.’ Melie released her hold and gathered up her things. ‘Um, where...?’ Aileeni pointed her in the right direction, and watched as Melie paused and turned. ‘Really. Thanks, Aileeni.’ Melie smiled. ‘You’re a good person.’

Aileeni sat and watched Melie disappear behind the counter, staring into the gloomy depths of the bar for many minutes after Melie had left, her face a blank. She was thinking back to her own life, when she had been Melie’s age, back to her own childhood. Sometimes when Aileeni met a person for the first time, she felt something begin to resonate within her, an emotional aerial vibrating along in tune with hidden pain. That aerial was buzzing wildly now.

*What is up with that child?*

She climbed off her stool and reached to gather up the two small bowls, spilling the olive stones.

*Piss.*

She scooped the debris up into her hand. Small flecks of ash adhered to the sticky remains.

## Chapter Seven

Like pearls around the aquamarine throat of Water, the Koyculture orbited in vacuum at the lip of the gravity well, 60,000 kilometres above the watery surface of the drowned Earth.

Novagaia was the largest of the 12 principal structures, a ribbon of excavated Lunar 1,300 kilometres in diameter and 300 kilometres wide. Looking down from above the solar plane, clockwise round the orbit, the next structure in orbit was Daedulusorrow. Daedulusorrow was a spherical world, a mere 100 kilometres across, a micro-Dyson sphere with an artificial sun in a magnetic bottle at its centre.

Next in orbit, two monstrous oneils. Plenty and Helicon. Plenty was just that: a 500 kilometre long tube of plentiful life, warmth, food, water and fun. It drew the youngest, the laziest, the most stupid, the most easily duped, the best and the worst.

Plenty was a marvellous place.

Helicon was the aesthetic Mecca of the Koyculture's population of artists. Smaller than Plenty, a scant four hundred kilometres long, it was nonetheless more verdant. Helicon positively *teemed* with places of astounding beauty and views of awesome proportions.

Marineris followed along, the dark mystery for many of the Koyculture. It had very little commerce with the rest of the Koyculture. Its population didn't speak the same language as the rest of the Koyculture. They didn't do the same kinds of things and didn't even think in the same kind of way. They didn't even have arms or legs, so how human were these people? Presuming they existed? And why should someone want to spend their life inside a blob of synthetically innervated carbonsponge?

36,000 kilometres distant was Lattice.

Just that: an intricate lattice of kilometres-long tubing, each rotating about its longest axis, the fattest tubes almost as wide as they were long. Each tube was an enclosed habitat, rotating independently of any other, bound together in a fixed lattice of multi-jointed interconnections. The entire structure formed a collective of rotating oneils, an airy, articulated cube six hundred kilometres on a side. Each oneil was an independent, self-governing meritocracy: Lattice politics was legendary.

Austerity was furthest from Novagaia, and it was well named. Austerity was a stellar kebab, 20 enclosed micro-orbitals - none more than 80 kilometres across - speared with a 400 kilometre long shaft. Austerity appealed to the ... *austere*. Austerity thrived with those who shunned the ease of the Novagaian ecopoesis, the easy hedonism of Plenty or the fierce competition of the Lattice collective. Austerity was populated by those who sought some shelter from the absurdity of being culled and evicted from home. Those who wished to live in sterile, closed little worlds of despair, where they could feel properly sorry for themselves.

Ascii and Verest were next in orbit. Like dynamic dandelion clocks, both seethed in vacuum. Both were fluid, uncertain worlds, composed of millions of independent structures; ziggurats, globes, cubes, tubing and all manner of architectural polymorphism. The structures jostled each other, in continuous motion. Yet all were bound as if under the influence of a vast attractor, the component structures coupled together in complex patterns of interaction. Field manipulating effectors bristled from every structure,

steering locally to avoid collisions, driven globally by the interaction of all the other structures with which it shared its trajectory.

Memecast was next, a simple torus, 500 kilometres across. Smooth and unmarked on its exterior, its cross sectional diameter measured some 100 kilometres. Broken into between one and 500 levels, its interior volume was truly enormous, and fully utilised. Memecast was home for the scientist, the historian, the artist and the mystic. Or so it liked to think. Usually it was just full of scientists.

A longish hop, 50,000 kilometres or so, and Sesquoia turned lazily in the harsh unfiltered Sol. Sesquoia was a distant architectural cousin of Lattice, composed of only six oneils. Each oneil was different, equidistant from any other around the surface of an imaginary sphere. Each had a miniature, elongated sun caged within a magnetic sheath, running its entire length, breathing light and warmth onto the rotating world beneath. And each was truly enormous: 500 kilometres in length, flaring out past the 10 kilometre mark to a diameter of 100 kilometres.

And last, a scant 20,000 kilometres from Novagaia, was the second spherical, micro-world in the Koyculture. *Oaxaca*. Oaxaca was empty now, nothing but a shell. All sentient life was evacuated fifty years ago under instructions from Water, who sealed the structure closed. Now, no one lived there at all.

Well, not quite.



The vehicle was roughly spherical, three metres across. It sat, dark and quiet in its small recess. A deep trough four metres across lay ahead. The trough ran away from the recess at right angles in both directions, disappearing off into impenetrable vacuum shadows. The vehicle sparkled, as a dozen small lights came on around its exterior. It rose silently, and then hung stationary, two centimetres above the floor of the recess. An umbilical detached, and then contracted back quickly into its warm sheath. The vehicle sank onto an invisible magnetic cushion, and lingered for the merest fraction of a second. Then, a peristaltic magnetic pulse hurled it along the trough, accelerating it rapidly in the shadows.

‘Floc, this is Maureen. How do you feel?’

‘Fine,’ said Floccanalog, comfortable within the vehicle’s cosy interior. ‘I didn’t feel a thing.’

‘That’s good. I have observed that the high acceleration induced by the Gun, although damped, can cause a period of affective unease in many passengers. You felt no discomfort?’ Maureen voice was low and melodious in his ear.

Floccanalog shrugged, sipped from a squeaky container of fluid. ‘None.’

‘I am glad. You will exit the Gun in ten seconds Floc.’

‘Thank you Maureen.’

Pause.

‘And thank you for talking to me. I enjoyed your company. For a resource, you have a lot of charm, do you know that?’

Maureen accepted the compliment graciously. ‘Thank you Floc. I too have found our discussions very stimulating. It makes me happy to know that I have had a beneficial effect upon the outcome of your extraction.’

Flocanalog listened to the gentle inflection of the simulated sounds.

‘*Can* you be happy Maureen?’ he asked. He had done so before. The resource had always given him different answers, taking him on long journeys through metaphysical landscapes, always avoiding the real substance of his inquiry.

‘I do not know,’ said Maureen at last, neutrally. There was neither regret nor elation in her voice. Flocanalog listened impassively, and slowly nodded his head. ‘Five seconds. Goodbye Floc. I wish you well.’

The vehicle was detoured out of the trough by a little magnetic push. Then it was spilling out from the rim of Marineris into the vacuum emptiness, heading at two hundred metres per second for a waiting magnetic glove on the Hub of the Novagaian orbital.

Flocanalog was on his way.



Marineris, like Novagaia, was an open orbital. But it was unique amongst the structures that made up the Koyculture, because it was entirely devoted to providing playground, workplace and home for its symbiotic human-Shell inhabitants.

Its inner surface area was a little over 1,000,000 square kilometres, and of this area, only 1,000 square kilometres was above the water. This land area was constituted by two islands, each a mere 500 square kilometres in size, at opposite sides of the orbital.

Both were called Terra.

These two islands existed as ideological buffers between the belief systems of Marineris and those of the rest of the Koyculture. Their main function was Transition: putting people into and - much more rarely - extracting people from, Shells.



Flocanalog was in the latter category. He had been removed from the tank of polyfluorocarbon emulsion, his lungs drained, and his eyes opened, four days previously. This was his first time outside since that time, and he stood, pulling air into lungs, which had not breathed atmospheric oxygen for over twenty-two years. He felt the air pass up his nostrils, and into his throat. He almost fell over with the potency of it, a micro-hydraulic exoskeleton catching him, and steadying him. He clasped his hands to the sides of the door-frame, feeling unfamiliar textures through his palms as he gripped the wood tightly, feeling nausea rising.

The door led out onto a small stone balcony, with steps leading off from the left. The balcony overlooked a series of terraced gardens, sliced into the slope of a small hill. The hill ended at shallow cliffs, maybe fifty metres high, where they fell away into water.

*Ocean. Home. Stapjeekha.*

Flocanalog straightened himself up, walked shakily to its edge, and leant heavily against the cool stone. He felt the weight of his body in his shoulders, the muscles of his back contracting, the feel of wind across the stubble on his head.

*All these things, he thought, my body remembers them, but... I do not.*

He hung his head between his arms, feeling the stiffness of muscle along the back of his neck and legs. He listened to the tiny whining hiss of the exoskeleton as it supported his head. He had agreed to wear the device, but grudgingly. It was slaved to his own nchoi resource, and its slight mechanical interventions aided his walking. But Flocanalog still did not like the device. His thoughts were for the exquisite control he had shared with his Shell, the power and elegance and sensitivity of his machine symbiosis.

The exoskeleton was a frail, unnatural device in comparison.

Flocanalog looked up, hissing quietly. He saw lots of undifferentiated green. His awareness of his environment for so long had been through different kinds of senses, conceptualised in language no human could understand. Although his body - his genes - remembered green grass and blue sky, he himself did not. It was like being reborn. Everything he saw was new and unfamiliar and incomprehensible.

‘Excuse me.’ The voice came from right behind him. He spun around, startled, but there was no one there. He became alarmed, remembering the shrieking, stick-like figure from his dream.

‘Who... who’s there?’ The regeneration of the tissue and the connections in Flocanalog’s language centres was complete, but he still had problems remembering *how* language worked.

The voice did not speak again. Flocanalog spun around quickly, looking out over the balcony. An icon blinked in his vision. ‘Grureenconfushun, volvolvol, vaultingempty, hishissbig...’ he muttered. He found himself trying to use human language to build sound pictures, an impossible enterprise. Flocanalog flailed around, losing his understanding of where he was, and what he was. The icon blinked insistently, pulsing, and he swiped at it. A soft gentle voice spoke his name.

‘Auditory tap requested, resource awaiting instructions.’

The words made no sense to Flocanalog. His vision was swimming, and his throat felt dry. His heart was clamouring, and he felt moisture prickle all over his body. ‘Volvoice gravelswelldus krisstal. Voicelooooom preeentsdarnesspromirelea...’ Another icon blinked, and he swiped at that too.

‘Auditory tap authorised. Hello Flocanalog, my name is Maureen. Do not be afraid. I am your friend. You can talk to me’.

‘Noshellshellalone Ssthuhapeehkaempgreeeen...’ Flocanalog felt noises flow from his mouth like saliva. He sank down into the lee of the balcony wall grasping one of the bulbous supports. ‘Greeeennn... eeeeeennn huuaarddfuon...’ He stared off into the distance, his eyes wide. Flocanalog felt terror well up within him: he was in an *impossible place*. How did he make sense of it? He heard the gibberish he spoke, but it made no sense. *How was that the world? What was the world here?*

‘Flocanalog, this is Maureen. I am going to make some interventions. You will not be harmed. I am your friend. I want to help you.’

Flocanalog listened to the strange sounds, and shook his ear. *There was something inside him! Was that what was supposed to be?* He fought an abrupt, paralysing fear. He heard nonsense bubble from his mouth.

‘Intervention initiated,’ said the gentle voice. ‘Interpreting... Ah.’

Flocanalog felt a concrete reality flooding him. He felt and understood the stone he sat upon, he moved his hands, placing them in front of his face. His *hands*. He waggled his fingers, and the digits responded. He breathed, and felt the moisture and the temperature of the air as he sucked it down.

‘What was that?’ said Flocanalog to himself. For a moment, the world had made no sense.

‘Flocanalog,’ said the voice in his ear. He remembered what it was, and was not startled.

‘Yes. Who is that?’

‘I am referred to as Maureen. I am your doctor.’

‘Are you human?’ asked Flocanalog.

‘No, I am primarily choi. The nature of my work necessitates, however, that I also incorporate choo components.’

‘What does that mean?’ asked Flocanalog. ‘And how are you talking to me? And where are you? And what just *happened* to me?’ Flocanalog heard his voice rising.

‘It means I have a limited self-awareness. I am talking to you via a microwave link to your resource. Most of me is housed in the structure you see on the small island several hundred metres from here, and what happened to you, was a schizoid seizure, located in some of the more recently regenerated parts of the primary visual area, resulting in a computational snowstorm. It must have been a quite frightening experience. Are you alright now? Your indicators look fine.’

Flocanalog listened to the melodious voice of the resource, not understanding most of what it said. But he was lulled by its calm voice. He turned to face the view from the balcony, and saw to his right, several hundred metres out from the shore, a small, forested island. A narrow, arching bridge, like the isolated leg of an insect, extended out to it.

‘Maureen,’ he said, and an icon blinked. ‘That’s you over there on that island?’

‘Most of my physical components are there, yes.’

‘What other parts of you are there?’

‘Other non-physical parts of me. I have parts all over the Koyculture. One part of me is currently in conversation with the Novagaian Hub resource. Another part is attending a lecture on philosophy on Memecast. I also maintain a number of remotes, one of which is currently sitting on your hand.’

Flocanalog looked down. On the back of his hand sat a silver dart, two centimetres long which as he watched, floated off his hand, and moved away.

Flocanalog followed the little machine with his eyes, and his gaze was drawn by the view. The balcony at the top of a small hill faced Antispinward. Flocanalog could see maybe 120 degrees of arc. He let his eyes wander across the sight, noting where the water changed colour, patches of turquoise and blues and greys shifting and glittering in the sun. He let his vision relax, and find its own focus in the distance.

It stopped at a wall of water, curving up and over his head. A mountain of water, hanging suspended from nothing, always threatening to come plummeting down, crushing everything in front of it. The sight moved him.

*How could Water possibly have built such a structure?* he wondered.

As he spoke the words, Flocanalog had the curious feeling that he had said them before, and had a startling bright image of another hill; a different place; the same words. Had he ever been to such a place? He didn’t think so.

An icon blinked. ‘Would you like to see the gardens, Floc?’ prompted Maureen. ‘I am an enthusiastic and knowledgeable guide.’

Flocanalog considered it.

‘Yes.’

‘The steps to your left...’ Flocanalog began walking towards them. ‘...take you to the first terrace level.’ Flocanalog gripped the banister, and climbed down the steps, hearing the hiss of his supporting exoskeleton.

‘Does everyone get one of these things?’

‘What thing is that?’

‘This exoskeleton,’ said Flocanalog with distaste.

‘Yes. In some cases it is invaluable. You see, even though your musculature, and the appropriate neural machinery, have been regenerated, it will nonetheless still take some time for your motor control to be fully reliable.’

‘Right.’ Flocanalog reached the bottom of the steps. A lawn spread out before him, apple trees clustered in a knot in one corner. Small steps led off the lawn, down to the next level. He began walking towards them, feeling the tug and push of the exoskeleton. He smelt unfamiliar smells, wrinkling his nose.

‘Forgive me,’ said Maureen presently, ‘but I am curious. Would you mind if I asked you a personal question?’

‘I don’t think so.’ Floccanalog reached the small steps. They led down to his left, curving back on themselves. He took the first step tentatively, hissing quietly.

‘I was responsible for your extraction from the Shell,’ said Maureen. ‘I am aware of the trauma that this process causes. I have participated in a number of such extractions in the past three hundred years, and the question I wish to ask is...’ There was a pause, so abrupt in the smooth flow of words that Floccanalog thought Maureen had disabled the tap. ‘Why?’

The question struck Floccanalog like a physical blow. Stapjeekha had asked him the same question, again and again.

‘Why?’ he echoed. ‘Why did I leave my wife, my life, my home? Why did I peel myself away from my Shell?’

‘Yes, that’s the gist,’ Maureen confirmed. ‘I would be extremely interested in your answers.’

Floccanalog was silent for many moments.

‘I don’t know if you would understand Maureen,’ he said eventually. ‘It’s because... it was a... do you believe... what do you know about Water, Maureen? Because it’s got a lot to do with Water, and a lot to do with myself. With who I am. With what I am.’

There was no sound from the resource for a moment. When it did speak, its voice was different. ‘I am in sympathy for the pain that you must feel in ignorance of satisfying answers to such questions. I ask myself the same questions.’ The resource sounded almost wistful.

‘Do you Maureen?’ asked Floccanalog, watching as a small winged shape flashed around the lawn, and settled on the top of the wooden shelter. ‘Perhaps you and I could share each other’s pain?’

‘I would like that very much.’

Floccanalog began talking. He described, conjectured, reasoned, queried and argued. He did not stop until the air had cooled, and the light had faded. When he returned to the warm confines of the medical facility above him, Floccanalog slept well and soundly. The first thing he did when he woke up was to call Maureen, and begin talking again.

## **Chapter Eight**

Manchester rode the 40 kilometres down from the top of the Rim on an induction cushion. She was annoyed because she generally tried to avoid entering decision quads with other Cardinals, but was now required to follow the recommendations of one.

At the base of the impossibly big Rim wall, Manchester struck out for a clump of Bus stops, mollified only slightly by the feel of the grass on her bare feet. She reached a woven Tree root path, and followed it up a short incline. She sat down to wait for a Bus.

Manchester knew *why* she was so often subject to the wishes of decision quads, but knowing that was no comfort. She had not been born at the same time as the rest of the other Cardinals. She alone had the dubious honour of having not been born on Earth. Consequently, other Cardinals treated her like she was a little lost child, always calling on her to check if she was well or arranging for her to do *this* little thing, or *that* little thing.

*Especially Lodz.*

Manchester glanced up into the sky. She saw a tiny descending dot, which as she watched, extended tiny, sinuous extensions. The falling dot became a boulder and the extensions began waving lazily. The boulder became a falling house and then two great flat pads touched the top of the hill. The main belly of the descending machine decelerated rapidly on 300 metres of contracting carbonsponge and fell to rest 10 centimetres from the surface.

*So, a Trip. Could be amusing, I suppose.*

She walked toward the side of the Bus and placed the palm of her hand onto the machine's surface. She felt a tiny bunch and quiver in the warm, striated material and waited for the Bus to admit her. She recalled again the intriguing snippet of information that Lodz had given her, about the young female having no Cascade signature. She tutted.

*Salisbury must be getting lax in her old age. She can't be looking hard enough. Everyone has a Cascade signature.*

The side of the Bus opened and she climbed inside, breathing in the machine's spicy smell. She sat down, smelling liquorice and pine, and placed her hands over the arm supports. She felt for the moist depressions on the underside of the arm rests and accessed the machine using the pockets of nchoo infection in her fingers. She entered the consensorias, and pictured a location, sensing the machine's eagerness and willingness to be away. She pulled her fingers from the moist access gates and lost the fuzzy emotional feel of the consensorias. The door closed liquidly, she felt an invisible hand pressing her into her seat - a tiny residue of the enormous, damped acceleration of the Bus departing the stop - and watched through the transparent bottom of the machine as objects became toy sized beneath her.

*And the man, the one from Marineris. He could be worth talking too.*

Manchester idly wondered whether the young male would have anything interesting to contribute.

*Probably not. Young mal never do.*

He *was* a student of history, though, and Manchester *did* have a similar interest. She had constantly been told by her elder Cardinals what it was like on old Earth, what they had seen, how they had lived, their collective, gradual realisation as they matured that they were not like their parents. Manchester had become so disgruntled with listening to stories of how she couldn't *possibly* appreciate what it was like, of how terrible and frightening it had been to live through the Great Dying, that she had determined to find out as much of that period of history - prior to the building of the Koyculture, 360 BK. to 100 AK. - as possible. That had been only the start of her education. Arguably, she now knew the Histories better than

any other Cardinal alive.

*Where shall we go, then?*

It was her responsibility to deal with the planning and organisation of the Trip. Which amounted to pointing in one direction or another, and starting walking.

*Undine usually raises an eyebrow or two. Escher possibly?*

She accessed her nchoi resource and a control window snicked open by her right hand. She called up a display of Novagaia. A virtual map appeared, a ribbon floating steadily before her. It showed Novagaia sliced open, unrolled and to scale: at both ends were two little hemispheres indicating the position of the bisected Chapel Halls. The ribbon depicted a structure that was 4,000 kilometres long and 300 kilometres wide, giving it the same kind of surface area as Marineris, some 1,200,000 square kilometres. Manchester could see the four blue smudges of Novagaia's seas, Ushogbo (named after the dead Cardinal of the same name), Wickremasinghe, the Joycean, and Lila.

Manchester keyed a sequence on the control window and swooped into the map. Now, she could see the first 500 kilometres of the orbital inner surface in closer detail. Manchester let her eyes wander, keying the control window without looking. A small virtual tool appeared over the map. Manchester let her finger direct its movement, tracing out interesting routes, places that she knew, sites of interest. Later, she would download the details of her route and the size of her party to a Tree, which would ensure that her Trip was adequately provisioned.

As she doodled she thought again about the young female Melie. She pronounced the name out loud, and listened. She had heard the sound that her mouth made before she realised.

*In a different language possibly?*

She invoked another control window and assembled a phonetic representation of the sound, speaking the word aloud and pulling the signal from her auditory nerve into the window. She then initiated a search through the nchoi resource memory, looking for a correlation: the molecular machine contained structural, phonetic and semantic analyses of all Koyculture languages, presently used but the search drew a blank. She snorted, and closed the window. The map superposed itself in front of her, and she returned to her doodling, curious and mildly annoyed.

*Where had she heard that sound before?*

Manchester decided that she would pursue her search via the Histories. She grinned: that would mean a conversation with a Hub generated Appearance.

The Bus' long legs began to unravel. Manchester saw the towering, spiny form of Tooktah, the great Tree of Trees at the centre of Chapel Halls, grow larger beneath her. The broad feet of the Bus went probing ahead and slowed as they found purchase at the tip of one of the spines. Landing daintily, drawing its belly in and down, the machine clung to the tip of the spine, bouncing slightly. It shuffled forward and a section of its belly irised open flush with an airlock blister.

Manchester sat in the Bus' interior, realising that she had made a mistake: she was going to be *there*, not *here*. She accessed the Bus through consensorias again, and pictured it another location at the other side of Chapel Halls.

*Malvern.*

Manchester blinked, recognising her behaviour. Sometimes little things popped into her awareness as the Third component of her mind sent her little suggestions for how she should navigate herself through life. *Obstacle there, moral dilemma there. Ah, enhancement!*

Once, long ago, Manchester had tried to explain to a Tripper what it was like to have a different kind of mind. The Third allows teleological perception of the informational underweave of things, she had explained. As a Cardinal she understood reality differently because, for her, it *was* different, she explained. In addition to the usual perception of EM radiation, mechanical and chemical energies of various kinds of which the human was capable of seeing, the Cardinal also perceived... and here, she had stumbled, her hands waving loosely in front of her.

‘Because it’s not really *perception*, you see. For example, I don’t *see* the colour red any different from you. My visual world is the same as your visual world, even though Cardinals do resort to the notion of teleological *perception*, which is confusing. But even construed as perception, even then, *they* - the teleological percepts that is - aren’t meaningful to *me* as such, because me, *my* awareness, is choo-choi, like yours.’ She stared at the lax-faced Tripper, her face hardening in a kind of brutal satisfaction, thinking *you asked, you listen*. ‘My awareness when it *is* Third augmented, *can* understand what I teleologically perceive. But then again, sometimes, it can’t. And then *other* times, when I am *not* Third augmented, information leaks in that I’m not aware of, like a prescient sense, until I suddenly up and walk out of somewhere or find myself somewhere I didn’t know I wanted to be in and then it all gets a bit disorientating.’

The Tripper had looked at her.

‘Yeah, thanks for clearing that up, great,’ he had said, and walked away disconsolately.

So Manchester knew what had just happened and she was content to follow the path that would take her to Malvern. Manchester liked Malvern a great deal. She settled back into the seat of the Bus, smiling.



‘The sexual organs of gymnosperms and angiosperms are fundamentally quite different you see.’ Malvern slapped the trunk of the mature *Abies cephalonica*. ‘Here, let me illustrate.’ He peered around himself in the dim light and spotted something lying a short distance away. ‘Ah!’ He darted over to the object. Retrieving it, he came and stood by Manchester’s side. ‘Marvellous.’ He turned the cone over in his hands. ‘Female I think, they tend to be a little slimmer than the males. Anyway, the strobili...’ Malvern looked sideways briefly at Manchester’s blank face. ‘That’s the *cone*, consists of a central axis...’ Malvern stirred his finger around the appropriate axis of the spiky cone. ‘Upon which the reproductive organs are arranged in a close spiral. Now that’s the *gymnosperm*, where flowers are arranged in these kind of complex inflorescences...’

‘Nice *word* Malvern.’

‘...Whereas in the *angiosperms* of course, thank you Manchester, the flowers are much more variable.’ Malvern used his hands to manipulate some enormously complex, invisible shape. ‘They may or may not be arranged in inflorescences.’ He shrugged and pursed his lips. ‘And if they are...’ He paused and stared off into the distance.

‘Arranged in inflorescences?’ prompted Manchester easily, pulling at mossy fibres snaking over and down the back of the log upon which she sat.

‘Then those same inflorescences, thank you Manchester, may *themselves* be extremely variable.’ Malvern looked up at Manchester, frowning ferociously, as if this was of enormous concern and bafflement. ‘The inflorescences can be entirely *male*...’ He shrugged and raised his hands, palms upward. ‘Entirely *female*, or even, indeed...’ He smiled and dropped his hands, nodding his head on one side. ‘Hermaphrodite.’ He frowned and scratched at his head. ‘I think.’

‘Well, to tell you the truth Malvern...’ Manchester beckoned the Cardinal closer. He crouched down by her side and she put her arm around his shoulders.

‘Yes?’

‘In *my* experience, angiosperm is the more interesting of the two taxa, as they are not simply wind pollinated, like the gymnosperm.’

‘Indeed!’ Malvern’s face creased into a delighted grin.

‘Yes. The stigma at the tip of the ovary of the angiosperm has specialised to catch pollen, which can no longer reach the ovule directly. So most of the pollination is by *animal* means.’ She rasped out the penultimate word and laughed liquidly into Malvern’s ear. ‘But indeed, as you say...’ She leant in to brush the tip of her tongue around the inside of the other Cardinal’s ear. ‘Most angiosperm inflorescences *are* hermaphrodite.’ Malvern sighed appreciatively under Manchester’s ministrations. ‘Although well known dioecious exceptions include willow...’ She kissed his neck, down by the throat.

‘*Salix babylonica*,’ murmured Malvern and twisted his head, breathing in the smell of Manchester’s hair. ‘*Salix alba*. *Salix triandra*.’ Manchester cupped the back of Malvern’s head, and felt it fall to her chest. His arm came round her waist. His mouth puckered gently along her collarbone, and she stroked his hair, closing her eyes.

‘The birch and the hazel,’ she said. ‘*Corylus avellana*. *Corylus colurna*.’

‘*Corylus maxima*!’ breathed Malvern, and looked up at Manchester quickly. He traced the curve of her neck with his tongue. ‘*You* are a flower Manchester. The very Flower of Us.’ His hand clasped the nape of her neck. Manchester felt a warmth begin to spread through her and nestled herself against Malvern’s hand. ‘You have sepal,’ he said, running his hand lightly down her back. ‘Protecting the developing bud, yes?’ He nibbled at her ear.

Manchester thought he had begun the comparison metaphorically. ‘And do I have petals, attractive to potential pollinators?’

Malvern’s head had sunk lower into her lap.



‘Marvellous petals Manchester,’ he said, his voice muffled. Manchester felt her legs begin to drift apart. ‘Wonderful gynoecium.’ She felt cool air touch the top of her thighs, and a warm moistness began to caress her. ‘Peel back the sepal and what do you find?’ Manchester rested a hand on the top of his head. She threw back her hair and breathed deeply, leaning on one stiff arm, the dark canopy above her twittering and clacking. She looked down, and saw Malvern’s straw blond thatch begin to move, slightly. ‘The bud of the flower!’

‘Ripe for pollination.’ Manchester voice quavered ever so slightly.

‘My dear one.’ Malvern raised his head and looked at her, some other part of him continuing gentle ministrations. ‘I quite forgot. May I...?’ His face was open and quizzical.

‘Oh!’ Manchester threw back another arm to support herself. ‘Oh yes.’



‘Hello! Anybody home?’

Manchester looked up at Malvern, whose hands had stopped their circular motions around the small of her back.

‘Oh.’ Malvern turned at the sound of booted feet on the wooden floor. Three figures appeared, standing framed against the late afternoon sun. Two of them were smiling. The other looked a little nervous.

Malvern smiled. ‘Hello my friends.’ He resumed the circular motions of his hands. ‘I’m just finishing up.’

‘Oh you’re not are you?’ Manchester gripped Malvern’s arm, fluttering her eyelashes at him. ‘Please don’t stop. *Please!*’

‘It won’t work Manchester,’ said Malvern gravely. ‘I am impervious to you.’ He sniffed haughtily and Manchester laughed. The nervous looking individual squeaked: the others all looked at him.

Pause.

‘And who is this?’ Malvern stepped forward, his hand outstretched. ‘I’m Malvern.’ The Cardinal smiled easily. ‘And you are...?’

The nervous looking individual took the small hand that was proffered up to him, and shook dumbly.

‘Tennys Smolensky,’ said Tennys weakly, his eyes fixed rigidly on Manchester’s ankle, in case it strayed to the rest of her, which was presently uncovered.

‘Ah!’ Manchester turned herself over on the massage table, leaning up on her elbows. She was quite

naked. ‘You’re the Tripper.’ She bounced off the table. ‘How do you do?’

## Chapter Nine

‘Know their problem?’ asked one, flicking his long overcoat open, revealing a flaccid, cybernetic phallus.

‘Wasat?’ his partner asked, exuding two small trails of smoke from his nostrils.

‘*Religionists*,’ said the first, gesturing. ‘All that crap is just sublimated sexual tension, mal. Shit, all that smelly, old mal wanting to shaft young mal, all cooped up in the same place. Makes me fucking sick!’



Dwoschultsizes Gromburg the Second, of the most Holy Order of Spiritual Unificationists, was not a pleasant man by nature. Indeed, Gromburg was neither pleasant nor, strictly speaking, a man. More correctly, the *thing* that believed itself to be Gromburg was not pleasant by nature. But then, neither was the thing that believed itself to be Gromburg even *what* it believed itself to be.

The Gromburg thing had no memory of regaining consciousness after Melie’s fists, reinforced and augmented by the micro-hydraulic exoskeleton, had destroyed its face and after Aileeni had lacerated a large portion of its spine with her unfeasibly large weapon.

This was because the Gromburg thing *had* no consciousness.

The thing that believed itself to Dwoschultsizes Gromburg the Second *did* have memories. Three weeks before, after having been summoned to hear its holy orders from the mouth of the Grand Austere himself, the Gromburg thing remembered going to Verest and being steeled to do God’s holy work. It remembered having subcutaneous impact armour engineered in around the torso. It remembered having its simple cleric’s resource upgraded with a variety of combat-assist tools. It could recall having an adaptive munitions microfactory installed in a Fat pocket on its belly. It remembered insisting upon a micro-hydraulic endoskeleton - to assist in the carrying of the Almighty Word to the scum and disease ridden filth that filled the dead skies above old dead Earth - and clearly recalled asking for medical nchoi to be secreted in Fat pockets in both legs, the chest and either side of the head. The thing that believed itself to be Gromburg could thus remember having itself, as they say, *tooled up* .

It was just that none of it had ever happened.

The thing that believed itself to be Gromburg had other, strobe-like memories of travelling to Godsfollicle, of meeting with the venerated Millstar and of witnessing the grotesque, depraved, most *awful* of behaviours. The Gromburg thing could recall snatches of trying to find the despoiler, to administer the retribution that such an act of sacrilege demanded. These events had happened. It was just that they hadn't happened to the person that the Gromburg thing believed itself - in short, digital episodes - to be.

The thing that believed itself to be Gromburg had no memory of regaining consciousness after its altercation with Melie and Aileeni because it was in an experiential loop, shunted there by an executive, parasitic nchoi resource usurping the lumpen wetware inside its skull. At the time of the incident, and reacting to the two traumas inflicted by Melie and Aileeni, this machine parasite quickly sent a series of commands through artificial nerves. Pockets of medical nchoi in the Gromburg thing's chest began implementing emergency field repairs. Next, the nchoi executive activated the intrinsic, endoskeletal support, causing the biological shell - in which the Gromburg thing believed itself to be embodied - to rise from the waist. A cascade of thick, viscous blood escaped from the facial trauma. The Gromburg thing climbed to its feet, leaving a large pool of red liquid behind, turned and orientated itself. The executive parasitic machine began planning, considering priorities and developing options, simultaneously directing locomotion, spinning an auxiliary process to monitor this function. The Gromburg thing began walking, away from the *Oil Burner*, towards the location of the venerable Millstar.

The thing that believed itself to be Gromburg was incognizant of pain during any of this, was unaware of engaging in any kind of decision making process because, of course, just at that moment, the physical machine parasite was not running the virtual, simulated entity that believed itself to be Dwoschultsizes Gromburg, Vicar-General from Austerity.

## Chapter Ten

The choo machine was four centimetres long and twelve-legged, with thin ebony and teak stripes running its length. Climbing the short trunk of the young *Juglans nigra* easily, it scuttled out amongst the foliage, and began hunting. It was culling a population of tiny vandals attacking the growing tree. Its twelve legs a blur, it moved from one leafy twig to another, ducking under and over, methodically grabbing and de-animating individuals of the offending beetle species with its tiny manipulators. As the machine made a methodological grab for a particular cluster of the tiny insects, the twig onto which it had crawled parted from the tree, the young shoot weakened by the ravages of the beetle infestation. The rearmost two of the machine's short appendages maintained purchase on healthy wood. The machine hung, a small black pendulum, before swinging the rest of its body back up onto the intact twig.

Unperturbed, manipulators snicking, the cull resumed.

The twig fluttered from the low branch, its leaflets holed and yellowing, and fell to the churning surface of a small pool. Pumped and regulated by the diffuse Gaian awareness of the orbital itself, the pool sent an excitable progeny foaming away through the forest. When it passed over the lip of the Malvern Fall, three

kilometres downstream, the watery child was three metres wide and flowing at 15 metres per second. The twig was visible floating on the surface of the water until the very last moment. Then it was sucked down, disappearing from sight.

Tennys peered up curiously as the twig swept past his nose.



‘*Yohunga?*’ echoed Malvern. He shovelled rice into his mouth and chewed briskly, frowning.

‘*Quercus canariensis?*’ Manchester ventured. She put down her fork, and reached for her glass. She looked at Malvern across the table, and then at Brock and Carys, seated to her right.

‘*Quercus katunga.*’ Carys said, correcting her. ‘It’s a hybrid. *X Quercus katunga* to be really picky, I suppose,’ she added, emphasising the “ex”.

Manchester nodded.

‘*X Quercus katunga,*’ said Malvern. ‘Yes.’ He looked into the distance briefly, evidently internally accessing his resource. ‘Yes,’ he said again presently, and smiled at Carys and Brock. ‘40 clicks down and clockwise.’ His eyes glittered. ‘We’ll take a picnic, what do you say?’

‘You want to come, Malvern?’ Carys glanced up at the small Cardinal. ‘That would be lovely. I haven’t seen you in months. What have you been up to?’

Brock leant back in his chair, pushing his plate away from him. ‘Yeah Malvern, what’s been cooking?’

‘Oh, you know. This and that. Pottering around. Sex. Massage. Tending a few trees. I’ve got a particularly nasty little beetle trying to eat my *Juglans nigra*. Irritating little beasties.’ Malvern breathed in and out deeply, his hand on his stomach. ‘And other than a *most* hospitable visit from my very dear friend Manchester, scant hours before your own arrival, I haven’t really seen nor heard a dicky bird. Apart from the sex, of course. Been ignoring my resource, too.’

Manchester snorted. ‘I try to do that and I get hounded.’

‘Ah, but that’s because you’re *you*, Manchester dear,’ said Malvern, ‘And all of us just *love you* so much, we want to take care of you, make sure your keeping *busy*.’

Carys glanced up, and saw the look on Manchester’s face.

*Whoops.*

‘Hey Malvern, do you remember that time at Novypolos?’

Malvern looked at Carys, then at Manchester. He opened his mouth and then closed it again, becoming wary. ‘When?’ he asked.

‘You know. At the Carnival? That time when you had one or two too many *field mushrooms* ...?’ Carys let the question dangle.

Brock looked blank for a moment, and then whooped, remembering the incidence.

‘A certain *dancer* as I recall.’

‘Ah *ha!*’ said Manchester with triumphant delight, her irritation forgotten, just as Carys had intended. The Cardinal pointed an accusing finger. ‘Child molester!’

Malvern went red and blustered, trying to maintain a haughty composure. ‘She was not a *child!*’ he tried to explain, but was met with a wall of derision. Malvern couldn’t maintain his aloof mask, and began laughing himself. ‘Alright, alright!’

Brock was wiping tears from his eyes. ‘Dear oh dear!’ He laughed once more, which set everyone else off again.



Where the stream went over the lip of the waterfall, Malvern had built a diamond loft for his home. Tennys had taken some time to understand this. To his left, white water plunged soundlessly downwards over the surface of an invisible cylinder. Above, clear blue water flowed by curiously calm, very fast and totally noiseless and to his right was a wall of silent aquamarine.

‘Quite something, isn’t it?’ Malvern took Tennys by the arm, and led him toward a seat. ‘This is the Fall Room. Unoriginal title, I know, but evocative. I always feel a little, well, *exhilarated* when I come up here. Excellent spot for quiet meditation, I’ve found.’ Malvern directed Tennys to a large sofa, and then moved away to a small table, on which five glasses and a frothing pitcher stood waiting. ‘I call it *Fall* incidentally, not just because of its physical location, even though that would be reason enough and you do like root beer don’t you Tennys?’

Tennys nodded his head. He was struggling to keep up with the Cardinals rapid speech.

‘Yes, thank you.’ He stood up again, a little confused.

Malvern came forward, handed the glass over, took a sip from his own and continued with his interrupted statement. ‘But also because I have had some quite uplifting experiences of actually *floating* in this chamber, of a moral and intellectual *weightlessness* if you like, no doubt of course, stimulated in part by the juxtaposition of so much natural energy...’ Malvern indicated the flowing water with a wave of

his hand. ‘With the *utter, complete* cessation of sound.’ The Cardinal fell silent himself for a moment. Tennys opened his mouth to speak, but Malvern continued again, huffing and smiling. ‘Not that such a *cosmetic* factor as mere acoustics can serve to validate the experience, of course, but that’s peripheral you see because...’ Malvern laughed and shrugged amicably. ‘If and wherever the mind and the body are able to remember their first *floating* stirrings, as the squirminess of a mud dwelling fish perhaps...’ Malvern looked at Tennys wisely. ‘And our genes never forget my boy. Or perhaps something more *primitive* living in the mud at the bottom of the ocean or *even ...*’ Malvern shrugged and grinned lopsidedly, taking another sip from his beer. ‘And this is my favourite of course, the *joyous* suspension of the womb of that most marvellous of creations, *woman* , then...’ Malvern smiled broadly and nodded his head. ‘Why then some good has occurred, wouldn’t you say Tennys?’ The Cardinal’s face became serious and friendly both at the same time. He looked at Tennys expectantly, took a slurp of his beer, and grimaced in satisfaction. ‘Excellent!’ He smacked his small lips.

Tennys didn’t know quite what to say. He had backed away from the advancing Cardinal as the torrent of words came over him, and ended up plastered against the clear wall of the chamber. His hand confirmed by touch what his eyes would not confirm by sight: namely, that the wall was made of *something* solid.

He was suddenly inspired. ‘Uh, yes.’ He nodded his head, causing Malvern to smile delightedly. ‘And uh, this is very interesting too.’ He knocked his knuckles against the wall. They made a tiny sharp knock. ‘Almost doesn’t look like there’s anything there. What’s it made of? Must be pretty tough stuff.’

‘Diamond.’ Malvern stopped a short distance away. The top of his head came up to Tennys’ belt.

‘Diamond? Heavy shit.’

A twig appeared from nowhere and swept past his nose.



Tennys laughed a small, high laugh, not knowing what was going on, but laughing anyway because he felt a little left out. He had not said anything for the last twenty minutes and had simply sat with his head bowed a little, picking unenthusiastically at the odd food, listening to Carys and Brock talk easily with the two Cardinals.

He was profoundly uncomfortable.

Not because the two Cardinals were odd or deformed or *anything* like that, but because there was something about Manchester and Malvern which turned him into a gawking idiot whenever they said anything to him. Manchester was *unbelievable* and Malvern talked so rapidly, and with so many complex buried sub-clauses and anaphoric references extending sentences back into the conversation, that Tennys had trouble understanding anything he said at all.

He wasn't disquieted because the two Cardinals were strangely *small* . At just under a metre high, they *were* small, but his discomfort did not stem from their height, that wasn't it. It was more the fact that... *what?* He couldn't say. They didn't *move* like a person that small, if they were human, would do, was that it? *Maybe* . Perhaps it was more to do with the fact that he had seen Manchester naked. And oily.

And *naked* .

Tennys found himself unable to banish the image of Manchester as she arose from the massage table. He was struggling to reconcile its potent charging eroticism with the way he should be feeling and acting toward Manchester, which was with polite, informed, fucking *intelligent* conversation. His internal dialogue reached a silent screech. He thrashed mentally, gritting his teeth. He chastised himself roundly and resolved to pull himself together. He was here after all, to learn from these people, *particularly* Manchester. He took a deep breath, and turned to face the diminutive Cardinal.

'Manchester?'

The conversation and laughter dropped around the table,

*Wonderful*, thought Carys with a smile, *Tennys is joining in*.

*Excellent*, thought Brock, pleased, *Tennys is getting into the conversation* .

*Good*, thought Malvern, *he's making a contribution* .

*Oh no!* thought Tennys wildly. *Why did it do that?*

Manchester turned to him. He looked at her face. Wide, almost square, with a small strawberry smudge of a mouth below huge dark eyes, a short bob of caramel hair curling to her throat.

Tennys swallowed and closed his eyes. Opening them, he cleared his throat. Then he cleared it again. 'Ah! Oh. Uhm, well, I uh, I was just wondering...' He put down his fork, horrified to see that it was shaking. He looked at Manchester and saw her looking back at him, her face a blank.

*Is she annoyed? She doesn't seem pleased. She's annoyed.*

He coughed and cleared his throat again. 'I was just *wondering* well, if I could have a chat really. Or, or... or a *conversation*, ' he added hurriedly. 'Uh, some time, soon. Or later, whenever really, coz I know you're busy and everything.'

Manchester turned slightly in her chair, pulling it out from the table.

'Certainly. Any particular topic?'

Tennys fought to stay calm. 'Ah! Oh. Uhm, well...' He huffed and laughed weakly, embarrassed. He ducked his head 'Uh, history, actually.'

Manchester looked at him carefully. She was silent for a moment.

'Yes of course,' she said, almost absently. She leant forward in her seat and rested her hand on Tennys' knee. He stifled a twitch and laughed nervously. She leant back. 'You need to *relax* Tennys.'

‘Ah! Oh. Uh, well, yes. I know. I think.’



‘She doesn’t *like* me!’

Carys smiled understandingly. ‘That’s not true, Tennys.’

The two of them had strolled out onto a balcony jutting out from the side of Malvern’s house after the meal. The Malvern Fall passed down noisily barely five metres from them. Carys placed her hand on Tennys’ shoulder and pulled him around gently to face her. ‘Look, people are always nervous when they meet a Cardinal for the first time. I remember *I* was, and I already had 40 years of life behind me, all over Koy.’ She smiled, remembering. ‘When I met Malvern for the first time, I saw a little person who just came striding up to me and who just stood there with their hands on their little hips. And then, just like that, they announced their wish to take me to bed that very instant and make love to me all afternoon. *You* were nervous, you should have seen *me!*’

Tennys smiled despite himself. ‘He did what?’

Carys laughed. ‘And I found out later, that that’s what he says to *any* woman he meets for the first time. Absolutely any.’

‘Really?’

Carys nodded smiling with the memory. ‘The thing to always remember about Cardinals Tennys, is that they are *special*. When they appeared on old Earth how ever many years ago...’

‘604,’ said Tennys automatically.

‘Whenever. Well, back then, they were the great hope, weren’t they? The Little Angels. And no doubt they were all that, when they had to be, down on old Earth. But that was such a *long time* ago. In the here and now, on Novagaia, Cardinals are not the weird little automatons they were, they are just *people* and very beautiful, most of them. Now what do you suppose that 400 virtually immortal, perfect little pixies who have no reproductive potential - because they constantly oscillate back and forth across that crucial differentiation - like to do to while away the years, hmm?’

Pause.

‘Study philosophy?’

Carys snorted in amused exasperation. ‘Tennys Smolensky!’ She beckoned him closer and whispered in his ear. ‘They like to have *sex*, Tennys. A *lot*.’



Tennys was shocked. 'I'm shocked,' he said. 'Sex?' He began to blush, feeling the cool spray from the fall as welcome moisture.

'Yes.' Carys was seemingly oblivious to Tennys discomfiture. 'And Malvern and Manchester are kind of partners, *occasional* partners, and I think that we arrived in the middle of a small re-union, so the air around the two of them, and particularly around the table tonight, was pretty charged with lots of little Cardinal pheromones running around, yes?' Carys scrunched up her hands, pulling her mobile mouth into little ripples. 'Which could get to a young man, I should imagine. I *certainly* felt something from Malvern, and Brock has always had a special affection for Manchester. Maybe your nervousness was caused by that?'

'Yes,' exclaimed Tennys. 'Yes!' He laughed and shook his head. 'I don't know Carys. When we arrived, I saw Malvern standing there by that little table, and Manchester jumped down and stood there, and she's small and cute and she's *naked* and wants to *shake my hand!*' He shook his head. 'Not what I expected my first meeting with a Cardinal to be like, I guess.'

'What did you expect?' asked Carys, encouraging Tennys to talk.

'I don't know.' Tennys ran his hand through his hair, and then pushed it into the pocket of his trousers. 'Little people in long red robes carrying big books around with them or something.' He paused and pulled at his nose. 'Or like tiny little dwarfs you know, with all their arms and legs out of proportion, waddling around and squeaking.' Carys laughed at the picture Tennys was drawing and he laughed too, feeling tension flow out of him. 'But instead I find these two little people, *perfectly* proportioned, quick, strong and *quite* happy to go walking around naked with someone they don't even *know* ...' Tennys paused and then continued, gesturing with his hand. 'And *then* Malvern shows me the Fall room and starts talking to me about floating or something, and I don't understand a word he's saying and then, around the table, you're all laughing and getting on and talking about trees, and... what language was that, anyway?'

'Latin.'

'Latin?' Tennys closed his eyes. 'Oh yeah. God, I'm so stupid.'

'No you're not.' Carys turned a little toward Tennys, brushing black strands of hair away from her eyes. 'So you've never done that?'

'Done what?'

'Walked naked around people you don't know?'

Tennys looked indignant. 'No, I haven't!'

'Maybe you should. A very freeing experience.'

Tennys grunted noncommittally.

'Hello you two.' The voice came from the shadowed doorway onto the platform. Tennys couldn't see who was there but Carys recognised the voice.

'Hello Manchester,' she said warmly and immediately took Tennys arm. 'Tennys and I were just talking about you.'

Tennys grinned weakly. ‘In a manner of speaking.’

‘Which?’ Manchester came out of the shadows. She leapt nimbly up onto the balcony’s thin railing, apparently unconcerned for the drop behind her. She slung an arm over Tennys’ shoulder, leaning forward to peer into the faces of him and Carys.

‘Sorry?’ Tennys stammered.

‘Which manner of speaking?’ Manchester began playing with the hair by Tennys’ ear. ‘Carys said that you and her were just talking about me, and *you* said...’ She poked Tennys in the chest. ‘That it was in a manner of speaking and then *I* asked which and then *you* said...’

Manchester sounded like she would continue indefinitely, so Carys interrupted. ‘In the manner of speaking whereby someone has a hard time matching their preconceptions of Novagaia and Cardinals with the reality, is what we were taking about Manchester,’ she explained.

‘Ah *that* old one. You have very nice hair Tennys, if I may say so.’ Manchester looked into his face, smiling a large, friendly smile.

‘Thank you,’ Tennys stammered and searched quickly for something else to say. ‘You have nice skin...’ he blurted and then wished he hadn’t, thinking, *when oiled and naked*.

‘*Thankyou!*’ Manchester turned to look at Carys. ‘What a *nice* young mal Carys.’

Carys smiled and hugged Tennys’ arm. ‘I thought so when I first met him. Brilliant historian, and does a nice ape impression too.’ Tennys turned to her smiling, remembering the incident.

‘Really?’ Manchester leaped off the railing, crouched down and began scratching and hooting. Carys released Tennys’ arm, and sprang down to join her. The two women circled each other, hooting and laughing.

Tennys goggled.

Manchester gave a sudden yelp, came racing across the platform on all fours, and leapt up into Tennys arms. ‘So now that we’ve cleared any lingering sexual tension between us young mal, perhaps you and I can have a conversation without you turning into a wobbling custard, eh?’ She smiled up at him and put her small hands into her lap.

Tennys brightened and returned her smile, deciding to go with the bizarre rather than fight it. ‘Yes, please. I would like that.’

‘Good!’ Manchester leapt from his grasp again and scuttled up onto Carys’ back. Carys whooped with simulated indignation, and began bucking around the platform, Manchester clinging to her neck.

## Chapter Eleven

‘I have not seen anything like it before,’ said the Copy, apparently sitting on the thick, ceramic edge of the bath. Little wisps of steam rose from the hot, oily water, smelling of bergamot and patchouli.

Reaching up with one arm, she retrieved a small bottle of a clear green gel from behind her head, and squeezed some of it into her hand. She began applying it luxuriously to her outstretched leg, absently massaging at a small tight clasp in the muscle hanging from her shin.

‘Most unusual,’ she agreed, glancing up. ‘What do you think?’



After dashing in and under a fierce shower of almost freezing water, gasping and shivering, braving the cold for as long as she could, Salisbury emerged and padded into the kitchen, feeling her skin prickle. She poured herself a chilled glass of vegetable juice, and retired to her bath. Only after enjoying the first few delicious moments of her submersion did she flick her eyes to the Copy icon. A version of her appeared, standing by the tub. Or at least it appeared to: her nchoi resource was downloading a virtual Appearance through an interface with her visual cortex. Salisbury gestured with an arm, spilling oily water onto the floor. ‘Please,’ she indicated. ‘Sit down.’ She reached for the gel again, squeezing a generous glob.

‘Thank you.’ The Copy took a dainty seat perched at the far end of the tub. It appeared to cross its legs, and put its hands in its lap. ‘I am sorry to be so insistent, but I am concerned.’

‘Proceed.’

‘I have been exploring the Cascade signature of the young woman, Melie Inherdinia. And...’ The Copy paused. Salisbury glanced up at it, surprised by the reticence. The Copy was of *her*, after all, and Salisbury wasn’t known for hesitation.

‘Yes?’

‘Most curious. My conclusions are extremely counterintuitive.’ The Copy spread its hands minutely, as if in apology.

Salisbury looked at it carefully. It had her same close-cropped black hair, the same tiny nose, the same shocking emerald eyes. ‘Let me see.’

Salisbury accessed her resource, opened a control window from a waiting icon and keyed a sequence. Doing so initiated a judicious downgating of inhibitory connections with her *metacortex*. Enfolding and hiding Salisbury’s cerebral cortex in a thin, three millimetre deep cowl, the metacortex was the physical

machinery responsible for supporting the mental, teleological-symbolic machinery that was the Third component of her tripartite mind. As inhibition became excitation, and as metacortical tissue became actively utilised, so the human choo and choi components of her extraordinary mind fused and blended with the unique Third component. Her cognition expanded. In rapid and complex stages, unfurling like the morning petals of a five-dimensional rose, her consciousness became augmented with teleological perception of the informational underweave of physicality, the *Cascade*.

It was impossible to explain the Cascade. A Cardinal could experience it and understand it. But the concepts necessary to describe it adequately would not pull back into a human, choochoi, understanding: the best that could be done was clumsy metaphor or extraordinarily complex mathematics so esoteric it was hardly worth bothering with.



Salisbury looked about her. All around were lines. Straight, curved, wriggling, static, short, long. Lots of lines, all around. Salisbury could see for kilometres yet there was no distance, no difference between *here* and *there*. All of the lines were present at once. Salisbury could spend a subjective eternity just studying one of them, yet there was no time, no *now* and *then*, and everything happened simultaneously. Each line was the same width, yet each pulsed and sparkled with tiny blisters, like rain drops on grass. Each blister swelled and pumped up the size of each line, yet the blisters were all different, some as big as stars others as small as quarks, yet there was no perspective by which to judge relative volume. Lines crossed and knotted in bundles, clusters of knots gathering separate from other clusters, some tiny, others huge entanglements, yet all the lines were equally spaced.

Salisbury recognised the copy next to her. She couldn't see it: there was no light, yet everything was bright, and the lines flashed and sparkled, the blisters pulsing. The Copy pointed, though it had no body, other than more lines. They moved but not really. They were *here* then they were *there*. The Copy pointed again and Salisbury looked. *There?* she asked, but there was no sound, yet from all around came a murmurous ticking, clicking.

They again were *there* not *here* and before a blister, which yawned and engulfed them. Inside was an infinite space, lines all around, tightly packed and disparate. Salisbury saw one of the lines flare differently, red not green though there was no colour. The air, but it was a vacuum, murmured quietly and then they were *there*, and plunging into another blister, smaller than an atom. An infinite space opened up, but there was nothing in it.

Salisbury stopped, astounded.

She was *there*, not *here* and plunging into another blister, red flaring all around her, yet she had no dimensionality. The same. Infinite emptiness. She moved, *here, here, not there*, and it was the same.

Salisbury disabled the nchoi tap with her metacortex. The bath, the water and the Copy rebuilt themselves quickly around her. She blinked.

‘I have not seen anything like it before,’ said the Copy.

‘Most unusual,’ Salisbury agreed, glancing up. ‘What do you think?’



The board was a square of polished pine, *Pinus leucodermis*, 50 centimetres on a side. Inset five centimetres from the edge was a smaller square of willow, *Salix alba*. The inner square was dissected by evenly spaced lines, forming a 19 by 19 grid. The lines were thin slivers of a darker wood, *Acer japonicum*, each less than a millimetre wide. On the intersections of the lines, in uneven, seemingly chaotic clusters around the edges of the board, were polished lozenges of marble and granite, white and black.

The board and pieces had been a present from Malvern, and Lodz loved its aesthetics. He was hunched over the board now, absently pulling at his lower lip with one hand, his eyes flicking back and forth across the board, computing dependencies, constructing strategies and abandoning them, building others.

‘Tricky.’ Lodz glanced up briefly before returning his attention to the board. ‘Have you been practising Galich? I sense a novel, aggressive air about your play today.’

Galich leaned back in his seat. ‘Perceptive judgement.’ Galich was almost fat, for a Cardinal. ‘I’ve been playing Salisbury, actually.’

Lodz looked up at him quickly, snorting. ‘Have you indeed. Well, that would explain it.’

Galich laughed, reached into a pocket and pulled out a small tin. Clicking it open, he began pulling moist, green strands from its interior, piling them into a paper. He shook his head. ‘She is quite simply extraordinary, isn’t she? I’ve played her now 30 times over a period of two weeks, and I once, *barely*, managed to scrape to within 50 stones of her!’ Galich shook his head again, and licked along the edge of the paper. ‘Though more usually, she won by more like 60. Unbelievable.’ Galich manipulated the paper deftly, letting the glue take hold. ‘I learned a lot though.’ He leant forward, resting his elbows on his knees. ‘Enough to wipe the floor with you my friend anyway.’

‘Don’t brag Galich. It’s not becoming.’

Galich’s grin widened. ‘Is when it’s true.’ He put the rolled paper cone into his mouth.

Lodz grunted and reached into the small bowl by his side, full with polished granite lozenges, taking a handful. He shook them in his closed fist contemplatively, muttering to himself, his attention fixed rigidly on the board. Then his clicking hand fell silent.

‘Ah!’ Reaching over the board, he placed a lozenge with deliberate care.

Galich peered at the board grinning and unperturbed. Then his face fell. The cylinder drooped from his lip. ‘Piss.’ He hunched himself over the board, flicking his eyes about. He pulled a small object from his pocket, and the end of the cylinder ignited.

Lodz sat back, closing his eyes briefly, breathing in the fumes. An icon pulsed into life in the black behind his eyelids, and flashed. He recognised it as Salisbury’s, and stabbed at it. A window snicked open, for a moment, floating large with Salisbury’s face where Galich’s head should be. Then it moved sideways and shrank, to end up a fifteen-centimetre square hanging by his right hand. Lodz frowned slightly. *Time his resource had a once over.*

‘Hello Salisbury,’ said Lodz to the image of Salisbury in the window. ‘What can I do for you?’

‘What? Oh,’ said Galich, realising what was going on. He puffed, a little dejectedly.

‘Lodz. I think I’ve just found something a bit peculiar.’

‘How so?’

Salisbury ran the palm of her right hand up and over her nose, sniffing loudly, and frowning. ‘Well, I don’t know really.’

‘Ah.’ Lodz diverted his attention to the board as Galich tentatively placed a white lozenge on the board but then withdrew it, frowning furiously.

‘Are you listening to me Lodz?’ Salisbury asked, her voice very mild.

Lodz recognised the dangerous tone, and snapped his attention back to Salisbury. ‘I’m sorry Salisbury. What did you say?’

‘I said I found something peculiar. With the Cascade signature of Melie Inherdinia.’

‘Who?’ Lodz hunched forward as Galich’s hand wavered over the board again, threatened to withdraw, but then carefully placed a stone.

‘One of Manchester’s Trippers.’

‘Oh yes. You found it then.’ Lodz flicked his eyes quickly over the board, trying to discern the strategy behind the placement. All at once, he saw it. He smiled with satisfaction. He placed a black granite stone carefully on an intersection. ‘I’m sorry, Melie Inherdinia, yes, Tripper. What about her?’

‘It’s her Cascade signature. It’s... it’s *odd*.’

Lodz snorted. ‘Odd? What kind of talk is that?’

‘The only kind I can use!’ said Salisbury, with a sudden flash of irritation. ‘Parts of her signature are... are not completely *human*.’

Lodz spluttered. ‘Nonsense!’

‘Precisely!’ Salisbury frowned and tugged absently at her earlobe: a sure sign of irritation. Salisbury

didn't like mysteries. 'If I didn't know better...' she began, but stopped, shaking her head. She pursed her lips.

'If you didn't know better what?' Lodz gave her his full attention. For something in the Cascade to rattle Salisbury, it had to be very odd indeed, even alarming.

Salisbury pulled herself from her reverie, and spoke quickly. 'If I didn't know better, I might mistake it for a *Cardinal* signature but... but that's just impossible, so I'm not going to even think about it yet.'

Lodz went pale.

'Cardinal?' he squawked. 'Have you told Manchester?'

'No, I haven't, I've only just thought of it myself.' She pursed her lips again, and stared off into the distance. 'And I don't think you should either. I will investigate further and get back to you.'

'Salisbury, wait...!' The window was already blank. Lodz closed with disgust.

Galich placed a milky lozenge on the board and leant back in his seat, smiling. 'Have at thee! What did Salisbury want?'

Lodz pursed his thick, rubbery lips. His grey eyes were hooded. 'I'm not entirely sure,' he answered truthfully, tugging at his lower lip. He drew a deep breath, exhaled and blew out his cheeks, letting the air dribble out of his mouth. 'So!' He returned his attention to the board, and glancing up at Galich. 'What are you up to?'

## Chapter Twelve

Upon their discharge, and released from their salt solution suspension, millions of tiny machines with small tails began swimming enthusiastically in the wet, silken darkness, racing for the one, true, solitary prize. Finding it first, one particular machine struggled mightily against the strong walls, desperate to bury its head and release its precious cargo of viral information. After considerable effort, the tiny machine succeeded, its tail flicking.

But a second machine was also present. It was different from the millions of others, a little longer, a little plumper. It had minute holes down its tail, with blistered lines wriggling all over it. One of the blisters yawned, and inside was an infinite space, dotted with enormous, floating shapes, kilometres long.

Whales.



‘Just how did you *think* you were going to get to Novagaia, Melie?’ asked Aileeni, shouting, exasperated. ‘Empty your bladder out the back of a bucket?’

Aileeni threw her words over her shoulder and swung round in the seat, glaring at the younger woman. Her fingernails clicked, rhythmically, in irritation upon the rutted plastic of the shuttle’s console.

‘I *thought*, ’ Melie shouted back from her own seat, her head in her hands, her long oatmeal blond hair flowing freely over her face. ‘That maybe someone would *take* me there. Like maybe someone *conscious* , as opposed to someone *unconscious* , lying flat out on their back because another certain *someone* punched them out! How was I supposed to know that Mikhail would wire his shuttle? I could have *asked* him, if he’d been able to *talk*!’

‘Listen girl, those mal were *never* going to let you have any jets, you know that!’

‘I know no such thing. I could have told...’

‘Yeah,’ said Aileeni sarcastically, raising herself up, and pushing out her breasts. ‘Like you could have told the ugly boss mal that he’s infected with a little bug that’s going to kill him, sooner or later, the infection *passed on* - bless me, no less, - by the very *same person* who wants to run off with his capital.’ Aileeni spread her palms upwards, to indicate the shuttle. ‘*Really* good idea that. He loved it, didn’t he? You could see it in his face, the way he went "what?", really angry like.’

‘Hey!’ Melie surged up out of her seat. ‘Listen. *I’m* not the one who claimed to be such a *hot* shuttle pilot that she could fly anything with *water* in it, am I?’ Melie put her hands on her hips, and felt her tail thrash.

*Shit it feels good to have an argument.*

She threw back her hair and looked down at the older woman from her full height of 212 centimetres, her eyes wide and her nostrils flaring.

Melie was enjoying herself. She suspected Aileeni was too.

‘I can fly anything that will *talk* to me, yes.’ Aileeni tapped the side of her head, meaning her resource Pilot, slamming her other hand down on the console, sending small pieces of paper and ash leaping into the air. She too rose quickly to her feet. She stuck her face in Melie’s, or as close as it would get, which was Melie’s ribs. ‘If a certain *somebody*. ...’

‘Yeah, like who?’ asked Melie quickly, leaning down to put her forehead close to Aileeni’s.

‘Like you no-tits!’ Aileeni poked Melie in the ribs. ‘If you had...’

‘*No-tits?!*’ cried Melie back, almost laughing and pushed at the smaller woman’s shoulder with one disdainful finger. ‘Ha! Admit it, you made a mistake and you just don’t like it.’



‘*Me?*’ spluttered Aileen, and almost laughed too. ‘*I made a mistake? You give me any machine resource you care to name girl, and it’s pussy inside of ten minutes, eating out of my hand but only if...*’ Aileen raised a strong finger, hissing menacingly, her dark eyes flashing. ‘I got all my tools.’

‘My arse,’ said Melie dryly. ‘You’ve been sat in that seat for the last *30 minutes* and you haven’t done *shit*.’

‘*Because I haven’t got all my tools!*’ Aileen cried, throwing her hands up in the air. ‘This shuttle is so *dumb* it’s confusing Pilot so getting control is just taking a little *time* that’s all.’

‘Yeah right. Bad workers always blame their tools.’

Melie looked at her friend Aileen, at the mane of frizzy red hair, at her large, white teeth. She could make out every pore on her skin it seemed. Melie felt the clamour of her heart and the heat of her skin. She felt *great*. She felt absolutely *brilliant*. Amazing what a good argument could do. She grinned and looked at her new friend.

Ghostly, ashen lines were wriggling in Aileen’s mouth.

Melie felt blood drain from her face. Her stomach tensed, knotting her insides and locking them in a painful cramp. She felt a cold sweat prickle her all over, quickly, like the feet of hundreds of tiny spiders, and her bowels loosened.

‘Melie?’ asked Aileen, curious but not alarmed as Melie’s face fell and her colour drained away.

‘Aileen!’ Melie whimpered, and Aileen’s aggressive stance immediately dropped at the fear in the tone. Melie’s hands began to shake, and she began to whine, like an abandoned child. ‘Aileenieeee!’

‘Melie, what is it?’ Aileen came forward quickly, becoming alarmed. ‘Melie? Talk to me, what is it?’ She took Melie’s unresponsive arm in one of hers, slipping the other round her waist. ‘Melie?’

Three things then happened, all at just about the same time.

Melie gave a single, sharp, terrified shriek, her hands clawing at the air, clutching at Aileen, at her clothes, at the seat, trying to find a purchase, something to hang onto, something real. But she seemed to find nothing satisfactory and flailed her hands around wildly, craning her neck up to keep her mouth away from... *It’s like she’s drowning* thought Aileen, suddenly, bizarrely, as she fought to contain Melie’s struggles. Melie’s eyes were wild and scared, staring into nothing, her breathing shallow and rapid, hissing out of her mouth urgently as if each breath was deficient of oxygen. Melie slumped forward, her eyes open but unseeing.

‘Shit!’

That was the first thing that happened.

The nchoi virus Aileen had introduced into the shuttle’s resource signalled completion with three small chimes, announcing its task was complete, and the shuttle resource fatally compromised. Access codes and system protocols began scrolling up thin, flexible displays mounted in the console. ‘Shit,’ said Aileen, looking for a proper grip on Melie, feeling her slip. She trod on her tail, but there was not such much as a flicker of response from Melie: and it must have *hurt*. Aileen staggered briefly, heaving Melie around and over to the second of the small shuttle’s cabin seats, and attempted to heft Melie into it.

That was the second thing that happened.

An ominous sounding clang came from outside the shuttle, dull and metallic. Aileeni gasped, and flicked her eyes up and over the cluster of graphics display on the cabin wall: exterior shots of the spine, of the Hair of God, of the interior of the small docking spine itself. A camera relayed images from its furthest end, nearest the lock of their shuttle. The mammoth form of the neomorph Nanashub stood opposite the outer door. His monstrous hands were clenched into fists bigger than ripe watermelon. He had punched the outer door. It had buckled. He was lining up for another strike.

That was the third thing that happened.

‘Shit!’

Aileeni quickly finished heaving Melie into the seat amidst a flurry of arms and legs and tail. She trod on the latter again, but didn’t worry. She considered her options. She took about half a second and jumped for the remaining, vacant seat and began tapping at the keyboard before she had even sat down, simultaneously accessing her own internal Pilot as she did so, invoking a control window. She took her hands away from the physical keyboard for a moment, her eyes re-focusing, and keyed a sequence on the virtual window, passing commands to Pilot.

*Quick launch!*

Her hands returned to the shuttle keyboard. She searched the graphics displays laid out in front of her for the appropriate, simple codes, instructing the shuttle resource to listen to, and obey the commands of, Pilot. She found them, keyed them, and then sat back as the two machines began communicating. She flicked her eyes up to the exterior view of the shuttle lock door. Nanashub had just finished peeling back what remained of the outer lock door and was now trying to squeeze through the gap.

‘Shit!’

Aileeni had not been joking when she had told Melie that she had no fat on her body. But she had lots of Fat, the raw material for medical and munitions microfactories in her legs. The munitions microfactory produced small, fragile-looking weapons on demand, capable of propelling pellets of high-density plastic half a millimetre wide at 300 metres per second. Cut a tree in half as easy as a person and sat in your hand like a little sculpture of wire and air. The munitions microfactory could up-tool in just under four minutes from a cold start. Aileeni dismissed the option.

*Not quick enough. Should have warmed it up .*

She had a pocketful of bean gas grenades, but the neomorph was probably not going to fall for those again. The door to the interior of the shuttle clanged, and bulged, and Aileeni snapped her head around, reaching for her seat restraints.

‘Pilot!’ she hissed, accessing the resource tool with her voice. ‘Status!’ As she spoke the words, Pilot and the shuttle resource came to an understanding. The resource tool told the shuttle to ignore all safety protocols and what was in the lock, ignore a potential breach in environmental integrity, and launch itself.

Pilot tapped her auditory nerve. ‘Launching. Two seconds.’

The door to the shuttle bulged again under another enormous punch from Nanashub. Aileeni could now

hear him - *it?* she wondered - roaring. A third punch landed. Red warning lights flickered. A dull-grey foam began hissing from ports around the door, trying to shore the environmental breach. Aileeni drew in her breath, waiting for the next punch that was surely going to rip the door right out of its socket, metallic foam or not.

It never came.

At the very last possible moment, the shuttle pulled away from the docking spine. Tiny quantities of water vapour instantly froze and crystallised around the rear of the departing shuttle, flying slowly away from the breach, sparkling and tumbling.

Vacuum frozen neomorph spit.

‘Clear and manoeuvring,’ said Pilot smoothly.

Aileeni looked up at the graphics displays. She had an exterior view of the lock. Nanashub was in vacuum, swinging out and back on one arm, the other reaching and clasping for purchase. He was frantically trying to find something to pull himself in with, towards the ripped inner door, his efforts hampered by the fact that he had his eyes squeezed tightly shut. There *were* instances where individuals had survived vacuum exposure for, in some cases, remarkably long periods. But Nanashub had a long way to go to find air and heat and the things necessary, generally, to stop him exploding and boiling at the same time. Aileeni smiled humourlessly, staring at the neomorph struggling on the display, his enormous bulk shrinking in size as the shuttle backed away from the spine.

Aileeni drew a deep breath. She was absolutely terrified, she realised, as she brought her hands up before her face. They were shaking. She had not been lying when she told Melie she used to be a soldier - well, tooled up security for a Lattice based mining outfit on Mars, which was as much war as anyone would want to see - but the inhuman Nanashub had scared her spitless. She smacked her lips, feeling the dryness in her mouth.

She suddenly remembered Melie.

‘Shit!’ She fumbled with the catches of her restraint. It was jammed. Aileeni struggled with it. ‘Piss on this... worn out... *shite!*’ She thumped it in frustration and it popped opened. ‘Melie!’ She went over to the other seat. Melie was slumped in it, her eyes still wide open, staring, prickling with red: they hardly blinked. Aileeni shook her, gently. ‘Melie?’



Melie knew what was happening as soon as it started. She saw the lines wriggling out of Aileeni’s mouth, like tiny worms, and saw the knots and tangles they started to make over her skin. They spread to Aileeni’s clothes, to the seat and even to the air itself, ghostly and silent. She knew what it was and she became scared.

The *Blit* .

She was *blitting* .

Infinitely long lines sliced and flashed past her, defining a non-dimensional space. She felt an abyss of terror open up under her. She shrieked and clawed at the air, at anything that would stop her from sinking, from falling, but nothing would. Everything was flimsy and see through and heavy and dark and she could not stop herself from going down, desperately craning her neck away from the opening maw around her.

Melie fell into seething nothingness.

She tried to scream but there was no sound. She could no longer see, but there was light all around. She thrashed, trying to move, but she had no body, and then she was *there* and not *here*, and she wailed in terror, not understanding what was happening. Lines pulsed all around her, and through her, but she had no body, and there were no lines, only blisters, red and pulsing, and they were so enormous a sun would have shrank to the size of a satsuma within it, while others were invisible specks but she could still see them. She cried and cried, but there was no sound, only her own scream and a murmurous ticking, clacking. Mindless with fright, she wailed and thrashed, moving *there* , and *there* . Blisters flared all around her, lines knotting and twisting, though they were all the same infinite distance apart. *What was happening? What was that? What? That! What? What was that? Thought! What is a thought? Thought, what am I? I am! Am I? I?*

Melie's awareness shrank from the nonsense, retreating from things it could not understand, becoming lured into potential truths, possible ways of being, her mind loosing itself in the informational matrix of the Cascade.



Melie had never been a good daughter. She had known this from a very early age. The knowledge was there, in the way her mother Sally would grip her arm a little too hard, in the way she always frowned when Melie tried to talk to her. Melie was not sure why she was a bad girl. She *tried* to be a good girl. She tried *really hard*. She tried to please her mother with gifts, with little pastry women she had made, with paintings of Sally and Thrat, with flowers from the forest. But nothing she seemed to do was ever right. Her mother would scold her for making a mess in the kitchen. She would spill tea on Melie's paintings, shouting at her that it was her fault the stupid drawings had got ruined, she had left them in a *stupid* place. Her mother would leave the flowers in empty vases, and watch them die, leaving the green, slimy leaves for days before she disposed of them, blaming Melie for the stench of vegetable decay.

Melie was hurt and baffled by her mother's behaviour, and sought the comfort of her father Thrat and his whiskery face. But her father was often a cold, distant stranger. She had one enduring, though undoubtedly composite memory of him. Of angry voices, far away, scaring her, and then of him coming

into her room, tucking her in, leaning over to kiss her, his breath intoxicating with the smell of fermented apples and cheese, salt water on his cheek. 'I love you Melie,' he had said and hugged her. 'Love you too Fra,' Melie had said back, because she couldn't say "Thrat" properly yet, clinging to his broad chest. She had felt safe in her father's arms, and craved their gentle embrace, but it was not often that her father even touched her.

Even getting out of her mother's way was not good enough. Her mother would scold her father, telling him he was always on *her* side, pointing at Melie, telling him quickly that she needed a job done, demanding that he put the girl down and come and *help* her. Her father would object and put Melie aside, and they would start shouting at each other. Melie would run from the room, crying, her hands over her ears, hating them and loving them and wishing they would *stop!*

Melie was a bad daughter. That's what she had used to think, because, otherwise why were her parents so angry and distant with her all the time? She must be a disappointment in some way, because she couldn't please them, couldn't make them happy. It was her fault.

She had used to think that. The incident that changed her mind occurred on her ninth birthday, when her mother had hissed words to her carrying nine years of resentment and anger and loathing.

'I wish your *sister* could have had a birthday party, she might have *enjoyed* it!'

Melie was clearing up paper cups and plates, the crumbs and leftovers of her birthday party. It had ended early, because Melie had pulled a curtain down from its railing in a wild, shrieking attempt to evade a tag. No matter that two other little people, Gareth and Jojo, had also jumped with her. The curtain came crashing down around their heads, burying them. Melie, Gareth and Jojo laughed riotously, thinking it was hysterical. They could hear the laughter of their friends, and rocked back on their heels, holding their stomachs with their arms, safe in the tiny den.

But their actions incurred the mother's anger. The party went deathly quiet, as Sally stormed over to the squirming mound of curtain, and pulled it roughly aside.

'Melie!'

Gareth, Jojo and Melie looked up at Sally, their faces falling. 'It wasn't Melie, M Inherdinia,' said Gareth, 'it was me, it was my fault.'

'It was, it was!' said Jojo, clinging to Melie's arm.

Sally ignored them. 'Look what you've done, you *nasty* girl!' She reached for Melie, grabbing her arm roughly, hurting her. Melie felt herself blush fiercely, forced to her feet, feeling the eyes of her friends. Some of them snickered quietly, at her, at her crazy mother. 'You're so *ungrateful*, I let you have all these friends to see you, and what do you do? You act like a *child*.'

And so the party had ended, and all Melie's friends had gone home, leaving her alone with Sally.

'You took Aphi's sweet life from her, and you *twisted* it!' Melie wasn't sure whether her mother was even talking to her, to Melie, but to some foul thing that Melie had become in her mind. 'Why did *you* live and not sweet Aphi?'

'Mama!' said Melie, pleading, feeling her eyes burn and water, becoming angry at herself for crying: Sally hated it when she cried. 'Aphi's *dead*. ...'

‘I know she is!’ her mother hissed quickly, dropping the handful of rubbish she held onto the table. Mangled paper debris rained down over the remains of Melie’s cake. Melie looked at it, at her mother leaning over the table, her face hard. ‘And it was *your* fault!’

‘*Pleasemama!*’ Melie pressed her hands to her eyes, feeling tears flow freely. Her head felt heavy and full of snot.

‘You killed... your own... *sister!*’ Melie’s mother hissed slowly. ‘You were inside me, you were *growing*, and you *strangled* her!’ Sally gulped huge quantities of air, choked on a sob and then started back from the table, as if finally shocked by her own cruelty, clutching her hands to her chest, her tail clipping the wooden floor.

‘*No!*’ yelled Melie suddenly, furiously. ‘*I know* what happened, Thrat told me, Aphi suffocated, she couldn’t *breath*, she was *ill!*’

Melie’s twin sister Aphi had died at the prenatal age of four months, nineteen days. Only one placenta had formed after fertilisation because there was only one egg, and it fed and cared for both foetuses. Everything had seemed normal, but there had been a complication. Very suddenly, completely unexpectedly, a routine scan of Sally’s womb revealed one of the foetuses dead. Injected medical nchoi had bustled around and within the tiny, withered form, trying to discover the cause of its death, but they found nothing.

Aphi had just died.

The other twin, Melie, grew healthy and strong. Intensive pre- and postnatal medical scans found nothing wrong or out of the ordinary. Melie was so strong and healthy, in fact, that since her first wailings in the clean hospital ward, she had not needed any kind of medical intervention. So no one was looking for, or even suspected the existence of, the three millimetres of densely folded, convoluted neural tissue which overlay her cerebral cortex.



Melie surged back to consciousness as quickly as she had relinquished it. Aileeni’s face wriggled back into solidity, the interior of the shuttle, her body, herself, became real and tangible again. Ghostly images were disappearing down a drain in the middle of her head, impossible concepts, structures and forms losing saliency. She caught the tail end of the last of these forms before the last vestiges of the Blit faded. It was of a wriggling machine, and a ball of jelly with things inside.

‘Not my fault!’ cried Melie, staring at Aileeni. ‘Not my fault. Whales! Fucking *whales!*’

Aileeni put her hand on Melie’s cheek, her face close and soft. She stroked Melie’s hair back from her forehead. ‘So, do you want to tell me what the fuck that was all about or not?’

Melie blinked and swept a hand across her face, brushing back loose hair. ‘*Whales?*’ she queried, slowly and curiously, peering up Aileen. She began to frown.

## Chapter Thirteen

‘What happened?’ Gervane came walking quickly out of the small dock for the *Ugly Bastard*, his face grim. He grabbed Kirsty-Ann’s arm in passing, eliciting a sharp *glurp* of surprise from her and pulled her along. ‘Gervane, what *happened?*’ she repeated.

Gervane told her, tight-lipped.

Kirsty-Ann gasped, horrified. ‘Oh, Ger *vane!*’



After a wait of about an hour, during which time Kirsty-Ann learned more about Bea’s sexual habits and preferences than Kirsty-Ann thought at the time that she perhaps *wanted* to know, Kirsty-Ann boarded the small reaction shuttle for Sesquoia, waving goodbye to the smiling, dungareed form of Bea. She watched Bea turn and leave, and ducked into the shuttle interior.

A few moments later, she ducked out again.

*Melie needs my help* she told herself bravely. *I’m not going to let that nasty man bully my sister!* Kirsty-Ann set her face into a determined scowl, and stomped away from the small, enclosed shuttle dock. She headed left up a narrow, sloping tube, went across a small open square and headed down a flight of wide, terraced steps, bravely avoiding the predatory eyes she imagined to be watching her. She turned right at the steps, into a wide, snaking corridor and emerged into a warren of dark, enclosed spaces. Passing through as quickly as she could, she found a familiar, narrow access tube which took her into the covered, open square. She looked around confidently for the mock-stone legend of the *Oil Burner*, *Est. 35 AK.*, and then stopped, realising she had absolutely no idea where she was.

*Whoops.*

Kirsty-Ann drew her hands up to her chest, and began picking at a nail. She glanced around her, her tail coiled up her back, trembling. She turned, looked back the way she came, trying to rehearse the route in

her head. *Out of the shuttle dock, turn right... no, left, no right. No... oh, I don't know*. Kirsty-Ann felt her eyes begin to warm and mist over, and her chin began trembling. She took a deep breath. *I'll go back to the shuttle dock, and start again*.

After three hours, Kirsty-Ann realised that she was lost. She was also tired, hungry, frightened and alone. She bought some fruit from a stall in a small, open square - it looked *exactly* like the one outside the *Oil Burner*, exactly like a dozen others, except that it wasn't - retired to a nearby table, and sat down to eat, keeping her eyes to herself, not looking around. Kirsty-Ann was torn. As much as she *desperately* wanted someone to help her, she was also terrified that if someone *did* approach her, then they would probably be as nasty as everyone else in this *horrible* place seemed to be.

Kirsty-Ann scolded herself for her lack of faith.

'Move mutant ass, fem! My table!' Kirsty-Ann gave a yelp as she was grabbed by the arm from behind, dragged out of the chair and hoisted to her feet. 'Nnyaa!' said her evictor, and lowered himself into the vacant seat. He glared at her, with small, black eyes in a round, flabby face. 'Nnyaa. Piss off, ya mutant. Nnnnya! Fucking *mutants*.' The man flung a thick arm in her direction. Leaning forward from his bulging waist, a long, dark overcoat spilled open to reveal a terrifically swollen belly.

Kirsty-Ann yelped, and jumped backwards. She finally found her voice. 'Hey,' she said, her chin trembling, looking at the man. She gulped a breath, and coughed up anger. 'Hey!' she shouted, and pointed. She couldn't think of anything else to say.

'What...?'

Kirsty-Ann swayed from foot to foot, her tail clipping her calves in a regular, angry swishing. She drew a deep breath.

'Why did you do that?' she finally asked, in a kind of whimper. 'I never hurt you. I was just sitting...' Kirsty-Ann felt her eyes warm and pool, struggled to hold back the tears. 'I was just...' The words stopped.

'Nnnnya! Mutants.' The man leant back in his seat, opened his legs, put his hand on his enormous belly. 'No respect for a pregnant man? Fucking *mutants*!'

Kirsty-Ann stopped. Everything else seemed to stop too. All sound, all motion, everything pausing, collectively, just at that point when he had said... *what? What had he just said?*

'*Ulbere! Uuulllberere!!!*'

A second figure approached the table. Like the man, but even bigger. Huge. The face was a big, broad slab, the breasts truly colossal, the voice stentorian. Kirsty-Ann realised that the figure was a woman.

'*Ya daft bastard!! I've been looking all over!!!*'

'Nnyaa.'

Kirsty-Ann looked up at the huge towering form of this monstrous female, back down at the smaller, plumper form of the man with the enormous belly, feeling herself grow giddy.

The huge woman looked down at Kirsty-Ann. She bent forward, leaning downwards. '*Met me*



*'usband then have ya?!'* She pointed with one huge finger, her mouth huge in Kirsty-Ann's face. *'He's pregnant!!'*

Kirsty-Ann gave a small moan, tottered backwards and wiped a hand across her forehead. She would have fainted, were it not for a pair of hands, that appeared from the encroaching darkness, and bore her up. The last thing Kirsty-Ann saw before everything went black, was a pair of warm, dark, friendly eyes staring into hers.

'Melie!' said a voice, then, quieter, surprised. 'Oh...'

*'What's wrong with her?!'* screamed the huge woman.

'I think you scared her,' said Gervane.

'Nnyaa. Fucking *mutants*.'



Mikhail crept into the dimly lit medical lounge of the tug *The Ugly Bastard* and walked over to the side of an enormous tank. Within, Nanashub lay immersed in medical emulsion, cloudy with nchoi agents, the tiny machines busy repairing the neomorph's traumatised body.

'Nanashub! Hey, buddy, how you feeling?'

Nanashub looked kind of cooked, with raw bits. His skin had ruptured over ninety nine percent of his body. He had lost, on average, two centimetres of surface tissue over those areas. Both eyes were gone. His lungs and his artificial genitals would have to be reconstituted. Considering that he had been in vacuum for almost sixty seconds, he had got off pretty lightly. The Body Artists from Verest had reconstructed his original musculature to withstand incredible amounts of abuse.

Mikhail avoided looking at Nanashub's body as much as he could, because he was feeling a little sick. Horribly disfigured slabs of meat tended to do that to him.

A large, flat display unfurled and hardened above the tank. Words began scribing across it. Nanashub was still running his business from his hospital tank.

'Where did she go?' Mikhail asked, echoing the silent graphics. He grasped the sides of the tank, and spoke out loud. There was a microphone in the tank, feeding a signal to Nanashub's resource, which would transcribe his words: the neomorph's ears didn't really work very well at the moment. Mikhail looked blank for a moment. 'Melie, you mean? And the fat witchfem?'

The words appeared quickly. **Who else idiot?**

‘Well, to Novagaia, I suppose.’ Mikhail’s brow began to bounce in mild discomfort. He looked away from Nanashub’s peeled body. ‘That’s where she said she was going anyway. What are we going to do about this infection, Nanashub? I reckon she was just...’

**Shut up. We’re going.**

‘To Novagaia?’ squeaked Mikhail. ‘Shit, they don’t even use currency there mal, what are we supposed to do?’ There was no response from Nanashub, and Mikhail knew better than to argue. He had seen what happened when people disagreed with Nanashub. Besides, the emulsion smelt of yeast and boiling bones, and he had no wish to stay in the medical bay any longer than necessary. ‘OK, Nanashub. Whatever you say.’

Mikhail turned from the tank, and walked to the door. He glanced back at the enormous shadow in the tank, remembering the woman who had punched him, becoming angry and scared both at the same time. He needed some air. He turned quickly, and walked tightly down the corridor, twisting through small, narrow passageways around cavernous holds, heading out of the tug. He exited through a lock door and strolled along the docking spine, to where it led into the large, circular bulge, where Melie and the fat witchfem had knocked him and Nanashub over. *How had she knocked over Nanashub so easily?* he wondered. He saw two of his fellow employees, Jurgen and Fist, gathered around a small, slight figure in a long, dark robe. Mikhail strode towards the knot and pushed his way through.

‘Hey, piss off Mik!’ said Jurgen irritably, as he was hustled aside, but Mikhail ignored him.

‘Hello,’ said the slight figure. ‘Are you in charge?’

Mikhail stared at the young man, flicking his eyes up and down, noting the youth’s dark hair and his large, clear eyes. Mikhail leered, and thrust his hips forward, bouncing on one stiff leg. His forehead rose and fell, and he flicked back his hair.

‘Who wants to know?’

Gervane, smiling tentatively, glanced round the three men. ‘Well, I don’t think that’s important right now. It’s just that a friend and I need to get to Novagaia. And I wondered if I might buy passage?’

‘*Buy?*’ sniggered Fist. ‘You can have mine for *free* honey.’

Gervane looked at him and cocked his head. ‘I’m sorry?’

## **Chapter Fourteen**

There were two particular arrivals at the Hub complex that day.

One was a Bus that had leapt up from the inner surface of Novagaia. The other was a metallic speck ejected from the barrel of an induction Gun on Marineris some hours previously. A tiny fraction of the

supremely powerful Hub resource glanced with a variety of senses at this irregular, tumbling ball as it approached. The induction Gun had been very accurate, and Hub needed to merely tickle the course of the ball with an intangible effector Digit. A waiting induction pocket caught and slowed the simple vehicle, depositing it on an access blister.

Altogether, executing that whole procedure took less than two picoseconds of resource time and long before Floccanalog had even begun to release his restraint harness, the powerful choi resource had done about a hundred billion other things.

Hub was a very *busy* machine.

Floccanalog emerged from the induction ball into the clean, dry air of the docking spine, blinking. He hefted his bag onto his shoulder, oblivious to the tiny hiss of the exoskeleton as it assisted his movements. It had irritated him, beyond reasonable cause for discomfort, in the first few days after his encounter with Maureen. He had expressed his dislike of the device in the following way.

‘I used to be able move magnetohydrodynamic limbs through a medium *eight hundred* times more dense than this like it wasn’t even there. Conjoined, me and my Shell displaced over 700 kilos but we could *fly*! Underwater, *I* could *fly* at speeds of, I don’t know, maybe 90 metres a second on an updive. Can you imagine what that *feels* like?’ Floccanalog dipped his head. ‘Sorry, silly question. But you see, that’s just it. That’s what it was Maureen... a *feeling*, of being fully, really *alive*. My hands and arms were the Shells hands and arms and when I ran, when I sprinted, it was the Shell that was sprinting, hurling water away from behind it but I could *feel* the water surging past *my* body.’ Floccanalog paused.

‘Your point?’ queried Maureen politely.

Floccanalog opened his mouth to speak, grimacing, his hands trying to grasp a slippery concept. ‘My point is that I resent this, this...’ he indicated the exoskeleton. ‘This *symbol* because it reminds me of what I... No, it doesn’t remind me, it... Look, I just remember what I was, and at what I am now, needing help in even *moving*, and I get angry, that’s all!’ Floccanalog had indeed got angry, despite himself, and he finished his sentence on a yell. ‘Sorry.’

The resource was quiet for a moment.

‘Perhaps, if you thought of the support in terms of what you will be *again*, rather than what you *were*, that would help?’ Maureen offered. ‘I am also interested in the way that you expressed yourself: the support is a *symbol* you said, which would indicate you are already beginning representational re-description, which can only bode well for the outcome of your extraction.’

Floccanalog laughed. ‘Representational re-description?’ He leant forward, putting his elbows on his knees, clasping his hands loosely together. He gave a little jolt a little as always. His hands were still very *new* looking. ‘What do you mean?’

‘Well,’ said Maureen and began explaining. She talked about language. She talked about how human languages worked, and how they exploited the similarities between perception and conception. She told him about how abstract symbols became attached to concretes at the interface between the mental machinery of choo and choi. She told him how hierarchies of abstraction were built upon these foundations. Then she began explaining about Shell languages and how they differed from human languages. She went on to give a brief account of the major differences between human and Shell languages, emphasising the gulfs in conceptual common ground. She explained how in Shell languages, no distinction was drawn between perception and conception. She told him how the Host choo machine of a

Shell communicated with its human choo-choi symbiont. Only then did she point out that, by symbolising, he was beginning to re-integrate his own choo and choi, enabling these two parts of himself to communicate better since the traumatic separation from the choo Shell. Now, she explained, he was beginning to think in more human terms where perception and conception were different things. Now, he was cognitively re-describing his own internal representations, constructing his own, private language in which to describe and understand himself and his world.

‘I do not know whether I am *wise*, Flocc,’ said Maureen, in response to his question, with what sounded like modesty. ‘I am very interested in certain topics, specifically, human-Shell interactions, and I have spent a good deal of time thinking about them, and have also gone to great lengths to try and understand them, certainly, but *wise*. ..?’

Floccanalog laughed.

‘I amuse you? Please explain.’

‘Oh, well, I was just thinking...’ Floccanalog passed a hand over his mouth, still mildly horror struck at the sight of the black tracery of the exoskeleton.

‘It is good that you can laugh,’ Maureen commented.

He drew a deep breath, smelling salt and iodine. An image suddenly assailed him. Very vague. More a feeling than a perception. He could almost see a face, a curve of a hip. A shoe. Spoken words.

He became serious. ‘I don’t know why I laughed actually Maureen,’ he said, ‘I just laughed.’ He was remembering. Other voices. A different time. He shook his head. A mnemonic bubble had burst within him. ‘I’m remembering things.’

‘What kind of things?’ asked Maureen, interestedly.

‘All sorts of things’.

‘What kind of all sorts of things?’

‘Voices. Faces. Someone’s face. A smell, perfume... *Neroli*. Words...’

‘Pre-Shell memories,’ Maureen said lightly. ‘Images of your past life.’

‘Pre-Shell...?’ Floccanalog frowned.

‘You must appreciate that a good deal of neural tissue has undergone *extensive* intervention since you were last bipedal. Some memory dysfunction is an unavoidable consequence of such huge changes I’m afraid, Flocc.’

Pause.

‘What do you look like, Maureen? I mean, do you have a visible persona?’

‘I do. I can interface your resource if you would like?’

‘Yes. Thank you. ‘

A virtual person appeared to his right, standing a couple of metres away. Maureen had made an Appearance. She was thin, silver-haired, with an intelligent, inquisitive face. The Appearance appeared to walk towards him, appeared to sit down by his side, and appeared to look at him with grey eyes.

Pause.

‘My grandmother. You look like my grandmother.’

‘Good heavens.’

‘Well.’ Flocanalog shrugged, hissing minutely. ‘Sort of. Or maybe you don’t actually. Maybe its your... I think it’s your hair. Or the way you move your head... the cut of it. I can remember...’ Flocanalog trailed off into silence. ‘My *grandmother*?’ He went quiet, closing his eyes. ‘Not a *concept* I have used for a long time Maureen.’ He gave a kind of baffled smile, not sure whether to be pleased he was recalling these memories. ‘What other people have I forgotten?’ he asked. ‘Who was I back then?’ There was no response from Maureen. ‘Who am I now?’

Pause.

‘Floc, perhaps you are hungry? It has been five hours since your last meal.’ Flocanalog grunted without replying. He sat staring into space for some long moments, lost in novel memory. The Appearance of Maureen looked at him with calm, intelligent eyes. ‘Surely answering such questions is the reason that you are on this path, Floc. I cannot answer them for you.’

‘Yes,’ he said, at last, drawing a deep breath. He turned to the Appearance of his doctor. He smiled and nodded. ‘Food.’ Eating was still something of a new experience: garlic was a revelation. His stomach rumbled pleasantly, and he found that he didn’t dislike the sensation. It felt *good* to be hungry. It *symbolised* that you soon weren’t going to be hungry for very much longer. He put aside his past, and looked to his immediate future.



The Hub resource was a frighteningly powerful machine. It contained within itself all of the knowledge, all of the art, architecture, science, literature, folklore, wisdom, languages and music produced in 20,000 years of human history. From all this information, the Hub made the Histories, the virtual worlds that re-created old dead Earth, and allowed unlimited access to it, by anyone, at any time. As long as they were on the Hub.

*Earth.*

As she once was, before Water. As she was before the Great Dying, the most cataclysmic 500 years of human history ever recorded. History from a time and a place that no one in the Koyculture could

properly imagine. Before the Koyculture had ever existed. Before the rise of the metacetacean race. Before Water made its proclamation of *koyaanisqatsi* , branding Earth *crazy life, calling for another way of being*.

Before the Cardinals had ever been born.



Manchester was pursuing her interest in Melie's name.

Accessing her resource, she called the component of the Hub resource that was Histories. An icon blinked in Manchester's visual phenomenological world, and birthed a virtual Appearance.

'No!' Manchester said gleefully, waving it away. The Appearance vanished. A second replaced it. 'No!' she cried again. This sequence repeated itself a further three times before Manchester settled on the appearance of the Appearance. It was small and bald, with a broad, flat belly. It looked a little like an owl. This was a Hub maintained Halflife, a simulated, limited awareness.

'Melie,' Manchester said aloud. 'Mark that sound.'

'Marked,' said the Appearance. 'Perhaps if M might expound on the topic of her search, M might be able to help more efficiently.'

'Oh, I don't think so. Begin a comparison between the mark and the phonetic signatures of all words in all languages BK., back ooh, say 2,000 years?'

'Begun. If M may ask, what is the reason for your inquiry? Just for my records, nothing important really.'

'How long will the search take?' Manchester asked, walking up to the Appearance and attempting to pull at the virtual tie.

'Uh. Unknown. Uh. Working.' The Halflife's limited repertoire of behavioural responses began to fail before Manchester's flagrant breach of protocol. It was one of Manchester's small eccentricities, baiting Halflife's. The Appearance appeared to huff. 'Ah, would M like...' it began.

'Bored!' said Manchester loudly. 'How long?'

'Ah. Unknown. Working. Ah! Comparison found.' The Halflife actually seemed relieved.

'Download to my resource and exit,' said Manchester. The Appearance barely had time to begin to huff before vanishing.

Manchester smirked and invoked a window, calling up the download from the Histories. She had to scroll through lots of resource burble before finding her answer. When she made the sound "Melie", she was also making the sound associated with the name of a community on old Earth, in what was Indochina, 900 and more years ago, in a dead language called Vietnamese.

It didn't mean anything to her.

She closed the window and began walking. Through the huge diamond bubble covering the Hub park, she could see the tips of many docking spines sprouting from the exterior of the Hub. She was headed for one of these now. She was going to meet one of her Trippers. She just *knew*.

A little Third nudge.



Flocanalog was so caught up in his own thoughts that he wasn't even aware of when the slight, green suited figure joined him.

'In from Marineris?' she asked. He looked down, startled, and blinked rapidly. He came to a stop. 'Support's a bit noisy,' she commented, indicating with a finger. She looked up at him, her eyes large, black and intelligent.

'Hello?' Flocanalog was tentative, uncertain whether he should smile, wondering if the figure would mind. He resisted an urge to put down his bag and squat to address this diminutive person.

*Diminutive.*

Recognition blossomed. 'Ah! Yes, as a matter of fact I am. I'm on Novagaia for... for spiritual reasons. You're Cardinal.' It was not a question. Flocanalog stared at the figure closely, noting the wide face and the fine, chestnut sheen of her hair. She looked fragile, and strong at the same time.

'Yes. I am called Manchester. Of Novagaia. You can call me Manchester.' Flocanalog smiled and nodded his head graciously. 'I'd shake hands but you're quite *exceptionally* tall, so we'll wait until we're sitting down, eh?'

'Flocanalog,' said Flocanalog, laughing, introducing himself. 'Of Marineris. OK, why don't we do that?'

## Chapter Fifteen

Seated at one end of the sumptuous divan with Tennys perched at the other, her legs drawn up under her, Manchester asked Tennys about his reasons for coming to Novagaia and why he was on a Trip.

‘Well, I thought it was kind of appropriate, I think. I’ve studied the origins of these Novagaian Trips and how they have evolved from what you used to do down on old dead Earth...’

‘What the *others* did,’ said Manchester, correcting him quickly. ‘I was never there personally.’

Tennys looked stunned for a moment, and then he remembered.

*Manchester had been born on Novagaia!*

‘Ushogbo!’

Manchester looked impressed. ‘Indeed.’ She inclined her head, acknowledging the accurate association. She held up her hand, forestalling the barrage of questions she could see Tennys was limbering up to ask. ‘For later discussion. You were talking about the origins of the Trips.’ She was warming to the young historian. He was too thin and awkward to be attractive and too internal to be easily sociable, but he had a genuine passion for history, which transformed him.

‘Yes. Well, as you know, my *primary* interest is in old systems of religious and philosophic thought. I did some work on Memecast, trying to find connections from the earliest goddess cultures of Catal Huyuk to the TM theosophy that you...’ Tennys caught himself and corrected smoothly. ‘Or rather the rest of the Cardinals preached, to what was left of us humans during the Great Dying.’ Tennys paused. ‘God, I can’t believe I’m even *talking* to someone that old.’ Breaching upon a personal conversational theme, Tennys briefly lost his way. ‘If that’s not an insulting thing to say.’

Manchester shook her head and drew herself up, intrigued. ‘Connections? What kinds of connections?’

‘Well, I don’t know really. Anything. Because what struck me was how *quickly* and *easily* the TM theosophy was taken up by the people who encountered it, who encountered the Cardinals.’ Tennys leant forward and chopped at the air with his hand. ‘All of the accounts that I’ve come across seem to point to common themes. There is boundary dissolving insight or ecstatic experience. There is exotic comprehension and a strange sense of bonding with Earth as she drowned. And there are *millions* of documented accounts of this kind. But that kind of religious experience is similar to that reported from the very *earliest* religious rites in human history, reaching right back to the idea of the Other, the female mind behind nature. So I’m just interested really, because these two religions, from either end of history, are so similar, and I wonder why that is. I mean, take the wide spread use of hallucinogens in both systems...’

Manchester interrupted the excited babble. ‘Hardly hallucinogens. Nothing so crude. Viral nchoo agents deliver a far less bruising experience, physiologically speaking. But yes, I agree, boundary-dissolving agents are common tools in both systems. I would make two points.’ She raised two small fingers and gripped the first lightly. ‘One, the theosophy of Ushogbo was based upon the *empirical* experience of the first 400 Cardinals, learning to understand the Cascade. That is a boundary dissolving experience which you...’ She indicated Tennys, meaning humans generally. ‘Cannot share because you have no metacortex. So, and in order to be open to what Ushogbo was trying to say all those years ago, those people on the first Trips had to have a similar experience. They had to experience an ecstatic, ego-dissolving sharing. The presence of benign agents effecting that experience, and the subsequent



veneration of those agents, is thus hardly surprising. The Novagaian ecopoesis is an example, where choo is venerated, in all its forms. Two, would you like some more beer?’

Manchester uncurled herself from her seat and reached for Tennys’ glass.

‘Yes, thanks.’ He handed the glass over and watched the Cardinal refill it.

Manchester returned with two fresh glasses and curled herself comfortably on the sofa, looking at Tennys intently. ‘So you’re on this Trip as a kind of historical field exercise, trying to get a feel for what, historically, faith on old Earth was like. Would that be an accurate assessment?’

‘I’ve not thought about in those terms, but I suppose that *is* one of my motivations. It’s not the main one, though.’ He took a sip from his beer and frowned in concentration. ‘I think that... Well, the thing is, I just have so *many* questions, because there is so much that I don’t understand. I mean, apart from religious interests, how did everything happen like it did? I mean the building of the Koyculture and everything. And further back, the Cardinals appearing, and before *that*, the emergence of Water itself. I mean...’ Tennys flung his hands up and shrugged. ‘Where did it all come from? Where did the metacetaceans come from?’

‘From their mother’s tummies?’

Tennys blushed. ‘You know what I mean.’

‘I’m sorry.’ Manchester suppressed her smirk. ‘Yes, it *is* one of the puzzles, isn’t it? The genesis of a whole other Terran race, and we don’t even know how it happened. The Histories are very vague. I’ve been trying for several hundreds of years to get more information, but the Hub is one of *the* most obtuse constructs when it wants to be. Too much time spent playing with Water engines...’ Manchester nodded wisely. ‘Has addled its mind.’

‘Several *hundreds* of years...?’ Tennys was awed into silence, and had to fight a peculiar shrinking sensation within himself. *How much can I ever know compared to this little Cardinal?*

‘Give or take.’ Manchester leant her head to one side, seeing the look on his face and understanding it. ‘Long time.’ She waited for his reaction.

‘Doesn’t that bother you?’

‘What?’

Tennys struggled to express himself. ‘Immortality. Not dying?’

‘Bother me?’ echoed Manchester, surprised. ‘No. I have seen many friends born and live their lives and then die. I have seen them from childhood to death and I have shared in their pain and their ecstasy. And I have grieved them and then the grief has passed and then there is only pleasant memory and life goes on. Life and existence *are* death and change and rejuvenation. I accept that, my body and mind accept that. Do you know, that there is no part of me that is more than five years old?’ Tennys shook his head in wonderment, listening intently. ‘So although I, Manchester, have been aware and sentient for 500 years, I am also in a sense, five years old, still learning and still changing. My point is that what I think and know *now*, I may not think, or may have forgotten, in another hundred years. Who is to say that the Manchester down stream, simply because she *is* that further down the stream, is therefore better or more knowledgeable, simply for that temporal distance?’

Tennys thought he understood. ‘You’re saying that just because my life is shorter than yours doesn’t mean the knowledge I gain is any less... valid? Is that it?’

‘Exactly! Now, you are here for...?’

Tennys shrugged and pursed his lips. ‘Long as I like.’

‘Excellent, then I will assist you in your research. Maybe we can find something interesting.’ She leant forward and whispered conspiratorially. ‘I know of information in the Hub that normally people are not able to access.’ Manchester sat back, and watched Tennys’ eyes go wide.

She was pretending of course, and knew nothing of the kind. But she sensed that an aura of mystery would fire the young mal’s curiosity.

She was right.



Carys was dreaming. She always remembered her dreams when she and Brock stayed with Malvern. She suspected it was something to do with their room: she always insisted on the same room. It was at the top of the Cardinal’s house, a bubble of diamond buried in the ground, open to the night sky. The walls were hardly there and appeared to be composed of soft earth, though the diamond was hard to the touch.

Her dreams were never the same, but they shared similar themes, of sculpting soft earth, except that she was the earth, and was being moulded herself. And it was Gaia who was moulding her, strong, feminine hands forming her into exquisite womanhood. Other hands joined Gaia, younger, more vigorous, more probing. Novagaia. As Gaia moulded her, so Novagaia teased her. She was the sculpture, blind earth, but she could feel the knowing manipulations of her sculptors, and she delighted. Novagaia, becoming brazen, sank down behind her massaging her moist, sandy calves. And then he rose and stopped and smoothed away at twin mounds of soft clay and then reached underneath her, rubbing at silken compost. Gaia was moulding the soft mulch of her belly, moving her hands higher to plump and tuck her loamy breasts and she felt Novagaia rub and rub, so softly, with such delight.

Her transition from the dream was gradual and almost unknowing. For a time, she was both awake and dreaming at the same time as Novagaia stayed with her and she felt his tongue, moist and warm. She luxuriated, still half asleep, blissful. And when she came, it was Gaia who came, the whole earth trembling with her ecstasy, Novagaia drinking the musky libation.



He was awakened by something nudging his throat.

He turned over, still asleep, to avoid it, and the nudging stopped. Then it resumed by his ear. He flung out an irritated arm and connected with something. He snapped awake at the contact. His eyes opened in time to see a small dark shape leaping from his bed. It grew two additional appendages as it leapt, and landed on four of them, to skitter quickly from the room, leaving a tang of turmeric in its passing. *Pissing choo machines. Too inquisitive by half.*

Tennys ran a hand through his hair. His breath was sour, he was thirsty and there was uncomfortable pressure in his bladder, predictably and uselessly causing his penis to become mildly tumescent. He showered, dressed, and wandered in search of food. He found it in the kitchen, along with Malvern.

‘The Fall room was the last piece of construction actually,’ Malvern said, flicking his eyes over the drawings. ‘All in all, it took the Tree almost six months just to grow the diamond. I spent almost three of those months in consensorias.’ Malvern paused, and stared at Tennys briefly. ‘Marvellous experience!’ He shook his head. ‘I do recommend it, gives you a whole new perspective on life, every time. Really, I can’t praise it more highly.’

Malvern had insisted upon showing Tennys the drawings - actual, physical drawings, not resource images - that he had made before his house had been built, when it had just been an idea in his head. These old drawing and sketches were now spread out on the table in the kitchen.

‘Can you imagine what it feels like?’ Malvern continued, his hands mobile. ‘You share your very inner self with the Tree. Choo on choo, language and communications completely unlike a choi symbolism, which is to say...’ Malvern raised his hand slightly, to his mouth, to indicate his words, smiling easily ‘A representational natural language like this, and you ask, *ask* mind you, the machine to help you!’ Malvern smiled as if baffled. ‘I spent days and days and days learning about the Tree that built my house, exploring shared concepts and ideas, and we came to some understandings, and then... *miraculous!* The Tree started building for me! Simply pulling its raw materials from Novagaia itself, reassembling and reforming them under our shared guidance, me and the Tree. The Tree and you form a pact, you see: you respect what it creates, and it respects your wishes, simple as that.’ Malvern chose a large, pinkish fruit from a bowl on the table and bit into it vigorously, chewing briskly, leaking juice from one side of his mouth. ‘Do you see?’

Tennys did not see.

He looked at the Cardinal, feeling irritated and baffled. He took a bite from his breakfast - a fruit-filled, sweet pastry - flicked moist flakes from his fingers, and put his elbows on the table. ‘The Tree is a choo machine right?’ Malvern nodded his head quickly. He had a mouthful of fruit, and didn’t swallow fast enough to speak first. ‘And these Trees can make things by sort of... *growing* them, yes?’

‘Correct,’ said Malvern. ‘The Tree is usually infected with many kinds of nchoo, these are the real little workers, they do the disassembly and subsequent re-assembly. What you saw may have been small, but it was a macro structure, choo not nchoo. Except that of course for my house, the process was very

slow, because diamond takes a bit of work to construct, you see, and the Tree had to devote a lot of effort to it. Whereas for a choo construct, most of which is empty air with lots of little pockets in the carbonsponge, then that's quite easy and simple to assemble.' Malvern smiled at Tennys broadly. He indicated the younger man's empty plate with a casual gesture of a finger. He bit into his piece of fruit again. 'How was the pastry?'

'Good morning you two!' said Brock, from one of the entranceways to the kitchen, bouncing down the two small steps. He stopped in front of the open windows, smelling the moist air: the kitchen was perched just above and to the side of the bottom of the falls.

'Good morning to you, my friend,' said Malvern, looking at him. 'The goddess has visited you this morning, I believe.'

'Ah!' said Brock, sitting expansively next to Malvern, dwarfing him, and slamming his fists down on the table, smiling broadly. 'She *has* indeed Malvern, she has indeed. And speaking of godi...'

*Godi?*, thought Tennys,

'...Where is Manchester this morning?' Brock looked about him, absently reaching for the bowl of fruit.

'She went to the Hub,' said Malvern. 'On a hunch.' He raised his eyebrows knowingly.

'Ah. Manchester and her hunches.'

'They're quite extraordinary, aren't they?' Malvern turned to Brock, his face becoming animated. 'A quite *remarkable* prescience, unusual for a Cardinal, because most of us have to work at it a little. But with Manchester, it's so natural. I enjoy her company immensely, as you know Brock.'

'I do indeed my friend.'

'She is, in many ways, the best of us, her youth notwithstanding.'

Tennys snorted. 'Her *youth?*' he asked, and then instantly became embarrassed by this interruption, feeling it was inappropriate.

Malvern turned to him easily. 'Quite so, my young friend. I *am* over 200 years her senior.'

Tennys thought briefly that Malvern was angry, but then the Cardinals face creased into a smile.

'It's a source of *amusement* for him, Tennys,' Brock said. 'For all the Cardinals as a matter of fact. Manchester is the wayward *daughter*, you see, and they like to tease her about it. Personally, I think it is a reprehensible practise.'

Malvern looked up at Tennys and Brock unperturbed. 'Could we return to the point? My contention point was that Manchester is the *best* of us. The very Flower of Us. Salisbury may fly the Cascade with more clinical efficiency. Niandankoro may be the largest of us, Nipauin the greatest scientist among us, and Hechi the most loved, but I believe Manchester to be the most *insightful*, naturally so, unconsciously so, which is all the more beautiful for her being unaware of it. And that is why gentlemen...' Malvern smiled openly, leaning back in his chair. 'I feel so *very* humbled when...' He became more serious for a moment, more intent. 'She *honours* me by allowing me to pleasure her.' Malvern sucked on his lower lip briefly, frowning deeply, staring intently at Tennys then at Brock,

struggling with the enormity of his sincerity. 'And it *is* an honour, my friends, it *really* is.' He nodded his head, his face simultaneously concerned and smiling, his eyebrows raised. 'The sublimity of the experience never ceases to delight and astound me. Frankly...' Malvern once more leant back in his seat. 'It *is* life.'

'That it is, my friend,' said Brock, his face open, grave and amused. Malvern and Brock nodded sagely at each other. Tennys flicked his eyes back and forth between them, a cup poised on his lip. He felt curiously as though he had missed something, as if some vital nuance of communication had passed him by.

'What do you say, Tennys?' Malvern asked.

Tennys was horror struck. *What should he say? What could he possibly say, after that?* He thought frantically.

'Well.' He noisily cleared his throat and replacing the cup on the table. It was shaking. 'Um, no I agree. I think.' He nodded his head vigorously.

Malvern nodded gravely in return, but his face was concerned. His mouth fell open and then closed. He stared into the distance briefly, before fixing his gaze on Tennys again. His eyes narrowed slightly then relaxed, and he smiled easily.

'Tennys.' He put his arms slowly on the table and clasped his hands. 'I wonder...? Have you ever been to a *Carnival*? ' He looked up at Tennys with inquisitive, glittering eyes.

Brock slapped his hand down on the table and hooted. 'Splendid idea!' Malvern looked up Brock and both grinned at the other.

Tennys flicked his eyes back and forth. 'A carnival?' he asked. 'What happens at a carnival?'

'Ah, well, it's a little like a *history* play...' Malvern began, smiling broadly, causing Brock to hoot again. 'With a variety of *embellishments*. '



There was a fire in the corner of the tented structure, open on two sides to the rest of the Carnival flaring, clanging, thumping, whooping and bubbling around it. There was a dark red rug all over the huge interior floor of the tent and cushions, with little knots of people, lounging, ambiguous in the warm, spice hazy air.

The thin, dark-haired figure was sitting crossed leg on a cushion, with a group of five other people - two other men and three women - none of whom he had ever met before. He was smiling broadly, feeling enormously relaxed, aware of the first tickling, blossoming effects of an ingested nchoo infection. He

breathed in. The air was effervescent. He drew his hand across his head and tiny silver bubbles erupted in its wake. He smiled and looked around. Everyone was grinning, seemingly stunned and in awe, all smiling, all looking at each other quizzically. He turned to the person next to him.

‘Hello,’ he said, and the sound was a joy, sculpted from silver filigree in the air. He felt an enormous affection grow within him and looked at the woman he had addressed.

She looked back at him. She was smiling, with large, dark eyes in a dark face. ‘Hello,’ she said. Something exploded deliciously in his head. An enormous empathic shock wave spread through him. He blinked, startled. Delighted, he wriggled, feeling the air grow brighter.

‘Did you feel that?’ he asked, wonder in his voice, shuffling over to her and sitting down close.

‘Yes!’ She beamed at him. She was plump and dark-skinned, with large, uneven teeth and tiny hands. She was the most incredible woman he had ever seen. He stared at her, almost awe-struck, baffled and delighted.

‘Who are you?’ he asked, and he felt it was the most complicated question in the world, because it would take a lifetime to answer, but it was so simple too, because...

‘I am Himochee,’ she said. Her belly was soft, like cotton wool.

‘I’m Tennys,’ said Tennys, and then, inexplicably: ‘I love you.’

Himochee beamed at him, her face glowing. Something pulsed between the two of them, sending silver motes sparkling and dancing in front of their eyes. They stared at each other, at each other’s eyes, feeling drawn to the same place, somewhere between them both, somewhere magical, where all was possible. Tennys reached forward, and put his arms around her, drinking in the smell of her, feeling her wriggle against him. He stroked her back, his hand trembling, astonished at the enormity of what he was doing.

Himochee put her arms around his neck. ‘I love you Tennys!’

## **Chapter Sixteen**

Melie and Aileeni were in an alcove above and behind the main cabin of the shuttle, swinging gently in two hammocks. Pilot had just signalled the mid-point of the journey. Novagaia was two hours from Godsfollicle. Melie knew that the Blit had never been like that before. The sense of incomprehensibility was the same, the yawning, gulping nothingness was the same. But on this occasion, something had stayed with her. The Blit had changed her somehow. She knew things now that she hadn’t done before it had happened. She didn’t know all of what she knew. It just wouldn’t pull into focus. It was a frustrating, baffling feeling, and Melie was feeling frustrated and baffled.

‘I was nine years old the first time it happened. It was my birthday. I had this party in the afternoon, but my mother got angry with something I did and started shouting at me...’ Melie stared off into the distance,

lost, remembering. ‘And it happened that night. I woke up, and I felt like I was falling. I thought I was dreaming. That’s all I felt, a falling: not like weightless falling either. I was falling but I never hit anything. And that was the first time I Blitted.’

‘Nine years old?’



There was no medical equipment of any kind in the shuttle, but fortunately Aileeni had brought her own. She accessed her resource, instructing the medical microfactory in her thigh to up tool. A tiny control window snicked open, showing her its status, counting down to full activation: thirty seconds.

‘Fucking *whales*?’

‘It’s OK,’ said Aileeni. ‘It’s OK, you fainted or passed out or something, I’ll find out. How’re you feeling?’ She flicked her eyes over Melie’s face, searching for abrasions or swellings.

‘I’m fine,’ said Melie, frowning furiously, passing a hand across her face, and pulling it over her chest. ‘*Whales*?’ she repeated, and pulled herself upright in the chair. ‘I... saw *whales* in the egg that me and Aphi came from...’ Melie slowed down the further she got into this sentence and jerked back when she got to the end of it, as if surprised to be saying such a thing. ‘What am I *talking* about?’

‘I’m sure *I* don’t know girl.’ Aileeni got up from her seat and retrieved a squeezezy container of fluid. ‘Here. Drink something.’

‘Thanks.’

Aileeni’s resource signalled that the microfactory had finished assembling a preliminary diagnostic tool. Aileeni placed one foot on her chair and hitched up her skirt, reveal a large, plump thigh.

‘Umm. Aileeni?’ asked Melie curiously, glancing up. ‘What are you *doing*?’

Aileeni reached down to her inner thigh, and ran a thumbnail down a stretch of it, up to her knee. A little section of her leg opened smoothly, like lips, and extruded a smooth-edged tray. Aileeni touched a portion of this tray with a finger. A thin capsule containing a clear gel popped to the surface. She offered it to Melie.

‘Swallow this.’

‘I’m not swallowing that. It just came out of your leg.’

‘Swallow it!’ said Aileeni. ‘It’s a standard field internal-diagnostic tool. Nchoi in suspension. No really, it is. Look I just want to check if you’re OK, and this is the easiest way. You won’t feel a thing. Trust me.’

‘I’ve noticed that about you,’ said Melie, looking dubious but swallowing the capsule anyway. ‘You fall into this kind of blunt soldier talk sometimes: "Standard internal diagnostic tool".’ Melie leant forward, pointing. ‘And what *is* that thing anyway?’ she asked, fascinated by the pale, flimsy looking microfactory.

‘Medical bag,’ said Aileeni. ‘Lots of nchoi, with lots of Fat to work with. Makes tools, treatments, displays, everything, to order. Really neat.’ Melie poked experimentally at the extruded surface of the microfactory. It was cool and hard like a ceramic, yet it had flowed into form like a liquid. Melie shook her head. She didn’t quite know what she thought about having a factory stashed in her leg. Being a neomorph was one thing - and Melie wasn’t even a cosmetic neomorph, she was from the best-engineered Sesquoian stock - but having a pocket of machines in your skin? Or was that any worse than what Nanashub had done to himself?

‘What’s the matter with you?’ Aileeni asked her. ‘You look positively *cringey*.’

‘Yeah,’ drawled Melie, slowly, indicating the microfactory. ‘Just thinking. Freaked me out a little, I think. Shouldn’t have. Sorry.’

The nchoi diagnostic tool began relaying its findings to Aileeni’s resource.

‘Hang on.’ She scrolled quickly through a resource window, checking the data. ‘All major indicators look fine. No physical trauma, no toxins... blah, blah, blah. No...’ Aileeni re-focused on Melie and backgrounded the window to a pale blue cube. ‘Nothing wrong with you, Melie. Nothing physical, that is. No trace of viral infection, bar the ordinary. You’re healthy.’

‘Yeah.’ Melie watched as Aileeni closed up the microfactory. ‘Yeah, I know, it’s not a physical thing, the Blit, I reckon.’

‘Is that what happened?’ asked Aileeni, taking her foot off the seat, and moving round to sit down. ‘You blitted?’

‘Yeah.’ Melie was curiously blank for a moment. That was the first time anyone had ever asked her about the Blit: the first time, because no one had ever before known about it. ‘I’m going to go and lie down for a minute. Do you want...?’ Melie paused, uncharacteristically bashful. ‘Could I talk to you about some things, Aileeni? I feel I need to talk, and I’d really appreciate it if...?’

‘Absolutely,’ said Aileeni gently, getting up out of her chair. She took hold of Melie’s arm, guiding her. ‘Let’s go and look at some stars,’ she suggested, gesturing toward the alcove. ‘Good place to chat.’



‘Nine years old,’ echoed Aileeni.



‘Yeah, and it’s happened once every six months or so for the last twelve years, getting more fucking freaky except, recently, it’s started happening more often, and its different now, too. Before, it was a bit weird you know but now it’s... I don’t know. Like what I was saying about whales and eggs, and stuff? Where did that come from? It wasn’t a dream, I’ve never dreamt it. But I *know* it happened, which sounds really strange but I can’t explain it properly. I mean, I just *know* that’s what happened, as if I’d been in the fucking womb looking right at it!’ Melie’s voice had got higher and more shrill. She finished on a squeak.

Pause.

‘You know Aileeni, I decided to come to Novagaia more as a bit of a holiday, you know?’ Melie sounded tired now, and depressed. ‘I thought that maybe the Cardinals could help me though I don’t really know how. Maybe I even started to believe my own lies, you know, about having a virus, you know, like a really sneaky one that no one could spot but the Cardinals. And maybe I thought that that was causing the Blit...’ Melie paused. When she continued, her voice was flat. ‘But I don’t think its going to be any holiday.’

Aileeni listened. ‘Tell me about these Trips.’

‘Don’t know that much really. You go walking, seeing the sights. You chat to a few Cardinals. Just generally hang out on Novagaia really... living the ecopoesis it’s called.’

‘How did you think that was going to help?’ Aileeni was pleased to hear Melie laugh, albeit slightly.

‘I don’t know. I thought that I would get some, you know, guidance. Like spiritually. Don’t laugh.’

‘Spiritual guidance?’

‘Yeah. I grew up on Sesquoia, remember, surrounded by all those plant and animal spirits. And I could always *feel* them. All that life straining upwards. You can almost *hear* it. Being in the forest, sitting high in a Crimsonwood, I could almost hear it, you know...?’

‘Hear what?’ *What was the girl talking about?*

‘Nature! All of her, the whole, silent noise made by everything living. All the spirits of streams and spiders and rocks, everywhere, everything. All singing.’

‘And you used to spend your time doing this, did you? Sitting in trees listening to birds?’

Melie threw her arm down to bat at Aileeni. ‘No, it wasn’t a *physical* sound. It was a...’

‘A spiritual sound?’

‘Right! So I figured maybe I could try and get some of that feeling back, on Novagaia, on one of these Trips. Because then I would feel *good* about myself, yeah?’

‘Why Novagaia? Why not Sesquoia, back home?’

Melie snorted. ‘I wouldn’t be well received on Sesquoia. I’m not wanted there.’

‘Doesn’t stop you from going.’

‘I know but I just don’t want to. There’s too many bad memories there. Besides, I’ve never been to Novagaia. I hear they throw good parties. When they all have this thing called Carnival where they go round in these big Caravans...’ Melie smiled at the thought. ‘Yeah, a *party*,’ she said. ‘I haven’t been to a party in *ages*!’

Aileeni suddenly laughed at loud.

‘What’s so funny?’

‘I was just thinking. The last time *I* was on Novagaia, I went to a party too. More like a riot actually.’

‘Yeah? Oooh, do tell!’



Aileeni had been on Novagaia some years previously. She had been a miner then, and pilot too, pulling a regular long haul out to and back from a station on Titan, her crew-mates two burly, evil smelling men, and one burly, evil smelling woman. Their small, cramped vessel, ominously named *Snow Crash* was mainly processing modules, its living compartments adequate, but spartan. To Titan and back, the trip was three months. Aileeni was being paid well, and she tolerated the general depravity and fornication that went on among the crew because, well, she sometimes joined in, and it was fun.

When they reached Lattice, their orbital stop, the *Snow Crash* delivered processed water, deuterium, oxygen, and mineral sludge. The rest of the crew disappeared into the depths of Lattice, looking for a hedonistic way to spend their wages but Aileeni took off for Novagaia. She didn’t know why, it was just somewhere she had never been. She departed an induction Gun on Lattice and landed on Novagaia just under three hours later.

‘Well, I wandered around for a while. All very pretty. Lots of little valleys, green grass, trees and flowers, but nothing like a *bar* around for as far as I could see!’ She laughed ‘I don’t know quite what I expected actually, but it certainly wasn’t *this*. Anyway, there I was in the bottom of a little valley wandering by the side of a stream, when I heard a sound, kind of like a drumming or something. Well, I looked around but couldn’t see anything. Then, *suddenly* these two huge great *things* came running around the corner, headed straight for me...’

‘Things?’

‘Well, that’s just it! "What are *they*?" "I thought, because they were *very* strange looking, dirty black with these two *huge* legs. I screamed when I saw them, I tell you. Well, they skidded to a stop ahead of me. *Huge* buggers, they were, and well, I just *froze* didn’t I, and *then* guess what?’

‘What?’

‘Guess.’

‘ *What?*’

Aileeni tutted. ‘Oh, you’re no fun! Well, what happened was, was that these two small eyes peeked out from the top and then there was this little voice saying: "Sorry, didn’t mean to scare you". And *then* guess what?’

‘What?’

‘You’ll never guess.’

Melie grimaced. ‘No, I won’t. What?’

‘Well, a young mal, barely a metre tall, jumps down and strides up to me and you’ll *never* guess what?’

Melie sighed. ‘What? And where did this mal come from?’

‘From the... the leggy thing. The... the *shoe machine* or something. That’s not important. What *is* important is that these two Cardinals were racing these strange leggy machine things...’

Melie did a double take. ‘ *What?*’

‘...and then *after* , one of them said...’

‘ *Cardinals?*’

‘Yes, that’s what I’ve been telling you. One of them comes up to me and he puts these little fists on his hips and clear as day he says, "My life is enriched. I have seen beauty, and her name is woman". I’m looking at him, shaking my head, thinking, *did I hear him right?* , when he says, "It is too much. I am Malvern, I must make love with you, will you make love with me?".’

Melie guffawed. ‘You got propositioned by a *Cardinal*? No shit? Wow. What did you say?’

‘Well, I told him it might be nice, but that he might be a bit *small* for me.’

Melie hooted. ‘And then what did he say?’

‘He looked kind of hurt actually,’ said Aileeni, remembering the incident with affection. ‘It was good sex in the end though.’

‘What? You had *sex* with him?’

‘Course!’ said Aileeni, unperturbed. ‘He was a Cardinal, wasn’t he? Wasn’t going to pass that chance up!’

Melie suddenly had a vivid picture of Gervane’s face. Her stomach knotted and she frowned. ‘I was just thinking of Gervane.’

‘Who? Oh. Him.’

‘I hope he’s alright,’ said Melie, feeling concerned. She caught herself. *Why shouldn’t he be alright? And what concern was it of hers, anyway?*

‘Not your problem, girl. He’ll look after himself. Or he will if he’s smart. Didn’t seem stupid, to you, did he?’

‘No.’

‘Then he’ll be fine. Stop worrying, you’ve got enough to think about.’



The Hub resource queried the shuttle as it approached. Pilot asked for docking permission, which was granted. Hub ignored the shuttle thereafter.

Aileeni sensed the auditory tap become active.

‘Docking,’ said Pilot. ‘120 seconds.’

‘Melie,’ said Aileeni, blearily: she had fallen asleep. There was no response. ‘Melie!’

‘Nnghh.’

‘Wake up. We’re here, we’re on Novagaia.’ Aileeni peered up through the window as the tips of docking spines began to drift past. ‘Well, the Hub anyway.’

‘Nnghh.’

## **Chapter Seventeen**

The Son was thirteen months old, a month premature, but the Mother was going into labour, brought about by trauma. Protruding from her side, and attached to a metal cable towing her to her own dismemberment, was half a metre of serrated steel.

Upon his arrival, the Mother guided her Son to the surface. Encountering atmospheric oxygen triggered

breathing in her child. He vented enthusiastically and the Mother was pleased. Even as she felt the lifeblood drain out of her, her child pleased her. She called then, mournfully, deeply, building her painful world and sending the sculpture of sound and death out into the ocean. Her Son drifted to her side, oblivious to the blood in which he swam, looking for the Mother's milk. He bleated to her with tiny chirrups and squeaks. His mother touched him gently with her fluke for the last time. The metal tugged at her but she was past pain. The precipitous, tortured parturition had claimed her.

She was dead.

The Son bleated mournfully for the fat-rich milk but none came.

Later, cruel snickering things with long knives came and took him.



Each was 300 metres in diameter, two crossed tubes piercing the centre of the ellipsoidal Hub complex. The Concourse. Suspended on slender guys, some of them only just wide enough for one person, others easily accommodating 50 people shoulder to shoulder, walkways hung from all over the interior of the Concourse. Everywhere, the volume in the Concourse was filled with walkways, terraces, branches, supports, lifts and platforms. The space hooted and clacked, buzzing with voice, intoxicating with the tangy, spicy smell of choo.

Manchester and Flocanalog were near the top of the Concourse, a 250 metre drop below them. Manchester had found a quiet spot off a narrow walkway. A cluster of sofas was gathered in a conversational knot on a small platform.

Manchester shifted in her seat, tucking her legs further under her. 'So let me see if I've got this right...'

'Sure, go right ahead.'

'And forgive me if I seem blunt.' She looked up at Flocanalog carefully, her eyes large and calm, chopping the air minutely with the edge of one small palm. 'But you seem to be saying that you've gone through this *terribly* wrenching experience, left your life and your world and all because...' Here she paused, dipping her head and frowning. When she glanced back up, her face was curious and attentive. 'All because you thought you saw a *whale*?'

'That's right. I saw one of the original, handless cetaceans of old Earth. An *Old One*.'

Manchester searched the Marineris man's face, noting his smooth bald scalp, the deep set grey eyes, the sharp beak of his nose.

'And you believe that this Old One told you to look for answers on Novagaia?'

‘Correct.’ Flocanalog blinked slowly, twice, and rubbed the palm of his hand up the end of his nose, rubbing at the beak of cartilage. He sneezed, and coughed. ‘Excuse me.’

‘Answers to what? What questions do you want answered?’

‘All of them,’ said Flocanalog. ‘I want all of my questions answered. Who I am, who I was, what I am. Everything.’ His face was grave, his expression serious. He leant forward, elbows flat on knees, clasping his hands loosely. The exoskeleton hissed as he moved. ‘I believe that the Old One told me I have been someone else, that I have lived another life. I believe it was speaking the truth, because I *remember* glimpses of a past life, many past lives. Maureen has told me that...’

‘Maureen?’

‘Oh. Maureen, yes. Maureen is a sentient resource, my doctor on Marineris, almost a...’ Flocanalog paused, remembering, smiling. ‘Almost a *friend* to me after I was extracted from the Shell.’ Flocanalog glanced at the small Cardinal. ‘Though you would think that strange, I suppose.’ Flocanalog knew of the Novagaian ecopoesis, and the prevalence and veneration of choo over choi. In this respect, Marineris and Novagaia were quite similar. ‘In fact,’ he said, glancing down, and then back at the Cardinal again, beginning to grin, ‘*I find it a bit strange!*’

The small Cardinal smiled. ‘I know that it is usual for Marineris to use choochoi constructs in Shell extraction procedures.’

Flocanalog nodded. ‘Yes. On Terra, in the Transition facilities. Maureen said she had choo components because of what she did, you know, regenerating neural tissue, redesigning the way choo and choi communicate. Rebuilding people.’

‘Then Maureen was a self aware individual.’

Flocanalog leant back, throwing his hands lightly in the air, hissing quietly. ‘She certainly seemed to *know* her own mind.’

Manchester nodded at him. ‘Yes indeed.’ A tiny crease of her brow betrayed a concern. ‘Did you ask her if she was happy?’

Flocanalog looked at her, slightly stunned. *That was exactly what he had asked her!*

‘I did, yes,’ Flocanalog replied. ‘She always kind of avoided the question, I think. Then she finally said she didn’t know.’

‘A limited awareness.’ Manchester shook her head. ‘Makes me sad.’ Flocanalog realised she was entirely sincere and felt drawn to her compassion, realised that he felt it himself.

‘It makes me sad too. I didn’t realise that it did.’ He stared off into the distance for a long moment. ‘You know, for the first few days on Terra, Maureen just used to speak to me, over a tap.’ Flocanalog tapped his ear with a finger and Manchester nodded her understanding. ‘But then she let me see her visible persona. And you know what Manchester, she looked like someone I used to know. Can you imagine? Well, she didn’t exactly *look* like her as such, but she had certain...’ Flocanalog paused, his hands cycling in the air. ‘*Qualities* that I found familiar. But the *really* interesting thing is that the more I was able to interact with Maureen as a person, like this, in a conversational setting...’ He indicated Manchester and himself with a quick wave of a hand. ‘The more of a person she became.’ Flocanalog’s

face was open with a friendly curiosity. ‘Do you see my point?’

‘I believe that I do, yes. If Maureen is choochoi, then she *is* a person, in some sense. But trapped in her present state, she hasn’t learned *how* to be a person yet.’

‘Exactly!’ Flocanalog was delighted that Manchester understood. ‘Exactly! As she spent more time with me, so she began to be more... herself, I suppose I would have to say. More *unique*.’

‘Then I should say, Flocanalog of Marineris,’ said Manchester, in cavalier style, ‘that I must thank you for your actions. Drawing awareness out beyond itself is a compassionate gift to the recipient.’

Flocanalog started back a little, surprised by the words, but pleased and thankful for them. He smiled, and nodded graciously. ‘Thank you, kind Manchester of Novagaia.’

‘Not at all,’ said Manchester, leaning towards Flocanalog, and resting a tiny hand on his leg. ‘I think you’re *splendid*.’ Manchester uncurled herself like a cat from her lotus and collapsed onto the sofa, looking up at Flocanalog, her tiny hands clasped primly on her chest, her legs dangling over the sofa’s broad arms. ‘I’m a terrible flirt, you know.’ She reached lazily out with one hand to brush Flocanalog’s leg. She glanced up at him, her eyes dark and quick.

Flocanalog looked at her, suppressing a small smile, and leant down towards her. ‘Why should that concern me?’ He drew back a little to see the Cardinal’s reaction.

‘Oh, no reason!’ Manchester furred herself back up into her lotus. ‘Just thought I’d tell you.’ Then she grinned impishly and her eyes sparkling. Flocanalog smiled back. He had taken a little time to get used to the Cardinal: she seemed to be lots of opposites. She was physically small yet appeared tall in the way she carried herself. She was petite but strong. She was intelligent and quick, seemingly arrogant, yet she was compassionate and warm, enjoyed laughing.

Manchester, becoming more serious, clasped her hands together. ‘But enough of banter. I want to her about your other lives. You were looking for *answers* I believe...?’



‘I can find no gaps in my memory for Marineris, but before, it is very blank, snippets. And confused, because many of the snippets are... familiarly unfamiliar. Like I have the memories of another person. Or, or another *mind*.’

Manchester listened attentively.

‘Well, the thing is that I think that’s *exactly* what they are. I have *my* memories, but they are the memories of someone, or something, different too, who is *also* me, do... do you understand, Manchester? I’m not explaining myself very well, I know.’

‘Some *thing*?’ Manchester asked him. ‘What do you mean? Not human?’

‘Yes, most definitely not human. And this I know because when I remember bits of that life, it is the Shell in me that sings.’

‘Excuse me?’

‘I mean, when I remember that life, as opposed to my life before Marineris, I remember...’ Flocanalog paused, struggling, his hands trying to manipulate the difficult concept he wanted to convey, grimacing. ‘*Shell dreams!*’ he finally blurted, shaking his head, knowing the description was inadequate. ‘Sound pictures, I remember things, ideas of the world that are perceptions of it, I remember... a place. A *being*. Like Marineris, but different, quite different...’

Manchester suddenly intuited to what he was referring.

‘You believe you remember things from a past life on *Water*.’ Flocanalog looked at her, almost trembling, his eyes shrouded. *She doesn’t believe me*, he thought. ‘I think it’s important for me to say that I believe you.’ Manchester continued. Her eyes were quite calm, her face a smooth blank. ‘Incidence of reincarnation are not uncommon, neither are they inexplicable. If you were a Cardinal, and could fly the Cascade with me, you would be able to know why.’ Flocanalog felt a slight internal slip, and he looked at the Cardinal quizzically, feeling that they had just slipped past each other, talking about related but different things. *He wasn’t talking about reincarnation, he was talking about ...* ‘Of course, subjective experience and empirical data do not always match up: one thing to *know* a thing, another to *experience* it.’ Flocanalog looked at the Cardinal carefully. *Was she always like this?* he wondered, *always knowing what someone was thinking about?* ‘All the time,’ said Manchester, smiling at him broadly, seeing his startled expression. ‘I do it all the time. Nothing remarkable about it. Just comes from close...’ She hunched herself up, giving the appearance of a tiny rodent nibbling a titbit from between its paws. ‘*Observation.*’

Flocanalog narrowed his eyes, smiling uncertainly. He didn’t quite know whether to believe her or not. ‘Uh, huh.’

The Cardinal carried on, unperturbed. ‘But this is most interesting, Flocanalog.’ Manchester straightened her back. ‘Of course, you’ve come to Novagaia, not really for the *Trip* as such, but because Novagaia still maintains contacts with *Water*, yes? That is how you will find your answers.’

‘More or less. Everything that has happened to me seems to be pointing to Water. That’s why I went to Marineris in the first place, because I felt this... this urge to live a Shell life, but even that wasn’t it, because when I saw the Old One, the whale, and it talked to me, constructing such a world... I can’t really explain Shell languages, I don’t understand them now but...’ Flocanalog trailed off.

‘Tell me anyway, about the Old One? Did any one else see it? Where were you?’

‘No, no one else saw it, I was alone at the time. I’d been to see some friends at their...’ Flocanalog half knew what he wanted to say. He wanted to say at the place where children built chaotic, collapsing playgrounds of sound but it was not a physical place where the children of Marineris were raised. There was a *soundworldpicture*, one Shell vocabulary item that signified this sound-woven place-concept, but Flocanalog couldn’t conceptualise it any more, let alone vocalise it. He settled for the prosaic human equivalent. ‘At their *home* and I’d been flying for a little while when I started being sucked down. No problem, just a little temperature well. I coasted with it and went a little deeper, and then... and then it



was right there. Above and behind me. Hadn't seen it approach. Couldn't even see it properly when I turned.'

'Why? Shell perception is pretty acute.'

'I know. It's kind of difficult to describe. Because I don't perceive in the same way anymore, the experience is... *odd*. The Old one *was* there, I'm sure. I ran a check on the Shell's senses, because I thought something was wrong, but they were fine, and I can't believe it was an nchoi infection, so it was real, but it just... didn't altogether seem to be there, all at the same time. I mean bits of it were, and other bits... weren't.'

Manchester grimaced. 'Mysteriuser and mysteriuser.'

'Anyway, I tried going towards it, but it moved away, still ghostly. Then it began talking, in this *crazy* ...' Floccanalogue had been going to say language, but it was like no human language. Sounds weren't words, they were parts of the world, because the world was sound and sound was the world. '...This *speech*, is all I can say, painting sculptures, telling me things...'



Shell-Floccanalogue listened as the Old One changed the nature of things as it spoke, taking his world apart and rebuilding it, flooding him with bursts of sonar. The new world was strange and vast, reflecting the mind of the speaker, a cetacean-philosopher-Queen, and he struggled to understand. He felt no fear, only a trembling exultation. The power and the intelligence of the Old One wove strands of sound into dynamic worlds of sound possibility around him in which he himself was cetacean, mute and tiny.

Cetacean-Floccanalogue floated in a world within a world. A warm, dark world, where all was *ummm* and *ummm* and a regular, comforting pulse. Although he could sense her and was aware of her life and her warmth, he couldn't see or hear the mother that he knew was close by. He had no direct perception of her.

The first sign of the attack was an influx of exotic chemicals. His mother's blood was pumping with massive amounts of trauma tell-tales. The chemicals jolted him, frightened him. He became scared for the first time ever. He was hardly even aware that he *was* scared: he had no concept for it. But his body knew something was wrong.

Cetacean-Floccanalogue awoke to his first real awareness, and it was of pain and terror. He struggled in his tiny floating world, wanting to go back to *ummm* and *ummm* and *ummm* but knowing, somehow, that he would not be able to. He felt his world begin to move. He became terrified, feeling his universe contract around him, pushing in at him. He began to struggle, feeling himself squeezed and released, squeezed and released, rhythmically.

The shock of the cold, when it came, was intense, but he had no words. It was not *ummm* or *ummm*.



After Flocanalog had finished he sat staring into the distance, his brow furrowed, dark blue pain drifting behind his eyes. He leant forward, putting his elbows on his knees, the exoskeleton hissing quietly.

‘Some story,’ commented Manchester.

‘That it is. What do suppose it means?’

## **Chapter Eighteen**

Melie pulled down her leggings and panties and sat down. She scrunpled some paper up from its holder, and sat there, waiting. She pushed a little and her bladder began emptying quickly, splashing onto the ceramic.

‘Hello?’

Melie searched around for the sound of the voice.

‘Any paper in there?’ She saw a tiny hand wiggle three small fingers under the partition from the cubicle next to her.

‘Oh sure.’ Melie unfurled a length of tissue, rolled it round her fingers and then passed it under the partition. ‘There you go.’

‘Thank you very much.’

Melie used her own scrunched up tissue, pulling down and back, and deposited it in the bowl. She flushed, pulled up her panties and leggings and unlocked the door. She walked to the row of basins and began to wash her hands. She glanced up at the noise of the cubicle next to hers flushing and saw a small woman come out.

‘Thank you for the tissue,’ she said. She was wearing a green long suit and had bare feet. ‘My name is Manchester.’ She smiled. ‘How do you do?’

## Chapter Nineteen

The Plunge sliced across the surface of Novagaia, a great, twisting valley 400 kilometres in length, bulging out into vacuum through the outer skin of the orbital for three kilometres at its deepest, highest extent.

For nine months of every Novagaian year, the Plunge was shrouded in thick blankets of snow and gripped by Winter during which temperatures fell as low as 170 Kelvin. But for three short months out of twelve, the Plunge was warmed and transformed. It became a riot of colour and fragrance as thousands of species of flowering plant rushed to reproduce. The ground became a variegated carpet of blossom, while the air became sappy and luxuriant with the perfumes of a newly lush Plunge.

Hechi loved summer in the Plunge and this was why she was troubled. Summer was supposed to be only two days away but it was still bitterly cold. And yet it was not so much the cold itself that was bothering her, but the fact that it was cold *now*. She always knew when the Mirror would unfurl and begin heating the underside of the Plunge, heralding the beginning of Summer. But this year something was wrong.

*What has happened to my Summer?*

Hechi accessed her resource and requested an exterior view of the Plunge. A graphics window snicked open, pulling a visual feed from a Hub remote, showing her the exterior surface of Novagaia. It was dark and cold. The Mirror - actually, 4,000 square kilometres of reflective molecular fabric - had not unfurled. She stayed staring at the images for many minutes, lost to a sudden melancholy. She keyed a sequence on the control window, and the view began to shift, to pan over the cold exterior of the Plunge as the remote lifted and began moving.

Everywhere it was the same.

Hechi slept poorly that night, plagued by cold, white, barren dreams.



A poem in motion.

At the four corners of a square, facing inward toward each other. All were dressed in loose, flapping

black pantaloons. All were bare-chested, and perspiring lightly, their skin glistening in the afternoon light of reflected Sol. They moved synchronously, adjusting the placement of their feet with phase-locked shuffles, breathing in tune. A gong sounded regularly, monotonously, and the four figures turned and twisted, moving hips and arms quickly to its slow rhythm, following a silent melody.

One of the figures lost concentration. His smooth movements became forced and jerky. Then he stopped altogether. He remained in his pose for a moment before dropping his arms. He bowed to his three companions. The sound of the gong disappeared into echo.

‘Apologies, my friends.’

‘Mind on other things, Shaowu?’ Salisbury asked him, also bowing.

‘I lost concentration momentarily, yes.’

‘Shall we go again?’ Chaiyaphum’s voice was high and soft, a modulated hooting. She was diminutive, even for a Cardinal, standing only 75 centimetres high. She inclined her head. ‘That was a difficult part of the movement. I have had to practise it often to achieve any real flow.’

‘I think Shaowu had a little too much of the Goddess last night,’ said Ksobi, his teeth very white against his gleaming dark skin. ‘I know where his concentration is.’

Shaowu turned to Ksobi with a perturbed expression on his face. ‘My *dear* Ksobi, really, I would have thought...’

‘From the beginning again?’ Salisbury glanced imploringly at Chaiyaphum.

Chaiyaphum smiled back knowingly. ‘From the top, Shaowu? Ksobi?’ Chaiyaphum looked intently in turn at the two Cardinals. They immediately stopped their banter, and attended to their starting positions. ‘We start with "Jumping Spider", using *hutu* and *graad* to move into "Youth and Age", yes?’

Salisbury keyed an open control window and the gong sounded again. The group closed their eyes, allowing their breathing to synchronise. Then they began moving, curling arms and legs slowly outwards reaching for sticky silk threads.



The choo machine departed the Plunge at a gallop, headed directly Starboard, the message securely logged as viral nchoo within it, and reached the rising vastness of the Rim wall an hour later. The machine scampered onto an ascending induction cushion, and rode the long, arterial Tree root 40 kilometres up to the blade-top of the huge wall. Already sealed against the vacuum, the machine orientated itself and began to sprint Antispinward along the edge of the Rim. The nchoo innervated construction partially re-configured as the machine accelerated, lengthening its four supple appendages. The tensioned

carbonsponge worked efficiently as the machine ran, clocking 40 metres a second in the harsh vacuum, the choo Host finding simple pleasure in the sensual execution of its locomotion.

14 hours later and 1,600 kilometres Antispinward of the Plunge, the machine slowed a little and probed its environment, looking for the Tree root it knew to be nearby. It padded over to the edge of the Rim wall and peered over the edge. The moist orbital floor was lost to distance 40,000 metres distant, shrouded with wispy patches of cloud. The machine raised a sinuous frontal extension, tasting the thin air, communicating with the sentient ecosphere of which it was but a tiny component. Then it became still: the construct did not vent atmospheric oxygen, and hence did not betray its motionlessness with even so much as the expansion, contraction of bellows.

The machine's patience was presently rewarded by the quiet arrival of an induction cushion, halting some metres below. The machine re-configured its central trunk, bulging itself outwards to form a fifth adhesive limb. It climbed down over the edge of the precipice to cling to the top of the clear capsule as it fell away down the smooth Tree root towards the orbital floor. At the base of the impossibly huge wall, the machine bounded clear, and sprinted away into the surrounding forest, eager to deliver its message.



Salisbury only noticed the coal and mahogany striped messenger when the exercise was over. The others were already heading back inside her Chapel Halls home. The choo machine was sitting on the wall of her small courtyard, its six appendages tucked neatly under it. She rubbed a towel over her face, staring. Under the force of her gaze, the machine leapt down and came padding toward her. It stopped a couple of metres away. It dipped its frontal extension and then lifted it back up high, appearing to nod.

‘Have you got something for me?’

She extended her hand and the choo machine nuzzled it. She smelt the sandalwood, liquorice spice of the machine, and then felt a tiny flick of moisture. An icon blinked in her phenomenology, her resource telling her that she had just been infected with nchoo. She queried the open window, curious as to the sender. *Hechi*? Salisbury always looked forward to hearing from Hechi because her messages were so infrequent, tending to be pieces of art in themselves. Hechi would tell a story, or read a poem. Or she would dance, and her steps would be the words of a novel language which she would translate for her listener, her tiny hands waving in front of her. Hechi could make Salisbury laugh and then cry in the space of three sentences.

‘Hey!’ said Salisbury over her shoulder. ‘We’ve got a message from Hechi!’

Ksobi turned back from the door and his face split into a grin. ‘How is she?’

‘Don’t know yet!’

Its message delivered, the choo machine was now padding back and forth, its frontal extension dipping.

Salisbury squatted down and accessed it, entering consensorias, thanking it. When she dropped her hands the machine stayed a while, brushing round her legs. Then it trotted quickly away, leapt up onto the courtyard wall and disappeared without a backward glance. Salisbury moved over to a table and chairs and poured herself a glass of iced water from a waiting jug.

‘Hilary, could I see Hechi’s message please?’

‘One moment.’

The nchoi resource took some time to decrypt the message encoded in the nchoo virus, and then queried Salisbury for her preferred mode of access. Taking a sip of her water and brushing the hair back from her face, Salisbury chose combined visual access. A window snicked open, showing her Hechi’s face: oval and coffee, framed with long black hair; slit eyes above pale, thin lips.

‘Hello my friend.’ Hechi’s image in the window looked concerned. Her simulated voice sounded strained. ‘I think something is wrong in the Plunge.’ Salisbury stiffened, and frowned. ‘I don’t know why but the Mirror hasn’t unfurled yet, and... I’m *worried* Salisbury. I haven’t tried asking the Hub yet, and I haven’t tried orbital consensorias either. I wanted to contact you first.’ Hechi’s image looked almost afraid. ‘Salisbury, could you come out to the Plunge? I know I’m being stupid, but I would...’

‘Pause.’ Hechi’s image froze and the auditory tap fell silent.

*What was going on?*

Salisbury had been contacted by three other Cardinals that day, Rineanna, Niandankoro and Nipauin, all troubled by suspicions that things were not as they should be. And now Hechi, too. *Was some agency at work on Novagaia that she, or the Hub, was not aware of?* It did not seem credible. Salisbury pulled at the lobe of her ear, tugging contemplatively. ‘Continue.’ Hechi’s image in the window began moving again, her simulated voice quiet over the auditory tap. As she watched and listened, Salisbury tugged at her ear lobe harder and harder, and harder.

## Chapter Twenty

Ushogbo was the name of the only Cardinal ever to have died.

The Cardinal of Cardinals, Ushogbo was the first to realise the significance of the metacortex and the nature of teleological perception. She was the first to experience and understand the informational Cascade as reality. She was the one who schooled her fellow Cardinals in the powers of their own unique minds, who worked tirelessly to develop the potential of her unique Cardinal race, only 400 individuals strong. Even as Earth began to choke, her lung forests filling with sea water, Ushogbo drove herself and her fellow Cardinals to fulfil their grim vocation as managers of a new exodus, taking the human species out of an environment that had become inimical to it, and was turning increasingly so.

When Ushogbo disappeared in 48 BK., she was presumed dead.

But she could not be properly mourned. The Cardinals, driven by their own nature as altruistic perverts, could do little else but what they felt was right: helping the sad, tattered remnants of human kind. Grief had to wait. And so the mourning of her, of every Cardinal's dead sister, began on the Novagaian home she had never really seen: a unique, incomprehensible event. No Cardinal had died before her, or was likely to again so how should she be remembered?

Ushogbo was also the name of the smallest of Novagaia's four seas.

Ushogbo the sea was highly irregular in shape, representing the iconoclastic nature of the dead Cardinal's mind. It was blatantly unnatural and yet beautiful, which Ushogbo was too. Its waters were stained the colour of her beautiful skin, a clear, deep tan, like strong tea. The shoreline was cut and sliced with hundreds of narrow fjords, reflecting the convoluted sharpness of her intellect, some of which linked up, and gave rise to small inland lakes, signifying the accommodating shelter of her inner strength. Ushogbo was 200 kilometres across at its widest point, dotted with innumerable small islands, each a unique ecosphere, a symbol of the dead Cardinal's special, irreplaceable nature. Ushogbo had warm placid ledges, and deep plunging troughs, reaching down through the outer skin of the orbital to depths of four kilometres in places, a physical topography mirroring a psychic topography. The waters teemed with life, biological species intermingling with variations on a choo machine theme, preserving the memory of Ushogbo the Cardinal as a living entity.

Ushogbo was a map of a person.



Eight of them eventually began the Trip.

Manchester and Malvern, Melie, Aileeni and Flocanalog, Carys and Brock, and Tennys. For the first three days they walked across open prairie, stopping and camping out in time for the Terminator to wash over them at night, no other sound than the wind and their own voices to disturb the silence. The novice Novagaians were moved to contemplation. All the time they were aware of the dichotomy of their surroundings, so natural seeming yet actually so entirely *unnatural*. They only had to look into the distance, to see the world curving up into the sky, to have this unnaturalness reinforced.

Over the course of the fourth day the prairie was gradually replaced by narrow, mossy valleys, heavy with the smell of choo. Spotting the fleet charcoal shadows of the different constructs became a game for a while. These were the foothills of the great, oval-shaped plateau rising up out of the surface of Novagaia before them. The plateau was called the Mammoths. 300 kilometres along its longest axis, the Trippers would encounter the Antispinward shore of the sea called Ushogbo.

On the morning of the fifth day, Tennys rose early, hoping to be up on the top of the Mammoths before dawn, to see the Novagaian day begin. Brock had told him that the sight from the edge of the plateau had to be seen to be believed. This early in the morning, the head of the valley was still in darkness, and the

ground was damp with dew. The air was cool and sweet, the sky a sharp black, studded with innumerable tiny pinpricks. It was very quiet. Tennys accessed his resource and an icon snicked into place, a ghostly pearl against the darkness.

‘Comm, ask the tent to collapse please.’

‘One moment.’

Tennys put his hand on the top of the dark, flimsy looking tent, giving his resource time to manipulate the infection pocket and deliver an appropriate, tailored nchoo virus. Then he stood back and waited.

Before Tennys and the other three Trippers - Melie, Aileeni and Flocanalog - had set out from Chapel Halls, they had been infected with nchoo. The viral agents enabled a limited access to the many and varied choo machines with which Novagaia abounded. Tennys was not exactly uncomfortable about using the nchoo infection - that would be entirely irrational, of course. He just *happened* to have farmed out the task of communicating with choo machines to his resource.

*More efficient that way*, he reasoned.

The tent began to billow then fell in on itself, pulling in guy lines and supports. Slowly at first, then with a sudden quick contraction, the volume inside the structure shrank. The tent collapsed into a solid cylinder two metres long. The striated black fabric appeared to knot and wobble over the surface. Then it bulged out, six sinewy appendages sprouted from the base and the tent rose from the ground. Its central section was still contracting, appearing comically bulbous, the carbonsponge re-configuring under nchoo manipulation. The tent extruded two frontal extensions, triangular in shape at their tip. They dipped and scraped the ground, then rose again and separated, fixing Tennys from 90 degrees apart. He smelt cinnamon and orange as the machine padded over to him. He shook his head, still amazed at the versatility of Novagaian choo machines.

‘Wild shit.’

The choo machine nuzzled his hand with the tip of one frontal extension, tasting him. He smiled down at it, cupping his hand. He looked up. He thought he knew the best route but it was hard to be sure in the murky light. He accessed his resource and keyed a sequence on a ghostly control window. The grid of the optics tool snicked into place, magnifying and enhancing his vision. He found he was correct: a well-delineated path led up to the top of the 200 metre incline, snaking diagonally across the cliff. Disabling the optics tool, Tennys hefted his pack onto his shoulders. Taking a last glance at the cluster of silent tents around him, he turned, and headed away from the little camp.

An hour later, he was three quarters of the way up the cliff. Away from the demands of social interaction and the effort of conversation, Tennys felt, as he always did, both happy and liberated, and sad and trapped.

He felt happy because the pack on his back was light and comfortable, because he had food and shelter, and because he could go where and when he pleased. And he felt liberated because he had the time to *think*, which was the most precious thing of all. He could think to his heart’s content about Manchester and the possibility of exploring the Histories with her and about the kindness of Carys and Brock and the eccentricity of Malvern, and he could cogitate upon his own feet and how they felt and about breakfast and sleep and Melie’s hair and her legs and her *tail! She had a tail!* and Novagaia and Water and what he knew of the man from Marineris and Shells and the Fall room and the taste of eggs in a pod over a small lake and then Memecast - but only briefly - and Buses and choo machines and old systems of



religious belief.

So, he felt happy. But he was sad also, because he realised that he was being solitary and unsociable and internal and appreciated - albeit intellectually, and hence abstractly - the disadvantageous consequences of such behaviour. As much as Tennys felt that he would *like* to be an easier, less forced individual, it was not something that he found came naturally to him. Like when he had met the three other Trippers in Chapel Halls for the first time, for example. He had been distant but not impolite when he shook hands with the tall, gaunt man from Marineris. He had grinned stupidly at the large woman from Godsfollicle. And he had become a gibbering mute when introduced to the young woman from Sesquoia, stymied by her oatmeal blond hair and aloofness. And she, particularly, hadn't liked the fact he was from Austerity, even though he tried to tell her he hated the place too.

Tennys winced, and sighed disconsolately as he remembered the incident, feeling echoes of embarrassment heat his cheeks. *Why are you such an idiot, Tennys?* he asked himself. *Why is everything so difficult for you?* He shook his head, looking back down the cliff. He could see the little cluster of tents and the larger, squat forms of the Trees. He looked up, out along the length of the valley. Trying to follow its shape as it curved round to the right, he allowed his vision to go higher, into the distance.

The Terminator.

*There it was! Do I have enough time?*

He accessed his resource. 'Comm, how far away is the dawn?'

The pearly icon snicked open. 'Hub resource reports Terminator 65 kilometres distant.'

'And when will the Terminator reach the edge of the Mammoths?'

'21 minutes and 13 seconds.'

'Thank you Comm.' Tennys disabled the tap. *Twenty minutes!* He began to climb faster, but in the end had three minutes to spare at the top of his climb. He sat down on the damp grass and shrugged off his pack. He reached inside for his breakfast, supplied by the Tree. He withdrew a plump green skinned fruit and bit into it hungrily. The accompanying choo machine leaped nimbly up onto the Mammoths proper some metres away from him, a silent, chocolate striped shadow. It trotted over to him and stood by his side, its two frontal extensions level with his shoulder. He accessed his resource, consulting a window. The Terminator was 13 kilometres away. He could see it clearly now.

Out ahead of him, dark was being overwhelmed by light, sweeping across Novagaia in a swathe 300 kilometres wide. Behind the Terminator, on the floor of the orbital, Tennys could see the prairie they had crossed in the last couple of days, waking up to the linear morning. Ahead of the Terminator it was dark, with the foothills of the Mammoths still hidden and mysterious. But the Terminator was remorseless, and banished all shadows in its passing. Fascinated and awe-struck, Tennys watched as the Terminator wobbled and became a fractal line as it passed over the foothills of the Mammoths. He bit into his breakfast fruit and chewed, enjoying the freshness and the tart juice cleansing his morning mouth. He looked to his left. He knew that 150 kilometres away was one Rim wall. To the right, the same distance, the other Rim wall. And between the two, the Terminator, approaching inexorably.

A river of light began flowing down the valley, sending boulders and hummocks into sharp relief before flooding them with luminescence. The river crawled up to the camp at the base of the cliff, and then shot

sharply up the incline itself, bathing Tennys in warm, bright sunlight. He blinked in delight, turning his face upwards, closing his eyes, feeling the warmth on his cheeks. He felt something awaken in the Terminator's passing, some spirit of joy. Opening his eyes, he turned to see the Terminator striding off across the Mammoths, leaving morning in its wake. The choo machine had taken off after the terminating wall of light, chasing it. Tennys could just make it out, a little black speck bounding away across the green expanse.

Tennys turned back to the view out over the cliff. 80 kilometres Antispinward and Chapel Halls would have had half an hour of dawn already. He bit into the fruit again and grimaced in satisfaction. He savaged the rest of it and threw the fleshy stone out over the drop. He reached into the pack again and... he had asked the Tree for... *yes!* Tennys pulled the doughnut out and bit into it hungrily. Custard spurted from a rent in its side and dribbled down his chin. Tennys grinned, and let it dribble, licking his lips. He stood up, threw his arms wide, and hooted, spraying bits of doughnut widely.

*'Waahh hah!Woo hoo!!'*

The sound disappeared without echo. Tennys put his doughnut down, and unbuttoned the flies of his trousers. Pulling out his penis, he urinated luxuriously out over the cliff, finding child-like delight in the trajectory of the stream. He hooted again, louder, and then yelled in surprise as the urine stream suddenly veered in mid-air and came back towards him, blown in by the wind gusting straight up the cliff face. He tried to waddle back from the cliff edge with both hands at his crotch. The stream splashed the lower half of his left trouser leg and both shoes. He laughed. He didn't much care but turned to the side anyway to finish his ablution.

He was disappointed to learn later that he had pissed on his doughnut.



100 kilometres Spinward of Tennys, and 50 kilometres to Starboard, was a gouge in the skin of the Mammoths. A serrated depression 50 metres across, 30 metres at its deepest point and roofed with a single diamond crystal. Tethered to the roof on impossibly slender cables were platforms hanging at all levels in the enclosed volume, some little more than a metre on a side, some hundreds of metres square. All of the platforms had foliage spilling off their edge and sprouting from their centres. Thick vines extended the vegetable hand of friendship to platforms lower down. The small, ebony forms of arboreal choo scuttled back and forth along the vines and guy cables.

The walls of the depression, similarly, were strewn with dense green flora, broken at irregular intervals by wide ledges of varying sizes, jutting out from the sides of the bowl itself. Slender spiral stairs led from ledge to ledge, themselves linked to tethered platforms by improbable arcing bridges. Many of the ledges cut into the side of the bowl lead to chambers and rooms inside the substance of Novagaia itself. And in one such room, buried at the back of a ledge near the crystalline roof of the bowl, Rineanna was receiving her friend Albany.

‘Umm.’

Rineanna savoured the first few moments of the delicious insertion, allowing Yoni to kiss with labial modesty. She sank a little, her eyes fixed on the pale brown of Albany’s own, watching for his reactions. Yoni gaped slightly, giving of herself, and Vajra probed her a little deeper. Rineanna paused, drawing out the moment.

‘Rineanna.’ Albany traced a finger along Rineanna’s spine. He felt himself begin to tremble, awe-struck with the enormity of sensation.

‘Ummm. Albany.’ Rineanna moved her head to one side as Albany brought a hand out from behind her back, and traced a finger down her cheek, over her collar bone, circling round the curve of a breast. She leant back from him, trusting to his hand, and he stroked her plump belly. She let her head fall forward, and moved her hips, urging Vajra deeper inside her, Yoni eagerly accommodating him. She put her arms around Albany’s neck, and pressed his head to her chest, enjoying the sensation of his hair, feeling the moist embrace of his mouth on a nipple. ‘Ah... Albany!’

Albany cupped her head, stroking her hair, pulling her toward him, releasing the hold on her back and moving his hands to cup her buttocks. She pressed up against him, completing the silken insertion.

‘Oh... Rineanna!’ Albany had the sound forced out of him almost as a laugh, the sensation was so exquisite. He pulled Rineanna’s head away from his shoulder, and looked deeply into her face. It was suffused and glowing, her eyes hooded and a little unfocused. They kissed for the first time and she was like a little bird, eager for the squid from its parent’s throat. She broke the kiss and leant away from him, showing herself off.

‘Umm.’ She licked her lips and began to slowly rise.

‘Oh... oh my !’ Rineanna leaned forward and chuckled into Albany’s ear, the sensation of her mouth next to his ear causing the whole side of his head to tingle and jump. ‘Oh my goodness!’ Rineanna paused and began to sink slowly down. ‘Oh... oh Rineanna!’ He closed his eyes, leaning his head back, smiling luxuriously. Rineanna grinned and kissed his throat, her body beginning to flood deliciously with sensation.

Rineanna *liked* Albany.



On the night of the fourth day of the Trip, sitting cross-legged by a crackling fire, with the small Cardinal next to him, Tennys asked Manchester where they were headed next on the Trip. She told him, downloading information directly from her resource to his. It was a place called Sonapur on the nearer, Antispinward shore of Ushogbo. 300 plus kilometres away. Six or seven days walk, at a brisk pace.

‘I’ll see you there.’

‘You want to get there by yourself?’ Manchester flicked her eyes up to him and then returned them to her lap, where she was rubbing a handful of dried leaves to dust in one palm with the thumb of her other hand.

‘Yeah, I’d like to try.’ Tennys abruptly became conscious that his actions might be perceived as a social slight, perhaps indicating he did not like one or more of the other Trippers. He became alarmed and tried to justify himself further. ‘I just sort of feel that I can think better when I don’t have to...’ he trailed off, and looked at Manchester, pained. She returned his gaze levelly. He shrugged again, and cleared his throat. ‘I just like my own company, I guess.’

Manchester looked down into her lap. ‘That’s fine.’ She was absorbed in her craft. She deposited the dusty leaves into a gauze bowl, set into the lid of a ceramic pot. She adjusted the positioning of the leaves, tidying them with her little finger. She glanced up. ‘But we’ll get there ahead of you.’ The small pot sprouted a transparent tube from the lid. This tube formed an arch, and came down to penetrate the top of a much bigger pot, this one transparent. The entrance and exit of the tubing to and from both pots was sealed tight. ‘Where did I put that...?’ Manchester rose smoothly from her lotus and looked about, pursing her lips. ‘Ah!’ She retrieved a water canteen and began to fill the larger pot with water, until it was half to three quarters full.

Tennys watched her carefully. ‘So you don’t mind or anything?’

‘Don’t mind what?’ Manchester began rooting through the large number of pockets on her poncho, evidently looking for something.

‘If I take myself off for a while.’ Tennys nodded his head to one side.

Manchester was silent for a moment and looked at him more carefully. ‘You are a free agent on Novagaia Tennys, you do know that, don’t you? You can go where you want, as you want. You don’t have to ask me or anyone else for permission. No one will mind if you do your own thing.’ She stared at him and he felt himself recoil a little under her scrutiny. ‘No one is going to think you are *avoiding* them,’ she continued with uncanny accuracy. ‘Of *course*, if you feel the need to find your own centre, I would *entirely* understand and *please*, by all means...’ she paused, and her previously grave face broke into a smile. ‘Feel *completely* free to do so.’

‘Ah! Oh. Uh. Thanks.’

‘My pleasure. Ah *there* it is!’ Manchester pulled a slim cylinder, perhaps ten centimetres long, from one of her pockets and returned her attention to the water pot. A second flexible tube sprouted from its lid, in addition to the tubing already linking the two pots. Manchester put the end of this second tube in her mouth. She sucked experimentally. The pot gurgled pleasantly. Manchester dropped the tube from her mouth and harrumphed in pleasure. Manipulating the slim cylinder she had found earlier with one hand, she took the tube in her mouth with the other, and applied a flame to the leaves in their gauze bowl. She sucked gently. Green tinted smoke began to fill the volume of the water pot, bubbling up through the water beneath it. Manchester began to draw harder and the top of the pot became quickly transparent as she inhaled the smoke. She let the tube drop from her mouth, and hissed, twice, in quick succession. ‘And Tennys, try not to be so *pompous*.’

‘Yeah, yeah, I know.’ Tennys watched curiously as the Cardinal exhaled dragon breath from her nostrils. She was silent for a moment, and then smiled. She leant her head on one side.

‘Your turn.’

Tennys shook his head, smiling. ‘Not for me thanks.’

The Cardinal ran a hand over the end of her nose, and rubbed several times. She sniffed.

‘I’m sorry, you must have misheard me.’ She reached into a pouch hanging from her poncho. Pulling out a circular tin, she extracted a small thatch of Weed and replaced the tin in her poncho. She began rubbing at the dark strands with her thumb, breaking the fibres down. ‘I said... *your turn*. Now, this phrase may indicate a number of different things but in *this* specific context, it’s a little social meme, conveying the concept of willingness and readiness on my part to share some indigenous, Novagaian grown Euphoric with you. Now, generally speaking, rather than refuse, which gives offence, you say, "Alright", or "Yes please", or some such thing. Because, by doing this, you are entering the domain of social and personal *intercourse*, Tennys.’ The Cardinal was beginning to grin. ‘And I know this is all very difficult for you, but you really *must* learn, *really* you must.’ Tennys laughed despite himself. ‘So what do you say my young historian friend?’

‘Well, I say, "Alright". Or "Yes please", or some such thing,’ he replied. ‘OK, so what do I do with this?’ He knelt to inspect the apparatus. He smelt the musky, herby smell of the bowl. ‘And what is that stuff anyway?’ He pointed at the dusty Weed in Manchester’s cupped palm.

Manchester continued her ministrations to the dried Weed.

‘I see we have made an excellent start in first level personal interaction: asking questions, being interested, good sign, very good. See that tube?’

‘Which, this one?’ Tennys took hold of the appropriate tube and flexed it experimentally.

‘Right, that one. A smile would have been nice at that moment, but never mind, can’t expect to get everything right straight away... ooh, there we are!’ Tennys grinned up at the Cardinal. ‘Now, what you do my young friend, is just suck when I tell you to... basically.’ She ended slowly, bending over the makeshift pipe and filling the small bowl carefully. ‘OK.’ She tidied the heap. ‘Ready?’

‘I reckon.’ Tennys was nervous. ‘What am I about to imbibe? Take. Smoke. Whatever?’

Manchester indicated for Tennys to put the tube in his mouth.

‘Part of Novagaia really. Weed is a mild euphoric with...’ She applied a flame to the small mound of crushed leaves. ‘Primarily a serotonergic effect, resulting in the elevation of certain euphoric telltales. It has some interesting variations from source to source, too, though that’s mainly because of nchoo infections, which effect their own nice, little changes. OK, nice and gentle to begin with, no problem at all.’ Manchester watched as Tennys began to suck tentatively. ‘Now a little harder. You see, we have our reservoir of cool smoke here.’ She indicated the top half of the water pot, ‘And there you go,’ she finished, as the chamber quickly emptied. Tennys sat back from the pipe, and tried to emulate Manchester, holding the smoke in his lungs for as long as possible. He managed about half a second, before exploding in a fit of coughing. Manchester uncurled herself from her lotus and stepped around behind him. She began to pummel and knead his back. ‘Weed is a prescribed part of the Trip as a matter of fact. Well, a prescribed part of *my* kind of Trip, anyway. I find that it facilitates a greater opening of the individual mind to the ecopoesis.’

‘Oh yes? Umm, that’s really good. Thanks.’

Manchester returned to her position. The two of them sat quiet for some moments, drifting on the Weed. Manchester chuckled, remembering something.

‘What did you mean when you said "We’ll get there before you."?’ Tennys said presently. It felt like about an hour since he had last spoken. He felt his eyes drawn into the dance of the flames. The air seemed to have taken on a very subtle orange tinge.

‘I meant, if you go by yourself, the rest of us will get to Ushogbo before you.’

*Why was Manchester speaking so slowly?* Tennys wondered. He raised his eyes from the flames and looked around the fire. Carys and Brock were deep in conversation with Flocanalog to his right, and Malvern was flirting outrageously with Melie and Aileeni. Tennys tapped into their conversations, smiling at the pleasant sound of their voices, feeling happy to be sharing this time with these people.

‘I might get there before you. You never know.’ He turned to look at Manchester. His head seemed to bounce very slightly when it reached its furthest twist. His eyes struggled a little, and then they focused on Manchester’s mouth. The air between them appeared to wobble softly.

‘It’s certainly possible,’ Manchester blinked slowly. ‘But not likely.’

Tennys turned his gaze back to the fire. He grinned. ‘I’m not so certain.’ His smile widened and he put his hands behind his head, stretching out his legs, which felt very *light* all of a sudden. ‘I bet I could get there before you lot, especially if you’re walking.’

Manchester turned to look at him again, a look of delighted surprise on her face. ‘Are you suggesting that we *wager* young man?’

Tennys paused, considering. Time stretched languorously. ‘Yes, I am.’

‘You’re on. What do you want to bet?’

Tennys goggled at her. *She said that really fast! How did she do that?*

‘Uh. Oh. Umm. Don’t know. We could ask the others?’

‘Excellent idea!’ Manchester and sat up. ‘Malvern!’

Malvern glanced over at Manchester from the capacious cushion of Aileeni’s lap. ‘Yes?’

Carys looked over at Manchester, and gestured to Brock and Flocanalog that Manchester wanted to speak. ‘Manchester?’

‘Tennys and I have undertaken a small bet.’ Manchester said.

‘Have you now?’ Carys laughed, glancing at Tennys and back to Manchester again.

‘Yes. Tennys is walking on alone to Sonepur and if he beats the rest of us to it, he wins. If he doesn’t, he loses. Simple as that. So, I want suggestions for forfeits please.’

‘Not much of a contest if he’s walking, surely Manchester?’ Malvern asked. ‘We’ll be...’

‘Malvern!’

Malvern understood immediately, and changed what he was going to say seamlessly. ‘...hard pressed to beat him, I’m sure, young, fit chap like that.’

Tennys caught a wisp of a deception. ‘Hey, what’s that all about?’ He looked in turn at Malvern and Manchester.

‘Nothing. Now, if he wins, what do *I* have to do? And if I win, what does *he* have to do?’ A barrage of suggestions erupted from around the fire.

‘If you lose...’ began Malvern, pointing at Manchester, but she waved him silent.

‘Nothing *disgracefully* sexual please, Malvern.’

‘My dear Manchester, where’s the fun in...’

‘Shut up Malvern. Anybody else?’

‘How about, if you lose then you have to cook us all *oysterflower* soup and then...’ Carys began.

‘That’s not a *forfeit*,’ snorted Malvern. ‘Manchester *loves* cooking. It’s got to be something *embarrassing*, or...’

‘Shut up Malvern,’ said Carys and Manchester together, laughing.

Tennys listened to the suggested forfeits, amusement, horror and distress cycling through him as they came.

‘Manchester should swim naked in Ushogbo and be tea stained all week!’ said Brock.

‘The skinny one...’ She meant Tennys. ‘...should dance a real polka!’ said Aileeni.

‘The mal’s got to be buried in sand all day on the beach and left to fry!’ said Melie.

‘Manchester should tell us her life story,’ said Flocanalog.

‘Yes,’ said Tennys loudly. ‘I vote for that.’

Malvern groaned theatrically. ‘That’s not a forfeit for *Manchester*, that’s a forfeit for the *rest* of us!’ Manchester threw a cushion at him. ‘I know, I know,’ he said quickly, rising from Aileeni lap. ‘If Tennys loses...’

‘Malvern...’ warned Manchester slowly.

‘No no no! No, honestly. Look, if Tennys loses, how about if...’

‘If Tennys loses, he massages Manchester, and vice versa,’ said Carys. ‘How’s that?’

‘Carys, that’s what *I* was going to say!’ Malvern protested.

‘Excellent idea!’ said Manchester. ‘After all that exercise, a good *rub down* would be *splendid*.’

Tennys quailed. ‘I can’t do massage!’

‘Oh then you *must* learn Tennys.’ Malvern demanded. ‘I myself am adept in 15 different schools of massage, ranging from...’

‘I know,’ said Brock. ‘What about, if Tennys loses, then he has to learn Tree consensorias, because he’s still using his resource for communication, so that would be a constructive forfeit, yes?’ He sought about for consensus, hearing Carys and Flocanalog murmur in assent. ‘And if Tennys wins, then Manchester has to tell us all about herself like Floc suggested because...’

‘Because everyone would enjoy the story,’ said Carys. ‘Apart from Malvern and he doesn’t count.’

‘Precisely.’

Melie looked at Carys and turned to Manchester. ‘Yeah, so would I. Go for it.’

There the matter was settled. If Tennys didn’t get to Sonepur on the Antispinward shore of Ushogbo before Manchester and the others, he would have to learn to overcome his reluctance at using the nchoo infection pockets, and enter the shared computational space where his choo met machine choo in the consensorias. The prospect both daunted and thrilled him at the same time. If he *won* however, then Manchester would have to tell the Trippers her story. That was Flocanalog’s suggestion, he recalled. Tennys harrumphed to himself, a sure sign his curiosity had been engaged.



Albany’s visit to Rineanna’s home had not been merely courteous. Rineanna and Albany shared a passion for consensorias with the Mammoths’ most distinctive choo inhabitants. Rineanna had grown her home on the Mammoths simply because the machines proliferated there, the Trees of the Mammoths’ plateau specialising in gestating such constructs. It was only recently that she had begun to notice unusual behaviours and interactions in the machines. The changes were slight, and someone less experienced than her might not even have noticed them.

But she had.

The two Cardinals were sitting on a platform suspended twenty five metres from the diamond roof. Albany was shaping sticky, spiced rice into small patties, and depositing them in hot oil. Rineanna was speaking.

‘If we start here...’ she said. Albany glanced at a resource window; he had slaved his resource together



with hers, and the machines were co-operating to create a shared virtual space for both Cardinals. He saw where Rineanna indicated on the map, and nodded. 'There's a large Tree copse nearby, I think, we should be able to attract a good sized hurl.' Albany nodded, glanced up at Rineanna. She was slicing spinach leaves into a large bowl, already filled with a huge mound of salad.

'Hungry?'

'Oh.' She put down her knife and turned to face him. 'I want you to look for any overtly immoral behaviour.'

'OK,' he said slowly, considering the implications. The morality of the Novagaian ecopoesis was so deeply ingrained in all species of choo machine that violation of it was simply unheard of. 'You must mean something... *extraordinary*, yes?'

'Yes.' She wavered, uncertain. 'And no.' She put her finger to her mouth, looking up. Albany recognised the gesture. 'It's more like...' She paused again, tried a different tack. 'They are *definitely* displaying less cohesion in the hurl for example, as if they're not communicating as well as they should.'

Albany reached beside him, and retrieved a slatted spoon, using it to remove the golden patties from the hot oil.

'You suspect an nchoo infection of some kind?'

'Something to check,' agreed Rineanna. She drew a deep breath. 'And simple behavioural changes notwithstanding, if we can persuade one of them to give us access, you'll find the consensorias different too: I think this is the most disturbing part for me. The machines feel like they're being *threatened* by something. The consensorias is sparse and cold. It's like they've lost some of their freedom.'

Albany listened. He had learned very early on in his life the unique, marked non-linearities in Rineanna's thinking and logic. He had seen her struggle with the simplest concept, and yet grasp the most baffling with unconscious ease. He was often dazzled by the force of her insights. He would always trust her intuition.

'I also want us both to spawn Copies in the Cascade. Maybe this is part of something else that's going on...' Rineanna drew a deep breath to try and dispel her mood. Her stomach growled. She was hungry. 'Anyway, let's get that food on the table. I'm starving.'

'Righty-ho.' Albany retrieved the last of the rice patties and set the food down on the table. 'Tuck in,' he said, but Rineanna already had.



The figure was alone on the Mammoths. Once, it had been accompanied by a choo machine, but that

had ran off and left him. The Terminator had swept over the figure almost two hours ago, leaving only the greatly diminished albedo of the jagged, shrunken lump of Lunar to light his way.

The figure saw something glimmering in the pale light, up ahead of him. Perhaps water. But as he got closer, he realised that it was not. Up close, it was a surface. A transparent surface. He could see through it, to a cave of sorts he reasoned, full of plants and platforms and... small naked people. The figure gaped and felt something nudge him in the back. Startled, he gave a yell and tried to stand. A choo machine recoiled from him. He flailed over backwards, losing his footing. Then, taking a desperate look behind him, he fell backwards into nothing to come crashing down onto the diamond roof of Rineanna's home, setting off a clattering howl of noise from the platforms below.

When Rineanna reached the surface, the figure was still trying to pick himself up and off the slippery diamond, and failing. He looked desperately, miserably unhappy.

'I'm sorry!' said Tennys. 'I really am! I'm sorry, I didn't realise.'

## Chapter Twenty One

Melie was not exactly *glad* that the geek was gone.

But first impressions persist. When she first met him he said he was from *Austerity* and just the mere mention of the word made her think of Gervane's ugly father or whatever he was, which in turn made her realise that she harboured a good deal of anger towards that particular individual. In fact, it made her realise she was fucking *really* angry with him. *Just who was that pervert to treat her like that anyway?* So when the geek said he was from Austerity, he unwittingly and instantly created a *bad* vibe.

'Austerity, huh? Crock of fucking *shit* if you ask me.' Melie glared down contemptuously: the geek was a good 10 centimetres shorter than her.

'Ah! Oh. Uh. Yes.' The geek tried to smile, peering up at her uncertainly. 'I mean, I agree! Horrible place. Umm... yes. As you say, a umm... Ah! Oh. Uh, well, OK then. Yes. Bye.' He toyed with the glass in his hand. Presently he appeared to become fascinated with a vine trailing over the edge of the terrace wall.

'Not very interesting then?' Aileeni asked.

'One, he's dull as fucking shit and about as much fun. Two, he's from Austerity which I shouldn't hold against him, but I *do*. And three, he doesn't know how to hold a frigging conversation and wouldn't know a truly *sexy* thought if it came up and slapped him in the fucking face. Last thing I fucking need is a *geek* for company, d'ya know what I mean?'

Aileeni looked at her young friend. Her tail was thrashing. Aileeni had learned what this meant.

'Anything apart from irritating young mal bothering you girl?' she asked, but it was not really a question.

Melie drew a deep breath, her hands on her hips, struggling to control a sudden powerful feeling of injustice. ‘Nothing a good fucking *castration* wouldn’t sort out!’ She almost laughed at the vehemence of her own words, but some part of her *wanted* to be angry.

‘Heavens.’

‘I’m fucking really *pissed off* with that mal, Aileeni, you know, the one from Austerity? I hadn’t realised it before. He tried to *shoot* me. He wanted to *kill* me, and what for? Because I had sex with someone he reckoned was a reincarnated *saint*? What kind of fucking *shit* is that? That fucking Austerity shit hole is full of stupid mal with no fucking *knowledge*. What did that mal know about anything *important*? Nothing! All he knew about was pain and hurt and power and what a fucking *wanker*!’

‘Heavens.’



The little Cardinal that Melie had met on the Hub did not seem in any particular hurry to move the Trippers along and they stayed camped at the head of the valley for a further two days after Tennys left.

On the morning of that first day, after hearing the sighs and moans coming from the portion of the big choo machine tent in which Malvern and Aileeni had slept the previous night, Melie went walkabout alone, hiking up and over the knuckles of the Mammoths. The ridges separating the innumerable steep valleys were often quite narrow, and the view from them was always changing. Melie took her pouch of Godsfollicle Weed with her, and sat for many hours on different ridges, watching the view, smoking and drifting, listening for the voice of Novagaia much as she had listened for a similar voice on Sesquoia, moving on, and finding other places to sit and be.

On the morning of the second day, the fifth day of the Trip itself, Manchester came walk about with her.

‘There’s a little place I know,’ she said, as the two women finished off the remains of their breakfast. ‘Quite beautiful, a clear deep rock pool sliced into the back of a narrow cleft. An exquisite spot.’ Manchester popped a grape into her mouth and chewed slowly.

‘Sounds great.’ Melie nipped at the remaining flesh of a plump melon slice. ‘How far?’

‘Couple of hours? At a stroll. The water there is splendid for swimming. Do you swim at all Melie?’

‘Yeah, well, I can swim, I haven’t for ages though.’ Melie paused, trying to remember. ‘The last time must have been on Lattice, four... five years ago. But that wasn’t really swimming.’

‘Then we’ll take some towels. I believe that a particularly nice Weed variation should be flowering there just about now, too.’

‘Really?’ Melie became interested. ‘What’s it like? Can we get some?’

‘Yes.’ Manchester wiped her hands on her leggings. ‘It’s very good, actually, I harvest a little every time I pass. What’s that you’ve got there?’ Manchester indicated the small pouch slung over Melie’s chest.

‘I got this on Gods, at the Oil Burner before I came. It’s an Ascii hydroponic I think, pretty nice stuff... D’ya want to try some?’

‘Yeah!’ said Manchester, exaggeratedly.

Melie nodded her head. ‘Yo.’

The Cardinal and her struck up a conversation on the relative merits of Ascii hydroponic versus Lattice dust inhalants versus oily Sesquioian gold sap bars. And, setting out on their stroll an hour or so later, Melie and Manchester continued to talk animatedly. The young Sesquioian was drawn to the clash of opposites in the small Cardinal, the young and the old of her, her warmth and her humour, the laughter from the small mouth, and the wisdom from the centuries old mind.

‘How is it that you are here Melie?’ Manchester asked her, as they paused at the top of the ridge overlooking their camp.

For an instant, at the Cardinal’s question, a dark gust of fear whipped up behind Melie’s eyes: she was on the shuttle with Aileeni, the Blit happening, freaking her out, scaring her out of her mind, and then just as quickly fading. The Blit. *What was it? What was wrong with her?* She didn’t even want to think about it, although she knew that she should, should deal with it. But not now, not yet.

‘Why am I on Novagaia?’ Melie looked out over the valley spread below them. She could see motile choo from the Tree gambolling on the far slopes. She let her hand sweep across what she saw. ‘For this really. To live the ecopoesis, yes? Because, you know, I’ve been scumming around all over Koy for four or five years now, going from one place to the other, you know, trying out different ways of living and loving. But recently, I’ve realised that... I decided that I wanted... some...’ Melie shrugged. ‘Don’t know the words but I wanted *this*. I wanted some time and some space and just some peace, I guess.’ Melie’s tail coiled up to her waist, and she picked at its silken tip, a curiously shy gesture. She looked down, and then up again, to meet the Cardinal’s eyes. ‘D’you know what I mean?’

Manchester nodded, her face gentle. She had learned a great deal about Melie in the last thirty seconds. She knew Melie was lying to her, though not maliciously. She knew Melie was scared about something, though not what. And she also knew that she liked the young woman from Sesquioia.

‘Yes. Yes, I do.’

‘Like, you know, I was on Lattice for a while, I had some great sex and met some really... really *good* people there, you know, but wow, really expensive place to live. You really have to work for your leisure on Lattice. And I’ve done the Helicon thing too, and Verest. I’ve picked fruit on Plenty and sailed Birds inside Daedulusorrow and sold my body on Ascii but...’

Manchester looked up sharply. ‘What did you do on Ascii?’

‘Well...’ Melie dropped her head. ‘It’s kind of complicated...’ She put her hand over her mouth, suppressing a giggle.

‘You *have* to tell me!’ Manchester reached out and touched Melie’s hand, smiling at her. ‘Come on, we’ll talk and walk, I want to hear everything.’ Manchester indicated, and they began walking up the spine of the ridge, towards the plateau top of the Mammoths. ‘So you were on Ascii?’ Manchester prompted. ‘Then what happened?’

‘Yes!’ Melie began to gather her thoughts, pleased at the prospect of telling a story. ‘Well, I’d just come in from Plenty, pretty wasted really but with a really nice tan from all that time in UV you know so I was feeling pretty good, you know.’ Melie did a little shimmy. ‘Nothing like a good bit of UV! Anyway I had the name of this fem, Clerijey she was called - what a hoot she turned out to be, but that’s another story - from another fem on the farm on Plenty I’d been working, yeah?’ Melie checked that the Cardinal was following, and continued when Manchester nodded. ‘And I stayed with her for a couple of months, and we became really good friends, we went dancing a lot, smoked ourselves silly, did lots of Euphorics, you know, and met some good people, and *one* of them...’ Melie was forced to take a deep breath. ‘Was a mal called Ruj Arrsgump...’ This time Manchester sniggered. ‘No, he was really sweet, I really liked him and he had a great body too. Anyway, anyway!’ Melie waved her hands. ‘Ruj was someone pretty important in Ascii politics. He tried to explain it to me a couple of times. He said Ascii was a... oh what was it...? a sibernetik meritokrasee.’

‘Oh yes. The Novagaian ecopoesis draws some inspiration from cybernetic meritocracy, although politically, Novagaia is more of a libertarian ecolonomy. Marineris is similar.’ Melie glanced down at the Cardinal in surprise, who looked up at her in turn. ‘What?’

‘Sorry. Forgot who I was talking to for a minute, I think.’

‘Oh.’

‘Where was I?’

‘Ruj the politician...?’

Melie’s face lit up. ‘Yes! Really nice mal. We ended up having a thing for a while...’

‘A thing? What, you gestated some kind of mechanism?’

Melie looked at the Cardinal blankly. ‘No. We had a *thing*, you know, *sex* and yoghurt on the tummy and long baths and stuff, it was really nice.’

Manchester’s mouth formed a little "oh". ‘You like yoghurt on the tummy too?’

‘Too right,’ Melie laughed heartily. ‘It’s good for thrush too, I find.’ Manchester agreed and the two women digressed to discuss fungal infections of the vagina for the next several minutes. ‘Anyway, Ruj and Ascii,’ said Melie eventually.

‘Yes.’

‘So we had this thing for a while, and I didn’t birth anyone or anything and it was really nice. Only problem was that I was getting short of resources. Ruj and Clerijey were really generous, but I like being able to look after myself Manchester you know? So I was thinking maybe I would have to move on and sort myself out. And that’s what I told Clerijey and Ruj, and they were OK about it, sorry to see me leave though I could tell. Ruj got pretty down for a couple of days, and I didn’t see him much. But then

he came *back* , and he was pretty excited. He said he knew about some work I could do, which would let me stay on Ascii for a little longer, if I wanted to.'

'And what kind of work was that? This is the interesting bit!'

'Well, not what you might think. I sold my body, sure, but not my *real* body.'

Manchester's brow creased and she pursed her lips. 'What?'

'Ah hah! On Ascii, right, they keep lots of libraries, full of all kind of stuff. Loads of BK. stuff. Loads of AK. stuff too, art and porn and lit and vid, you name it. The Culture Bank they call it. Anyway, Ruj was friends with an artist, who wanted models for this... piece of *art* she was doing.'

'So you were a *model* .' Manchester sounded almost disappointed. 'I thought it would be something really *compromising* .'

'No, not a model. Well, not really, because what I didn't realise was that this was *Ascii* yeah, not Helicon, so artists work with *choi* all the time. And like, when I sold my body to Paula, I sold a high res *copy* of it...'

'Of course! I was trying to remember where I'd heard about Ascii, I think it was from Malvern.' Manchester looked at Melie carefully, a crafty smile on her face. 'These copies are usually taken in a particular setting aren't they? What was yours?'

Melie blithely flicked her long hair back from her face. 'Oh well, Paula was quite into the *sensual* you know, so part of the deal was that *nchoi* would, you know, record all the nice things that we're happening to me with Ruj, you know, being all...'

'Yoghurty?'

'Right on! Easiest work I ever did!' The two women laughed.

'So you're in the Culture Bank of Ascii having sex. What a honour. Are you proud?'

'Yeah. Well, I think so. I never got to see the finished piece, so I don't really know how it turned out.'

Melie and Manchester reached the top of the ridge where it led like a steep ramp onto the flat top of the Mammoths. They turned right, peering out over the cliff that formed the back of the valley which opened up below them.

'That's a shame.'

'Yeah, I should go back and see it some day, I guess.' Melie looked across the grassy roof of the Mammoths plains to her left. Something caught her eye in the distance, a dark smudge travelling quickly across her field of view. 'Manchester?' She glanced down as the Cardinal turned her head. 'What's that?'

Melie pointed and Manchester followed her finger.

'Ah!' Manchester was silent for a moment. Then she smiled. 'Can your resource uptool an optics window for you?'

‘No, don’t think so. Never asked. Hang on.’ Melie called up a resource window and silently interrogated the nchoi machine, watching its responses scroll ghostly on the clear black window. ‘Nah. Crock of shit.’ She disabled the window.

‘Oh, well, we could try slaving them together, but... never mind, you’ll see them soon enough.’

‘See what?’

‘Our transportation to Ushogbo.’

Melie looked down at Manchester with a confused expression on her face. ‘I thought we were walking. You and the geek have a bet on, don’t you?’

Manchester laughed at Melie’s description. ‘The geek and I do. But I’m going to *welch* .’

‘Yeah? Cool.’

‘Oh good, do you think so? I do like breaking rules, they’re so *pompous*!’

Pause.

‘Refresh my memory. What’s a geek again?’

Melie looked down at Manchester sharply. ‘Jeez, you know shit for someone five centuries old.’



‘Manchester?’

‘Umm?’

Melie and the small Cardinal were sitting on an improbable beach of dark, fine sand, using their clothing as impromptu blankets. Manchester wore a loose vest and a scarf at her throat. She was otherwise naked. She had her eyes closed and her hands palm down on the ground, her hair drying in the warm wind.

‘What are you doing?’

Melie, like the Cardinal, was naked except for her thin shirt. There was a small, clear pool before them. The two bulbous Trees at either end of the beach attested to its artificiality, exquisitely crafted though it was. Across from the beach, a vulval opening 20 metres high in the face of the Mammoths spilled bright reflected Sol into the subterranean chamber.

‘I’m listening.’

Melie studied Manchester’s face. Her eyes were like dark, pooled chocolate, large in her petite face. Her short chestnut hair glinted richly in the light where it was still wet.

‘To what?’

Manchester smiled. ‘To Novagaia.’

Pause.

‘What, like the *orbital*? ’

‘Yes.’

Pause.

‘No shit?’

Manchester smiled. ‘Novagaia’s awareness is around us all the time. I have nchoo pockets in my fingers...’ Manchester raised her hands, and offered them, palms uppermost, for Melie’s inspection. ‘This kind of silica is always good for consensorias. Here, take my hands.’ Melie hesitated but took the Cardinal’s small hands in hers. She ran her thumbs over the tips of Manchester’s fingers. They were smooth.

‘Nothing there.’ Melie flicked her eyes up to meet Manchester’s.

‘With nchoo you can share consensorias with other choo constructs, with Trees and with Shells. And if you try really hard, you can also attain consensorias with the orbital, with the totality of everything Novagaian. Here, I’ll show you how it works...’ Manchester reversed roles and took Melie’s hands in hers. She shuffled closer, still cross-legged, and pressed the tips of her fingertips to Melie’s own. The two women were now joined at the hands, their palms at chest height. ‘Close your eyes,’ Manchester encouraged, and Melie did. She enjoyed the feel of the Manchester’s hands. *You can’t really know a person until you’ve touched them*, she always thought.

Manchester encouraged Melie to breathe with her, to take in slow lungfuls of air from the pit of the stomach, to clear her mind. Melie listened as Manchester began to speak.

‘If you learn the skills to direct consensorias then you can really begin to live the ecopoesis of Novagaia. So I’m going to try and get your nchoo to listen to mine. Yours is very young and hasn’t learnt enough about you yet to be really competent, but I know a few tricks.’

‘OK.’ Melie felt a tingling in her fingertip. *Or was that her imagination?* There was a tinkling of unreal sound and then Melie gave a jolt, as an intense wail of anguish welled up from within her, to be replaced by a euphoria, with a deep crimson nature and with hot anger suddenly enraging her and melting her into a desire state so profound it... went away. ‘Wow, I just felt some *wild* things.’

‘Did you?’ Manchester sounded pleased. ‘That means we’re getting somewhere. Now, what about... this?’



Behind closed lids, in a non-visual world divorced from the perceptual clarity of sight, Melie assumed a form. Another was with her. They communicated, nature to nature, and where they overlapped, joy and an intense excitement were generated. Melie was enfolded by an warm strength. She didn't see it but she felt it and knew it to be Manchester. The Cardinal was talking to her, though she was not using words. Melie found she could respond though she did not use language. She was choo on choo with the mind of a 500 year old Cardinal. Elemental nature to basic form, Melie and Manchester saw something of what the other was.

When Melie felt Manchester's hands drop away from hers, she opened her eyes, her vision watery. She blinked rapidly, and drew a breath, which turned into a single, ragged sob, from nowhere, surprising her. But there was a new strength within her, an awareness that her pain was no longer a private suffering, because she had shared some of it with Manchester. She didn't know how. She hadn't said anything, and she had not heard the Cardinal utter a word. She raised her head, and met Manchester's face. It was open, full of compassion. The Cardinal blinked, and nodded her head slowly, reaching out with a hand, and placing it lightly on Melie's knee.

'You have all the time that you need on Novagaia, my friend.'

Melie felt her throat constrict and tears burn her eyes. 'Thanks,' she blubbed, sobbing, laughing, unconcerned with the contradiction of simultaneously being in two different emotional states. Manchester mirrored her, her face alternatively grave and delighted, and listened as Melie began to talk.

'I think there's something wrong with me. I mean, I think I must have a weird kind of bug or something. Maybe a virus, I don't know. I told Aileeni and Nanashub it was a virus but I don't know, it's just so weird.' Melie frowned, trying to convey what the Blit was like. 'It's like I *see* things sometimes, but not really. Lines and spaces. Then I feel like I'm falling, and I'm not seeing the real world at all, it feels like, but something else. I mean, I've tried the best Helicon tailor-made Euphorics, you know, and a shit load of Sesquoian psilocybin and been to some pretty wild places with those, but this is something else...' The Blit. *Blitting*. She had chosen the label because that's kind of like what it felt like to her, initially. A blizzard of disorientation, a sudden snowstorm in her mind, clouding and making uncertain all previous knowledge. 'This is the Blit. It's what I call it. "Oh shit, I'm Blitting".' Melie laughed, but it was to cover her fear. She shook herself, suddenly, violently, her distress making her appear childlike. 'I get really scared, now, when it happens, because it's getting worse. Before it was like my own little secret you know, wasn't scary or frightening at all, I'd just take a little trip inside my head but like, in the last year or so, it's been getting really... really fucking *out of hand*, I mean, I'm *terrified*, and it seems so *real*, like the world really isn't like I think it's supposed to be, and it's something else instead. D'ya know what I mean?'

Manchester spoke for the first time. 'Yes.' Melie's description of the Blit had suddenly struck her as disturbingly familiar.

'I Blitted on the way over here from Gods, in the shuttle. Aileeni was with me, and I'm really glad, because this one was a biggie. I must have passed out or something, because I began to feel the Blit happening, and began to see these little lines, like worms, in Aileeni's mouth...' Melie paused, remembering, recollecting the horror. She shook herself. 'And then the whole fucking shit house came apart, I tell you Manchester, I didn't know *what* was happening. I didn't know who I was, I wasn't even sure if I was *real* any more. But then, when I came to I had... I *knew* all this stuff, which has never happened before with the Blit. It's a bit like I had a dream, you know but a dream about stuff that I couldn't *possibly* know, no way. Like about me and my sister. My dead sister that is, who died in Sally's - my mother's - womb. Sally blamed me for killing her and hated me for it. But when I came out of the Blit this time, I knew things that... I don't know, it sounds crazy.' Melie paused again, frowning. 'I mean

this is going to sound *really* crazy,’ she warned.

Manchester smiled at her. ‘I’m unshockable.’

‘OK.’ Melie drew a deep breath. ‘I saw... I saw *whales* in Sally’s womb. Huge fuckers. They were *there* ! I know it for a fact, but I mean. What am I *thinking* about? How can that be real? Except I know it is... I *feel* that it is.’

Manchester was gazing intently at Melie, clutching her hand. The young girl from Sesquoia had kicked in Manchester’s genetic altruism like a hammer blow. Manchester felt herself wanting to reach out to Melie, with all of her, with all of the involuntary need of the altruistic pervert to share and heal others pain.

‘So anyway, that’s about it. I don’t know what the Blit is, or how any of it connects up, all these freaky things that happen to me, but I reckoned that on Novagaia, maybe I could try and sort myself out, you know. Find some peace, find a peace in myself, where I can always go...’ Melie trailed off, and hung her head briefly. Her tail curled up into her lap, and she picked at its tip, flicking her eyes back up to Manchester’s from under a sparse blond awning. ‘D’ya know what I mean?’

‘Yes,’ said Manchester. ‘Yes, I do and I want you to know that I’m going to help you, if you want me to. I’m your friend, Melie.’ She smiled as she realised the truth of it herself, and then frowned. ‘And I don’t like seeing someone as full of love as you hurting alone. Whatever the Blit is, Melie, you and I are going to find out, and we’re going to make sure it never scares you again, OK?’

Melie was struck dumb, overcome with gratitude. ‘Thank you, Manchester.’ She hesitated, and then leant forward, putting her arms around Manchester’s neck. The little Cardinal responded, and the two women sat for a long moment, each clasping the other, their heads resting on each other’s shoulders. Their embrace was broken when Melie felt something warm and dry touch her throat. She opened her eyes. Slightly shorter than the longest of Manchester’s fingers, a choo machine nestled at Melie’s throat and padded on four tiny appendages to perch on her shoulder, where it began vibrating softly, emitting a dull purr. Melie smelt the clean, smoky smell of it. Manchester had been carrying it all this time.

## Chapter Twenty Two

‘Floc old boy, you got the hang of an optics tool yet?’

‘Yes, I think so. Why?’

‘Thirty degrees right of you, perhaps 20 kilometres... see it?’

Flocanalog looked with unaugmented eyes, and saw a dark, smoky blip, travelling quickly across his field of view. ‘What is it?’

‘Uptool your resource,’ said Malvern, his face mischievous. ‘You tell me.’

Flocanalog looked dubious. ‘OK. Hang on.’ He focused his eyes inwards and selected an icon. A resource window opened, and he keyed for a menu. Selecting from the choices, the window closed, and a fine grid-work overwrote his vision. Looking out again, he searched for the dark smudge on the horizon, and found it considerably further over to his left than he had anticipated. Whatever it was, it was travelling very fast.

*How am I going to get a focus on something moving that fast?*

He waited until the smudge was clearly within one pixel of the optic tool’s grid, and keyed for magnification. The grid flashed, and then expanded rapidly.

‘Argh!’

A wall of striated black suddenly filled his eyes, bunching and flashing, apparently centimetres from his nose. He stumbled back, fearing for his safety, the exoskeleton hissing from the force of the passage of... of whatever it was. Then the moving wall of black was gone, and he saw only magnified dust.

Malvern was chortling heartily. ‘So you *haven’t* got the hang of an optics tool yet?’

Flocanalog looked at him, irritated by his manner. ‘It would appear not.’ He frowned, but then laughed along with the Cardinal, because Malvern was still chuckling, and the sound was infectious. ‘Alright Malvern. What is it?’

‘Ah well! There be *Mammoths* in this place!’ Malvern grinned, looking up at Flocanalog with twinkling eyes. ‘I tell you what...’ Malvern’s eyes focused inwards and an icon in the shape of a small phallus flashed into Flocanalog’s phenomenology. ‘Tricky business catching a Mammoth with an optics tool, but if I can slave your resource to mine, then you should be able to get a better view. Do you want to let me in?’ Malvern inclined his head expectantly.

‘So this little penis is yours then, is it?’ Flocanalog asked, deadpan.

‘Indeed. I suggest you sit down. Seeing things in directions other than where you’re looking can play havoc with your balance.’ Flocanalog murmured assent and lowered himself carefully to the ground, the exoskeleton hissing. ‘Must do something about that. The noise I mean. Remind me would you Floc, when we get to Ushogbo?’

‘Surely it would be much easier just to *tell* me what that thing is rather than all this business with resources and optics tools.’

‘Not necessarily, my friend,’ said Malvern gravely, as if contemplating the meaning of life. Then his face broke into a grin. ‘And this is more fun. Simple pleasures Floc, simple pleasures. OK, now, key the icon.’

Flocanalog did so, swatting at it. It became virtually tumescent, flashed purple (*typical*) and then vanished. Nothing happened for some moments. Then a grid-work snicked into place, and Flocanalog’s resource began issuing commentaries on what Malvern’s nchoi was doing to it, keeping its Host informed of the way its resource integrity was being compromised. A portion of the grid flashed ghostly silver, a notably larger pixel area than Flocanalog had originally chosen, and it expanded to fill seventy five percent of his field of view. The image displayed in the grid was corrupt, distorted, and Flocanalog recoiled from the digital nonsense.

‘Malvern!’ Looking away from the expanded grid, he could see the Cardinal standing some metres from him. ‘Looks like junk.’

‘Yes, these choo move so fast that compensation at any kind of distance... with any useful resolution requires... lots of computation. Ah!’

Flocanalog watched through augmented eyes as the dark smudge resolved itself into twenty or so of the huge machines, moving parallel to the Cardinal and him. He stared, astounded, and his jaw grew slack.

‘There be Mammoths in this place,’ said Malvern, from somewhere to his left, but all Flocanalog’s attention was fixed on the window.

*Mammoths!*

The machines were at least 10 metres high, characteristically dark, whorled with walnut, grained in pale khaki. They were tripodal. Each possessed two huge appendages at the rear, easily five metres across at their widest point. There was one, smaller appendage at the front. The main body was a warped ellipsoid, wider than it was thick, an enormous shiny carapace coloured and flashing like oil in water. The machines were bounding across the ground in low parabolas. Both rear appendages worked in unison. The central carapace was elongated out backwards, tilted over forward 60 degrees from the vertical. The one smaller appendage emerging near the top of the carapace sported a single, dark fist at its extremity. This fist swung pendulously under the machine as it bounded, providing a counterweight action to the great force of the two drive legs. The fist came hurtling forward when the machine hit the ground, and then swung back under again as it bounded forward.

The Mammoth machines were moving incredibly fast. Flocanalog’s resource was giving figures of a more or less constant 70 metres a second. At that speed, the machines could get from one of the Mammoths to the other in two hours.

‘There be Mammoths here,’ Malvern muttered for the third time.

‘I wish you would stop saying that Malvern,’ Flocanalog said. ‘*Those* are Mammoths? I thought the plateau was called that?’

‘It is Floc my friend, it is, and so are its most splendid inhabitants, the Mammoths. Look at the colours of the carapace, the easy power of their locomotion! Of course, you were in extensive consensorias with Shell on Marineris weren’t you? You must miss that experience keenly.’ Malvern broke the slave connection to Flocanalog’s resource, and the same virtual space snicked closed in both the two men’s field of view. ‘Perhaps my friend, you can recapture some of that exhilaration here on Novagaia. Because you see, consensorias with the choo mind of a Mammoth is quite simply the most *potent* experience...’ Malvern’s brow creased in concentration. He was struggling with the enormity of his sincerity again. He smiled quirkily up at Flocanalog with the effort of it. ‘A simple pleasure, of course, but one nonetheless...’ Malvern appeared to have gone beyond his earlier concentrations and now he huffed and chortled. ‘That I would recommend heartily with no hesita... oh. That’s odd.’

The Cardinal went quiet. He had found something.

Within his own phenomenology, he began jumping about nchoi generated virtual windows, intangibly interrogating and directing his resource as it ran through a check on the, much smaller, nchoi machine nestled in Flocanalog’s head. ‘Indeed,’ he exclaimed a few moments later. ‘Did you know you have a choi remote slaved to your resource, Floc? It’s about, oh, 10 metres away...’ Malvern raised his eyes

and looked at Flocanalog and then about himself, searching for the remote to see if he could spot it. 'Hmm?' The Cardinal frowned. 'Must be tiny.'

'A remote?' Flocanalog frowned. 'What do you mean, a remote?'

'Well,' Malvern retreated momentarily inward to direct his resource again. He was silent for some moments, his eyes tracking invisible computation. 'It would appear that you have inadvertently brought a stowaway with you from Marineris, my friend!' Malvern laughed. 'What a delightful concept.' He looked at Flocanalog, his humour infecting the Marineris man, who laughed too, shaking his head, baffled.

'What are you *talking* about Malvern?'

'A stowaway! That remote is a choi construct, not indigenous to Novagaia, but to Marineris, or rather, Terra I would hazard a guess... Your resource has been compromised by invisible command paths, which would tend to suggest that... Hello?'

Flocanalog heard a tiny chime over his auditory tap. Hairs bristled at the back of his neck and he felt his chest thump. Then he heard a familiar voice.

'I'm so terribly sorry! I feel such a fool to be found out.'

Pause.

'*Maureen?*'

'Yes, hello Floc. Hello Malvern.'

Malvern heard the simulated voice and looked surprised. 'Hello, my dear. Subtle work,' he added, meaning the auditory tap.

'What are doing here?' Flocanalog asked. 'I mean, how are you? In fact *are* you here or are you still on Marineris?'

'Both, I'm afraid, Floc. Your resource houses a small copy of myself presently. It only needed a tiny nchoi augmentation really.' Maureen paused and the auditory tap fell silent. 'I needed to make sure you were alright.' Maureen sounded almost confused, abashed. 'I don't know what I thought I would do, but I stowed away anyway. Was I wrong, do you think?'

Flocanalog listened to the voice of his doctor, thinking *was this Maureen or not?*, finding pleasure in thinking that it was.

'No, you were not wrong Maureen. I'm glad that you're here.'

A small, silver-haired woman appeared, sitting at Flocanalog's side, her feet curled underneath her. Maureen had made an Appearance. The virtual woman appeared to smile and her eyes appeared to twinkle. The Appearance appeared to open its mouth to speak when the ground trembled.

Flocanalog flicked his eyes up and around, and gasped.

He and Malvern were being encircled by Mammoths. They looked like bouncing boulders. The huge, dark forms quickly formed a wide circle around them. The circle shrank slowly, like a dissipating

tornado. Malvern stood, a delighted expression on his face, threw his head back and howled at the sky. From the Mammoths in response came a deep, almost subsonic purr.

Flocanalog felt his nose and mouth fill with the smell of choo, with hot cinnamon and burning sage. ‘Maureen, can you see this?’ He turned, tracking one of the huge machines as it bounded past. He could see smaller, fleeter forms in amongst the larger machines now too. *The Mammoths must carry them*, he thought. Malvern howled again. A resonant susurration echoed him from the shrinking circle of machines. Flocanalog joined in, stepping forward, throwing his arms wide and drowning the hiss of his exoskeleton with a loud roar. It contained considerably more anger than he either intended or expected, seeming to boil out of him. He found its release gratifying. The effect on the machines was pronounced: the ground trembled as they bounced, responding to his passion, the deep, rumbling purr rising in volume. The circle continued shrinking: the nearest Mammoth was now only 30 metres away now.

‘So *these* are Mammoths.’

A small machine from the shrinking circle of giant forms detached itself, and sped toward them. *An emissary?* Flocanalog wondered. It moved quickly, a half metre long, ebony and mustard striped, bounding fluidly. Malvern went to meet it and it stopped in front of him with dramatic deceleration. The two of them regarded each other, and then Malvern stepped forward and opened his hands. The machine rose and placed itself in his hands. The consensorias was brief and the machine bounded away after only a few seconds.

Malvern turned to Flocanalog, beaming. ‘Time to fetch the others. We’re on our way to Ushogbo.’



The Mammoth was moving at 70 metres a second, its interior warm and cushioned, reaching to the sensual in Carys and Brock as they were carried together, alone, inside its fragrant carapace.

Brock lifted Carys’ skirts with his hands, running his hands up the back of her thighs, feeling the thin cotton of her panties. She rested her hands on his chest, curling her fingers in the hair, and lent forward, putting her arms around his neck. He cupped her buttocks, and brought his hands up to cradle her head, running them slowly along her back, aware of her trembling as his fingers reached the bare skin by her shoulder blades.

‘Love me, Brock.’

Brock felt a surge of blood in his penis.

*Carys.*

It was no one part of her that he loved, but all of her, every facet of her. She only had to say something or move in a certain way and he would feel desire welling up within him.

She rose up on him, sitting in his lap. She unbuttoned his shirt, smiling into his eyes all the while. She encouraged him to divest her of her panties, pulling them down as she rocked back on his legs, her skirts billowing. He lay back, and she turned slowly, showing him her naked bottom. Brock sighed and reached out tenderly to massage the soft globes.

‘Oh Carys.’ He urged her toward him. She teased him by drawing away and rotating her hips. Then she moved again, until she was straddling his shoulders.

‘Love me, Brock.’

Brock felt her head come to rest on his hip and the silken caress of her hair. Then he tasted her, his eyes closed, lost to the reverence and ecstasy of the moment. She was damp already. He ran his tongue over the convoluted tissue, savouring the plumpness that he had loved so often yet it was as the first time, the wonder and extraordinary intimacy of the moment never leaving him.

Above, Carys moaned appreciatively and ran her fingers down stroke his flanks, scratching him with her nails, setting up local, sympathetic vortices of pleasure in him, causing him to run his tongue more deeply for a keener taste.

‘Carys, my love, you are *beautiful*.’ He dipped his nose inside her, breathing through his mouth. He heard her moan with delight as she pushed back against his insertion.

‘Oh Brock, love me. Love me!’

The Mammoth bounded on, its lovers nestled securely inside its powerful carapace, carbonsponge muscle bunching and expanding, driving the machine on.

## Chapter Twenty Three

Salisbury felt a mixture of anxiety and joy upon receiving the message from Niandankoro. She always enjoyed seeing her strong, gentle friend, only on this occasion she was concerned about the circumstances. Niandankoro was worried and that in itself disturbed her.

Something was *happening*.

But she neither knew what, nor how. Her teleological-symbolic mind was unable to provide her with solace, as the Cascade seemed turbulent, clouding her prescience. And orbital consensorias revealed Novagaia to be... *confused*? That was not the right description, but she had nothing better.

But such concerns seemed very remote indeed when, after taking a Bus headed Antispinward out of Chapel Halls and climbing inside a pseudo-Shell less than an hour later, she saw Niandankoro ambling peacefully along the soft, bleached silica of a Lilaan beach.

Salisbury directed the pseudo-Shell to surface a short distance up from the Cardinal giant. The machine complied, extruded short, sturdy appendages and waddled slowly up out of the water, the cloudy, jelly-like mass of it wobbling incongruously on dry land. A portion of its belly pulled open and Salisbury climbed from the innards of the machine.

Niandankoro noticed the pseudo-Shell and a large smile spread slowly across his face as he recognised the slight, black hair of its occupant. He stopped, spread his arms wide, and was knocked over flat on his back as Salisbury leapt up and threw her arms around his neck, clasping her legs around his waist.



The culling of the human species by the metacetaceans of Water occurred during half a millennia of history called the *Great Dying*, 350 BK. to 100 AK..

This cull was not conducted savagely or gratuitously. There were no executions or brutal killings as such, and no hypocritical rationalisations. Indeed, no one even suspected that a cull was even in progress for many years. But gradually, year on year, as people died naturally of old age and disease and injury, slightly fewer were born to take their place. The metacetacean cull of the human species took the form of a remorseless, encroaching species-wide sterility. What agent or agents effected the sterility was never discovered. Many theories were proposed and tested. Quantum-viruses. Microscopic autonomous agents. Poisons. Genomic alteration. But no causal mechanism was ever established. No instance of any quantum virus was ever found. The means of transmission of any microscopic agent remained unknown. The effects of the plague of sterility mapped onto no geo-social factors by which to predict its spread.

From a peak of 20 billion individuals 350 BK., mysterious metacetacean intervention caused human populations, like rotting bark from a dying tree, to slough away in irregular strips, surges and remissions. 300 BK., the human population of Earth stood at 19 billion individuals. By 200 BK., the number had fallen to 13 billion and 100 years later, it had shrunk to one and half.

Humanity began to panic.

It had done so previously, just before the Great Dying began. Then, 300 years BK., the A Ideolog revealed for the first time the depth of its commitment to the large scale raising of cetacean sentience. Then, the young metacetacean race - numbering perhaps 400 individual whales, dolphins and porpoises - announced its awareness to the world at large and declared the oceans of the planet a new citizen state called Water. Most of humanity in the five planetary Ideologs welcomed the news with stunned, bewildered joy.

*How was it possible that the cetacean mind, so long latent in its species dreamtime, had suddenly acquired consciousness? Can they talk? Do they have sex?* There were a million questions.

The A Ideolog declared a New Age. The historical, continental home of the human species had, once again, been the birthplace of a new people, it said. A new kind of consciousness with whom humanity



could share its home had emerged, it said.

And slowly, the implications of what the A Ideolog had achieved began to grow. Not *Artificial* but *Natural* Intelligence. Biological, non-human, sentient individuals. The big industries of the B Ideolog took up the challenge of allowing humanity to visit its new neighbours. Soon the first Shells began diving into Water: bulky and slow-moving and with none of the sophistication of choo consensorias that was to come later, but they worked. Breathing oxygenated emulsion, human kind began to swim and communicate with their new equals, the *meta-* cetaceans of Water. They learnt to enjoy the child-innocent humour of dolphins. They became engaged with the powerful intellect of self-aware porpoise minds, and they struggled with the baffling, *koan* -laden pronouncements of philosopher-mystic whales. Spiritual leaders from the D Ideolog listened to the words of these great metacetaceans and found that their 3,000 year-old systems of religious and philosophic belief were being recapitulated, causing 2 billion swarthy hands to wring in delight.

So the New Age blossomed, and with it, the human spirit.

It did not last.

In the higher echelons of corporate governance in the C Ideolog were individuals profoundly uncomfortable about the new metacetacean race. They believed that it would get in the way of profit. They refused to recognise the legitimacy of Water as a citizen state from the start. They rejected the view that the *metacetacean* mind was any different from that of a simple animal *cetacean*. They pointed to the crude nature of the choi-controlled mechanical harnesses serving as pseudo-limbs and pseudo-digits. They mocked the extensive choi intervention that had to be made in the brain to enable the metacetaceans to communicate using human languages. *Look*, they argued, *the sentience was not even genomic!* The rational establishment scientifica of the C Ideolog began a campaign to convince the rest of the world that they had been duped by *Synthetic* Intelligence, and that the metacetacean mind was nothing but an artefact of some clever choi engineers. These so called *meta-* cetaceans were not *people* , with rights and privileges and status. They were simply *animals*.

Then, on a Friday, at six thirty in the morning, 360 years BK., a commercial trawler working out of a port on the Western coast of the C Ideolog caught and killed a self-aware metacetacean citizen of Water named Rippidyhaas. The condemnation was planet-wide. The A and D Ideologs expressed their moral outrage and threatened trade sanctions. The B and E Ideologs expressed their determination to enact legislation recognising the legitimacy of the metacetacean race within the year. Yet while all this was going on, two more metacetaceans were murdered: one, a pregnant Sei-whale, a metacetacean mother-to-be named Yoorpridepase, the other a second bottlenose, a metacetacean male named Prabhupada.

Water responded.

A commercial trawler hunting in the solar polar waters, registered by the C Ideolog fishing registry as the *Seraka* , vanished. Eight crew went missing, initially presumed dead, although they were later recovered from a polar ice-floe, cold, hungry and confused, and unable to explain how they had got there. Through the media of the A Ideolog, Water claimed responsibility and said that it would no longer tolerate violations of metacetacean rights. Any agency - individual, corporate or Ideological - found engaged in such violations would be punished. Moreover, Water declared the oceans of the planet to be sovereign territory. Any agency - individual, corporate or Ideological - found transgressing that territory would be punished.

The corporate mindset of the C Ideolog would not accept that they were being threatened by, as they erroneously saw it, a bunch of *talking fish* . Following this announcement, violent anti-cetacean

demonstrations flared up. People rioted, demanding action. Businesses panicked. The corporate governance of the C Ideolog also ignored the warning and, to calm its rabid populace, initiated a wide-spread cull of any cetacean - with meta status or no - found within its coastal waters. While the B Ideolog tried in vain to have this decision reversed via diplomatic pressure, while the A and D Ideologs suspended all high level government contact and imposed its threatened, swinging trade and cultural sanctions, another 35 metacetaceans were murdered.

Water responded again.

On a Monday, at nine o'clock in the morning, 361 BK., a coherent bubble of seawater massing some  $1.5 \times 10^9$  kilograms, appeared above the capital of the C Ideolog. It remained there for the next five days, hanging, impossibly suspended from nothing, and then vanished.

Terrified, and pandering to the hysterical demands of its populace, the C Ideolog replied to this outrageous display of force by declaring war. In the first month of 362 BK., the corporate military of the C Ideolog initiated a co-ordinated offensive against the oceans of the planet. Small-yield fusion weapons were seeded throughout the Pacific and Atlantic oceans. A number of orbital platforms were primed, ready for when they would explode and use the resultant microscopic suns to power EM beam weapons, directed downwards to boil the briny skin of the usurpent Water. Biological weapons were deployed. Submarine weapons - pitiless, inhuman choi-constructs no bigger than tuna, which killed without reason or direction - were released in their thousands. And all around the coastline of the continental C Ideolog, whole areas of ocean became covered with a molecular photoelectric film, excreted by the actions of an engineered algae. The film generated electricity and fed it directly into the water, making obscene and dangerous marine killing fields.

And all this effort, all the expenditure and the industry, all this was justified by the xenophobic media of the C Ideolog as necessary. It was necessary, they said, because the planet must be rid of the monstrous enemies of humanity, the mindless, so called *meta* -cetacean animals pretending to be people, and taking control out of the hands of the one true race of Earth.

The prosecution of the war did not, however, proceed as the corporate strategic choi, or their human counterparts, had either predicted or expected. No weapon behaved as it should because - somehow - Water intervened. The fusion weapons inexplicably failed to explode. Orbital weapon platforms destroyed themselves for nothing, as their lazed EM emissions were dissipated and reflected away by intangible - and theoretically impossible - shields. The autonomous choi weapons became infected with strange logic-bombs, causing them to turn on each other in blind frenzies of machine blood-lust. Biological toxins failed to distribute, staying in metre-wide bubbles, obstinately refusing to succumb to the forces of diffusion. The photoelectric film fed current into the oceans for several days but then became ineffectual as the waters of Water simply refused to conduct it: Thousands of square kilometres of ocean suddenly began behaving as if it were something else.

This last action *really* scared the military of the C Ideolog. Their most sophisticated killing machinery had catastrophically failed. In less than two weeks, all potential avenues of destruction had met with magical, accommodating opposition from what was supposed to be a race of sophisticated *fish*.

During the hostilities, Water did not take a single human life.

Water responded, giving advance warning of what it intended and bluntly ordering evacuation. The C Ideolog, humbled and humiliated, acquiesced. The destruction when it came, was ominously low key. One moment, the glass and concrete of the innumerable towers, buildings, blocks and homes in all four cities were at rest, quiet and still without their human clients, glinting in the sun. The next, they were

rubble. There was no blast, as such: it was as if some monstrous, invisible boot had simply descended from the sky and crushed each city like it had been no more than a colony of ants.

Water did not explain its actions further, neither did it make any further threats. Metacetaceans across the whole of Water retreated behind a wall of silence, and refused to have any further commerce with humans at all, leaving behind them the philosopher-mystic koan of *koyaanisqatsi* .

*Crazy life.*

The A Ideolog was devastated. The C Ideolog turned against itself. And humanity could only look on helplessly as their new neighbours shunned them and the implications of *koyaanisqatsi* began to be appreciated: their world was to be taken away from them.

So began the gradual death of Gaia.

The atmosphere changed, becoming heavier with CO<sub>2</sub>. Planetary temperatures began to fluctuate. Sea levels began to rise. Comets were inexplicably captured, appearing in the sky and plunging with tremendous force into the oceans. The metacetacean race began its long rise to ascendancy as mother Earth slowly choked in her own fluids. And like experimental animals with no control over their situation, shocked on the paws one too many times, humanity sat back and watched it all happen, unable and unwilling to take any action. The planetary Ideologs became less important. Economies collapsed. Beliefs, principles and authorities began to wane, as individuals ceased to look outwards, to new generations and new life and began to look inwards, seeing 100, 200 years down the line, the seemingly inevitable extinction of their kind.

A profound, species-wide depression set in.



Spinward of Chapel Halls by 3,000 kilometres was Lila, the fourth and largest sea on Novagaia, 500 kilometres across at its widest point. Innumerable tiny islands, their interiors hot and moist, were linked to each other by submerged rock causeways, forming a wonderfully contrived micro-archipelago stretching right across the artificial, freshwater sea.

The Lilaan micro-archipelago was a mysterious, wondrous place, with a huge population of motile choo gestated by the Tree factories, existing in a multitude of unique, elusive forms. The islands were thick with lush flora. They clacked and hooted and chirped and cried and screamed, alive with a flourishing biological fauna, in addition to the choo forms. The extensively seeded Trees were herculean in the engineering of their environment and the results were extraordinary.

Where the islands of the micro-archipelago met the waters of Lila, the Trees formed beaches of clean, bleached silica, soft like silk. When the Trees from different nearby islands collaborated, the causeways between them would change, as aggressive Tree saplings and motile choo began building walls and

dykes, depositing organic matter, and planting water sustainable flora. Gradually, the islands would merge. The causeway would be reclaimed from the waters of Lila, the Trees would exchange nchoo, the trees would exchange pollen, and new life would emerge and flourish. The Lilaan micro-archipelago was home to the Cardinal Niandankoro, Salisbury's special friend and a giant of his kind, standing 142 centimetres tall.

'I can think here.' He and Salisbury strolled arm in arm along a long, wide Lilaan beach, motile choo gambolling in the quiet surf behind them. 'I fell in love with Lila the first time I saw it. Novagaia is very present here.' Salisbury listened to the melodious, quiet sounds made by Niandankoro's voice, realising how happy it made her to hear them again. She had not been this close to her friend for three years. 'Consensorias is everywhere and I hear the song of our orbital mind safe in its dreamtime, nurturing and protecting us all.' Niandankoro nodded his head, and his dark thatch of hair tousled. 'I love you, Salisbury. And I love Lila and that is why I had to see you.'

Salisbury put her face to his chest, listening to his breathing, blending with the soft crash of the surf. 'What have you learned my friend?'

He placed his arms around her waist, pulling her tightly toward him. 'You sound fearful.'

Salisbury breathed deeply, smelling the early evening of the micro-archipelago. 'I am.' The sky above Lila was a dark blue and the light was translucent, shimmering. She looked up into his face: Her special, gentle lover. 'Would you hold me, please?'

'I am,' he pointed out and stroked her short raven hair.

'Then hold me *tighter*.'

The two Cardinals stood, the larger enfolding the smaller, for several long moments. Then they sank to the sand, and a slow worship of the divine in the other began, old as time.



The metacetacean cull did not eradicate the fertility of the human species either altogether, or all at once. When the time came to climb the *Hair of God* into the sky and to relocate to the new worlds of the Koyculture in 0 AK., the human species numbered some eight million individuals. Yet during the first 50 years of banishment from the drowned Earth, less than 20,000 children were born.

The full extent of the Great Dying was only fully appreciated when it finally began to reverse, in 100 AK. The human species had been brought by the metacetacean cull to the edge of extinction, reduced to a population numbering just 700,000 individuals, comprising isolated pockets of lonely, frightened people living on the glistening new worlds of the Koyculture.

But at least the remnants of the human species had friends.

The Cardinals, the strange Little Angels, themselves baffled and grief stricken at the sudden disappearance, presumed death - *though how was such a thing possible?* - of the first and the best of them, dear, gentle Ushogbo.

The gestation period for the Cardinal foetus, principally because of the complexity of the metacortex and the time it took to form, was more than 12 weeks longer than for a corresponding human foetus. The women who ached and groaned under these additional weeks of discomfort bore their pregnancies with equanimity: human offspring were fast becoming an increasingly rare occurrence on the rapidly drowning Earth, and the impending birth of a child - any child - was an occasion for special joy. Each and every Cardinal was born within an hour of any other, to human mothers all over the surface of the drowning Earth, 200 years into the Great Dying, 150 years BK.

All except one.



The path down to the cove was steep, and slippery, heavily forested. The vegetation was strangely quiet, with little of the distinctive, raucous chittering that Salisbury remembered from the Lilaan islands. She felt edgy, and the air did not smell right. Hilary, her nchoi resource, reported anomalous activity in the infection pockets in her fingers, and the presence of unusual nchoo agents all around her: it would attempt to screen her from the worst of its effects, but what leaked through was enough to chill her: there was death here! Niandankoro was below her on the path: he paused, and waited for her to descend, extending her his hand. His eyes were hooded, and he looked pensive, sad.

‘You feel it?’ he asked.

‘Yes.’

‘Forty metres.’

He squeezed her hand, and they continued the descent, Salisbury becoming more and more twitchy. The light through the canopy above and around her waned and ghosted, the air in turns sticky and thick, and then insubstantial, as if deficient in oxygen. She was in passive communication with a Third copy, and it was just as scared as she was, the Cascade bucking and heaving all around it (although it was calm, and had no volume). Niandankoro broke through a wall of green, and rose slowly, blinking into the harsh sunlight. Salisbury followed him, and stopped, her face falling.

‘Oh no.’

Niandankoro took her hand. Like frightened children, taking courage from the other, the two Cardinals walked towards where there should have been waves. The waters of the cove were gone, hidden under a mouldering, sulphurous tangle of a slimy alga. It was a dung-purple colour, and it hissed and spat as

some grotesque, composite entity. Turgid waves of it lapped the silica of the beach like a dirty tongue, leaving tar-sticky stains in its wake, flowing like petrochemical honey around the forms of hundreds of choo constructs lying like shrivelled seaweed on the beach.

Salisbury gasped, and put her hands to her mouth, her eyes roving over the wretched sight.

Niandankoro touched her elbow, pointed. At the end of the beach, close to where the forest stopped and the beach began, was a Tree copse, of twenty individual machines. Each one had been dismembered, fleshy parts of their interiors strewn like knotty gristle around their bases. A single, large, dark shape lay slumped, horribly burned, over the melted remains of the last Tree.

‘The motile choo died trying to save the copse. I was too late to help them: they beached themselves. I pulled down an EM strike from Hub, I didn’t know what else to do, and it hit... whatever that thing is.’ Niandankoro’s deep voice faltered, broke, continued low and uneven. ‘However it was gestated, wherever it came from, it destroyed many motile choo in the forests, too...’ he indicated the quiet, subdued greenery behind them. ‘Just ripped them apart like paper...’

Niandankoro trailed off, and his broad, flat face showed grief and confusion. He clenched his teeth, and pursed his lips. ‘Salisbury,’ he said, and turned to her. He had tears in his eyes, and he took hold of her hands with both of his. ‘This is what I have learned.’

## Chapter Twenty Four

Within an encapsulating inertial bubble generated by his own powerful mind, the First Metacetacean moved sedately through his world, a unique, incomprehensible being. Pulsing with light, 70 metres long, his enormous flanks an active interplay of form and texture, the First Metacetacean called to the Mother of Water to join him with a booming, keening reverberation.

The First Metacetacean remembered having different physiognomies. He remembered when Water was latent and the metacetacean mind still slumbered in its dreamtime, when he still possessed the blubbery, mammalian body of his youth. The First Metacetacean remembered the disgust and the contempt that he had felt for the absurd, digit-less shell that he had been born into. He remembered the desperate, aching feelings of despair upon meeting one of, ostensibly, his own kind, and remembered realising the depth of his solitude at the empathic, but conscious-empty, bond of a latent mind.

There had been other physiognomies in other times too.

As the alterations to the cetacean genome he helped design became more prevalent, so increasingly, self-awareness arose spontaneously in each new generation. The metacetacean race began to grow, rejecting human notions of consciousness and pooling their awareness in collective, higher-order minds. The First Metacetacean remembered exploring the unlocked potential of his own powerful mind, his associated *Water engine*, freeing him from the limitations of genomic handlessness. The First Metacetacean remembered how some metacetaceans had used their Water engines to reprogram their genomes themselves. Some sank to the ocean floor and excreted hard, impervious carapaces, becoming

emulsion breathing Clams. Some became baby Krakens. Others became vast, iridescent jellies, trailing greetings of themselves for kilometres behind. The First Metacetacean himself had existed in over twenty different physical forms in his long life.

But the First Metacetacean always recalled the pain and confusion of his ancient, mammalian proto-self. He did not want to forget. Once, he had been truly alone. The first and the only *meta-* cetacean, conscious, self-aware, and teetering on an edge of a profound grief-psychosis.

He would never forget.

# I am with you

The First Metacetacean recognised the Mother of Water responding to his call. His entire mass went from 40 metres a second to nothing at all in the space of an eye-blink. The dissipated energy boiled the local water around him and illuminated his surroundings for hundreds of metres. The First Metacetacean floated serenely above the lip of a two kilometre deep trench, surrounded by blind, skittish fish attracted and suspicious of the hot riot of light that constituted the First Metacetacean.

# Great Joy! Sing me your world

# To Roof and cold-wise, come I on tails of riser!

At first, he did not perceive her but then suddenly, she was right beside him. The Mother of Water was slender next to the bulk of the First Metacetacean, barely 20 metres in length. Having long ago abandoned any pretension of cetacean resemblance, she trailed an inverted forest of swaying tendrils behind a bulbous, labile head, with translucent wings, coloured silver and yellow and green.

The First Metacetacean greeted her fondly.

# My world is enriched

# Nogai is willing! Metacetacean joy will flow and Water will ease and ache the Way

# Greatjoy! Proud gentle Nogai

A sudden chaotic burble of sound engulfed both metacetaceans, causing the Mother of Water to let loose an explosive series of clicks and booms. She flipped around, her wings pulsing a hot yellow in response. She vocalised.

# Wombofmine!

The daughter of the Mother of Water was called Shochil. She glided down from above, her slender snout rising and dipping, her vast tail coiled lightly, cycling rhythmically with colour.

Shochil was a 20 metre high sea horse.

# Wombmother, Nogai? Way is clear for sistermind Nogai?

# Way is clear

# Greatjoy!

Belying her apparent fragility, Shochil began cartwheeling around the much larger bulk of the First Metacetacean, booms and squeaks and clacks erupting from her.

# Glad Shochil? [Olympian laughter]

# Gladhappysadweepingjoy *tearwonder!*

The First Metacetacean spoke.

# Nogai is emergent! The Way opens. All Metacetacean must know

The three citizens of Water harmonised their minds, locking their Water engines together. They began to sing using the oldest metacetacean language form, building *soundworldpictures* for the metacetacean minds of Water to hear. All over Water and beyond, metacetaceans paused to listen to the message, feeling a great warmth begin to fill them.

*The Way was clear!*

Shochil fizzed with warm EM, her snout dipping and rising.

# Echoreturningand *listen!*

From the heights and the distances, the three citizens of Water heard the long, booming susurrations reach them.

# Greatjoygreatjoygreatjoy!!

## Chapter Twenty Five

His legs were tornadoes, his arms tightly bound twisters, his body holding the power of an incipient storm cloud. Through the senses of the Mammoth, he could see for miles, yet with a resolution that enabled him to pick out individual blades of grass from kilometres away. He was aware of a great wind, the exciting smell-presence of companions, the hot blue of the sky and the rust-emerald detail of the Mammoths plains all around him. His legs hit the ground, and he leaped, his whole body collaborating in the effort, teasing the trajectory out long and hard. Less than a second later, 60 metres distant, his legs hit the ground again, his arms swinging down low, knuckles passing centimetres from the ground in an impossibly fast arc, and he was gone again.

His sharp, borrowed eyes picked out a discontinuity ahead. Companions leapt past him, and he caught the keenness of their anticipation: he felt himself accelerate, not knowing why, feeling the excitement of the powerful choo machine. The discontinuity revealed itself quickly: an edge, beyond which was empty space. He looked around him: his companions had settled, collectively, into a broad line, stretching away on both sides.



The edge came closer: he felt an exquisite tearing, stretching inside him. He moved faster and faster, and then he was in empty space, his companions by his side, a white-flecked tan and rust carpet below him. From all his companions came a triumphant release, in which he found himself joining, and he knew he had jumped over the edge of the Mammoths, and that this was a wonderful thing. The teasing, stretching reformation of himself quickened, making him twitch and jump with an almost sexual pleasure. He felt a laugh bubble up from his throat as he *changed* and became something sleeker than he had been before.

He hit the rust coloured waters of Ushogbo with explosive force and sank down for many tens of metres, tornadoes dissipating in huge clouds of steam and oxygenated brine.



‘So, you see,’ said Tennys, as he finished telling his account of Mammoth consensorias, addressing his words to the table at large. ‘I fulfilled the *forfeit* as well as *winning* the bet itself, because I was in consensorias with the choo machine all the way from the hurl with Rineanna and Albany to when it jumped over the cliff into Ushogbo, and... have to say that it was the most *amazing* thing I’ve ever done.’

‘The *most* amazing?’ Melie remarked. This was not sarcasm on her part. It was, almost, an invitation for Tennys to challenge her, to engage her interest. Something had happened to the geek since he had been away, and despite herself, Melie was interested in what it was.

‘Well, perhaps not *the* most amazing.’

*There!* thought Melie, as she studied his face. *He positively leered!*

‘Yeah Tennys,’ said Carys, through a mouthful of what Malvern had described as “Buddha Jumps Over the Wall”. ‘If it wasn’t consensorias with a Mammoth, what was it? You’ve only been on Novagaia a while.’

‘Oh.’ Tennys appeared to become a little embarrassed, and his earlier brashness wavered. ‘Well.’ He looked up at Carys and Melie in turn. He noticed Melie’s tail twitch, his eyes attracted by the movement of the bushy, silken tip in her lap. He had learnt its significance. ‘Well, I *met* someone you see,’ he said quickly and immediately began qualifying and quantifying. ‘Well, I *sort of* met someone, she was called Himochee. Well, still *is* called Himochee of course. What I mean is I don’t know really, I mean, I went to this Carnival you see, because Malvern and Brock said that I should and I thought it would be fun too, and...’ He suddenly looked anxious. ‘Am I talking too much?’

‘Don’t be soft,’ said Carys with a snort. ‘Oh, I’m happy for you, Tennys. You needed someone, didn’t you?’

‘Shit no this is really interesting,’ said Melie. ‘So you went to a Carnival? What was it like?’

Carys' words struck Tennys the most. *It was that obvious?* He looked blankly at Melie for a moment, staggered by the realisation that this gorgeous, aloof woman was actually *interested* in what he was saying. He felt his chest begin to swell with... something, he didn't quite know what. A mixture of smugness, pleasure and anxiety.

He took a deep breath, leant forward on the table and gathered his hands together. 'Well, after I climbed from the Mammoth - after it had swam back up onto dry land that is - I kind of walked into it you see, the Carnival that is, because a lot of it was happening on the *beach* ...'



Tennys met back up with the other Trippers when Manchester contacted him via resource and gave him directions to a large terrace, jutting from the cliff face portions of Sonepur out over Ushogbo. When he arrived, the first thing he saw Malvern was naked to the chest, singing loudly and sweating profusely in front of an open fire source.

He was cooking.

'Ah Tennys!' A cleaver 20 centimetres long and half that in width loomed dangerously in his small hand. 'I do so love to cook, eh?' The green innards of some unfortunate vegetable clung to the shiny metal.

'Hello Malvern.' Tennys backed away hastily as the Cardinal advanced.

'Thought I'd knock us up some food to celebrate your victory over Manchester, eh? I hope you like seafood. Aileeni and I went harvesting earlier today and found some *quite* exquisite *wakame*. Manchester and the others are just finishing our provisioning and will be back shortly...' Malvern pointed imperiously at Tennys with the cleaver. 'I trust you spent some time at the Carnival, young mal?' The cleaver wagged and the thin blade cut the air with a perceptible hiss. Tennys found the effect disconcerting. He scratched his head quickly with one hand and indicated the cleaver swinging perilously close to his stomach with the other.

'Could you point that somewhere else Malvern please?'

The Cardinal looked at him blankly for a moment, and then at the cleaver. His face flooded with comprehension. 'You needn't worry about this my boy!' He huffed and chortled. 'I am a master chef and *cuisinier* of more than 600 years experience!' Malvern took two swift steps back from Tennys. With the cleaver in his right hand and using only his nails to guide the blade, he began chopping *wakame* into fine strips without looking.

Malvern grinned.

Tennys winced

‘Ah, the brave skinny one has returned!’

Tennys recognised Aileeni and turned to say hello. ‘Hel...’ He continued after some moments with a querulous. ‘*Aileeni?*’

‘Who else mal?’ Aileeni-who-was-not-Aileeni put her hands on her hips.

Pause.

Tennys heard Malvern chuckle. He looked across at the Cardinal, who raised his eyebrows and smirked. Tennys looked back at Aileeni-who-was-not-Aileeni and had a sudden, very acute feeling, like a *déjà vu*, of two different avenues open to him. A different Tennys, scarcely two weeks younger, would not have recognised them and would have dived straight into the first: mute, embarrassed incomprehension.

*She had been really fat. Now she wasn’t.*

He chose another path.

‘Wow.’ He smiled, finding in the effort that it became easier. He looked at Aileeni-who-was-not-Aileeni and found she was smiling too.

‘How do I look?’ She gave a twirl, her short black dress flaring at her waist.

Tennys huffed and laughed, genuinely amazed. ‘Extraordinary! You are umm...’ Tennys cleared his throat. ‘Considerably *slimmer* than I remember Aileeni.’

‘That I am young mal, that I am. Lost my microfactory Fat didn’t I?’

*Lost her fat?* Tennys thought. *What was the woman talking about?*

Aileeni walked over to Malvern and grimaced at his preparations. ‘Look at the state of that! That’s shoddy work that is...’

Malvern put his arm around Aileeni’s leg and tried to turn her away. ‘My dear woman, if I’ve told you *once*, I’ve told you a *thousand* times that you must...’

‘No you haven’t.’

‘...Leave the *important, skilful* jobs to *me* ...’

‘Malvern you’re an insufferable *jerk* sometimes, do you know that? Any cook worth their salt knows...’

Tennys understood that Malvern and Aileeni had been lovers before and were now lovers again. He found the whole idea entirely improbable: there was such a thing, after all, as *size*.

At that moment, there was a large commotion from the entrance to the terrace. Manchester bundled in with Flocanalog, Carys and Brock behind her, all of them laden down with provisions for Malvern’s feast. They were all talking excitedly but broke off when they saw Tennys.

‘Tennys!’ boomed Brock.

‘Tennys, my dear!’ Carys gave him a hug.

‘Well done Tennys,’ said Flocanalog. ‘We get to hear something about our talented guide now, yes?’

Manchester came forward. ‘Hello Tennys. You won. How splendid.’

‘Thank you Manchester.’ Tennys fought to keep a smile off his face.

‘So you got to Sonepur almost two days ahead of us.’ Manchester peered up at him. ‘What have you been doing with yourself? If you don’t mind me asking.’

Tennys looked at her for a moment. ‘Well, I did this and that, you know. Jumped off a 200 metre high cliff in consensorias with a Mammoth. Swam in the sea. Went to a Carnival...’ Tennys’ mind drifted off at the mere mention of the word and the smell of Himochee was in his nostrils again, her soft warmth in his arms again. Despite himself, he felt a dopey grin spread across his face. ‘Nothing much really.’ He abruptly became aware that he was the centre of attention. He became uncomfortable and sought to divert attention elsewhere. ‘Anyway, what are we going to eat?’

The ploy worked. The Trippers turned to Malvern, brandishing ingredients.

‘Malvern, I’m *starving* ...’

‘I hope we’re having *shittake* patties, Malvern, just look at these, aren’t they splendid...?’

‘It was Lilaan *nori* you wanted, wasn’t it Malvern?’

Tennys felt a hand on his arm. Manchester stared up at him searching his eyes. Then she smiled and gave a little sigh. ‘I’m happy for you, Tennys.’ She patted his arm and turned away, leaving Tennys with the curious feeling that he had just become transparent to her. She had meant his being in Sonepur, being at the Carnival, meeting Himochee... *How much does her Cardinal mind tell her?*

Tennys smiled, shook his head and walked to the edge of the terrace. He took a deep breath, smelling the cool, brine-fragrant air. He looked down, over the terrace wall. In the dark, he saw the lights of other terraces below him, the matchstick people moving about upon them. He saw dirty-white flecks at the base of the cliff, where the Mammoth plateau plunged into the tea-coloured depths of Ushogbo. His eyes lost focus, his ears filtered out all other noise and he listened, really *listened*, for only the second time to the sea. The first time had been with Himochee, on the beach. He remembered the sight of her, illuminated from behind, the thatch of hair between her legs as she squatted down and drew in the sand...

There was a sound to his right, a faint crisping, hissing inhalation. Suddenly, Melie was next to him, scrutinising him like a cat, her face unreadable.

Tennys froze.

‘You smoke?’ Melie put a disembodied ember to her mouth, causing it to glow brightly. The sweet, herby smell washed over Tennys. He was suddenly flooded with memory, so intense it felt like the real time experience itself. He was surrounded by dark cushions and pleasant smells. His belly was full, his mind soaring with the effect of nchoo agents, Himochee nearby...

‘Yes.’

The sound of his own voice broke the paralysis. Melie extended her hand and he took the proffered smoke. He inhaled, slowly and carefully, and exhaled with a recently acquired luxuriance, letting the spent smoke dribble out over the terrace wall.

‘Look,’ said Melie abruptly, a little gruffly, and subsequently moderated her tone, continuing. ‘Look, I wanted to...’

Pause.

‘Yes?’

‘You and I haven’t...’ She tried again, paused again and then tossed her head, throwing her hair away from her face. She began speaking rapidly and quietly. ‘Alright, look. I thought you were a jerk when I first met you, alright, and gave you a hard time, which I shouldn’t have, but I did, and I’m sorry for that really, it’s just the way I am... I have a bad association with Austerity, and...’ Melie shook her head from side to side. ‘I just shouldn’t have given *you* a hard time, because that’s not fair, its not your fault you come from a shit-hole, is it? So... I’m sorry, OK?’

Tennys listened, nonplussed. *How should he respond?*

‘No apology necessary.’ He smiled. ‘OK?’ Melie remained impassive for a moment and then she smiled too. Tennys was amazed at the transformation. He could not recall having seen her smile on the Trip before. At least not at him, anyway. ‘You have a lovely smile Melie,’ he said. Melie glared at him. ‘No use looking at me like that, it’s true, ask Brock or Malvern, they’ll tell you the same.’ He smiled, internally amazed - and delighted - at his own ease of expression. Melie opened her mouth to speak then closed it. Then she smiled ruefully. Tennys followed all of her expressions careful. He adjudged his conversational efforts *reasonable* and was emboldened. ‘What happened to Aileeni?’ he asked. ‘She got thinner.’

‘Yeah, I know.’ Melie glanced over her shoulder at the other Trippers, clustered in a knot around the fire at the other end of the terrace. She waved at Carys. ‘Well, you know, Aileeni’s got these Fat pockets all over her...’

‘Fat pockets?’

Melie’s tail flicked quickly at his interruption. Tennys noticed, and noted.

‘Yeah, Fat. Not biological fat. It’s like the raw material for microfactories. Really neat, but carting round all that weight all the time is a drag.’

‘Amazing. She looks really... different.’ He had been going to say *attractive*, but thought better of it at the last minute.

‘Yeah, she does, doesn’t she? Mind, she’s been shitting like a fucking mule for the last two days, getting rid of all the Fat.’ Melie grinned at the expression on Tennys’ face.

‘What are you two whispering about over here?’

The voice’s owner, Aileeni, sauntered over with three glasses and a bottle. She sat down, pouring three

generous measures. The liquid was a dark, clear yellow, and smelled of fruit.

‘*Niwe*,’ Aileeni explained, raising her glass. ‘*Jhamslaavis*.’

‘Yo!’ Melie came over and chose a glass. ‘*Jhamslaavis*.’ She sipped carefully. ‘Hmm. Nice.’

‘That’s what I thought, so I got ten.’

‘Hey I just thought, I shouldn’t call you fat arse any more. Not now you’re all *svelte* and *seductive* like.’ Melie grinned.

‘Ooer.’ Aileeni took a large slurp from her glass. ‘But you can if you like, girl, because I kind of got used to it from you after a while.’ She reached out and pinched Melie’s cheek playfully with two fingers. ‘Little darling.’

Tennys, emboldened by his recent, relatively successful conversational efforts, tried to join in. ‘So you wouldn’t mind if I called you fat arse either, then?’

Melie looked at him and grimaced. ‘Fucking jerk-off,’ she chided playfully. ‘*I* can call Leeni fat arse, but *you* can’t.’

‘Least ways, not unless you want "Needle Penis" tattooed into your arse with a dirty needle that is young mal.’ Aileeni added cordially.

Tennys gulped. ‘I’ll bear that in mind.’

‘See that you do.’ Aileeni fixed him with a stare. ‘Now then girl...’ She released Tennys from her gaze. ‘*Jhamslaavis*.’

‘*Jhamslaavis*.’

The sound of laughter came from the other end of the terrace. Brock and Flocanalog had found something of mutual mirth.

‘*Damslarvits*,’ said Tennys.



Manchester clasped her hands to her chest and smiled beatifically at each of the Trippers in turn. ‘Melie? Tennys?’ She turned to her right, and addressed Flocanalog, her hand resting lightly on his arm. ‘Floc? Are you ready? Oh. Would Maureen like to hear too by the way?’

‘Who’s Maureen?’ Tennys hissed to Carys.

‘Shh. I’ll tell you later.’

‘Yes... And yes. Thank you Manchester,’ the Marineris man answered.

Maureen made an Appearance in Manchester’s resource.

‘Ah!... Hello Maureen!’

‘Hello Manchester. It’s good to meet you. I’m sorry, I didn’t mean to startle you.’

‘That’s quite alright.’ Manchester turned to her left. ‘Aileeni? Carys? Brock?’ Manchester addressed each Tripper in turn. ‘OK, now I’d like everyone to close their eyes...’

There was a theatrical groan from Malvern terminated by a loud yelp. He rubbed at his shin. ‘Who did that?’

‘Now close your eyes. I’m going to come round to each of you and just rest my hands on your head. So just relax. Close your eyes...’

Manchester moved round the table, talking, and pausing at each Tripper in turn to deliver a tailored nchoo, serving as a narrative virus, as a *meme* engine with which she could tell her story.

‘Just close your eyes...’



Afterward, Tennys and Melie had difficulty explaining quite *how* it was that Manchester told them her story. They had no recollection that she spoke, although she must have done. What they did have was memories - of being in places, hearing things, seeing people, thinking thoughts, none of them their own. They knew what Mirandar looked like - tall and willowy, straight dark hair, laughter lines around her mouth - and they knew who had relieved Manchester of her virginity - small, insufferable, loved to cook - but they could not say for sure that they had *heard* this to be the case: felt it, smelt it, seen it, perhaps, but not heard it.

‘Fucking odd, but really wild,’ was how Melie put it.



Manchester's birth on the Novagaian orbital 65 AK. was unexpected. The metacetaceans of Water engineered a replacement for Ushogbo, and delivered the instructions for how to build her into the ova of the woman they mysteriously selected to be the new Cardinal's biological mother, Mirandar Jatspaar. Mirandar did not know which one of the 20 different men who periodically flooded her womb - this *was* just after the Great Dying - had been the carrier of this novel information. She did not care. She was *pregnant!* She endured her extraordinary pregnancy with the courage and patience inherent to her gender and the birth itself, when it came - despite the alarming length of the gestation, and the resultant toll of the extra 12 weeks on Mirandar's physical condition - was uneventful and mercifully quick.

Upon reaching the frigid world outside her mother, Manchester bawled mightily. Mirandar cried, too, though for different reasons. She cried because she was happy. She hugged her seconds-old, blood-stained daughter to her cheek. She felt her child's warmth and smelt its smell, the umbilical cord still attached inside her, snaking between her legs, and she cried tears of utter joy.

When she was three months old, and after having exacted an explanation of viviparous birth from her mother, Manchester told Mirandar how sorry she was, to have caused her mother so much pain in bringing her into the world. Mirandar's eyes had filled with tears and she had picked her little daughter up (she could not walk yet) and hugged her tightly.

'You don't have to thank me, precious. I *wanted* to bring you into the world because I love you, and any pain I felt was forgotten the instant I first saw you.'

'I wath all red.'

'Yes, you were!' Mirandar laughed. Her precocious daughter was only three months old but could already talk. More than talk. *Communicate* .

Mirandar was a fit and healthy 67 years old at the time. She could confidently expect to have another 150 years to see her beautiful Cardinal child grow to maturity, and she planned on enjoying every day of it. Her daughter wouldn't grow *physically* as a baby girl would ordinarily do, of course. Salisbury had explained to her why this was so. Her daughter was special, a *Cardinal* , but Mirandar did not care about that. She simply loved *her daughter*, without condition or qualification, with a deep and abiding affection.

'Will I have babieth, too?' asked the infant Manchester.

'I don't know,' replied her mother, running her fingers through the blond down on her daughter's head.

Manchester chirruped, and smiled at the touch. 'Nithe!' She squeaked and clapped her chubby hands.

Manchester realised her differences from a very early age: in the way in which she would *know* that her mother was going to bath her, and would deliberately soil herself to enjoy the experience of being splashed clean. In the way her contemporaries - that is, other three month old babies - wouldn't (*couldn't*, she learned from Mirandar) speak to her. And in the way that she was constantly visited by lots of little people - smaller than Mirandar - who came to talk to her and bounce her on their little knees. And because of the way that she seemed to know things. *Why* that happened, or *what* caused that, or the *cause* of something else. She could close her eyes and feel the presence of something else, separate



from *her* and things that were *not-her*. It was like a *not-not-her* .

Manchester found it all rather curious.

On Mirandar's advice, she asked one of the little people who came to visit here why this was the case. Mirandar had told her that the little people were like her and very wise. So she asked one of them: *what was this not-not-her?* The little person had short, raven hair, black like wet coal, with deep, green eyes. Manchester liked the smell of her: it was clean, like crisp apples.

'Tell *me* what the *not-not-you* is,' Crispapples said.

'But I'm athking *you*.'

'And I want to know what *you* think it is.'

The infant Manchester pouted. 'But I wath athking you...'

'Alright, I'll tell you,' said Crispapples. 'The *not-not-you* is something that is normally... invisible. Do you know what that means?' Manchester nodded. 'OK. But you have... *special eyes* which mean you can see the *not-not-you* . See if you can tell me what the *not-not-you* looks like. Do you know? Does it have a shape?'

The infant Manchester pursed her lips and a little bubble escaped her mouth. 'It hath loth of lineth.'

'Are you scared of the *not-not-you?* '

Manchester thought long and hard, and her arms waggled in the air. 'Well, I am juth a *bit* .'

'Well, shall I tell you something?'

Manchester chirruped. 'Yeth!'

'I see a *not-not-me* , and it used to scare me too, but now it doesn't, because I know that it is friendly in a way. And useful. I can help you see the *not-not-you* like that, if you want?'

The infant Manchester considered, the bubbles escaping down her chin. 'Can you *weally?* '

'Yes, I can. It's good not to feel scared, isn't it?' asked Crispapples.

'Yeth!'

And Salisbury-Crispapples took the infant Cardinal onto her knee and wiped her mouth with a cloth.

'Nrggh!'

Salisbury was to become a big sister to the infant Manchester, often staying with Mirandar for extended periods. The two women became close friends. They would go walking in the Maymaneh hills Spinward of the Joycean sea. They would take picnics and nappies and blankets and Mirandar, who loved to paint and sculpt, would take her easel. Her daughter and Salisbury became her models. Salisbury could remain motionless for hours at a time, her musculature control exquisite, an artist's dream.

Manchester was not so co-operative. Often, she would squawk with fright and reach out her stubby little arms, and Mirandar would have to leave her canvass or her pad and gather her daughter up, to comfort her. It was not easy for a person less than a year old to handle the existential perplexities posed by the informational Cascade, and the infant Manchester occasionally scared herself at what the Third revealed to her.

‘Third theary monththerth,’ she would explain, and Mirandar would sweep the hair away from her daughter’s eyes, huge in the tiny face, and smile. Mirandar was human, had no understanding of the Cascade, but she understood when a child was scared.

Each time, after Mirandar returned to her painting, Salisbury would always talk to Manchester, trying to teach her ways to navigate through the non-perceptual teleological percepts delivered by the metacortex into her young Cardinal mind.

When she was two years old, Manchester deduced the existence of probability waves, and baked her mother strawberry shortbread fingers, which burned. Manchester was distraught.

When she was three years old, Mirandar took Manchester up the Rim wall to an observation blister. Sitting in the thigh-well of her mother, the infant Cardinal’s tiny hands pressed up against the bulbous, diamond window.

‘See? I was born there.’ Manchester looked where her mother indicated, at the dark blue globe hanging apparently just out of her reach. Manchester pressed her nose against the transparency, wonder on her child’s face. ‘It’s called Water now.’

Manchester squirmed around. ‘What was it called before?’

‘Home.’

Manchester did not understand the expression which accompanied the word. ‘Are you sad Mama?’

When she was five, Manchester learned to spawn Copies in the Cascade, to let her Third augmented mind find its own way, without her active intervention. She was building and consolidating the teleological-symbolic neural machinery of her mind, her consciousness beginning to soar.

‘Mani look!’ Mirandar voice was a whisper. Mother and daughter were concealed in the hide, and they had been waiting all day. ‘He’s proposing to his mate.’ 30 metres from them, a brightly coloured male Bee-eater, resplendent in his red, white and yellow plumage, was offering a female Bee-eater a dragon-fly, its diaphanous wings clearly visible either side of the long, sturdy beak. ‘It’s a courtship gift.’ Mirandar explained to her daughter. ‘I wonder if she’ll accept it...?’

‘Oh, I want her to, he looks like he would make a good daddy, look at his wonderful feathers!’ The female jumped around on the branch, dancing away from the male, who dutifully followed, undeterred by her apparent lack of interest. Then she snatched the gift from his beak and immediately flew off, intent on devouring the tit-bit. He followed, quick as a flash, different thoughts on his mind.

Mother and daughter lowered their field glasses, and grinned at each other.

‘Wasn’t that splendid?’ Mirandar exclaimed and Manchester nodded her agreement.

‘I wonder if we shall see them again? We might see their children!’

When she was six, Salisbury took her to the Hub complex in a Bus. Manchester sat strapped into a seat, a half chewed carrot in her hand, gazing through the side of the Bus as the spiky, ellipsoidal Hub hove into view.

‘Ugly.’

‘Hmm hmm,’ said Salisbury. ‘Blame Water, they built it.’

She experienced her first orgasm at the age of nine years. That her body was capable of delivering her into desire states of quite delicious proportions was a joyous revelation to the young Cardinal. For many years of her formative adolescence, Manchester masturbated with glorious abandon, learning about the varied ways in which she could pleasure herself. She allowed herself to be penetrated by something other than her own fingers at the edge of 11 years when, after having basked for many long minutes in the wonderful sensation of having a tongue travel lightly over her clitoris, she decided that this was a good time. The first person she told was Mirandar, who hugged her, and made her a cup of mint tea, which the two women drank watching the Terminator sweep toward them over the Maymaneh hills.

Mirandar and Manchester knew each other as friends and equals for almost 70 years before Mirandar died. Manchester mourned her loss deeply, her most potent introduction to grief. She scattered her mother as flakes of carbon over the upper Afine canyons Spinward of Undine, as Mirandar had requested. She had often built sculptures there, either in consensorias with Trees or using her own hands, sculpting in silica, clay and wood, and her favourite sat in a small break in the forest, the clearing kept fastidiously clean by Tree intervention.

It was called *Three Women*.

## Chapter Twenty Six

The Hub gripped the bulky, decelerating vehicle lightly with hundreds of intangible Digits, manipulating the thousands of metric tonnes of mass like an egg, careful not to rupture the fragile metallic shell. It demanded - and received - information on every conceivable aspect of the vehicle’s business, configuration, capabilities, cargo, crew and passengers. This was not standard procedure, but the inscrutable Water engine with which the Hub was associated had requested that it investigate this specific arrival. It was one of the passenger biographies that, particularly, caught the Hub’s attention.

*Austerity.*

Hub spent a few picoseconds pondering what to do - a not inconsiderable period of deliberation for the enormously powerful machine. Then it initiated a soft EM sweep of the vehicle, looking for the weak energy signature of the individual it was interested in. Then it located and subverted a diagnostic choi remote, which it sent on an intercept with the EM signature as, simultaneously, it began feeding the vessel’s resource collective with false sensor echoes, blinding the simple machines to its actions. Then, the mysterious, magical metacetacean Water engine with which the Hub was associated reached into the

informational underweave of things, and tweaked at temporality.

The individual stopped.

The diagnostic choi remote, the size and shape of a clenched fist, intercepted the individual's EM signature. Hub gently prompted the machine to begin an invasive exam. The remote drifted up to float by the individual's nose and extended a tiny tube up the bulbous protuberance. There was a minute, dense puff of saline as an army of medical nchoi was deployed. The choi remote extracted the tube and drifted away to wait.

Hub, in a manner of speaking, twiddled its thumbs.

While waiting for the medical nchoi to begin relaying substantive findings to their parent remote, other parts of the Hub were busy doing several million other things. In a period of some 60 seconds, 20 different vehicles departed Novagaia - via the four induction Guns running the circumference of the orbital's high Rim walls - and 15 vehicles arrived. Hub accelerated and captured all of them easily. In addition, it manoeuvred a further 13 vehicles clear of docking spines with intangible Digits and eased another 7 vehicles - the largest massing some two million metric tonnes - onto the soft, puckered lips of vacant docking blisters.

Inside the complex itself, 55,405 individuals asked Hub a question, of varying levels of complexity and it answered them all at once. Hub was also maintaining, simultaneously, some 8,092 different Lifeswork - the rich, virtual renditions of information from the Histories - and also driving the simulated awareness of the 15,346 Halflifes populating them. It was also co-ordinating its army of constructs around the innards of the complex. Hub, in fact, had some 200,000 such surrogate eyes and hands, and that was only the tangible ones.

The intangible Digits were, quite literally, innumerable.

The Hub machine was not self-aware in a human, or even a Cardinal, sense, but it was aware nonetheless. None of the fleeting, temporary Halflifes it maintained were full expressions of its own awareness - although many people, and some Halflifes, believed that this was the case. Above and around and within, supporting from without all of the Halflifes, and riding serenely above the millions of autonomous parts of itself, was the Hub mind proper. This diffuse, powerful mind was presently in conversation with the Water engine with which it was associated, curious as to the metacetacean interest in this particular vessel.

# The entity moving fortimeward is potential backtimeward negativity. From a futurenow the teleological percept is of effect preceding cause so the matter is of some interest. Oblige me.

# As you wish.

And that was the end of their conversation.

The diagnostic choi remote began relaying its findings to Hub. The information relayed caused the Hub mind to experience *disappointment*. The exam had revealed that this was not an embodied sentience. It was an autonomous, encapsulated Halflife. Although it was a biological construct - it leaked, smelt, excreted and so on - the watery protein shell housed only a sophisticated resource parasite driving a simulated awareness posing as a real person.

Hub, in a manner of speaking, frowned.

This autonomous encapsulated Halflife, covert inside its soft, watery shell, was an affront to the morality of the machine ecology that was the *essence* of Novagaia, and the values of this philosophy were deeply, intrinsically, part of the powerful Hub machine. The Hub mind passed its findings, and its value judgement, to the Water engine. The latter said:

# Koyaanisqatsi.

Hub decided to keep, in a manner of speaking, an eye on this autonomous Halflife. Such an entity was capable, it knew, of the worst grotesqueries. Two further minutes went by before the metacetacean Water engine reached back into the informational underweave of things.

The individual resumed.

And aboard the docked vessel, named the *Ugly Bastard*, the thing that believed itself to be Vicar-General Dwoschultsies Gromburg the Second thought precisely nothing: the simulated belief system had been shunted into an experiential loop by the nchoi executive.

Within a broad, white belly, the munitions microfactory was beginning to warm, tooling up.



Nanashub emerged from the tank of medical emulsion only a matter of hours after the *Ugly Bastard* arrived at the Novagaian Hub, his eyes, lungs and genitals rebuilt. He was looking forward to being on Novagaia, and finding those responsible for him being in vacuum for the best part of a full minute and, very nearly, killing him.

Melie and the fat woman.

*Especially* the fat woman.

Nanashub did not know yet whether he would kill them. The indecision was not due to any moral qualm, but rather, stemmed from a desire to both *hurt* and *destroy*: incompatible aims in the end, he always rued. But it was this indecision that was making him happy. He was looking forward to the decision he would make. He would enjoy either course, but it was pleasant to tease out the options.

Nanashub shifted in his seat, some four metres wide, specially reinforced to accommodate his huge mass. He looked down at the back of Mikhail's head, below him, checking the *Ugly Bastard's* docking progress on grey graphics displays. A flat, expressionless choi resource was speaking in the background. *Repulsive little worm*, thought Nanashub. His thoughts drifted to the *Ugly Bastard's* passenger, the cleric from Austerity as he claimed, the munitions microfactory and associated military choi peripherals suggesting otherwise.

‘Vessel is docked master.’

The simulated voice over the auditory tap was from his military grade resource. Nanashub had programmed it to consider and address him as master. Having - as it did - executive status over the other choi systems of the *Ugly Bastard*, Nanashub made sure no aspect of control escaped him.

Nanashub manipulated a resource window with a finger the size and colour of a small aubergine, initiating what he thought was a covert probe into the Hub registry, searching for the arrival of the shuttle the two women had stolen from him. His resource went into brief communication with a tiny component of the Hub - the latter’s condescension was utterly lost upon the dense military machine - and downloaded the accessed information to its Host’s eyes via a virtual window.

Nanashub scrolled through the data, absently smiling at the thought of sharp metal on pink skin, *snick-flooding-crimson* and found the arrival of the shuttle eight days previously.

Nanashub grin-leered unpleasantly, his flat nostrils flaring over 15 centimetres of his squashed ellipsoidal head, thinking *s cream-cry-pain* thoughts, feeling a pleasant, warped-sexual ache in the pit of his stomach.

Nanashub planned on enjoying his visit to Novagaia.

## Chapter Twenty Seven

‘I’m from Helicon originally,’ said Carys, in response to the question.

‘Oh, really?’ Flocanalog licked foam from his upper lip. He no longer hissed when he moved: the Marineris exoskeleton had dismantled itself under guidance from Maureen and Malvern that morning. With its loss, Flocanalog felt more *whole* and he was delighted with the sensation. ‘The artistic oneil.’

‘Well, it likes to *think* of itself as that, yes, and there *are* lots of artists there of course. But you see *tension* plays such a large part in the Helicon ideal of good art...’

‘Tension?’

‘Yeah, you know, shocking or banal or whatever to the current view, that it’s like living with a bunch of aesthetic *butchers*, who just want to pull things apart. Everything must be *evaluated* and *discussed* and the implications and motives of the artist *judged* and really, I wanted something much more simple and... *life affirming* than that.’

‘D’you know, I don’t think I’ve *ever* tasted *anything* as *good* as this... well, *ever*,’ said Aileeni wonderingly, holding up a large glass of dark fluid, topped with a head of creamy foam. She drained half of it in one gulp. ‘Ah!’ She licked her lips, burped, and smiled. ‘Pardon me.’

The three of them - Aileeni, Carys and Flocanalog - were in Sonepur, which like most other Novagaian

settlements, was more forest than structure. They were in a sun-dappled, forest-walled square, sitting in the shade provided by vine-laden trellises. Conversation murmured around them. Music was playing. There was the click of accompanying fingers, appreciative laughter. The air was perfumed with a miasma of recreational intoxicants. Rotund, dark chocolate shapes moved sedately in and among the dozen or so tables, replenishing those wishing to be replenished from internal pockets of themselves. Trees sat at the four corners of the square, bulbous, alabaster and green.

‘I tell you, these Trees are a blessed *wonder!*’ Aileeni fastened her fingertips to the depression in the middle of the table: a tiny Tree root protruded there. Aileeni manipulated her infection pockets - she had been practising - and delivered a viral nchoo request for another drink. ‘Anyone else?’

‘Not for me thanks Aileeni,’ said Carys.

‘Sure?’

Carys appeared to waver. ‘Oh... No, really, I’m fine.’

‘OK. What about you?’ Aileeni’s eyes lingered on the tall Marineris man, lounging easily in the expansive wicker chair. *Handsome, after a fashion*, she mused privately. *Glad he got rid of that support.*

‘Don’t mind if I do.’ Flocanalog smiled across at her. ‘Same again.’ He reached for his glass, went to drain it.

‘Maureen?’

Maureen was tapped into the resource of each of the three Trippers, her Appearance apparently sitting in the fourth, vacant seat. ‘Yes, Aileeni?’

‘Can you get *drunk?*’

Flocanalog snorted at the question, smiling. He reached for his drink again, remembered it was empty, abandoned the action, leant back. He glanced at Aileeni, her generous, smiling mouth, loud laugh. *Fine woman*, he mused privately, watching, as she tossed her thick mane of hair. *Reconstituted man you may be Flocanalog*, he said to himself, *you are still a man*.

‘Not literally of course,’ said Maureen, replying to Aileeni’s question. ‘Although I have experimented with effecting changes to some of my more primitive structures and components, in effect, simulating the effects of various pharmacological interventions enacted willingly by humans upon themselves...’

‘What, you mean like drinking?’

‘Yes, and I found that, generally, the effect was deleterious. Apart from one simulated Euphoric, which I found most agreeable.’

‘No shit?’ Aileeni grinned and raised her glass to the Appearance. ‘Here’s to getting really *agreeable!*’

Carys smiled, enjoying herself and the company. She liked Aileeni straight away. There was a genuineness about the woman, and a *compassion* - evident in the tenderness she showed towards Melie - that Carys felt attracted to at once. She and Aileeni were quite alike in many ways, she suspected. She had also felt herself buzzing in sympathy with the hidden pain in the young woman from Sesquoia. Carys

decided to reach out to Melie. Perhaps a gift? She and Brock were returning to Chapel Halls only two days from now, though. She became a little reflective. A little sadness in all joy.

‘Maureen?’ asked Flocanalog.

*Flocanalog.* It was a strange name. Full of hard, guttural cees and gees. *Maybe it sounds better underwater?* Carys felt a kinship with the man from Marineris. There was an element of sexual attraction in this, but for Carys, there was an element of sexual attraction in her relationship with anyone: that was her nature. But in Flocanalog’s case... He had, she decided, some of her partner’s quiet strength.

‘Maureen?’ Flocanalog said the name again.

‘Flocanalog?’

‘Maureen?’ Flocanalog opened his mouth to continue when:

‘Piss in a bucket, get *on* with it, mal!’ Aileeni cried.

‘OK, OK!’ Flocanalog laughed and held up a hand. His face went blank. ‘I’ve forgotten what I wanted to say.’

A bulbous chocolate-veined machine glided up to them on dozens of tiny appendages.

‘More drinks!’ Aileeni leant back in her chair and allowed the choo construct to nuzzle her hand. It wagged its hindquarters pleasantly, recognising her nchoo. She sought the machine’s moist access gates with her fingers. She felt the droopy friendliness of the machine greet her in consensorias and ask her what she wanted. The communication was intuitive, non-verbal, imagistic: Malvern had schooled her in its rudiments. The machine understood and extruded a smooth hose-like appendage. Aileeni held out her glass and it began to fill with dark, fragrant liquid, cream-foam-gathering, ejected under pressure from a reservoir inside the barrel-like machine’s insides.

‘Give us your glass, Floc,’ Aileeni instructed Flocanalog, when she had re-filled hers and deposited it on the table.

‘Sure.’ Flocanalog picked up his glass and his hand touched Aileeni’s in the passing. Two pairs of eyes sought each other out, both open wide in equal surprise at the potency of the fleeting contact. The glass hovered momentarily above the table, shared between the two of them. Aileeni dropped her gaze first, then glanced back up.

Flocanalog smiled, enjoying the novel feeling of sudden, uncontrollable swelling in his penis.

‘Thanks, Aileeni.’

‘My pleasure.’

A world of private meaning passed between them in the utterance of the two simple sentences. Aileeni leant down to her right, accommodating the choo machine. Flocanalog ranged his eye over her large behind, the soft bulge of her tummy, the frizzy mop of hair, the nakedness of her shoulders. He felt a tremendous feeling of *quality*. He felt his heart beat faster, and his nostrils flare. He shifted in his seat, and coughed into his hand.



‘Uh *huh* ,’ said Carys quietly, who had been observing.

‘What?’

‘This is for you,’ said Aileeni, polysemously, when Flocanalog’s glass was full, handing it across the table to him. Once more, their hands lingered in the touch and Flocanalog felt the same, sparking-tactile jolt, like anti-electricity. He smiled.

Aileeni had been aware of his eyes as she poured him the drink. Now she saw the falling-lust-serious interest on his face, his wide nostrils, and dilated pupils. Aileeni knew what he was thinking. After a brief internal wrangle with herself - there was really never going to be anything but one answer - she decided she quite liked the idea too.

‘Wonderful.’ Flocanalog took the glass, meaning something else: he did not drink. He looked into Aileeni’s face and was filled with a longing to run his hands through her hair and to feel the warmth at the nape of her neck. He even leaned forwards to carry out the action, but stopped himself.

Carys coughed. ‘Do you know, there’s usually a good market around Two Beaks somewhere?’ she said brightly, looking from Flocanalog to Aileeni. ‘I think I might take a stroll.’

Maureen looked up, puzzled. ‘You might?’

‘Yes. Why don’t you come along?’ She rose from her seat, and bent down to whisper in Aileeni’s ear.

Aileeni’s face was blank for a moment and then it flushed red. She squawked and clapped her hand over her mouth.

‘ *Carys!*’

‘Enjoy yourselves, now!’ Carys kissed Aileeni on the cheek, retrieved her loose jacket and bag from the back of her chair and sauntered off.

‘Oh!’ The face of Maureen’s virtual Appearance’s appeared to flood with comprehension. ‘I believe I have just... Yes.’ The Appearance vanished.

Flocanalog and Aileeni exchanged amused glances and leant back in their chairs. There was a pregnant pause, matching the pregnant gap between them where Carys had been seated. The space seemed to loom, like a micro gravity well, drawing the two of them closer together.

Flocanalog leaned forwards, clasping his hands. ‘So.’ He picked himself up and took up the vacant seat. He opened his mouth to speak, closed it, smiled, and then reached for his drink. He was a long time in supping, and then:

‘...’

‘Yes.’

‘You don’t know what I was going to say.’

‘Yes. I do.’

Flocanalog looked at her: large face, large teeth, and a *huge* mane of fiery, frizzy hair, tied back in a loose pigtail. He reached out his hand, paused. She did not move. His hand moved again, sought out the curve of her jaw, just below her ear. He took a lock of errant hair in his fingers, feeling the texture. He looked into her eyes. She took hold of his hand and guided it to her breast, allowing him to cup her, her hand on top of his. She gave a sigh. Flocanalog felt as if his trousers were about to burst.

‘Blimey,’ he tried to say, but it came out as a growl.

Aileeni raised her eyebrows. ‘Animal.’ She pushed herself very slightly against his hand.

‘Aileeni.’ His voice was hoarse. ‘I’m not in the practise of...’ He tailed off. His hand slid down to Aileeni’s hip. ‘It’s been a long time.’ He let his hand stroke her ribs. ‘I’m not sure I remember how it all goes.’

Aileeni felt herself begin to moisten at his touch. Nothing dramatic, just warm, tingling. ‘It will all come *flooding* back, I’m sure.’ Over Flocanalog’s shoulder, she could see to the next table and the smiling curious face of a young man, observing the proceedings. His grin grew wider at her look, and he touched his hand to his forehead, bowing his head respectfully, looked away. ‘Let’s go somewhere?’

Flocanalog stood quickly and drew her to her feet. ‘Alright.’ He urged her towards him with a hand at her back. She resisted, and then acquiesced. His fingers tightened on the plumpness they could feel at her waist.

Aileeni sighed at the hardness she could feel on her stomach and then it was she who was pulling him.

‘Come on,’ she urged.

‘Where?’

‘Somewhere with no *people*.’



With warm vegetable weave under her bare feet, and a high arch of thick forest above her head, Carys wandered along the wide, white path, smiling at the people she passed.

*Flocanalog and Aileeni. How nice!*

When she reached the end of the path, she smelt the clean, crisp green smell of the forest mingling with the briny tang of Ushogbo, and emerged blinking onto a grassy esplanade. A hundred metres wide and more than 60 kilometres in length, the esplanade ran along the top of the Mammoth cliffs, mirroring the beach 500 metres below it at the base of the cliffs.

Carys wandered onto the short, clipped grass. There were people everywhere, walking, running, lounging, eating, rolling, sleeping, playing, shouting, talking, praying, reading, watching, listening and feeling.

*How wonderful!*

She stopped and smiled, taking it all in. She breathed deeply, feeling a breeze stroke up the inside of her calf. The market. She must find the *market*.



The pseudo-Shell loitered 50 metres below the cream rusty waters of Ushogbo surrounded by curious, darting fish. In response to its occupants' wishes, the machine began to move. Large wings extruded from its fleshy sides and it pulsed with bands of crimson, apple-white and mustard. Slowly and sedately, it began to fly. Inside, cushioned in a fragrant, rippling twilight, Flocanalog smelt the sharp musk of Aileeni's armpit and ran his tongue through the silken hair.

'It all came back to me,' he murmured. 'Would you say?' He suckled gently at a large brown nipple.

'Uh huh.'

The two of them were lying naked, side by side, the skin of the pseudo-Shell translucent below and around them: the effect was of floating above a dark infinity.

Flocanalog had come in Aileeni's silken depths almost as soon as he entered her, but despite this had remained semi-erect after his ejaculation. He had moved to withdraw but Aileeni had pulled him to her, squashing herself against his chest. Then he got hard again, and the second time, their lovemaking was slower and utterly delightful.

'I have an idea.' He ran his tongue over the cotton-wool softness of Aileeni's belly, tickling his nose on her pubic hair.

'What's that?' Aileeni stroked her hands through his hair, moving her hips gently.

'Well, it's a bit unusual.'

Aileeni chuckled, low in her throat, and brushed an errant strand of frizzy hair away from her eyes. 'How unusual?'

'I would like to try something.'

'You don't want to put yourself in my bottom, do you?' Aileeni sat up and set her breasts wobbling delightfully. 'Because I wouldn't be very keen, though I know...'

Flocanalog looked at her, stunned. Then he burst out laughing. ‘Aileeni, nothing like that!’ His hand sought out the tender parting of her thighs, cupping her moist mound. ‘I prefer this.’

‘That’s alright then. You wouldn’t believe how unpleasant some mal can be!’ Aileeni moved on his hand. ‘Umm, that feels *nice* .’

‘I was thinking about consensorias actually.’ Flocanalog kissed her forehead.

Aileeni looked at him blankly for a moment. ‘You mean *make love* in consensorias?’

‘Yes.’

‘How?’

‘Ah, well, you know I was bonded with a Shell on Marineris...?’



‘Undine, now that’s the place, dear lady.’

‘Really? I’ve never been there, but I hear it’s magical.’

The old stall-holder smiled. ‘Magical is the word. People say there’s a Water engine resident there, and I believe them. How else do you explain walls of water flowing upwards and standing in sheets for all like it was something solid? Hmph. Would you like some more tea?’

‘Yes thank you.’

‘Two ticks.’ The old man levered himself slowly up out of his chair and disappeared into the back of his tiny stall.

Carys had found her market, three kilometres along the cliff top esplanade. She had wandered through the riots of colours and smells and voices, her interest diffuse until attracted by one stall in particular, perched right on the cliff edge. A small table supported a dozen assorted wooden sculptures. Larger stone art stood to one side. A small, wizened man sat on a collapsible chair, sipping from a large, steaming mug.

‘Hello.’

‘Afternoon.’

She bent to inspect the pieces. ‘Your work?’

‘All my own humble creations, yes.’

‘They’re very good.’

The leathered face creased in a warm smile. ‘Will you take some refreshment my dear?’

‘Thank you, I would like that.’

The old man grunted and set aside his cup, levering himself upright slowly.

‘Oh, let me help you there.’ Carys came round to take hold of his arm, smelling the old man smell of him: peppermint, antiseptic, stale tobacco-variant. He accepted graciously, and ambled slowly into the back of the stall, returning shortly with another chair, which he unfolded for her.

‘Here we are, my dear.’ His voice was gruff, his manner pleasant. ‘Now. What can I do for you?’



Aileeni was in a heaven of sounds that were touches and smells that were colours and sensations that were tastes. Floccanalogue was inside her. She had her arms around his neck, the soft warmth of the pseudo-Shell at her back. She could feel a ripple-churn of water past borrowed, consensual flanks and the powerful beating of carbon sponge wings that were hers and his and others. She was inside herself, and outside herself looking on, Floccanalogue’s naked buttocks between her splayed legs. Her body was deluged with sensation, flooding deliciously with feelings that were sounds that were ripe like peaches. She sighed, tingling wet, short of breath, feeling a hardness like the taste of chocolate within her and sensed an impending, rippling speedening. She heard a moan as a flash of emerald in her nose and felt an explosive sound in her vulva which bucked her hips. She gasped and the pseudo-Shell pulsed a hot, flashing yellow in accompaniment. She could feel the warmth of a mouth on her own and felt tears of joysadness well in her eyes. She felt him lick the saline from her cheek and pour words in her ear like velvet cream. Something was going to happen. She moaned and the hardness inside her swelled as moist breath like honey in her ear made her vulva engorge and oh. Oh!



The old stall-holder took a loud slurp from his mug and pointed out to sea, using the sculpture in his hand to indicate. 'Well, will you look at that.'

Carys scanned the water and then saw it too. 'Oh yes! How wonderful! I didn't know they could that, did you?'

The old stall-holder chuckled. 'No dear lady. What a remarkable thing.' He turned to her, his grizzled face creasing in a smile. 'What would cause a pseudo-Shell to jump from the water like that, do you suppose?'

## Chapter Twenty Eight

Looking to Antispinward with unaugmented eyes, about 35 degrees to his right, he could just make out the Mammoth cliffs 60 kilometres away across the tea-coloured waters of Ushogbo. The cliffs were over 500 metres high along most of their 140 kilometre length.

And he had jumped off them in a giant, living machine.

Tennys called up a resource window and watched the grid-work of the optics tool snick into place. He selected for extreme magnification and his resource assembled an image for him. Now, he could see the long beach at the base of the cliffs. He could see tiny match stick figures, the bulbous shapes of pseudo-Shells, the ruddy-cream, rolling-crash of surf. He picked out the green-white slash of the esplanade at the top of the cliffs. He smiled.

*I like Sonepur.*

He disabled the optics tool and closed the window. He found he did not want his vision encumbered by virtual objects just at this moment: the real view was too good. He breathed deeply, hearing the sounds of the Tirn forest at his back and the far away screech-scrawling laughter of sea birds.



They left the tent, walking through the fragrant night air linked arm in arm, their footfalls silent, light as air, enjoying the whooping, thudding, raucous growl of the Carnival around them.

'I know somewhere.' Her face shone and her teeth were shockingly white against the dark of her skin.

He could feel the plumpness of her hip on his thigh and her hair black and long in the chaotic light.

‘Where?’

‘Special. We can be alone. Oh!’

The night air exploded above them. A series of loud concussions drenched them with sound. They peered upwards, entranced. The sky had splintered and was falling down towards them in sparkling motes of crimson and purple. As they watched, it happened again. The dark night birthed streamers of colour as bang-whooping echoes careened off the Mammoth cliffs to their right.

‘You.’

There was an empathic jolt inside him. He felt a giddy, irrepressible soaring and wanted to laugh, cry, jump, shout, scream. He sank to his knees, clasped her to him and put his hands around her large bottom, burying his nose in the downy reaches of her tummy. She stroked his hair, cooing at him. The dark night sky splintered into rainbow shards again, white, yellow, green, and concussions thrummed through them both. She motioned him up and he complied, unwilling to let her go. She was beautiful. He felt a surge of nchoo infection, frosting his vision with warm bubbles of silver. Affection rose through him and spilled out the top of his head, eager to join the splintering sky.

Her eyes widened, feeling the same pulse, the same time, the same moment. Words from her mouth dripped into him like honey.

‘Come in me.’

Her face was round and dark. She rubbed herself against him and felt his erection. Her eyes bounced in pleased surprise. She put her mouth next to his ear, pulling his head down, and her voice was low, seductive. ‘Come. In. Me.’

He kissed her, for the first time, *though how had he not done so before?* Her lips were soft, her saliva sweet. The contact galvanised the nchoo infection and he felt her mouth as if it were all over him, not just on his lips. A screeching, diminishing fizzing engulfed them, abruptly, quickly quiet. The dark sky birthed coloured streamers, showering them with violet and emerald motes, dancing, silver bright, warm and enticing.

She took his hand.



Tennys sat on a mossy boulder, a mass of dark vegetation behind him, the warmth of reflected Sol all around. He was perched on a thin spine jutting into the waters of the far Spinward shore of Ushogbo. Looking out, he could see innumerable little islands running away towards the far shore, 60 kilometres

distant. He could see the tiny black speck of the departing Bus that had brought him and Brock here (not nearly so big as the one he had taken from the Hub). He could also see other Buses coming in the opposite direction, bounding in easy, short parabolas from island to island. He looked to his left: open, rusty waters sparkled in the warm Sol. He twisted his head further left: 200 metres away, across a deep, narrow fjord, another spine just like this. Sheer walls, straight down, save for minute ledges, accessible only to sea birds. He flipped his head around and saw an identical spine on his right, topped with a thick mane of swaying trees. From here, and extending Spinward of Ushogbo for 120 kilometres was the Tirm Forest, 9,000 square kilometres of dense, variegated woods. Tennys heard a rustle from the trees behind him and turned to see Brock emerging, in the last stages of adjusting his trousers.

‘Pissed like a hose-pipe,’ he remarked evenly.

Tennys got to his feet. ‘All set?’

‘I reckon.’ Brock stooped to gather his pack. ‘Let’s go.’ The two men grinned and set off, picking their way carefully along a narrow path. They were headed back into the heart of the Tirm Forest, along paths that Brock had learned over years spent camping and walking in the area, often coming to the Tirm to paint. He explained it thusly as they walked.

‘Something to do with the quality of the light, Tennys.’

‘The *quality* of it?’

‘Now, it is a strange thing, really, to be talking about the *quality* of light, as you say. I mean, light is light, you might think. It can be lots of different colours and intensities and so forth, referring to the properties of the EM, wavelengths, frequencies and so on, of course. But how is light *qualitatively* different in any one setting or occasion, as opposed to some other setting or location?’

‘I don’t think it can be.’ The air was an invigorating potency in Tennys’ nose and throat. ‘Light is not different on two different occasions because physical properties are invariant, aren’t they? Surely a judgement of quality must be a purely *subjective* thing? It’s part of the observer’s own mind imposing order on what is perceived.’

Brock picked his way around a small boulder jutting into the already narrow path: it left a space barely 20 centimetres wide.

‘Ah yes, but what you overlook in *that* explanation is the possibility that invariant physical properties are *not all that there is to it!* Oh, I’ll grant that your own personality and emotional state and whatever will colour your perceptions of knowably invariant features such as EM properties. But that’s not what I mean. What I mean is, what if the quality judgement *comes first?*’

Tennys frowned and shook his head. ‘I’m not with you.’

‘Well, how can I put it? It might be our *eyes* which perceive light but our *consciousnesses* which perceives the quality of light, direct and unfiltered. No, not even the quality *of* light, but the light *of* quality.’ Tennys struggled to understand, and then gave up. He laughed, realising he was inadequate to the demands of natural philosophy. ‘Have I lost you, Tennys? I’m sorry, I do tend to ramble about such things. Very important to a painter, I feel. Look at that!’ Brock pointed quickly, and something startling blue-shot-red-yellow streaked past him. ‘Recognise it?’

It seemed like an absurd question and Tennys shook his head, about to say no, when his memory



supplied the reference. A dream-like image, somehow wrapping feelings and words and sights all up together in a clear superposition. *Manchester's story*.

'Bee-eater!' Tennys' eyes lost the bird as it dipped and dove into the surrounding forest. *Was it carrying a dragonfly?* Tennys voiced his unspoken thought.

Brock turned and laughed heartily. 'I didn't see.'

The two of them walked for some minutes without speaking, each lost in their own thoughts, the Tim clacking and warbling on their left.

'Brock, did Malvern really, you know... with Manchester?'

'He did.'

Pause.

'Sly old bastard.'



It was like nothing he had expected or imagined. The nchoo infection was dribbling away, its warm, bubbling-silver effects losing saliency, but that did not matter. He was scared, his fear making him flaccid. He was excited, his arousal sending blood to thicken him. She was lying next to him, on her back, her hair spread out in soft ribbons. Her eyes were closed. She was smiling, whispering his name, sighing. He traced a fingertip down her side and across her tummy, down her leg and back up, teasing her belly button. His eyes were fixed on her face, on the thin sheen of sweat at her temples, moistening the hair there, on the darker, mottled patch on her cheek, on the twitch at the corner of her mouth. He put his hand under the curve of her armpit, leaned over her and kissed her mouth.

'Himochee...'

She did not answer.

'Himochee?'

'Ummm?'

He stroked her cheek and she opened her eyes. She took hold of his hand, guided his finger to her mouth and put it into her mouth. She sucked, regarding him out of dark, black eyes. He gasped, incredulous, his breath quickening at the incredible sensation of her mouth. Then, releasing his finger from the silken caress of her tongue, she guided it down. He felt the feathery tangle of her pubic hair, and then a moist warmth.

‘Ummm!’

He kissed her, frictionless delight at his fingertip as he stroked up and down scant centimetres of hot, slippery tissue. She raised her arms and sighed.

‘Oh!’

She had to encourage him up.

‘I’ll squash you.’

She laughed at him, a low bubbling in her throat. ‘No you won’t.’

Trembling, giddy with excitement, he climbed between her legs, and held himself rigid on his arms, not wanting to hurt her or put pressure on her. His insertion, when it came, was slow and fumbling, not at all the smoothly orchestrated affair that he had wanted.

‘Oh, Tennys, that feels so *nice!*’ She wriggled under him, her smell more powerful than any nchoo infection, her arms around his neck, pulling him deeper inside her. He felt his testicles come to rest against her plump lips and he almost fainted with the realisation of where, and how, he was.

‘Oh my God.’ His hips took on a life of their own, pulling him out and sending him in.



‘Not seen you doing a great deal of *research* lately Tennys. I thought you came to Novagaia to learn about old religions?’

‘Yeah, I did. Sounds a bit odd when you put it like that.’

‘Lost interest?’

‘No. No, not really... I’ve forgotten about it to tell you the truth. Well, no, I haven’t forgotten about it as such, just... backgrounded it for a while, I suppose.’ He glanced up. The two men were sitting on a fallen trunk, watching the small stove efficiently boil water. ‘Other things have taken my time.’ He grinned. ‘If you know what I mean.’

‘Have you arranged to see her again?’

‘Yes, but we’re going to be leaving Sonapur pretty soon, aren’t we?’

Brock shrugged. Couple of days. Why don’t you ask her along for the rest of the Trip?’

‘What about the others?’

‘What about them?’

‘Won’t they mind?’

Brock poured hot water into the two cups. ‘Don’t see why not. Though Himochee might not want to come of course. At all. She might turn you down flat.’ He raised his hand. ‘Never, *ever* underestimate a woman, Tennys. Their capacity for what us men would call irrational behaviour is unbounded.’

‘Yeah, I know. They are different women, aren’t they? They don’t think like men do. I mean, when you say they’re not *rational*, it’s true, but they can still be *logical*. Like Manchester, she’s sometimes really rational and logical, and then other times, she’s...

‘A woman.’

‘Yes.’

‘Milk?’

‘What?’

‘In your tea?’

‘Oh, yeah, thanks.’

Brock dribbled milk from a small canteen, and handed the cup to Tennys. He sat back down on the log. The thick Tirn forest was sheltered and cool, clack-warbling sounds coming from their left. The two men sat in silence for some minutes, supping the hot tea.

Brock spotted a Lesser Horncraft.

Tennys didn’t.

‘But that’s just it, I suppose,’ said Brock.

‘What is?’

‘It’s like painting, you see? It doesn’t matter how fine the brush is, or how deft the stroke, or even what the quality of the pigment is, the painter can never quite capture the *granularity* of things, he will always only produce an approximation of things. Not that veridical reproduction is only what is important, of course, that’s not my point. Because at the same time, the inability of the artist to accurately render *granularity*, the *discreteness* of things, means that the fundamental *inter-connectedness* of all things becomes the more natural expression.’ Brock paused and drew noisily from his cup. ‘You follow?’

Pause.

‘And that’s like women, is it?’

‘What?’

‘That. What you just said.’

‘Yes. Exactly. Because if you try and understand women, the further you go, the more uncertain the judgement. It’s like the old quantum physics, you see. Do you remember all that stuff?’

Tennys hummed and supped his tea. ‘Vaguely.’

‘There used to be this idea of "particles". Silly idea really because these ancients got really baffled when they found that these "particles" appeared to split up into smaller and smaller bits the harder they hit them. Yet they spent years, *decades*, trying to figure out what these smaller bits of reality could possibly be.’ Brock looked baffled for a minute, frowned, shook his head and chortled. ‘Unbelievable.’ He raised his cup and slurped noisily.

A phrase was running through Tennys’ head.

*Three quarks fur muster Mark.*

Tennys flicked his eyes to an intangible resource icon at the periphery of his vision: it bulged and expanded to a window within easy reach of his fingers. He keyed for a library search. The phrase was something he had read once, and everything he had ever read was stored in the powerful nchoi resource snuggled at the back of his head, nuzzling the visual cortex.

The auditory tap chimed. ‘Searching.’

‘The point is, of course, that there aren’t any *elementary* particles as such at all. Of course, you can carry on bashing bits of reality up into smaller and smaller bits indefinitely. But the more energy you put into the collision, the more apparently "elementary" particles you get. I mean, given that the distinction between matter and energy is part of the Mayan delusion, then isn’t it *obvious* that an apparently endless regression of particles is going to be observed. More energy equals more "elemental" bits.’

The auditory tap chimed. ‘Reference found.’

‘Quarks.’

‘Beg you pardon?’

‘The particles. The supposedly elementary ones. They were called *quarks*. They were invented by someone called "James Joyce" who died in 559 BK. *Finnegans Wake*. Doesn’t sound very scientific, does it?’

‘Alchemists! Where are you getting that information from?’

‘My library.’ Tennys tapped the side of his head.

Brock grunted, sniffed and slurped.

‘Anyway, the point is of course, that there are *no* elementary particles as such. Only energy and probability. And probabilistic explanations are most appropriate for women. You see, I think that most of the time, males know *what* will happen, if say, they forget something important to the female, like her birthday or something, though he is not able to tell *when* the consequences of his forgetting behaviour will

arise. But if he knows *when* something is likely to happen, like making love, for example, then he cannot tell *what* will happen on that occasion. You can't know both things at once, you see.' Brock warmed to his subject. He set his cup on his knee and used his hand to chop air. 'Now the *male* on the other hand, is more like your ancient mechanical view, with everything running along neat, tidy, predictable lines. Take the male sexual response, for instance. A male is aroused, or can be, to the point of erection, by a representation of a woman's body. Now, he doesn't generally think that this is a *real* woman, but his nervous system, time and time again, will respond just like there was a real woman in front of him. Regular as clockwork, nothing unpredictable in his behaviour at all.'

Pause.

'Brock?'

'What?'

'Look, start again, will you? Like from where you said, "It's like painting", I thought that was a good metaphor to start with, I could handle that. How did we get from God particles to erections?'

Brock looked at him blankly. He slurped his tea noisily, and smacked his lips, rubbing his hand on his legs. 'Well, it's all the same thing, isn't it?' He belched, slapped his chest. 'Pardon me.'



Two hours. She hadn't arrived.

The little beach-front cafe was busy, Novagaians coming and going. There was sound of laughter and the smell of salt and ripe fruit in the air. Tennys thought about getting himself another drink, decided that he didn't want his mind fogged with any more stimulant, nodded to himself to confirm the decision, and then almost immediately reached out a hand to the middle of the table, manipulating the Tree root.

'Fuck it.' He sat back, sighed deeply, clenched his teeth suddenly as an unutterable sense of loss welled up within him. *Where was she?* He released the pressure in his jaw and threw a glance around him. With one arm over the back of his seat he looked around. There were Novagaians, distinctly dark, in groups everywhere, at tables, walking along the bleached, woven-root promenade running by the side of the cafe terrace. Everywhere, people. Women. Lots of women. He alone was alone.

*Shit.*

His jaw clenched, shutting out the sudden pain, feeling resentment, bafflement, confusion, anger. *What are you like?* he chastised himself, only barely not speaking, the words warming and thrumming his throat. *Fuck sake, Tennys, sort your self out, so she hasn't arrived, so she's late, she'll get here sooner or later.*

But what if she didn't?

Tennys turned further in his seat, felt awkward, stood up abruptly, swayed a little, and turned the chair around, facing the beach and the tan waters of Ushogbo across the white promenade. His drink arrived, and he drank, seeking a refuge. The sight of the beach, so different...

He remembered wandering along the beach, still dark before the morning Terminator. He remembered her looking at him and smiling. He remembered being tremulous in the combined afterglow of orgasm and nchoo infection, recalled being suffused with a magical intoxication which was from neither of these two sources.

'Novagaia in quiet song. She's beautiful, isn't she?'

He remembered Himochee squatting in the sand, a piece of driftwood in her hand, scratching an explanation of the ecopoesis in hard-packed sand near the water's edge. He remembered her telling him of the engineered choo altruism that was so much part of the Novagaian ecopoesis, the interdependence of people with choo and nchoo, Trees and the Novagaian orbital itself.

'You think of the orbital as a female?'

He remembered his eyes straying to the dark thatch of pubic hair visible through the open front of Himochee's sarong, scant inches above the sand.

'Of course. The orbital is life giver, life sustainer, the food we eat and the air that we breathe, and that's just like a mother. Of course Novagaia is female, it's obvious.'

Something tickled Tennys' down-hanging hand. He felt a tiny flick of moisture. He turned his head to see an ebony choo machine slide away from him, a long, proboscis-like appendage tasting the air, hunting for its next delivery.

A window snicked open quickly, his resource informing him of the presence of nchoo agents within him. A message was waiting for him. His heart leapt at the possibility that it might be from Himochee, and then crashed when he realised what such a message must mean. He shrugged, feigning disinterest to himself. He failed and keyed for decryption. The resource projected a graphics window, ten centimetres on a side, which appeared to float several centimetres above the table in front of him. Himochee appeared, her face more beautiful than he remembered. He felt his stomach heave. Something akin to a ball rose in his throat, choking him.

'Tennys, I'm sorry, I can't make our meeting, perhaps another day? Something has come up, and well, I'm sorry, I really am...'

'Stop.'

Himochee froze in mid-word. Feeling his eyes begin to burn, a pain more acute than any physical nociception sting at his heart, Tennys stared numbly at his hand, seeing nothing. 'Himochee.' He looked at her frozen face, and watched it waver and water as saline escaped down his cheek, the ball rising, clotting his throat. 'Himochee...'

## Chapter Twenty Nine

The three people stepped from the white Tree root path onto the fine sands of the Smile, 30 kilometres down the long straight beach from Carys and the old stall-holder. The bleached silica was so fine it was like walking on silk, but this late in the morning, it was almost too hot to walk on. They were wearing simple shirts of woven vegetable fibre over swimwear, carrying towels draped over their shoulders. The waters of Ushogbo crashed rust-creaming onto the beach 200 metres ahead of them.

They made an incongruous sight.

A small male walked between two females: he was talking excitedly, his head bobbing, sandals slapping, waving his hands expressively. At what must have been a particularly exciting point of his narrative, he brought his palms quickly together in front of him so that they barely touched. Then he flung his arms dramatically out to their sides. His left hand stopped short of the smaller female's nose. The other hand contacted the join of the taller female's legs which was level with his shoulder. The hand attempted to linger as if by accident.

'Malvern!' Manchester brushed the Cardinal's hand away.

Melie was less sanguine. 'Lose it Malvern or I'll break your fucking fingers.'

Malvern withdrew his hand from between Melie's legs with a bold smile. 'Terribly sorry, my dear.'



Herne felt his feet hit soft sand and pulled himself upright, breathing deeply and strongly, spitting brine. He drove with his legs, forcing himself through the shallowing water, whooping. When he reached dry sand, he turned, put his hands on his hips and looked out ahead of him. Chaplin and Maddox were still in the water, 30 metres out. Herne ran his hands over his face and laughed, bellowing out across the water.

'Call yourself *swimmers*? '

Chaplin won, though only just. Emerging from the water he put his hands on his knees and coughed, pummelling his chest. 'Herne, you are a *fish*! '

Maddox came in last.

'I swear you got *dolphin* in you mal.' He extended his hand and the men slapped. 'Good swim, Herne. Good swim.' He rose, coughed and spat. 'Right. Breakfast then!'

‘I tell you mal, I am starving,’ said Herne as the three friends dried themselves. ‘I fancy cereal porridge.’

Chaplin snorted, ‘Listen to that, will you? Cereal porridge! No imagination, you Herne, that’s your problem. What about...? Mango tempura with black coffee, suspenders and delicately spiced *breasts*?’

The Bus was 50 metres up the beach. Once dressed and inside, Chaplin accessed the machine, giving it directions through nchoo consensorias. The hole in the side of the Bus closed up with a dry plop. Flat, pliable strands of carbon muscle extruded from the seats around them.

Chaplin grinned. ‘Going up.’ He chewed the words laconically, grinning lopsidedly. ‘Hoopla!’

This particular Bus was a young man’s choo machine, notably absent in the dampening mechanisms with which larger Buses abounded. Herne knew what was going to happen, but even so, the takeoff left him feeling like about five people had just sat on his chest.

Which, in a sense, they had.

‘Woohoo!’



Malvern watched Melie being tentative at the water’s edge.

*A great beauty.*

She bent down to the bubbling surf and he sighed.

*Oh my.*

She rose and he admired the graceful sweep of her quadriceps bunching as she stood.

*A great beauty.*

She was dressed in a simple black swimsuit, fine, downy hair giving way to virgin skin where her tail emerged from the base of her back. Her swimsuit cut just below, and just above, her buttocks.

*Oh my.*

Melie turned at the water’s edge with a hand at her mouth, looking back up the beach at Manchester anxiously.

Manchester laughed and waved. ‘Go on!’



‘It’s *cold*,’ came, diminished, back.

Malvern smiled lazily, leaning back on an elbow, watching. His eyes rove higher, up the splendid symmetry of Melie’s back, to the naked nape of her neck, her hair gathered in a loose bun. He watched as she waded forward. Her slender calves disappeared under the lapping surf, reaching her knees, then the tender insides of her thighs. He saw a little triangle of daylight, for just an instant, where her thighs met and then splayed, ever so slightly. Then she was gone, like a mermaid, silkily into the water.

Malvern sighed, at peace, in the presence of beauty. ‘She is a great beauty, eh Manchester?’

Manchester did not respond for some moments.

‘Yes. She is.’ She broke into a smile. ‘I know what you are thinking.’ Malvern did not doubt it. Manchester knew what he was and loved him all the same. He was constantly baffled and delighted by this knowledge. Manchester gathered her hands in her small lap. She was cross-legged, her back very straight, naked from the waist up, a delicately painted sarong reaching her knees. ‘She is also Cardinal.’

Malvern laughed. ‘I’m sorry, only I thought I heard you say that...’

‘I did.’ Manchester regarded him with large, intelligent eyes, watching for his reaction.

Malvern blustered, ‘You can’t be serious!’

‘I am perfectly serious.’

‘But... but *how*? I mean, why? I mean... *what*? ’

‘I know.’

Pause.

‘I believe it would greatly aid matters Manchester if you could say more than two words in any one sentence.’

‘It might.’

Pause.

‘Well?’

Pause.

‘I’m trying to think of another two word sentence to say, but I can’t, isn’t that strange? All at once, couldn’t think of one.’

‘Manchester, I find it peculiarly annoying to have startling assertions flung at me and then not subsequently elaborated or justified. So would you just *please* explain *what* you are talking about. You believe Melie...’ He gestured out to the water, turned his head, and snapped it back. ‘Is a *Cardinal*? ’

‘I do.’

Surf crashed lazily, screeching sea birds cavorting above.

Pause.

‘So she has metacortical tissue?’

Manchester nodded. ‘I had diagnostic nchoi ported down from Hub surreptitiously do an exam over the last three days: I’ve had her genome mapped and cortical connectivity assayed at a thirty percent granularity - a full determination would take even the Hub several months, and you know how ridiculously fast it is - but that’s beside the point. Melie *does* have metacortical tissue, or what looks very much like it, and the connectivity exhibits fractal branching, just like in any "ordinary" Cardinal. These are simply facts of her construction...’ Manchester shook her head minutely. ‘But there is something else going on Malvern. And Melie is part of it. Her Cardinality is absolutely central. I’m sure of it.’

Malvern sighed. ‘On what grounds?’

‘Her Cascade signature for one. I’ll show you. Get a copy up and running.’

Malvern, exasperated, complied, directing his resource to activate the nchoi Bridge with his metacortex. His awareness began unfolding into inaccessible dimensionalities. His understanding of the structure of reality changed and became augmented. Visual and auditory perception became less important as the ur-reality of the informational Cascade assumed prominence. Lines and spaces of teleology opened up around him, infinitely far apart and all tangled up together in the same noplac.

His mind united in a new triumvirate of choo and choi and Third. He was one with a computational Other, singular and multiple, the copy next to him, although it was infinitely far away, but there was no distance in the Cascade. He looked, but had no eyes, no light, blinding white all around, within, without.

*Manchester.* She was with him. He capitulated to her superior nature, and allowed himself to be guided, through no-space and cavernous one-dimensional lines, through dark, whispering blisters, huge like oceans and as small as ants. There was *meaning* here, and *cause*, and concepts of things not even expressible with referents from a less powerful mind, all available to a Third augmented consciousness capable of teleological perception.

Then, after a time, as the nchoi bridge with the metacortical tissue disengaged, the ur-reality of the Cascade slipped away in impossible segments. Esoterica flew down a drain in his awareness past the boundaries of a mental event horizon. Inside, locked within an informational singularity, was knowledge unavailable to a choochoi awareness

Malvern gave a shuddering breath, reassembling himself internally. He opened his eyes and saw Manchester looking at him.

‘Do you know?’ She meant did he *know*: had he pulled back into his understanding anything from the Cascade about Melie?

Malvern had a suite of tools - mnemonic triggers, interpretation daemons, and a host of other specialised aids - for probing behind the event horizon of his own unusual mind. But on this occasion, he did not need them.

‘Yes.’

Manchester nodded. 'Melie has told me she experiences episodes in which she "blitts". What she's actually experiencing is the intrusion of metacortical activity into her consciousness. The teleological perception is undirected and she has no way of harnessing what she's experiencing, and no way to comprehend it. Her resource is rudimentary and there is no metacortical Bridge to help her, of course.'

'Uncontrollable, unpredictable Third generation?' Malvern's face grew aghast as he contemplated the prospect. 'But Manchester, this is terrible. The poor girl must be scared out of her wits. She needs our help!'

Manchester smiled. 'I agree. Suggestions?'

A tall rangy woman came up the beach towards them. She pulled at a thong in her hair, and shook her head violently, spraying the two little people with water.

'Yargh!' said Melie. 'Why the long faces?'



Himochee Ortony Cemilliheir and Ghuvdaa Milliwhakay had been friends since the age of five. They were sharing their lunch in a small Sonepurian cafe clearing. Himochee pulled a moist hunk from her fruit-bread and popped it into her mouth.

'And Fritjof, what is he up to?'

Ghuvdaa waved a hand. 'Don't talk to me about Fritjof. You know the slimemould said he would take me to Plenty? For the Air Festival?'

Himochee nodded, 'Yes, I remember you saying.'

'Well, I thought that it would be just the two of us. But the stupid clod of a mal has invited most of his entire extended *family*.' Ghuvdaa reached for her cup and took a small, angry sip from the fruit tea it contained.

'Did you tell him that you thought it would just be the two of you?'

'No, of course not. He should have known.'

'Yes. But he *is* male, so what else do you expect?'

'I know.'

The two friends fell into a companionable silence. The cafe-clearing was quite small: more than about 30

people would have stretched the procurement abilities of the resident Tree considerably. For the present, Himochee and Ghuvdaa were two of only four: two septuagenarian women talked quietly and animatedly on an adjacent table.

Himochee allowed her thoughts to drift, to her own childhood, riding Caravans round and round the inner surface of Novagaia. She was a native Novagaian, the product of a union between native Novagaians, themselves the product of other natives, back for some 20 generations. She had an immediate family of mother, father and brother, but also, like many Novagaians, an extended family. As a child, although she had only two biological parents, she nonetheless had many surrogate parents or *Crechems*, the number of which was not, and did not stay, fixed. As adult members of the Caravan on which Himochee was born left, seeking other places and other people to experience, so others would join to take their place. And with their arrival, they would assume the role of Crechem: surrogate parent, carer, guide and teacher, always for more than their own biological offspring, never for greatly extended periods, each adult member of the Caravan contributing to a collective child nurturing.

As a young girl, Himochee could remember playing with other children from the Caravan, Ghuvdaa always with her, ducking in and among the ponderous, friendly legs of the motile Trees that constituted the Caravan. The underside of the machines was an exciting, mysterious place for the young Himochee, like some strange, inverted forest-den. The machines moved slowly, and with such ponderous care, that no child was ever hurt playing in amongst its tangle of thick carbonsponge legs. Some of the braver, usually but not always, the young males, even used to lay down directly in the path of one or other of the numerous coal-black machine appendages, whooping with the thrill of it, as the large flat base - easily their height in diameter - descended toward them. It would always halt well clear, passing over them, moving with the greater bulk of the rest of the Tree, not planting itself unless there was open ground, and no fragile bodies in the way. Himochee had been one of the brave ones, risking the terrifying ordeal, but Ghuvdaa had always been squeamish.

‘Hello?’

Himochee came to with a start, and focused on her friend’s face. Ghuvdaa was small and round like Himochee. Both were dark, distinctly Novagaian though Himochee was darker. Where Himochee wore her hair long and straight, Ghuvdaa sported an unruly mop of shaggy chestnut curls. Her left eye was a vivid green, the other a pale toffee. Her mouth was wide, her teeth small, and her cheeks dimpled when she smiled.

‘Sorry Guvie. Do you remember playing Squash Dare?’

Ghuvdaa snorted and laughed. ‘What a hoot!’ She frowned. ‘I was always really good at it as I remember.’

Himochee’s eyebrows shot up. ‘You are such a *liar* Ghuvdaa Millawahkay. Like what about that time when we were at Undine? I was the one that had to pull you out of that wall, wasn’t I? “Honestly Himee, it’s *completely* safe”.’

Ghuvdaa threw her head back and laughed loudly. ‘Hee hee, do you remember? And there was that old mal...!’

‘Oh yes, what was his name? Poncy? Ponting?’

‘*Poncit!*’

‘ Yes, and he got really angry and started waving his arms, and we were both just standing there, you dripping wet, sorry little looks on our faces!’ The two friends chuckled at the remembered incident, and regarded each other warmly.

A large mal appeared at the side of their table, pulled out a seat, reversed it and sat grinning massively at the two women. ‘Alright Himee? How’re you doing Guv?’

‘Better before you arrived.’ Ghuvdaa stared at Himochee’s brother Herne past a lofty nose. ‘What is that *smell*?’ She sniffed exploratorily in Herne’s direction. ‘You been eating decomposed milk products again you big ape? *Yuhhk!*’

Herne leant forward and breathed on Ghuvdaa, causing her to recoil from him with amused horror. ‘Oh you are *disgusting!*’

‘Herne, you stupid ugly fish.’ Himochee punched her brother on the arm. It was like hitting a tree. ‘Leave her alone.’

Herne turned to Himochee, offering her his cheek. ‘Go on, lay one on me.’ He pointed at his chin with a blunt finger. ‘Right there, go on. Do it.’

Himochee laughed, ‘I don’t want a fight, Herne. I have far better things to do with my time.’

‘Yeah, like what? I’ll come.’

Ghuvdaa groaned theatrically, but she was smiling, directing her question at Herne. ‘Do I have to put up with *you* all day?’

Herne folded his arms slowly across the back of the chair, his forearms bunching. He gave Ghuvdaa a winning smile. ‘I’m not so bad when you get to know me.’ He looked her full in the face. ‘Love those eyes.’

Himochee laughed. ‘You two make me laugh!’

Herne and Ghuvdaa looked at her blankly, then at each other.

‘What do you mean?’ they both asked indignantly, which only made Himochee laugh the louder.



‘I’m fucking *what?*’

Manchester knew it didn’t need repeating. She looked at Melie carefully, watching for signs of reaction: for the moment, there was only amused disbelief. Melie and the Cardinal had parted company from

Malvern, who had disappeared off on his own, only an hour ago. The two women had sought out the shade of the forest two hundred metres up from the beach, and were presently strolling through a high vaulted green cathedral, sturdy woven Tree root beneath them.

‘Manchester, that’s... that’s *crazy!*’ Melie had unrolled her swimsuit down to her waist and was wearing a light cotton top, showing off her tummy. She shook her head, her tail twitching back and forth, brushing her calves. ‘I mean, I’m not a *Cardinal*, you guys are something else! I mean, you know the *future* and stuff, right? And you see the world differently, and...’ Melie waved her hands in the air. ‘All kinds of stuff!’

Melie glanced up over Manchester’s shoulder. Three native Novagaians stood in the entrance to a small, enclosed Tree copse. Two were fems. The other was a tall, well-muscled mal. He was staring at Melie like she had just fallen out of the sky. Under different circumstances, she might even have been interested. As it was, having him stand there and look just annoyed her. She glared at him and pointed.

‘What the fuck are you looking at needleprick?’

Forgetting about him instantly, Melie pulled Manchester along the path and dropped her voice. ‘Look Manchester, you’re *crazy!* I’m not a *Cardinal!* How can I be a Cardinal? Look how fucking *tall* I am for a start! So I have nightmare trips from time to time. Is *that* what it’s like to be a Cardinal?’

Manchester walked lightly next to the taller Sesquoian, her hands at her sides, the sarong unfurled and now covering her from chest to thigh. ‘I *know* it sounds strange, Melie. I wouldn’t even *suggest* it unless I had good reason to do so.’

The path took a turn to the left, the vegetable cathedral shrinking, enclosing the two women more snugly. A motile choo, a chocolate-striped shadow, slipped past them and dived into the forest wall. The smell of rosemary and mulch was heavy in the air. ‘And I can’t really see the future.’

‘Whatever. You have reasons, you say? What are they then?’

‘Ah well.’

Pause.

‘Manchester, what?’

‘Well, I had the Hub do an exam on you...’

‘You did *what?* An exam? What exam? I didn’t have any exam, what are *talking* about Manchester?’

Manchester coughed and wouldn’t meet Melie’s eyes. ‘Well, you did, actually, Melie. Via nchoi. They slipped into you while you were asleep. I’m *sorry*.’ Manchester shrugged expansively, and looked up into Melie’s eyes, which were frosty. ‘I don’t even know why I didn’t just ask you, but I thought at the time that doing a covert exam would be better, because then you wouldn’t have been worrying about what it revealed, and so, I...’

Melie held up a hand. The two women stopped in the middle of the path, turned toward each other, Melie’s tail swishing quickly back and forth. ‘Alright, alright. I’m worrying now. You should have asked me, you didn’t, but it’s done, I don’t care about that. What did the exam show? I’ve had exams before, they haven’t shown anything unusual, are you saying this one *did?*’

Manchester sniffed, rubbed her palm over the end of her nose quickly. She pursed her lips, opened her mouth, closed it. 'Why don't we find somewhere to sit down?' she said finally. 'Then I can explain.'

'Yeah, why don't we do that.'

The two women resumed their walk, Melie silent and stony-faced.

*That could have been better.* Manchester thought.



'What the fuck are you looking at needleprick?'

*I'm looking at you gorgeous,* Herne thought.



Malvern sipped at the fresh coffee, savouring the first, bitter warmth. He replaced the cup, and keyed at the waiting resource window: it was apparently flat on the table in front of him. The window scrawled graphics, which cleared as the auditory tap chimed.

'Hub courtesy Malvern. What do you want?'

Malvern listened to the voice: familiar as his own, noted with approval its blunt directness.

'Uplink me with Salisbury.'

An icon pulsed, once, twice, three times. Then it expanded to a 15 centimetre square, filled with the angular, black framed head of Salisbury. It wasn't a camera image, of course. Malvern's resource was communicating on-line with the similar nchoi machine in Salisbury's head, and the two resources were generating real-time simulacrums of each Host for the other. Salisbury would, similarly, be seeing an "image" of Malvern's head talking.

'Hello Malvern. Courtesy call?'

‘Hello Salisbury. I’m afraid not. Well, not entirely. How are you my dear?’

Salisbury shrugged. ‘My physical constitution is nominal. I’m glad you’ve contacted me actually Malvern. I want you to come to Escher.’

Malvern temporarily forgot his own questions. ‘Why, what’s going on?’

Salisbury smiled grimly and snorted. ‘Indeed.’ She said nothing for some moments, the simulated face remaining off-puttingly impassive. Malvern opened his mouth to speak. ‘Two days, Malvern. I have Chaiyaphum, Ksobi and Hechi all arriving, plus a few others. Rineanna, Niandankoro...’

‘Niandankoro? What pulled him away from Lila?’ He chuckled amiably. ‘Must be terribly important.’

‘Yes,’ said Salisbury, with a flash of irritated impatience. ‘It is. Two days, Malvern. Escher.’ The window snicked closed.

‘Salisbury!’

The window iconised and flashed to the periphery of his vision. He had not even mentioned why he had called her. *Melie*. Irritated, he keyed the remaining window again. He drummed the fingers of his left hand as the resource connected him. The auditory tap chimed.

‘Hub courtesy, Malvern. What do you want?’

‘Uplink with me Salisbury.’

‘Again? Your memory going or something?’

‘Just get on with it,’ said Malvern testily.

## Chapter Thirty

In the dream, he was standing at the top of a cliff, sloping down in a wash of loose gravel to a wide beach of black, gritty rock. There was no wind, and the sun shone strongly out of a clear sky. He looked about him, and all around it was the same: the shallow even drop of the cliff, the green water, the dark, crystalline rock. He took a step forward, and the ground underneath his feet crunched and popped, little sparkling shards flying up around his feet. He became aware of someone behind him, speaking in a low voice. He turned, but there was no-one there. The voice continued, behind him still. He frowned, and turned again, but there was only the rock, and the sun and the water. The voice was insistent. *He must. He must*. A wind sprang up, bringing with it a sharp iodine smell. *Now, you must go now. You know you must*. His frown deepened. He began walking down the cliff face, slipping with the pulverised rock. He reached the beach, and began walking toward the water. The ground became hot under his feet, and he felt the first hollow emptiness of fear gnaw at his insides. He looked around and called out. The slope



had got steeper, it didn't seem possible now that he could have climbed down it. He saw a figure at the top of the cliff, a stick-like thing, jumping and screaming and pointing at him. He called out, but his voice was a whisper, and it carried no distance. The stick thing bent down, picked up a portion of the cliff and snapped it down...

### *Discontinuity*

...and like a wave travelling down a rope, the cliff began to peel away in a solid sheet kilometres wide. He could see every detail of its surface as if it were no further away than his outstretched hand. Mountains, rivers, people, children, bees, grains of pollen: he could see all with the same resolution. He felt the ground shift under his feet. He cried out, becoming angry and felt a bubble of power rise within him. He grew in stature, losing his arms and his legs. He rose from the ground, floated and made briny Water all around him. He pushed back the descending cliff-world of the stick-thing with no more than a brush of his hand. The stick-thing flailed and whined. He heard it mewl and cursesnicker as it was inundated, the gritty, black beach disappearing beneath the sparkling effervescent flood. He heard a voice behind him, felt exhilaration tingle along his entire length, snapped flukes quickly to orient himself for the presence that was there.

*You can, you can. You know you can...*



Flocanalog awoke from the dream as if emerging from milk, the transition seamless and white. He opened his eyes, already fully alert, feeling ghost emulsion bubble in remembered lungs. He turned his head, saw Aileeni's frizzy mane in silhouette and spooned himself with her, hearing her grunt and wriggle softly in her sleep.

Images from the dream were still with him. His mind churned with questions and interpretations. Feelings were recapitulating themselves. The sensation of losing arms and legs was very potent, like his Shell extraction in reverse, only, curiously the feeling was not of loss but of *gain*. He closed his eyes. The *power* he had felt, pushing back the cliff and the stick-thing, growing and becoming something bigger than he was. He shook his head, recalling the exhilaration and the fear, finding the emotions becoming less vivid. The dream images were losing saliency. Suddenly, it was very important to him that they not.

He pulled himself from the wide bunk, pausing to savour once more the morning smell of Aileeni's neck before dressing quickly, and stepping out in the early morning darkness.

He and Aileeni had spent in the night in a snug. One of hundreds like it, the snug was an extruded bubble of warmth trapped in the carbonsponge matrix of a giant Tree. So when he stepped outside, he found himself in a smooth-sided tube, woven Tree root beneath his feet. He moved silently through the vegetable darkness, his hand brushing lightly against the warm arterial walls. He remembered his dream, but poorly now, as though it had been bleached of meaningful colour.

*You can, you can.*

He noted the change in the air as he approached an open exit. He stepped into a tall cylindrical chamber. The entrance closed smoothly and the elevator plunged downwards, free falling down 100 metres before being braked by the Tree, depositing Flocanalog on the beach. He walked along a wide, woven path between bamboo structures, and then cut across to the water's edge, looking ahead for... *there* . He came up to a low wall and looked over the edge. Three large, milky shapes bobbed gently in the waters of a small inlet.

Flocanalog stepped over the wall and climbed down. He bent down and touched one of the shapes on a darker region of its top surface. Colours stirred slowly through the milky mass as he manipulated the nchoo pocket. He felt the calm lick of assent in the brief consensorias, rose, stepped back from the water's edge, and waited. The pseudo-Shell rose from the dark water, pulling itself like a homogeneous lump of yoghurt onto the dry bank with innumerable puckered appendages. It was lumpen and slightly awkward when out of its home environment. It irised open along a section of its length, and he climbed inside.

Some 10 minutes later, he was in consensorias at a depth of 50 metres, sending the pseudo-Shell powering through the tea-stained waters of Ushogbo at 20 metres a second, heading for Inhoplae Basin.



Sharing consensorias with the pseudo-Shell was nothing like the symbiosis with his Shell on Marineris. He pondered this as the pseudo-Shell breezed over a shoal of small silver *hipostrata* , darting collectively away from the flying choo machine. *How did he know that this was the case?* He had no memory of his mind's I being any different then: he was *him* . So what had he been before, had he been him then too? If so, why couldn't he recall the life of that him?

Flocanalog looked about him. Not with his eyes - they were closed - but vicariously with the senses of the pseudo-Shell, with discrete bursts of sonar and maser imaging. He could "see" the edge of a cliff ahead signalling the fall off from shallows to the depths of Inhoplae. He could "see" bands of wavering temperature gradients, the knobbly growths of coralforest colonies, skittering fish, the sudden, sandy burst as sole erupted from their seabed hidey-holes. Then he was over the cliff and there was just empty water beneath him for two kilometres straight down. He urged the pseudo-Shell down, "feeling" the water past his flanks grow colder and heavier. He probed around with his borrowed senses, "hearing" a far off boom.

*What was that?*

The cliff now behind him extending for kilometres either side. He turned the pseudo-Shell and decided to track it. It took two hours to travel from one end to the other, 70 kilometres in all. He came back to his original position and directed the pseudo-Shell Antispinward, further out into Inhoplae Basin, exploring with borrowed senses. 15 kilometres away, he came across another trench, 20 kilometres wide at one

end, tapering to a narrow point at the other and plunging to a depth of four kilometres.

A delightful suspicion began to grow in his mind.

He left consensorias and accessed his resource. He asked the nchoi machine to tap the sense memory of the pseudo-Shell and to construct a map of the terrain he had just travelled based over. He requested a 3D rendering and instructed that all subsequent information from sonar and maser imaging be incorporated: the auditory map chimed and a busy icon popped into being.

‘In progress.’

Flocanalog re-entered consensorias and directed the pseudo-Shell to Port and Spinward. He found what he was looking for 10 kilometres distant. A shallow rent in the floor of the ocean, 15 kilometres across and two kilometres deep, like a gentle impact crater. Delighted, he turned the pseudo-Shell to Starboard and 18 kilometres distant, found its twin: an ocean crater, bulging through the floor of the orbital to form a domed mountain two kilometres high.

He left consensorias, removing his hands from the pseudo-Shell’s moist access gates. He instructed the resource to display the resultant map and a grey virtual window quickly began animating itself with contours of the ocean floor. He looked at the image carefully. He opened an auxiliary resource window and keyed a number of transformations. The map rolled around its horizontal axis, trenches became mountains and shading introduced itself. He looked at the resultant image and grunted in amazement, smiling at what the map revealed.

A face.

Etched into the floor of the ocean, 80 kilometres long, staring down 40,000 kilometres to the surface of Water, smiling through hard vacuum to the builders of the Koyculture, was the face of Ushogbo the Cardinal.



The First Metacetacean reached into the informational underpinnings of physicality with his own esoteric consciousness and blinked lazily as he became *there*. As brine boiled locally over sections of his exterior, cooling in thick clots over others, he sent out a welcoming boom into the surrounding tea-stained water.

# I am with you

Silence.

The First Metacetacean was content to wait and allowed his thoughts to contemplate origins. He remembered the building of the twelve principal structures of the Koyculture and the debates that had

occurred within the young metacetacean race at the time, still struggling with the cataclysmic emergence of self-awareness within the species genepool.

*How to proceed? Whether to proceed?*

The First Metacetacean experienced pleasure at the memory, and slid into a phenomenological narrative of the events: He tweaked its apparent chronology, and the entire subjective experience passed in only seconds.



The building of the Koyculture seemed magical to the shrivelling population of old Earth. One day in 200 BK., 150 years into the Great Dying, human kind looked at screens and displays of the sky, listened to fevered commentary and read accompanying graphics as, above the 28th parallel, a tiny black dot appeared hanging in the sky. Year by year by year it grew larger, elongating, an inconceivable thread descending silently and slowly from the blackness.

*The Hair of God .*

Four decades after its first appearance it was 20 metres thick and 70,000 kilometres long, and it dangled above the Roof of the World, almost close enough to tickle the top of the Himalayan plateau. Water ordered it secured and frightened human engineers gutted the inside of mount *Kanchenjunga* to anchor the cosmic thread to the surface of the drowning Earth.

Earth's lunar companion was grated away by Water to help construction of this vast cable. The shrivelled surface was scraped clean of metals and its meagre water was extracted from the secret, interior spaces it had sank to over the millennia. The resultant lumpy satellite was left to tumble in silent humiliation at its mineral ablation, leashed in perpetuity to the greater mass of Water. And before she was completely inundated, Gaia too gave generously of her treasures to other metacetacean enterprises. Billions upon billions of tonnes of biotic and mineral resources were pulled up and out of her gravity well to pass into the machines building the machines building the machines building the human race its new home. But neither human nor Cardinal ever supposed that the Koyculture was anything more than it appeared to be: an immense piece of almost magical engineering. But the metacetacean builders of Water had aimed for more than simple *structure* .

*They had aimed for life .*

Because from the wheeling, complex forms of Oaxaca and Novagaia, new life-forms would arise. From Daedulusorrow and Verest too. And not just *life* either but *sentience* too. From Lattice and Plenty and Helicon the first attenuated Children of Water would arise, emergent nova minds of marvellous sophistication. From Ascii and Memecast it was the same. From Sesquioia and Marineris it was the same.

And from Austerity, too, it was the same.



The First Metacetacean pulled himself from the phenomenological narrative, experiencing discomfiture.

*Austerity.*

The First Metacetacean experienced surprise at his discomfiture, which in turn caused him to be surprised again.

*What an extraordinary mental episode.*

He examined it, traced its teleology to a Cascade event and entered the event horizon of his powerful mind, casting about, looking for... he withdrew.

*Malignancy.*

The First Metacetacean considered a course of action. Then he reached into the informational underweave and caused water to vibrate next to an auditory transducer of the Mother of Water, 42,004 kilometres away, two kilometres below the surface of Water.

# [PainImage] Will you go? Child is in need

# I will go

The First Metacetacean twisted slowly, lightsparkling as he rolled. He perceived the first, fleet forms begin to congregate around him. Soon he was engulfed by a dancing cloud of animal and machine biota. Then, nervously, tentatively, the presence of Nogai coalesced out of the increasing complexity, the Child mind revealing itself cautiously before him. The two incomprehensible beings greeted each other. The First Metacetacean listened to the innocent gaiety of the emergent orbital mind. Then he replied, booming and keening slowly, painting his thoughts for the child consciousness to perceive. Nogai twittered in reply, its communication immanent in the interplay of animal and machine biota wheeling, playing and crossing around the mountain of clear, black, milky *sparklingfriend*.

The First Metacetacean concentrated on the elusive nuances of Nogai's expression, marvelling at the child's increasing sophistication, the *quality* of the awareness. He listened to the fluent, genuissaint burlblings for a while longer. Then, like a father taking a toddler to the park, small hand clasped in the larger, he began to amble through the tea-coloured water, painting his world in sound for the young orbital mind of Novagaia to hear.



Flocanalog considered the map face for a long time. He played with resolutions and enhancements, swooping into increasing detail. He lost the overall picture and found himself flying over the steep sided valley between the huge closed lips. He pulled back to survey the whole. The face was incredibly detailed. Not smooth like a sculpture, but drawn with infinite precision, more like a veridical reproduction on a massive scale than simply a huge portrait. She was definitely smiling, and her eyes were big and wide, her mouth huge, teeth like mountain ranges, sharp and sheer. Small valleys, hundreds of metres long, extended away from the two eye trenches, giving the suggestion of eyebrows. There was a tweak between the nose trench and the mouth trench, dimples, moles: he could make out the bone structure of her cheeks, the swell of her forehead, the hairline, the curve of her jaw... he shook his head, dumb struck. *Who did this?* he wondered. Surely not the Cardinals, because the orbital was already constructed.

*Water?*

Flocanalog grunted and closed the window down, realising he had been engrossed for some minutes. He took a while to settle himself, and then felt with his hands for the pseudo-Shells access gates, entering consensorias. The milky blob swirled lemon and purple, extruded rippling wings of carbonsponge, rose slowly, and began to fly. Flocanalog did not see it until he crossed the trench mouth of the map face.

The most extraordinary sight he had ever seen.

A little over half a kilometre distant, some 100 metres above, was a flying mountain, spilling light like hot magnesium in oxygen. A vast shoal of accompanying forms obscured it. He could make out choo variants as well as many species of marine fauna: he recognised squid, tuna, seal, shark, even marine birds, wheeling and darting about the... the *whatever* it was.

Flocanalog sat and watched the spectacle for some moments, before instructing the pseudo-Shell closer. The choo construct complied by hugging the ocean floor with numerous puckered appendages, almost burying itself in the silty mud of the basin bottom. The flying, lightspilling mountain suddenly boomed into the water. The pseudo-Shell possessed transducers for vibration and, in consensorias, Flocanalog gasped as the noise thrummed through his skin, deafening in the dense water. The power was prodigious, ominous, causing the pseudo-Shell to cower in the sand from the force of it. Flocanalog attended to the sound, listening through choo senses, feeling rather than perceiving, filtering a portion of the energetic signature, hearing squeaks emerge and long, drawn out whooping.

The shock of recognition was almost blinding.

Flocanalog felt his stomach knot with a sudden, burning excitement: a *cetacean* proto-language form. An *Old One*! Fighting to control a tense exhilaration, Flocanalog urged the pseudo-Shell closer to the source of the sound, creeping along slowly on sucker appendages. The lightsparkling form remained at rest, turning slowly, the motion of so many bodies around it bewildering in complexity, blurring its outline. The pseudo-Shell got to within 200 metres when it abruptly disappeared.

Just like that.

Instantly, from stationary to moving, fast, away from him.

Flocanalog sent the pseudo-Shell surging upwards. He caught a diminishing maser echo as the vastness disappeared off to Port. Flocanalog urged the Host after the faint percept, but lost the signal. He clenched his teeth and cursed himself roundly for the error, his anger making the pseudo-Shell skittish - *I should have stayed where I was!* - when, in a manner of speaking, he caught something out of the corner of his eye: a flying mountain.

Flocanalog sent the pseudo-Shell surging after it in an explosion of cold ebullition, and this time, didn't lose sight. In consensorias, tapped into the Host's sensory transduction, Flocanalog "saw" as his target dipped down and behind the back of an underwater rise: he urged the Shell faster, keen not to lose sight for too long. The pseudo-Shell accelerated, hurling water away behind it magnetohydrodynamically with tremendous force.

Powering down and around the base of the rise, the pseudo-Shell was suddenly enveloped by intangible fingers, which captured the struggling machine in invisible bonds. Flocanalog cast about in rising panic with the machine's senses for the source of whatever it was that had decelerated him, and then he saw it.

Rising from behind him, a bulking presence, piercing him with painful bursts of light, its surface dark and turbulent, flashing crimson, in places translucent, sparking a brilliant white. It engulfed him, seeming to stretch forever to left and right, booming, and whining with a sound like mountains rubbing.

Inside the pseudo-Shell, Flocanalog fought to stay in consensorias, resisting the urge to pull himself away from fuzzy machine senses providing him with such a terrifying image. He fought fear, tried to breathe. He spoke, and words flowed from him in a ragged trickle, his spoken words finding only poor translation into the primitive vocalisations of his chirruping pseudo-Shell.

\$ I am me [Image]

Flocanalog felt the intangible force holding him alter and change somehow. Sound washed over the choo machine, physically rocking it, and Flocanalog was forced to break consensorias, feeling the enormous movements of water as aching nociception. He forced himself to utter a last communicative act before breaking the nchoo link to the Host mind.

\$ Who are you?

Cocooned inside the darkness of the Host pseudo-Shell, Flocanalog heard no reply, only a gentle thrum under his hand: his *hand*. He raised it before his eyes in the almost-dark, could almost believe it was not there, and that other limbs took its place, began to feel something - like an nchoo infection, like Manchester's narrative engine - seep up through him, a tickling mental warmth, a certain elevation, a disorientation. He raised his head, though there was nothing to see, felt a slide into...

Flocanalog gasped.



The First Metacetacean captured the flying choo construct and inserted a nchoo probe into both Host and temporary symbiont. At the same time he slipped into the Cascade, feeling for the ripple in the informational continuum that had alerted him. He moved *there* , peeled a 10 dimensional sphere like a sun and looked into infinite depths, peering curiously.

What he found shocked the First Metacetacean to the core of his thousand year old being. Quite literally struck dumb, he was caught in an intense recollection of sudden, shocking cold, of being blind and limbless and bleating in the salty fluid of an ancient, leaking, biological mother.

Part of the First Metacetacean experienced the pain of that older *him* , the emotion modelled spontaneously upon touching the mind of the Host incumbent. The First Metacetacean slipped from the Cascade, felt his consciousness shrink, to encompass the fragile form of the choo Host, and its more fragile still symbiont. For the first time in six centuries, the First Metacetacean directed a portion of his mind to model the psychology of a suffering human.

The First Metacetacean vocalised, inserting the communicative act by nchoo into the unconscious incumbent before releasing the pseudo-Shell. He manipulated the Cascade, existentially re-wrote himself and disappeared, turning the water dark in his leaving.

# Extraordinary. I am [Image] We are [Image]

## Chapter Thirty One

The platform was a retreat of sorts, one of many that Manchester had grown in odd places all round the 4,000 kilometre circumference of Novagaia. It was 30 metres above the spongy forest floor, an irregular pentagon 12 metres across, speared through by the bole of the mature *Abies grandis* . A deceptively sturdy staircase wound up and around the stout trunk, puncturing the platform near one edge. The floor was composed of thin branches, richly interconnected and sprouting from each other as well as from the main trunk. The gaps and crevices between the branches were filled with organic matter - some of it the result of natural accretion, most of it deposited by Tree intervention - which fostered new life in the form of spongy mosses and grasses. A low wall of gigantic sterile cones, half a metre high, stood in a neat double line all around the edge of the platform. Structural integrity was assured by millimetre-thick Tree root pulling the platform taught, anchored in the trunk of the giant fir some five metres above.

Manchester had shared consensorias with the Tree that had teased the biological tree into growing the platform 217 years ago

‘What I would like to do, first, is to show you exactly what the exam found, if that’s alright with you?’ Melie nodded. ‘OK, and I think that the best way I can do that is to slave my resource to yours. Do you



see my face?’ Melie looked blank for a moment before realising what Manchester meant. She looked inwards. Indeed, Manchester’s calling icon was a picture of her face, in miniature.

‘Yeah.’

‘Poke it.’

Melie did so, with a certain savagery. Her resource opened a black virtual space to the bottom of her visual field. Silvery warnings and reservations began scrawling across it, informing her of the requested slave action.

‘OK, we’re there,’ said Manchester. ‘Where shall we start?’

‘I know, let’s see if I’m *pregnant* too, that would really fucking make my day.’ Melie tugged vigorously at a clutch of moss between her crossed legs and sent it arcing out into space with a twist of one long arm. ‘So I’m *pissed off*, alright?’



Melie stared at the images, rendered apparently large in her visual field by the nchoi machine tapping her optic nerve. She listened absently as Manchester talked, pointing with her small hand to indicate particular features.

‘Many of the structures are buried within the cerebrum or forebrain. The basal ganglia, the caudate and globus pallidus, the hippocampus and amygdala...’ Small, irregularly shaped sections of the 3D resource image pulsed locally as Manchester identified the individual structures. ‘Then lower down we have the hypothalamus, the pons and medulla and so on. Now, all of this cerebrum is covered by the cerebral cortex...’ Another portion of the 3D image glowed pale cream, this time a thin layer covering the rest of the brain image. ‘The cerebral cortex is only three millimetres thick for the most part, but it’s the thing that makes *homo sapien* what they are. Now remember, this is a perfectly ordinary, standard human brain. This is what they all look like.’

‘So what does my brain look like? Shit, I don’t believe I just *asked* that.’

Manchester smiled gamely. ‘I’m going to show you what mine looks like first.’ The virtual image disappeared to be replaced an instant later by another. ‘OK, now, first I’ll highlight the cerebral cortex... notice anything?’

‘Yeah, your sair... sairabrul cortex looks kind of weird, like it’s buried.’

‘Precisely. OK now, I’ll highlight the metacortical tissue...’ Melie saw a pale crimson cloak enfold the image of Manchester’s brain, covering its outer surface completely. ‘You see, in the same way that the human cerebral cortex enfolds the older cerebrum in a very thin layer, so similarly the Cardinal

metacortex enfolds the cerebral cortex. The layer is about the same size, too, only three or four millimetres thick at most.'

Melie snorted quietly. 'So what about me?'

Manchester sighed. The brain image vanished. The virtual window remained black for a moment, before quickly reassembling another scan image. Melie studied it intently.

*Didn't look any special: just like the others in fact.*

'I highlight the cerebral cortex...'

A ghostly milk flooded the thin layer of virtual tissue.

'And now I'll highlight the metacortical tissue...'

Melie saw the outer portions of her brain's reproduction swell and fill with the pale crimson of Cardinality. The entire available surface of her brain was clothed in a red sheath of metacortex.

She was a Cardinal.

That's what the Blit was, what was causing it. She sat back staring at the image, feeling... *nothing* . A frightening numbness.

*What could it possibly mean?*

The window signalled closure, and then iconised.

'Melie?'

She stared at nothing, her eyebrows knotting.

'Melie?'

She felt Manchester's hand on her knee, felt the Cardinal grip her hand. She tried to speak but only managed to croak. She tried again.

'What does it do?'

Manchester sighed, staring at Melie's downcast face, feeling her engineered Cardinal altruism begin to bite. Melie had picked the easiest question to ask, the hardest to answer. Manchester settled herself, and tried to frame a response.

'It's a *little* like being able to see in four or more dimensions,' she attempted, with the first of what she knew would be a sequence of inadequate metaphors and analogies. 'Human minds are choo and choi, both neural and symbolic. And if your mind is choo and choi, then you perceive, and conceive, in three dimensions. If you wanted to know about larger or greater dimensionalities, then you would have to resort to maths, to complex symbolic expressions. But there is no *perception* , no direct *seeing* of a hyper-dimensional thing. Even *conception* of more than three dimensions is difficult without using intervening symbols.'

Manchester paused, looking at Melie carefully, realising that much of what she might say would not be understood by the young Sesquoian, but unable to make the explanation any easier.

‘Now, because both our brains have a metacortex, you and I *can* see in four dimensions. Well, not really, as I said, because that’s only an analogy, but do you see the point? How can you or I possibly describe the thing that *it is like to be* in four dimensions, and to *see* everything as completely normal, to someone else, who cannot even *imagine* four dimensions properly, let alone *see* them. We might be able to give them a rough idea of what it is like, but it’s not the same as them experiencing *what it is like* to be that phenomenological consciousness. But that would be the case if we were talking to an individual without a metacortex, a human. But you, Melie, have a metacortex, which means you are...’

‘Not human?’ The words were tremulous in the young mouth, and loathing stretched her thin face. ‘A *freak*?’ The last word was almost a screech.

Manchester cursed herself for letting words distract her from an observation of their effects, for failing to see Melie’s face recoil, uncomprehending as the abstracta of existence wafted over her.

‘No, Melie. Not inhuman, not a freak. Not at all, not at all.’ Manchester spoke the words softly and slowly. ‘You are not what you always thought you were, but you are certainly no freak. You are a very special young woman.’ Manchester cocked her head and blinked. ‘You are like my sister, in a way. Both Cardinals out of time.’ Manchester paused, choosing her next words carefully. ‘Do you remember that I said I would help you Melie? Well, I’m going to start now by not hiding anything from you again. But you have to be strong to yourself. Believe in yourself, believe in your own, special nature. Love what you are, because what you are is beautiful and precious and deserves nothing but the utmost care and affection.’

In reply, Melie burst into tears.

Manchester’s altruism burned and she almost cried with the force of it. She picked herself up from her lotus, and wrapped herself around Melie’s back, clasping the young woman’s body to hers. She assembled a palliative nchoo infection, and delivered it in her saliva through a light kiss to the girl’s head. Melie quietened, rocking gently, her sobs continuing, more muted now. She was trembling.

‘Oh Melie.’ The Cardinal stroked Melie’s long hair. ‘You poor girl.’ She felt the trembling quieten and heard Melie’s breathing slowing.

‘I’m alright.’ Melie sniffed and rubbed her nose. She laughed abruptly with effected glee. ‘What was all that about then?’ She looked about her mockcomically but her face lost its smile very quickly. ‘I’m *scared* Manchester. Oh, I am so *scared*. Something... why? Why am I so scared? There is no *reason*, what is it then? It’s not them...’ She waved her hand, indicating the brain images long gone, and Manchester understood the oblique reference. ‘It’s... oh God, it’s like a wave, it’s like... the Blit. Manchester, I’m Blitting. No. Oh please, no...!’ Melie’s body began to tremble and she whined like a frightened child. Her eyes went wide and unseeing and her hands locked tightly together under her chin.

Manchester accessed her resource, quickly activating the nchoi Bridge with her metacortex, invoking the teleological-symbolic, Third component of her mind. She dispensed with the usual precautionary checks, and her phenomenological world expanded shockingly fast to encompass the Cascade. She cast about, looking, though there was no light and millions of eyes, for... *there*. Melie. She moved... *there*, and merged, strengthening the whole, bolstering Melie’s child-like Cardinal mind against the existential perplexities of the Cascade.

‘Melie!’

Melie heard the sound slowed down, as if through highly attenuated air. Nothingness blazed below her. Impossible lines twisted through and past her, all with her together in no space... 'Melie!' ...The sound was almost not there, hidden by the silence of murmurous hissing, clicking regularities.

'Manchester!' She screamed though she had no mouth and there was no sound and no air. An esoteric form of torque began twisting her, turning herself inside out, and outside in. ' *Manchester!*' Vast blisters flared with no light blinding her, from every and no direction. 'Hand... on my hand!' *What was that?* Real! *Touch.* Solid. Finger. Nail. Tissue. Cell. Gene. Molecule...Acid...Gene...Cell...Person.

Melie lost some of her fear and was simultaneously Melie-holding-Manchester and Melie-somewhere-else, in the Cascade, experiencing *what it was like* to be a Cardinal. She felt herself breathe, perceived and conceived the reality of the informational underpinning to reality, and was not afraid. Then the lines and hyperspaces folded away into impossible origami shapes and sluiced away down a drain in her mind.

The Blit was gone.

Melie kept her eyes closed, knowing that - again - some echo of the Cascade experience lingered. Then she opened them and found Manchester regarding her placidly, her small face quizzical. She looked down and saw the Cardinal clasping both her hands tightly. She smiled weakly and glanced up at the Cardinal's face, a host of unspoken questions answered with every nuance of her.

Melie laughed. 'Oh Manchester, I can really *see* you!' She reached out her hand to confirm how close Manchester was. She glanced up and around, her mouth open with wonder. 'Oh, I can *really* see...' It was like seeing with magnification, but nothing was close up. The light as it lanced through the canopy, *incredible*, hair thin beams of brilliance, and the *leaves* : she could almost see individual cells, their organisation, the patterns of congregates, and emergent patterns of emergent congregates, all blended, yet she still saw the whole leaf. She saw lots of leaves, but also the microstructure of each, all at once, all together, all perfectly, perceptually real. 'Manchester, this is *amazing!* Let me see if I can describe it...'

'You see, separately, the whole and you see, separately, the parts and you see, collectively, everything all together too.'

'Yeah!' Melie brought her head down from its dizzying craning, her eyes alive with excitement. 'It's... it's...'

'It's an after-effect of metacortical activity. I have it too. All Cardinals do. It lasts about five minutes usually, and then loses salience.'

'Oh.'

'You sound disappointed.'

'I think I am!' Melie laughed. 'I want to be able to see like this *all* the time! Oh... it's so *beautiful*...!' But already she sensed the quality and acuity of the apparent perception dimming. She talked as she gazed around, the effect decreasing slowly. 'And this is because I Blitted? I've never had this before, why have I never had this before? Maybe because you were there too this time... funny, but I do think of it as a place, somewhere else, but it's not, is it? It's all around, everywhere, but I just don't... see it, yeah? I have to have this... this metacortex thing in order to "see"...' She laughed and pointed to the side of her head, raising both fingers to indicate the scares. '...Whatever this *other* thing, the Cascade thing,

is. How am I doing?’

‘Brilliantly.’

‘OK. But like walking around like that all the time would be really freaky, right? So this metacortex only kicks in now and again, kind of when it feels like it?’

‘Basically yes. In your case, you have no way of knowing how to harness the activity of the metacortex. Cardinals use a *nchoi* assisted Bridge, which means that we can access the metacortex when we want.’

Melie chewed her lip, frowning. ‘So me Blitting is the metacortex going a bit crazy, and making me "see" when I’m not ready for it?’

‘Yes. What you call the Blit is what happens when metacortical activity changes the quality of your own consciousness.’

Melie shook her head a little. ‘And do you think I could learn to, you know, harness this thing or what?’

‘Yes.’

‘Really?’

‘Yes, in fact, I would say that it was almost necessary, because you don’t want spontaneous, unpredictable Third generation going on all the time.’

‘"Third generation", what’s that? I’ve heard you mention it before.’

‘Third is the name we give to that part of the mind which is supported by the metacortex. Roughly speaking, the cerebrum is *choo* supporting tissue, the cerebral cortex *choi* supporting, and the metacortex *Third* supporting. Human consciousness is a product of *choo* and *choi*, but the Cardinal has *choo*, *choi* and *Third*... just like you.’

Melie shook her head again, but she was smiling. ‘I don’t feel it. I’m not a Cardinal.’

‘You have a metacortex. That makes you a Cardinal.’

Melie continued to shake her head. ‘I know but still. Maybe I’m not a Cardinal, but something... new.’

Manchester chuckled. ‘Some *onenew* perhaps, but certainly not some *thing*.’

## Chapter Thirty Two

Like some enormous, dynamic dandelion clock, Verest swarmed in vacuum 50,000 kilometres above the liquid surface of Water, constituted by innumerable, tumbling parts, with internal volumes ranging from

a mere 100 cubic metres to over one million. Verest was never at rest, each component of it in continuous motion, bound within the swirling influence of a huge, abstract attractor. Sturdy choi machines coupled to independent clusters of field-manipulating effectors steered each constituent structure locally along an orderly trajectory, each element of the whole driven globally by the combined interactions of all other constituent parts. Sparkling shards of traffic glittered throughout the interstices of the fluid, flowing populations of polymorphic forms. Independent choi ferries, surfing the wash of innumerable effectors, carried the citizenry of the Koyculture about the strange, diminutive world.

The transient population of Verest was huge. Millions of individuals could be within the confines of its fluid borders at any one time, although its permanent population was much smaller. In the constantly changing, zero-gee environment, with orientation a quaint anachronism, with life chaotic and events split-second, native Verese numbered only in the hundreds of thousands. Almost as if in recompense for the paucity of their numbers, however, each one of these individuals was utterly, totally unique.

The Body Artists.

Perhaps of all the dispossessed of the Koyculture, these individuals came closest to being almost metacetecean in the extravagance of the morphological changes they chose to effect upon themselves. As if in sympathy with the strange, chaotic environment of the Verest attractor, the Body Artists who inhabited it united science with art in the tailoring of the human form. Each Body Artist was an *artiste*, a sculptor of tissue, their tools not fingers, but molecular nchoi, their materials not damp clods of clay but fragile strands of gene. As in all science and in all art, there were good Body Artists and bad Body Artists: genius, charlatanry, competence and acceptability all touted their wares within the swirling, architectural soup of Verest.

New in from Godsfollicle, Kirsty-Ann and Gervane were lucky: they chose genius. Not that that stopped Kirsty-Ann from leaving bruises on Gervane's upper arm with the force of her grip, when she first saw the truly, unbelievably monstrous form of Professor Lucius Harmins-Keirhardy.

'The Fourth,' the Professor added cordially, with a voice like grapes being crushed, turning portions of his lumpen body a friendly yellow and exhaling through his secondary, brachial respiratory orifice. 'How do you do?' The Professor extended a slim, purplish appendage toward his two young visitors. The bulbous tip re-configured quickly and silently, forming a dextrous manipulator with three, smaller, non-jointed digits. 'And what do we have here then, hmm?' The curious, wet sound of the Professor's voice emerged from a flattened, mobile brachial orifice, the primary respiratory organ he deployed for speech.

Kirsty-Ann looked at the approaching tentacle-like digit with wide, terrified eyes, her left hand gripping Gervane's right arm with a savage intensity, transfixed by the gently undulating mass of tubes towering above her that was Professor Lucius Harmins-Keirhardy the Fourth.

The ambient illumination of the Professor's office was punctuated by a number of smaller, brighter light sources, bobbing within the chaotic space of the Professor's study. The light from these mobile sources moved erratically over the Professor's exterior: in places, it flashed and twinkled, most brightly in two regular rings at the "top" and the "base" of his orientationless form. And it was with a particularly unreal sense of horror that Kirsty-Ann realised that the eight markings around the Professor's "base" that she had taken for large, black spots were, in fact, eyes.

The Professor's eyes.

All eight of them.

Which was half the number that he actually had.

And they were all looking at Kirsty-Ann.

Surprisingly, it was only after one of the Professor's slim appendages slid down to her side and gently took hold of her hand - the feel of the Professor's digits, soft and cool, like refrigerated suede, would haunt her for days - intending to shake it perhaps, that Kirsty-Ann really got the willies

She screamed.

Then she screamed again.

Then she carried on screaming, flailing her arms in small circles at her sides with her eyes tightly closed, jumping up and down in little hops, the fabric hooks on the soles of her feet ripping rhythmically on the floor.

The Professor drew back his appendage from Kirsty-Ann with extraordinary speed, the smaller digits at the top of the larger tentacle shrivelling in fright. His outer surface flushed a concerned blue, in ribbons, and his friendly voice issued forth with a sound like grinding mulch.

'My dear child, whatever is the matter? Are you ill?'

'I think you scared her,' said Gervane, trying to keep his own voice from trembling. Eight of the Professor's eyes turned to regard him. Kirsty-Ann tried to climb into his neck, whooping and making little whimpering, hurt-bird noises.

'Ah yes.' The Professor raised and entwined two large appendages near his base, as they cycled with warm, red hooping: the gestural ancestor of a shrug perhaps. 'I do tend to have that effect on people I'm afraid.'

Gervane was so impressed by this degree of understatement that he snorted and, out of character, swore. 'No shit?'

There was an awkward silence as the Professor politely ignored the expletive. Gervane felt inexplicably embarrassed and spoke to break the silence. 'I need to look different.'

The Professor exhaled through his secondary respiratory orifice, using the primary orifice to speak, his voice lubricated with wet mud.

'How different?' Four upper appendages separated, and waved, in a gesture of interrogative self-referencing. 'This different?'

Gervane quickly shook his head and raised his hand.

'No. Definitely not. Thanks, but not that different. No. Thanks, but no. No. No thanks. No.'

'Is it gone yet Gervane?'

## Chapter Thirty Three

Undine was the one place on Novagaia, and the only place in the entire Koyculture, where the metacetacean race still reminded human kind - in typical fashion - of what they were capable. Undine itself was a basin the size of Chapel Halls, 20 kilometres wide and 3,000 metres deep. The central third of it was flooded by a lake six kilometres across. But rising up out of this lake like some gigantic sculpture in ice, was the Palace of Undine.

Except that this was no ordinary sculpture.

This one was fluid and warm to the touch. This one had streams flowing up inclines and rivers cascading up spiralling aqueducts made of nothing but themselves. Here, walls were water standing in vertical sheets, and ceilings were coherent, bubbling brine. Here archways effervesced and stood supported by nothing more than their own bubbling solidity.

Undine was a magical place of flowing water and moist air. And despite the fact that huge, articulated pontoons of Tree root floated within its confines, defining its floors, everywhere else was water: coloured water and fizzing water and cloudy water and water cascading upwards and water suspended vertically in columns and walls and ceilings.

No one on Novagaia knew *precisely* how the Palace was possible but everyone knew that it was "caused" by something called a "Water engine". No one knew what a Water engine was really either, but they all agreed that some unimaginably powerful kind of strange metacetacean machine *must* be responsible for the Palace of Undine, because how else could water be *caused* to flow uphill like that?

No native Novagaian lived in the Palace permanently. The architecture was too plastic for that. Every few hours, the Palace re-modelled itself. Cavernous cathedrals of sombre brine would echo with the sonnets of ancient metacetacean proto-languages one day and be gone the next, replaced by mysterious labyrinths of liquid tubes and globular spaces, ringing with the chatter of dolphins.

Undine was the place of clear Water.



Salisbury rested her palms flat on the hot, stone wall, supporting herself with her arms. She dropped her head and rolled it slowly back and forth, feeling the tension in her neck. Below her, one of the Palace's pontoon streets was anchored to the shore. The first fluid forms of the Palace appeared some 200 metres out into the dark water. The Terminator had brought the linear night some hours ago and the Undine



basin as a whole was shrouded in darkness, but the Palace was alive with milky luminescence.

*Why Undine? Why here for a meeting?*

She encouraged herself to remember the first time she had seen the Undine basin. Conscious rehearsal of old memories. It was a habit that many Cardinals adopted: it helped them to cope with the fact of their existence as the oldest biological beings ever to have lived, barring a few cold temperature trees. She directed herself to re-experience the shock she had felt at her first proper view of the Palace rearing up out of the centre of the basin. She remembered the column of coherent water rising toward her fragile craft and missing by scant metres. She remembered the sight of the column falling back down and forming a new, continuous arch of bubbling water, 30 metres high, standing unsupported up out of the lake. She re-experienced the amazement, the shock, the fear, her gasping intake of breath, almost crashing in the fragile choi flyer.

She chuckled at the memory.

Novagaia was a virgin world then. A concession from Water before the eviction of humanity up the *Hair of God* resulted in her being the first person to walk its newly completed surface, in 2 BK. Salisbury remembered the experience as both joyous and sad. Water stipulated it must be only her, no other, and so she became the First Novagaian, totally alone. She had no other sentient presence there with her. No-one with whom to share the astonishment, the joy, the *elation* that that she felt, every day, for the entire 20 days that she spent travelling the wet inner surface of the young orbital. Her isolation tempered her joy though. It was only *her* alone in a beautiful, virgin biosphere and she so much wanted to share it.

She came across the symmetrical basin - unnamed at that time - 1,100 kilometres Spinward of Chapel Halls, on the twelfth day of her solitary tour. She set down her compact flyer at the rim. Her resource was useless, rendered so by Water she presumed, and so she could not obtain precise distance measurements. At first she simply took it all in. She could see forest below her and identified *Sesquiadendron giganteum* and *Cryptomeria japonica*, together with members of *Cedrus* and *Picea*. She went to invoke her resource to make a catalogue entry, then hissed in annoyance at the lack of response.

Below, and further away from her, the forest ended and pasture rolled away into the distance. Salisbury could see the attenuated patches of white there, which lifted and dispersed as she watched - and it was this rising clot of avian pollen that drew her eye to the middle of the lake. Reflected Sol was glinting and sparkling off there. Something at the far limit of her vision: she couldn't make it out. Salisbury automatically flicked her eyes up, to meet the bank of resource tools she usually had lying around, the simple act pulling the intangible shapes into apparent focus. *Just once, go on, just once*, she silently implored and pulled an icon down into a window, keying for an optics tool. There was a small pause. She thought excitedly for a moment that... A spiky, pulsing ball appeared large in her visual field, throbbed noncommittally, and then vanished, taking the open window with it.

*Interdiction.*

‘Shit.’

The word wafted away into the new biosphere, heard only by trees and Trees. After staring uselessly out into the middle of the lake for some minutes, she turned, and climbed back into her flyer, sending the diaphanous craft buzzing angrily down into the basin.

*Why Undine?*

Salisbury pulled herself out of the mnemonic narrative.

*Fear.*

She paused for reflection. Was it because she was *frightened* that she felt the need to come back here? Undine was the place of Water on Novagaia and it had scared her once. Not in its physicality as such, but in its *symbolism*, in the causal expression of such magical means of physical manipulation. And she was scared now, she realised.

Or was it excited?

She accessed her resource and activated the nchoi Bridge with the metacortex. She slipped effortlessly into the informational Cascade and hung, thinking, allowing her own thoughts to drive interpretations of the Cascade reality, finding herself *there* and *there*, observing blisters flaring and lines congregating infinitely far apart. She flew the Cascade better than any other Cardinal, except possibly Ushogbo, at home in the qualitatively different consciousness of her tripartite mind like no other. She found no perplexity or self-dissipation in the Cascade, only knowledge, of *how* and *why* and *what*. She was thinking: *How do I proceed? Why is the orbital behaving as it is? What do I do?* She hung, letting herself think, her cognition generating ripples in the informational continuum. Lines knotted around her burning with black light and ticking through non-existent air leaking spaces like... ah!

She felt the ur-reality of the Cascade fold away past the informational event horizon of her Third augmented mind. She used no mnemonic triggers or interpretations daemons but still knowledge remained. She pondered what she now knew.

*Nipauin was the one.*

She was still thinking when she felt Niandankoro's hand on her bottom.



'I estimate that the anomalous viral nchoo is currently being produced by approximately 3 percent of the choosphere. Most of the mutations are local, to particular populations, which is how I discovered it in the first place in the Mammoths. So it could look much worse locally than it actually is orbital wide.'

Rineanna was coming to the end of her presentation. As usual, she had done a thorough job, bounding all around Novagaia by Bus for the previous week gathering data, stopping and sampling, stopping and sampling. Albany looked tired beside her.

'Thank you Rineanna,' said Salisbury, glancing round as Rineanna closed down her slave link. The same virtual window snicked closed for 12 different Cardinals. All were gathered round a table four meters on a side and barely 15 centimetres off the floor. Presently, it was littered with bowls of olives and breads,

and large, iced carafes of water. ‘Questions?’

Salisbury looked around the group. Sitting opposite her, she saw Chaiyaphum gather her tiny hands together in front of her and bow minutely over them to Rineanna. ‘Rineanna, do you have data on the effects of the viral anomalies as well as their prevalence?’

‘Yes and I will give you what I have, all of you, even though it’s not much. However, I think Niandankoro has much more telling first-hand experience of how bad the mutations could become.’

Sitting to Salisbury’s right, Niandankoro drew a deep breath.

‘That is correct. I will provide pictures.’ Niandankoro dipped his head and his fingers moved as his hand rested on his knee, directing the intangible resource. The same virtual window appeared for each Cardinal and began displaying a sense-memory reconstruction, pulled from Niandankoro’s real time experience and stored by his nchoi resource. The 11 other Cardinals gasped with horror as a rogue choo machine mutation ripped Tree tissue out of a bleeding cavity. They watched its sudden incineration by the weapon directed from the Hub, and then sat frowning at the sight of the cove and the festering, clogged water, the piteous forms of de-animated choo.

The pictures ended and Niandankoro spoke into the silence. ‘Rineanna speaks well. Chaiyaphum asks wisely. We are right to be afraid of what might come, if we do not act with our best minds.’

‘Yes, that’s all very well, but what do we *do* about it, eh?’ Malvern asked. ‘I think that is our problem. Well, more like *one* of them because I have a particular problem of my own, too, which...’

Salisbury did not want to talk about Melie just yet and interjected. ‘For later discussion, I feel Malvern. Please if we could concentrate on one thing at a time. Hechi, you have something to tell us all, I believe.’

Hechi smiled. She began softly, her voice fluting and light, like a bird. ‘My friends, you know that I have no *science!*’ Hechi opened her eyes wide, looking around, knowing they would respond to the humour of a remembered time of sharing. Hechi drew her hands together as the warm chuckles washed over her. ‘Yes, a time for sharing, now. The Plunge is still in Winter and should not be. This heralds a change my friends. Another, new beginning. We must be ready.’ She turned to each of the 11 other Cardinals around her, her sisters and her brothers. ‘We trust the Unspeakable. We know the Cascade. Let us trust it now.’ She dipped and wove her hands, fluting, pointing to Salisbury. ‘We have the First Novagaian to guide us, and the love in our hearts and genes to do good.’

Shaowu, to Hechi’s right, stroked Hechi’s intensely black hair gently with his long fingers. ‘Oh dear Hechi!’ He shook his head, his hand at her back, presenting her to the group. ‘Our Love Goddess!’ The group laughed again, and Hechi twittered with delight.

Seated between Chaiyaphum and Ksobi, opposite Salisbury and Niandankoro, Lodz grunted into the conviviality. ‘Mutations of viral nchoo are not the only problem.’ He hunkered down inside his large poncho, hiding his arms, his large ears protuberant. ‘Nipauin.’

To the right of Niandankoro, dark, round, serene Nipauin blinked cowishly. ‘My grumpy friend is correct and I will return to his point. But I want to say first that, by my calculations and based upon Rineanna’s figures, I believe that if just *30 percent* of orbital nchoo mutate in this way then the ecopoesis would be rendered untenable in only a matter of months.’ She paused for the implications of that statement - namely, extinction - to sink in. ‘However, and whilst we must undoubtedly act soon, I believe that we *can* intervene successfully to avert a catastrophe.’ That brought sighs of relief around the table,

and a lift in expressions. Nipauin was the closest thing that the Cardinals had to a scientist among their number, and if she was confident about the viral mutations being a tractable problem, then it was, and it would be solved. ‘However, that is not all that is going on.’

Salisbury felt herself gripping her fingers into a tight knot. She had only an inkling of what Nipauin was going to say, but she knew (she *Third-knew* ) it would be important.

‘Two things have come my attention.’ An icon appeared and expanded to a window in each Cardinal’s visual world, Nipauin’s resource driving the slave connection. The window displayed an aerial view of water, just visible ahead the bulking vastness of a Rim wall.

Ksobi cocked his head at the virtual ocean rushing beneath him. ‘Wickremasinghe?’ he ventured. ‘Coming up to Novypolos and the Pipe, yes?’

‘Indeed.’ Nipauin glanced up at the other Cardinal. ‘We are presently 50 kilometres from the Port Rim wall, 1,500 kilometres Spinward of Chapel Halls.’

‘How can you tell all that from a patch of water?’ Malvern muttered.

‘Yes, and that’s what...’ Nipauin paused as she manipulated her own resource window, skipping to another image, showing a waterfall stretching up into the sky without apparent end, its base a rolling doughnut of mist two kilometres across. The image froze and became animated with graphics, which put virtual pincers on the dimensions of the thing as alphanumerics wriggled into view. ‘This is my own library footage of Pipespill into Wickremasinghe from 30 years ago. As you can see, around 500 cubic kilometres of water are usually emptied by the Pipespill every day. That figure hasn’t changed in 400 years.’ The image was wiped and replaced by another looking almost identical. ‘But now this is the Pipespill now. Note the reduction in size.’ The virtual pincers were still in the same place, and indeed, the fracturing column of water was smaller than before. ‘Flow is down to 450 cubic kilometres a day and falling.’

Nipauin sat back, allowing the window to persist, leaving the closure to the individual. Many sat and continued to watch, saying nothing. Salisbury’s conviction of impending importance was dimmed with the news but not extinguished: this was not it.

‘Prognosis?’ asked Niandankoro.

Nipauin blinked slowly, ‘Siltation. Radical, adverse changes to all local climates and habitats. If the Pipespill flow continues to decrease, Wickremasinghe could well turn into a stagnant pond.’

Rineanna, sitting opposite the bland face of Nipauin, snorted. ‘How long?’

Nipauin dipped her head. ‘Hard to say. Months? Years?’

‘What is the *cause* of all of this?’ Ksobi exclaimed, his teeth white against the dark skin. ‘I do not believe these events, the mutations, the Pipespill, the Plunge...’ He gestured at Hechi. ‘...Are unrelated. I believe they must have a common causal history. We must find out what that is.’

‘I agree. And I think that what Nipauin will say next is relevant.’ Salisbury felt herself trembling from within, the prescient knowledge of the Cascade crashing against the limits of her understanding. *Something, something. But what...?*

Nipauin turned to Salisbury, surprise on the serene, round face. Her large eyes blinked slowly, like a seal. ‘You do?’

‘Yes.’ Salisbury forced her heart to beat slower, activating medical nchoo to deliver a tailored compound of her own design. Her fingers relaxed. ‘Please, Nipauin.’ A few of the others were looking at her quizzically, seeing the signs, recognising them, nodding their heads in silent support: Chaiyaphum, Niandankoro, Hechi.

‘Well.’ Nipauin gathered her hands together in her lap, just as she gathered her thoughts. She frowned. ‘It’s really most peculiar.’ She shook her spherical head, her dark hair pulled tightly over the smooth skull. ‘As you know the Hub maintains many kinds of connections with the rest of the Koyculture. But when Oaxaca was emptied 50 years ago, much of the EM traffic between Hub and Oaxaca stopped. However, the Hub *does* maintain a real-time microwave link with Oaxaca to keep tabs on just where it is.’ Nipauin paused and shook her head, frowning. ‘Recently it claims to have found gaps. That is, it claims to have witnessed times - very brief, less than one hundredth of a second - when the microwave was not being bounced back, as if the mirror receiver on Oaxaca had moved. Naturally, Hub sent a remote to monitor the dish. Nothing happened for months. No more breaks. The microwave came in strong and clear: some times Oaxaca was 29,408.186 kilometres away and other times that figure differed by a few tens of it metres, but that was the only variation. Then, when the remote returned, it happened again. Hub sent out a bevy of remotes this time, and also remote accessed the Oaxacan resource for information.’

‘Hub being its usual thorough self,’ remarked Malvern. ‘Do you suppose it enjoys being particular?’

‘Yes!’ came a chorused answer.

‘And you did tell us that there was a point to all this Nipauin,’ observed Albany amiably.

‘Yes. Well. That’s it really. The Oaxacan resource didn’t have any answers. It claimed to have recorded no such thing. The flock of remotes found nothing wrong with the microwave antennae and the gaps never happened again.’

There was silence. Malvern waved a hand. ‘And?’

‘Well that’s it. The interesting thing is the Hub’s explanation for why the gaps occurred. It claims that the only thing that explains what happened is that Oaxaca did, indeed, disappear. Except that then it came back. Really quickly. I tried to ask why it thought this and it got very shirty.’ Albany and Malvern both chuckled at the quaint language. ‘Very odd. And that’s it.’

‘So Oaxaca just moved then did it?’ Ksobi remarked with a booming chuckle. ‘Several hundreds of billions of tonnes, moved, just like...’ Ksobi fell silent as he realised just what it was like.

A psychic dam burst in Salisbury’s head and a torrent of awareness plunged through her. She closed her eyes and saw some impossibly complex model began to form in her mind: it was almost as if she could reach out and manipulate it, and by so doing, manipulate her world.

She knew. The event horizon in her mind had been breached.

*Moving worlds.*

Hechi saw Salisbury open her eyes and motioned for Ksobi to be quiet with a gentle hand on his arm.

‘I do not know how I know it...’ Salisbury whispered to the group, and they heard the urgency in her voice.

Hiss echoing, it came back. ‘Still I know it.’

‘Speak,’ said Niandankoro. ‘For us all.’

And she told them.

## Chapter Thirty Four

‘Access one point six four point two.’

‘Accessing.’

Tennys shifted his attention to another window and read the displayed 100-word analysis entitled *Shamanism as Social Catalyst*. He snorted, finding nothing and clicked to the next. *Pathological Monotheism*. The auditory tap chimed.

‘One point six...’

‘Display please.’

The voice cut off and the analysis scrolled before him on *Archaic Sexuality*. He began to scan it efficiently. An icon pulsed into being, a spiky ellipsoid in miniature: something from the Hub. He flicked his eyes at it and inspected the contents of the resultant window. *The Tassili-n-Ajjer Plateau: Neolithic Art and Culture*. He scanned the terse sentences, keying one or two highlighted phrases, examining the hypertextual elaboration expand from the text:

"...The Red Sea was landlocked during much of this time. Lowered sea levels meant that the boot of Arabia was backed up against the African continent effectively forming..."

Tennys deliberated for a moment, rolling the old names round in his head. *Africa. Arabia. Tassili-n-Ajjer*. He iconised the window, saving the read for later and sent an acknowledgement to the Hub resource for the download. He didn't know if the Hub access that he enjoyed via his own resource was particularly special, but Tennys had found the notoriously cranky Hub machine very helpful; it had even assigned him a Halflife interact for the Histories.

Tennys was going over his notes, trying to bury himself in work. He was trying to get a grip on what it was he wanted to learn: he had a feeling something *fantastic* was in the Histories, to be found if only he could locate it, if he could just ask the right questions.

Tennys flicked his eyes away from the virtual window and glanced around him at his surroundings. He

was on a balcony, a little lip of carbonsponge jutting from the bulk of a Tree clinging to the sheer rock walls of the Mammoths cliffs. The waters of Ushogbo were calm and caramel golden, glinting in the Sol. Tennys ignored it all. He reached down, took a sip from a cup of cold boiled cereal extraction, sweetened with honey, licked his lips.

*What do I want to know?*

The question was not superfluous. It was necessary to internally frame such things on occasion. *I want to know...?* He was answered with a deafening mental silence. He wailed internally. *I don't know what I want to know! How can I not know what it is I want to know? I don't believe that I cannot know what it is that I want to know!* Tennys became entangled in higher order intentional idioms and felt himself flounder. *Don't be absurd, of course you know. Just think! I want to know...?*

Tennys - mentally - closed his eyes, fearful of a thought lacking in content, afraid of a particular content. He willed his mind to supply inspiration and fat labial tissue blazed behind his closed eyes.

*Oh no, no, no!*

Tennys whined and squirmed with longing. He forced his mind, tried to think instead of...

Fat, *wet* labial tissue.

*Oh God!*

God.

Now there was something. God. Gods. Of all kinds. *Where do they come from? What are they? An innate species meme?* The questions burbled. *If so, then the religious meme must have adaptive value. What are the adaptive advantages of religious thought?* Tennys ticked them off in his mind. Familiar territory. He had been down this line of thought before. Perhaps today it would take him somewhere new. *Security of an immortal soul. Principal advantage: ease of mental life. Feels good to know you are going to carry on... Yes, so what?* He found himself interrupting himself. *What do I want to know about that? Just about it, that's all.* He snorted aloud, disrupting the internal narrative and pulled himself up out of that particular phenomenological world, to another, more rooted in perceptual experience. He looked at his feet.

An intense somatic memory of Himochee's hot, wet vulva slipping over his big toe assailed him, making the entire right side of his body tingle. He thrashed to his feet, surging up out of the chair and sending a fountain of papers into the air. Then he stood, downcast, his breath hissing and caught a suggestion of Himochee's smell. He groaned and put his hands to his face. *He could smell her on his hands!* He sniffed again and it was gone, an olfactory hallucination. His shoulders sagged and his head drooped. A great wave of longing sluiced round his mind, ablating the same sensitive thoughts each time, like sand in water scraping away soft cheese. He slapped himself. Once. Then again, much harder. He felt the burning of his cheek and took a deep breath, in out, in, out. For a moment, the longing was replaced by an invigorating anger and he felt empowered. But then, with astonished despair, he felt the longing cutting back into him, draining him.

He sank down onto the reclining chair, and put his head in his hands. Then he slowly got up and went into the Tree snug backing the balcony. He returned and sat contemplating life for a moment, then winced and raised a large mug of rootbeer to his lips.

In time honoured fashion, he then proceeded to get shit-faced.



Flocanalog did not remember the pseudo-Shell being released from the grip of its captor nor its subsequent flight back to the shores of Sonepur. He had no memory of climbing from its belly, no memory of walking, of seeing or of navigating himself until:

‘Hello lover, been out for a stroll?’ Aileeni bit into a hunk of croissant. ‘Coffee?’ she asked, before looking back down at her spread magazine.

Flocanalog was suddenly... *here* . He had been *there* . A cafe, open tables. He looked down. Aileeni. He looked further, spread his hands, looked at them in astonishment. ‘What the...?’

Aileeni glanced up and noted his consternation. ‘What’s up?’

Flocanalog sat down stiffly at the table, staring at his outstretched hands as if surprised to see them.

‘You, uhmm...’ He cleared his throat. ‘You probably won’t believe this, but... but I was in a pseudo-Shell 120 clicks from here in Inhoplae basin this morning, just below the surface and... and I was caught by something and... and that was just *now* . I mean... I was there and now I’m *here* ...’

Aileeni eyed him carefully. ‘You’re right, I don’t believe it because I just watched you walk straight on up this street here.’ She gestured with a toss of her head.

‘Then how...?’

Flocanalog did not finish the sentence.

Pause.

‘Look. I don’t know if I can describe this...’ Flocanalog waved his hands, trying to get a feel for what he wanted to say. Aileeni, watching him placidly, took a sip of her tea. Flocanalog gazed into the distance, recalling the fuzzy, consensorial images from Inhoplae, searching for the right words. ‘It looked like a giant torpedo of marble riddled with holes, but bright like Sol and flashing diamond and all the colours of fire. It was surrounded by shoals of fish and seals and squid and octopus and aquatic choo like I’ve never seen but... but it was the torpedo thing, the mountain of light, that was the thing because it... because it spoke in the language of an Old One and then, when...’

Aileeni’s eyes went wide, and she swallowed hastily.

‘Whales?’



‘Yes. I think so. Sort of. I don’t know! The whole thing - the torpedo and all the animals and machines - seemed very coherent. I tracked it in the pseudo-Shell. I couldn’t see *how* they were moving but they were and fast...!’ Flocanalog’s face fell and he frowned. ‘And it gets a bit hazy from here on.’

‘Why what happened?’

Flocanalog shook his head and kept it fixed to one side after a number of shakes. He rubbed his finger under his nose and sniffed. ‘Well.’ He chewed an empty mouth before continuing. ‘I believe we had a sort of *conversation* .’

Pause.

‘ *We?* As in, *you* and *it*?’

‘Yes. And do you know what it said?’ Aileeni looked at him rhetorically. ‘Do you know what it said?’ He gazed into the distance, remembering. ‘It said... it said "Extraordinary. I am..."’ Flocanalog stopped, and his brow furrowed. ‘"I am...?"’ He shook his head. ‘I can’t *remember!*’ He slammed his fist on the table. ‘I communicated with *something* while I was out there. I *must* remember...’

Aileeni looked concernedly at Flocanalog, feeling her emotional aerial buzz with sympathetic pain. She could see that his face was flushed and creased, that his teeth were clenched, obviously angry. She knew a number of strategies for dealing with angry men: two really. One was to threaten them with violence, the other to offer them sex. Neither strategy seemed appropriate in this instance. She took a sip of her tea, regarding the Marineris man over the rim of her cup, then remembered the episode in the pseudo-Shell. She warmed at the memory, and was inspired.

‘Why don’t you talk to Maureen, lover?’

Flocanalog snapped his eyes up to her, leant across the table and kissed her roughly on the mouth.

‘Aileeni, you are *star* .’



Tennys awoke, his bladder painfully full, his mouth a slimy, stagnant pond gone dry. He was shivering, covered with precipitate water and nauseous. Sheets of soggy paper lay crumpled across his chest, the ink leaking into his clothing. He opened his mouth, exhaled rotting cabbage and closed it with a dry slap. He groaned, tried to sit up and felt his head swell and stab painfully. He groaned again, rolled over to cover his eyes with his forearm and crashed out of his reclining chair.

He lay, moaning and unable to move, uncaring about the cold of the stone and the water seeping through his clothing. Then he felt his crotch flood with warm fluid and realised he was pissing himself. Distressed, he marshalled control and stemmed the leakage. He pushed himself up to his feet, stood weaving around

a vertical and then vomited over the balcony wall.

Afterward, the urgent pressure of his bladder told he still needed to piss. He attained an upright stance on the third attempt. He fumbled with the catches of his trousers, using one stiff arm to lean on the balcony wall. He raised himself up on tiptoes and with his face set in a blissful grimace, urinated out over the drop: probably not a good idea during the day, but this late there was no one below him to complain.

*Fuck it*, he thought.

‘Fuck it,’ he said aloud, his voice curiously small, disappearing into the darkness over the water. ‘Fuhkit. Fahckeet.’ He heard the sound his voice made change as he spoke the words. ‘Fahhakeet. Pfuufkit. Pafookitch.’ His penis dribbled, the bladder exhausted, and he swayed backwards tucking it away, coming down clumsily from the chair on one stiff leg. ‘Vavoofkeetch. Savoofkitch. Sabadnintch.’

*Funny how things change. One thing ends up something different.*

‘Juslike fuhkin hishtree.’

*Yes, history always changes. Someone who was once something, becomes something different.*

‘Fuhkin toorite.’

*Like that person you read about today.*

‘Eh?’ He yanked himself out of the narrative, and the slurred syllable disappeared into the darkness. There was no answer. He reeled and felt sick again all of a sudden. The dark night spun around him and he sat - fell - down unceremoniously onto the chair, leaning back against the balcony, pulling his arms around him.

*Someone he had read about? Today? Someone he had read about?*

‘Whafucksgoinon?’ he muttered, feeling a déjà vu thing as he did so, improperly remembering a stretch of beach, a silver-haired old woman, the sound of water. He shivered violently.

*Who had he been talking to?*

He shook his head. The question seemed unreal, like a dream, its referent - some *one* - a ghost. But he was wide-awake, so how could he dream a voice? How could he dream anything? Had it been his own voice then?

Something he had read about today?

*What?*

So many questions all of a sudden. He scratched the underside of his chin. ‘Fuhkih I dunno.’ He looked blearily around him, felt himself shiver again, uncontrollably. He needed to warm himself up. *Heat*. With a grunt, he hauled himself to his feet and launched himself ballistically towards the shower nook.

He barked his shin on the way, which woke him up.



Flocanalog strolled away from the cafe with the vegetable weave of Tree root cool under his feet, thinking.

*Why can't I remember?*

A crowd of young people ran past him, towels under their arms, their laughter floating back to taunt his seriousness.

*Why can't I remember? It makes no sense! I can recall some things but not others. So why allow me to remember anything?*

He stopped short, realising he was attributing an agency to his amnesia. *Perhaps himself? A hysterical amnesia then?* He went back over the incident in his mind: he could feel the deceleration of the pseudo-Shell as it was captured, remembered his fear, could see the coruscating brilliance rising behind him, the tickling effects like an nchoo infection... and then the memory petered out, like a stream running dry. He heard only whispers, saw only shadows.

*Damn!*

He passed a hand over his brow and noticed a scar on his index finger, a white fleck half a centimetre long. *How had he got that?* He stared at it, suddenly chuckled. *Oh dear*. He tried to think of his life on Marineris, to recall twenty years of symbiosis with an aquatic choo machine. He could not. He tried to think of his youth, time he spent as now, as a bipedal, oxygen breathing man, eating, farting, sleeping. He could not. There was so much he didn't remember, what did one more incident matter?

Except that this incident *did* matter.

It suddenly seemed to him then that he was only weeks old. He had been reborn in a tank of oxygenated polyfluorocarbon emulsion in a Transition facility on Marineris, and it was like he had never been anything else. He was a needy child, an infant in a world he did not understand. He felt uncertain, nebulously bitter.

'What is going on?' he asked. His voice rose to the end of the sentence, the force of it pulling him upright. He caught the tail end of a déjà vu, of himself uttering the same words on a cold, wet balcony, with dark water all around him.

He did not understand anymore. Twice in two lifetimes, as two different people, he had encountered an Old One. The first occasion (he tried to recall, reconstructed only nonsense shadows, no resolution, no meaning) put him here on Novagaia, and now the second. If it was an Old One? It didn't look like any whale he had ever seen.

*Why can't I remember?*

Like a gale of rubbish, his head swirled with messy, disordered thoughts. He no longer knew why he was here. Why he was him. None of it made any sense. Nonsense kept happening to him: *why*? He thought of Aileeni and she was a lifetime away. He thought of Stapjeekha and she was a mote of dust a thousand lives away. And who was he? He looked at his hand and saw blood rivers and pore-caves a mile across into which he might just fall if he leant forward and going down with clenched insides and screeching howling...

He felt the sharp mental snick of Maureen's medical nchoi intervening. He recognised the experience. A sudden, neurological blizzard. His first one had been on the balcony of the Terran island on Marineris. He had suffered from them less and less since his arrival on Novagaia. That one had been caught in the bud.

Flocanalog concentrated on right now.

Aileeni was *right now*. He clung onto the thought. She was immediate, right here, real and *now*. He felt somatic memory flood him, smells and sensations pulling him into an emotional solidity. Manchester was *now*. Brock and Carys were *now*. He stared sightlessly out to Inhoplae, feeling the heat of Sol on his face. He caught a salt-iodine-water scent from Inhoplae.

'Penny for them.'

The voice was from his left. He glanced up and smiled. 'Hello you.' It was a long time before he said anything more. 'Maureen... something happened to me in Inhoplae Basin this morning.' He recounted his experiences in Inhoplae. 'Did you see anything? Hear anything? I want to know if I can retrieve information on this experience. I believe that an Old One communicated with me. I *know* that it did, but I can't remember! Can you help me?'

There was no reply from the Appearance for some moments. Then:

'Since transferring myself to the Hub I no longer maintain an active presence in your resource Floc, as you know. That would have made the job easier, even though even I might have also suffered a mnemonic purge. As it is, I can only say that I *will* help, but cannot guarantee that I *can*.'

Despite Maureen's reservations, he still felt as if a great weight had been lifted from him. He released a breath he hadn't realised he was holding and smiled.

'Thank you Maureen.'

The Appearance appeared to smile, 'If I may offer a suggestion. Inhoplae is the most relevant context for any memory reconstruction. Perhaps it would be better if you stayed here for a while.'

Flocanalog paused to consider, but only fractionally. 'I agree.'

## Chapter Thirty Five

‘A what?’ asked Manchester.

‘An autonomous encapsulated Halflife,’ replied the wizened old woman: actually, a Hub generated Appearance.

Manchester hummed. ‘And what is that, exactly?’

The Appearance, very nearly as small as Manchester herself, waved a knobbly finger briskly in front of her. ‘An autonomous encapsulated Halflife is a nchoi resource resident in a biological shell. A parasite of sorts, a self-replicating computational viral complex. In this case, a parasitical resource is subverting the neural tissue of a Host organism from Austerity to use as its implementation and increase its own replicative complexity.’

‘Yukky.’

‘Behaviourally, an autonomous encapsulated Halflife like this is quite hard to spot, because the nchoi parasite actually constructs a stable belief system for the Limited Awareness Personality Construct that it drives.’

‘So the construct actually believes that it was a *real* person?’

‘Precisely so. Some part believes itself to be an embodied sentence.’

Manchester was intrigued despite herself. ‘How do you know?’

‘How do I know what?’

‘Well, if something *believes* itself to be a person, then it will *act* like one, so an observer will have no *behavioural* grounds for believing that it is *not* a person surely? So how is the distinction drawn? Which is to say, what’s the difference between a *real* awareness and a *simulated* awareness?’

The old crone sighed wearily, ‘From the Intentional Stance, there is no difference. However, there are significant anatomical differences between the neurophysiology of this construct and an embodied sentence. The neural tissue serving as the parasites implementation is...’ The crone waved a hand and her lip curled with distaste. ‘*Lumpen*. Experience has not shaped it: it is simply serving as a computational substrate, as raw, computing wetware for artificial meme complexes.’

‘The *Intentional Stance* : that’s a very old idea. At least 900 years isn’t it?’

The crone looked surprised. ‘Do you know Dennett?’

‘I have met him in the Histories. What would he made of you, I wonder?’

The Hub generated Appearance sniffed and the knobbly fingers apparently gathered on the apparently smooth wooden tip of her walking stick. ‘I have conversed with a personality reconstruction of this great philosopher of course, and gather that he rather likes me, actually.’

Manchester looked at the Appearance carefully. ‘Is that *affection* Hub?’

‘I can model an analogue of the emotion, of course. Your ascription is unwarranted, however. I merely

found the reconstruction stimulating.’

Manchester smiled. Hub was such a *particular* machine. It was not always evident, because Hub had so many means of expression, through its many physical Digits in the Hub complex itself, all of which had idiosyncrasies, through the Histories and other virtual environments: it could be accessed visually, through resource, and verbally, via an auditory tap, usually then through a transient Halflife. It was thus very difficult to know the Hub itself, as a distinct entity: Manchester had been watching and learning for hundreds of years.

‘Back to this Halflife,’ Manchester said. ‘Surely most of Hub’s interactions with *real* people...’ The old crone appeared to notice the subtle inflectional gibe and sniffed imperiously. ‘Are via Halflife, so what is so bad about this one?’

The old crone hissed. ‘I have already explained. It is *autonomous* and *encapsulated*. It is a free agent. *Malignant*. Dangerously unpredictable. There is no prior history of this kind of armed construct on Novagaia.’

Manchester hummed concernedly. ‘Armed?’

‘Yes. It is equipped with a munitions microfactory. Subcutaneous impact armour. Various other things.’

‘Yukky. So it’s dangerous then!’ Manchester smiled broadly. ‘It will probably kill, ooh...’ She sucked her lip, raising her arms to the sky. ‘Hundreds, no *thousands* of people.’ She beamed.

The old woman winced and waved a hand. ‘Gagh, you are a *perverse* sentience!’

Manchester clapped her hands. ‘Splendid! Oh, do you really think so?’ The old crone hissed again, raised a knobbly finger, and then vanished. The auditory tap chimed. ‘Oh Hub, that was too easy! She was no effort at all!’

‘My apologies Manchester,’ came the voice of Hub. ‘I wasn’t paying sufficient attention.’

‘Mind on other things?’

‘You might say that.’

‘OK. Mind on other things?’

The auditory tap sighed: machine exasperation, Manchester supposed.

‘If I could direct your attention to the autonomous encapsulated Halflife.’

‘Oh yes. Well, I suppose you had better keep on an eye on it, really. Can’t be doing with a mad organic robot running about the place, now can we? Now, is there anything else? I have several *hundred* more important things to do.’

The Appearance of the crone snicked back into apparent solidity. Hub was gone and back in the form of the Halflife. ‘Do you indeed? You do surprise me. Only there *was* one small thing.’

‘Yes?’ *What was the Hub up to now?*

‘The vessel upon which the construct arrived...’

‘Don’t keep saying "the construct". Give it a label.’

‘The vessel upon which Gromburg...’

‘Ugly name.’

The old crone slammed the sharp end of her cane down onto the stone floor. It made a deafening crack, and Manchester jumped. She suspected that Hub had augmented the auditory signature: it had seemed *very* loud indeed.

‘Be *quiet* girl, your prattling is beginning to *irritate* me...’

‘Oh Hub, that’s better!’

‘*Silence!*’ The old woman appeared to slam her cane down again, the retort sounding like a small explosion. ‘You *will* be *quiet!*’

Manchester was awed into silence. *Wow* .

The old crone reseated herself, her lips trembling, her eyes sharp. ‘*Now*. The vessel upon which Gromburg arrived is used by an organisation that is currently employing Melie Inherdinia, and from whom she recently appropriated some property. I’m sure she intended to return it, but in the meantime, I suspect they are a little *angry* with her. They may even attempt physical violence.’ The Appearance of the crone cackled as Manchester’s face lost its grin. ‘Hub has searched the vessel’s choi libraries and found several documented accounts of ritualistic sexual torture by the organisation’s corporate chief executive. Ha! That stopped your prattling voice, didn’t it?’

‘Hub, I want a tight watch kept on that Gromburg thing and on whoever steps onto the orbital surface with it. I want you to communicate this information to Malvern, and to Salisbury. Explain its significance.’

‘Very well.’ The old woman placed both her thin hands on the stick between her legs. ‘Though I could just dismantle it.’

‘No.’ Manchester’s genofixed altruism made her recoil at the suggestion: Cardinals did not kill, even parasitical choi resources. ‘Just watch it.’ She was blank for a moment. ‘Put a Limpet on it.’

‘Ah yes. Good idea.’



‘Good morning sir, welcome to the Concourse of the Novagaian Hub complex. Allow me to introduce

myself. I am a Limited Awareness Personality Construct generated for your ease and convenience as part of Hub courtesy. My name is Brian. How do you do?' Brian exuded warmth and interest, his manner polite and courteous.

Above the Neomorph's 12 centimetre wide nose were a pair of opaque, silvered glasses, measuring 50 centimetres from arm to arm. Nanashub presented the latter to Brian when he raised his squashed-looking head. Vast arms like small trees crossed over the seven square metres of his bulging chest and a voice like the crushing of coal rose out of the depths.

'Leave.'

'Oh, come now sir! Surely you don't want to leave already, there is so much for you to see and enjoy on Novagaia! May I ask, is this your first visit here? If so, then perhaps if sir told me some of his interests, I could recommend something. Walking, perhaps? That's always very popular.'

Small mountain ranges of muscle flexed across Nanashub's forearms and his cheeks bulged. 'You don't want to know my interests.'

'No, I do really. I'm very broad-minded. I don't mind at all.'

Nanashub couldn't believe he was having this conversation. 'Listen. Either leave. Or die. Understand?'

Pause.

'Well sir, I really must hand it to you, you do that *very* well.' Brian shook his head in apparent amazement. 'The sense of menace and *brutality* you were able to convey was quite realistic.' He appeared to clap his hands. 'A thespian if I ever saw one! How about sir, if...'

A diamond blade slid out of a cutaneous graphite sheath on the underside of Nanashub's forearm and into his hand. The neomorph brought his arm up between Brian's legs, intending to disembowel him from crotch to chin, but ghosted instead through nothing.

'Yes,' Brian commented, somewhat icily. 'I did explain this to sir earlier but perhaps sir misheard me. I am a Limited Awareness Personality Construct generated by Hub courtesy. Thus I possess no corporeal actuality and exist only in the internal space of sir's resource. I am therefore intangible. A physical assault upon me is not only futile and stupid, it is also in violation of Hub courtesy. And if sir might permit me...'

Nanashub roared in frustration and stabbed with a courgette-sized finger at his resource, bringing down a window. He keyed for a systems crash. An emergency window snicked open from the periphery of his vision and began reporting on the shutting down of tools and communications.

'I would like to point out that only in the most excep...'

Brian vanished.

Nanashub snorted with satisfaction. The exposed blade resting in his hand snicked back into the cutaneous sheath on his forearm and became invisible. Nanashub checked the status of his resource. *Bad compromise*. It was about five percent usable with only minimum communications and emergency tools running from a hardened memory cache. He grimaced, and clenched one of his hands into a fist the size of a largish watermelon. *How had his resource been compromised so easily?* Nanashub drew down a window and keyed for a limited reboot of his resource. He watched anxiously as alphanumeric flicked



progress. Six percent. Seven.

‘Hello again sir. Just to reiterate, I am a Limited Awareness Personality Construct generated for your ease and convenience by the Novagaian Hub resource. To finish my earlier expos...’ Nanashub scrambled to abort the reboot, wincing and growling at the sound of the voice.

Brian vanished and Nanashub sneered, glancing around at the Concourse.

*So many soft bodies.*

His mind filled with his peculiar kind of pleasant thoughts, with images of ripping and tearing *snick-crimson - floodingwarmth* and twittering cacophonies of *agony-pleading* .

Nanashub was not evil as such. He was simply utterly inhuman.



Manchester stared at the two images for many minutes. One was of the neomorph Chief Executive of the *Cunnycarnival* . The one who liked to indulge in ritualistic sexual torture. She grimaced. The concept was alien to her. She could not conceive of the kind of individual who would enjoy practising such things. The other image was of the autonomous, encapsulated Halflife. She did not intend for either of them to get anywhere near the surface of Novagaia, let alone anywhere near the young Sesquoian woman Melie.

*Melie.*

Manchester smiled as she remembered the expression on Melie’s face after her Blit on the platform. "Oh I can *really* see you!" Manchester felt affection flood her.

*We are sisters. Both Cardinals out of time .*

Melie was younger by several centuries of course. And she had a reproductive capacity, but these were not important concerns. The question of *how* Melie had grown metacortical tissue was not, Manchester considered, important at all. The fact *that* she had, was. The metacetaceans of Water had simply acted as mysteriously in Melie’s case as they had in the case of all the other Cardinals, herself included. Equally, there was no point debating *why* they had done it: they just had.

The Terminator was only minutes away now. Her thoughts drifted back over the day. Her and Melie, talking, laughing, talking again, only descending from the little platform late in the day, their stomachs growling. She pulled her blanket around her and took a sip from her cup. Thick, hot chocolate slipped into her mouth, tangy with orange and spicy with a Euphoric of her own design.

*Melie. A Cardinal. A sister.*

She was looking forward to Melie's upcoming education too, having already cast herself in role as principal teacher, the issue of whether Melie would stay on Novagaia already settled.

'Where else would you go?' Manchester had asked her.

The sounds of the forest dimmed and even the breeze appeared to drop as the Terminator suddenly passed over and took day into night. Manchester loved this time. She sat staring out into the moist darkness for many minutes, smelling the cooling air. Her meditation was interrupted by an icon pulsing into life at the periphery of her vision. She flicked her eyes up to it, bringing it into focus and smiled as she recognised the call sign. The icon expanded to a neutral window, then displayed a face. Black hair framed a round face with small eyes and yellow skin. Thin lips formed a smile, and Cardinal Nyahua spoke warmly.

'Precious Mani-sah.' He raised two hands joined at the palms, dipped his head over them. 'You are well?'

Manchester caught her breath, captivated by the voice. She was over 400 years old, yet Nyahua only had to say her name and she was a little girl again. A very *naughty* little girl. She blinked cowishly and went into flirt mode.

'Nya-sah, my *dear*, I am *very* well, thank you *so* much for asking.' She draped her fingers nonchalantly through her hair. 'I was rather hoping you might tell me how extraordinarily attractive I am.'

Nyahua chuckled, his small eyes creasing in humour. His mouth lengthened sideways and lifted at the corners: the closest he generally ever got to a smile. 'Words cannot do Flower of Us justice.'

Manchester smiled. 'You say the nicest things Nya-sah.' She composed her features, wriggled, and looked earnestly into the window, her black eyes wide. 'And am I the most truly *special* person you have ever met? Please say yes.'

'Yes.'

Manchester clapped her hands and beamed like a small sun. 'What a *nice* thing to say!'

Nyahua's round face shone with warmth, 'Mani-sah has need of me?'

'What?' Manchester was staring blissfully at Nyahua's face. 'Oh yes. *Yes*, Nya-sah. You must come to Sonepur. There is someone I want you to meet.'

'Someone other than Mani-sah?'

Manchester laughed. 'Yes, someone other than me Nya-sah. Someone from Marineris.'

Nyahua cocked his head to one side, his dark eyes twinkling. 'Shell extraction?'

'Yes.' Manchester put a finger to her lips. 'And no. Quite unique.'

Nyahua's interest was piqued. 'Tell me more Mani-sah.'

Manchester and Nyahua talked further, with Manchester purring like a cat under Nyahua's gentle personal stroking, before cutting the resource uplink. The sounds of the night had picked up again after

the Terminator's passing. Now, the forest sang with a chorus of clicking and buzzing and hooting. Manchester sat, glowing inside for some moments before picking herself up and shuffling towards the interior of the Tree. The little bubble room she had requisitioned for the night was spartan: a bathroom nook, a sofa bed, and the balcony. She poured more chocolate for herself, brought down the illumination and padded over to the fireplace. An archaic tradition, one she favoured, and the Tree obliged her.

She built the fire from dry, neatly sliced pine, piling on an aromatic hardwood and retired to the sofa as it caught. She sipped more Euphoric chocolate and contemplated the night sky, dark and brilliantly clear through the open balcony doors. She could hear the Tirm cooing and buzzing and squawking. Light green fingers of air stroked her calves. The fire grew and she began to feel its heat. She stared into the flames, watching the smoke whisk away up the arterial Tree root above the fire. She sipped from the Euphoric-laced chocolate again, then set it down, becoming light and warm.

*Nyahua.*

Manchester sighed deeply, blissful like a warm, well-fed cat.

*Good to see him. Dear Nya-sah.*

She stretched luxuriously, raising her arms, her face pulling into a smile at the delightful sensation. She felt her libido rising as a warm wave as the Euphoric took effect. Pleasant recollections bubbled up into her awareness: a forest, the light brush of a wind, a tongue. *Salix alba*. She hummed and rubbed herself on the soft fabric on the sofa, feeling herself warming and tightening. Her knees migrated outwards. The Euphoric flowed silkily through her as she remembered a blond thatch below her, moving, exquisite tendrils ghosting up across her tummy.

*Shame he isn't here. He would enjoy this.*

Her hand wandered as the Euphoric came on her strong. She felt delightfully congested inside and her legs drifted further apart in response. She retrieved her chocolate and poured the thick liquid over herself, turning her mound into a plump, warm éclair. She replaced the mug on the floor, feeling the first dribbles between her buttocks and guided her hand, pressed slowly with the tip of a finger. She threw her head back, a sigh escaping her at the moist insertion.

‘Oh!’

She closed her eyes and smiled as the Tirm clacked and hooted and candlelight flickered as chocolate dripped around her enmouthed knuckle.

## Chapter Thirty Six

At a distance of 45,000 kilometres above the aquamarine surface of Water, the dark sphere span on an axis tilted 30 degrees from the plane of the solar. It measured 500 kilometres across at its oblate equator. The occasional trench or bulge was only visible in the crescent where EM from Sol reflected with steady

pearlescence. Cuboid mountains a kilometre tall passed in and out of sight like the pimples of an orange. There was no other light, no other motion. There was just the oblate sphere, quiescent, turning in its orbit. Below and behind, a tiny flame like a candle seen at 10 metres, fizzed on the watery surface of Water, evidencing something aerobraking in the atmosphere. Then the flame died and unchangingness returned.

Majestic forms blossomed silently into the blackness.

*Metacetaceans.*

The Mother of Water, a watery dragonfly with multifaceted eyes and diaphanous wings flashing silver and white.

The First Metacetacean, an inverted cathedral of marble, spilling light like hot magnesium in oxygen.

Rippidyhaasalog, a rippling sphere 50 metres across, pulsing with thorns and spines.

Shochil, a giant briny equus, coloured like oil on water.

Everywhere, lightspilling forms appeared all around the oblate sphere, encircling it Jovian fashion in a thin ring. Thousands. Millions. Baby Krakens, tentacled monstrosities, graceful collectives of pulsing jelly, trailing themselves for kilometres behind. Cycling, pulsing, sparking forms, the citizenry of Water pondered the silent sphere before them.

# Water is present

The First Metacetacean gathered Shochil to his side, like a minnow to a whale, as Rippidyhaasalog appeared to swell, its spines and thorns drifting as if in a current.

# Invigorating forgotten pleasure

The Mother of Water drifted towards the collective of minds called Rippidyhaasalog, hailing the First Metacetacean and Shochil as she approached. She turned her vast, multifaceted eyes on her fellow metacetaceans, her body cycling with bands of yellow and green, waving clusters of appendages flashing with a silvery brilliance.

# Oaxacan Way?

Shochil let loose with a spiralling cerulean shout, screeching off into the higher UV, losing her voice in the excited, background whistle of EM spilling from Rippidyhaasalog.

# Oaxacan Child walklearning wombmother!

# Greatjoy!

The Mother of Water turned and addressed the First Metacetacean.

# Little One? [Image]

The First Metacetacean rumbled and spiked in the lower EM.

# Urwombmother...

There was humour from Rippidyhaas analog, a gurgling sparkle of infrared, and it (they) expanded its (theirs) environmental pocket to encompass the three other metacetaceans. The collective metacetacean entity tweaked at the Cascade and rewrote causality, making water for Water. Sound boomed in the coherent pocket of solar moisture, allowing the metacetaceans to communicate in the medium of their oldest language.

# A gift from we to ease the speaking of

The First Metacetacean tumbled in the brine, Shochil cartwheeling with him burbling excitedly, the elder metacetacean gentle and stern.

# Child is curious [Image] Time to ease the Way

His fellows intoned with him, the speck of brine echoing to clacks and whistles and booms.

# Ease and ache the Way

# We are upon [Image] It is now

The First Metacetacean boomed into the water and sent his words through the Cascade for all of Water gathered around the dark sphere to hear.

# [I image] Water becomes Oaxacan Way

The four metacetaceans probed their world, gazing eagerly from their fluid enclave out into the vacuum. They saw the dark sphere, the Jovian ring of Water, a sharp crescent of Sol.

The Child of Water began to emerge.

The Oaxacan orbital split open along a 200 kilometre long rent running north to south of the sphere and spilled a blinding yellow flood into the vacuum. The top of the structure bulged up 10 kilometres in a matter of seconds, subsided, bulged again and then split, gushing a whitecream brilliance through the breach. Flakes of orbital structure, sheets of dense metal hundreds of kilometres square, peeled away like juicy, green cellulose. Within, something rose and flowed into form, crashing, collapsing, reforming, glowing. Shochil could not help herself, almost uncoiling with her joy, a flashing mosaic of vermilion pumping up and down her spine.

# Beautifulchildofus *hello!!*

The four metacetaceans slipped into the Cascade, feeling the informational continuum tremble at the presence of the esoteric entity.

The Oaxacan child emerged from its cocoon, shedding the fragile shell and reached out, stretching itself. It had no fixed form. Its boundaries were defined by transient areas of light that flowed into impenetrable darkness. Areas burning with nova brilliance whirled and were engulfed by ravenous patches of motile vacuum shadow.

The entire outer structure of the orbital had now opened in sections about its base, which was still whole, holding the swirling child entity in a cup 150 kilometres across. Flakes of orbital shell were still breaking off, now spiralling away from the shattered sphere. The First Metacetacean nudged them into a safe

orbital burn, like brushing crumbs from a plate and perceived others do the same.

The Mother of Water pulsed hotly in the informational Cascade, her message heard across the Jovian ring of citizenry.

# [Image] Love of Water [Image]

The voices of Water rose, soft and encouraging, beckoning the Child out. It brightened in the remains of the bowl, moving away from it, a flowing, coherent nothingness. It swirled and turned, apparently amorphous, stretching parts of itself and was suddenly *there*, in front of them, the little pocket of Water lost before the intangible folds of the Child of Water. The Oaxacan entity spoke, its consciousness revealed in the communicative act as quick and fluid like water.

# I am this [Image]

The four citizens were awed into silence. Like drops of congregating mercury, pockets of metacetaceans accreted around them, generated inertial bubbles fusing seamlessly. The First Metacetacean was the only one who could successfully manage to speak.

# We are this [Loveimage]

The bubble of water, clotting with the citizenry of Water, continued to grow, tens, then hundreds then thousands of individuals murmuring to the unique Child:

# We are this [Image]

# And this [Image]

# And this [Image]

The child flashed xanthic over hypersurfaces which folded impossibly into empty starlight and set the Cascade trembling.

# Delightlove *creator!*

## Chapter Thirty Seven

The Bus disappeared with a sharp crack, accelerated upwards by attenuating pylons of carbon muscle, quickly becoming lost against the cerise sky, trailing legs shrinking quickly.

They were gone.

Carys put her hand on her partner's chest and her head on his shoulder. 'I shall miss them.'

Brock held her and breathed the perfume of her hair. ‘So shall I.’ He glanced over at Flocanalog. ‘So your Trip is over Floc, my friend?’

The barrel-chested Cardinal Nyahua demurred. ‘The journey of friend Floc-sah only just *begun* .’



The Novagaian settlement of Escher was in three parts, each taking advantage of a different facet of life near a Rim wall, in this case, the Starboard one. The first part was called Loamfall. Loamfall was 30 kilometres long, made up of thousands of stepped, crescent terraces, descending toward the Starboard Rim from a height of 1,000 metres above the mean orbital surface to a depth of 1,000 metres below it. At the bottom of this incline was the Escher lake, linearly sliced in half by the huge Rim wall. Lowpoint, the second part of Escher, lay submerged on the floor of this lake, two kilometres below its surface, making the Rim 43 kilometres high at that point, taller than anywhere else on Novagaia. The settlement was made up of giant, choo machine Clams pressed into the submarine silt. By contrast, the third part of Escher sat pimpling the vacuum polished metal at the very top of the Rim itself, a micrometropolis of diamond bubbles gathered around the thin grooves of an induction Gun. This was called, predictably enough, Highpoint.

The view was simply *awesome* .

Looking straight out over Novagaia, the far horizon was 300 kilometres away, the Port Rim wall of the orbital visible as a curvilinear smudge on the upcurling horizon. Looking left, to Antispinward, was the curved inner surface of the orbital surface rising up to form a sky of mottled green and brown and white, with the 20 kilometre wide bowl of Chapel Halls invisible at its centre, lost to the distance. Ushogbo was visible though, a glinting brown puddle 200 kilometres away. Looking to the right, to Spinward, it was the same, another world on its side and another puddle: the Wickremasinghan sea this time, 600 kilometres away.

Above, dusted white, vacuum blackness.

Below, mottled white and brown and blue, organic green.

Tennys felt a tap on his shoulder.

‘Alright?’ He half turned to see Manchester grinning in the seat behind him. She was raised slightly higher than him and could see over his head. He gave her the thumb up. ‘OK, here we go.’

The choo machine trembled around him and he felt forward motion. He felt his stomach tighten, his breath coming faster. A wild energy suffused him.

‘How long will we fall?’

Manchester shrugged, her eyes wide, ‘30 minutes? You really should be in consensorias for it.’

‘OK.’ His fingers felt for the moist access gates of the machine on the arms of the seat. The carbonsponge held his fingertips with a sucking adhesion, then he entered consensorias.

Experiencing vicariously through the borrowed senses of the choo machine, he tingled at the cold of the vacuum and felt the warmth of unfiltered Sol on the hard carapace of his skin. He felt himself move forward and leap, and then he was unsupported above a drop of 43,000 metres and falling. He fell for many minutes, not actually as fast as he had imagined because of the lack of gravitational attraction pulling him down.

He released his fingers from consensorias.

Cocooned inside the Host machine, he used his own senses to look around. He could see the sparkling expanse of the odd Escher lake below: a tiny puddle, one shore a straight line for 50 kilometres where the Rim wall came down out of the sky and sliced it in half. He could also see the lush green of Loamfall stretching away to Port, a thin strip. But behind him was a streaming metal fall. Grey and unmarked, the 16,000 cubic kilometre vastness of the Rim wall stretched away to Spinward and Antispinward of him blocking the stars, 4,000 kilometres long.

He re-entered consensorias.

Five kilometres above the surface, as the air began to thicken underneath him, sheets of chocolate-striped ebony exploded from his shoulders and his ribs.

Wings.

The rippling carbonsponging caught the wind and stiffened, braking the plunging mass. He began to fly. He spiralled lazily at first, his rate of descent slowing. Now, he *understood* the wind as a strong and reliable pressure surface under his hand. Now, he *felt* his arms as aerodynamic surfaces. So if he just... One of his arms dipped sideways and he immediately began accelerating towards the surface far below, an organic comet plunging through the clotting air.

He descended until he was barely a kilometre above the waters of the lake. Then he felt a pleasant, stretching, tearing sensation, familiar from his Mammoth consensorias, and knew that the Host choo machine was re-configuring. He felt his aerodynamic arm surfaces grow smaller and smaller and then disappear completely. He became a falling projectile and finally entered the waters of the Escher lake at 60 metres per second, sleek and bullet like.

Underwater, he grew new, hydrodynamic wings and fell into darkness and 30 minutes later, was staring up through the diamond roof of a submarine Clam in Lowpoint, a three kilometre depth of water held back by apparently nothing 50 meters above his head.

‘43 kilometres, top to bottom.’ Manchester exclaimed, her face set in a large grin. ‘The *only* way to travel!’

## Chapter Thirty Eight



From Escher, with their numbers reduced to five without Flocanalog, Carys and Brock, the Trippers joined a Caravan heading Spinward, for Undine and the Port shore of the Wickremasinghan sea.

Caravans were land-based migrations of the largest choo constructs on Novagaia. These were motile Trees really, slow and ponderous on an inverted forest of stout appendage, providing home to some 2,000 native Novagaiaans, some adults, some children. A few member Trees of this Caravan were truly enormous, their internal volumes exceeding 100,000 cubic metres. These machines were very old, some the age of Novagaia itself, grown as the orbital took shape during its construction over 500 years ago.

The Caravan was made up of 400 individual Trees and tended to be roughly symmetrical, with the larger, older Trees towards the centre and the younger, fleeter machines on the edges. Like elephants gripping one another's tails with their trunks, flexible bridges of carbonsponging linked the ponderous machines to their fellows. These bridges allowed access to and from any one Tree of the Caravan to any another. No one Tree was autonomous from the rest, though all had slightly different roles to play in the maintenance of the travelling community. Some Trees were specialised procurement factories, others were accommodation based with snugs of various sizes bubbling within the warm matrix of the Tree itself. Still others were recreational - a great many were recreational - and these tended to blend with those that were educational.

The Caravan moved at one metre per second, three and a half kilometres an hour, 86 kilometres in any two passes of the Terminator. It would take them nine days to get to Undine and another seven to reach Wickremasinghe and Novypolos, not counting stops.



The Trippers were all accommodated in one of the larger Trees near the centre of the gently heaving, ponderous herd of machines. Their rooms, little extruded bubbles filled with sofabed and bathroom nook, were all linked. Melie's room was the last in a row, on a corner. It was not so much that she had a door onto the balcony of this room, rather that the corner of the room was simply not there.

Melie wondered what would happen if it rained.

Aileeni wandered through from the next snug wearing a voluminous dressing gown that showed her ample cleavage. She planted a kiss on Melie's upturned forehead. 'Morning girl. How are we today?'

Melie clung onto Aileeni's hand on her shoulder. 'I'm wonderful thank you Leeni,' she said cheerfully. 'Here, look at this.'

'What's that?' Aileeni came round the table and peered over at Melie's breakfast. 'Look's lovely,' she

lied.

‘Cereal porridge. It’s really good, you should try some.’

Aileeni waved a lazy hand, the other stifling a huge stretch of her mouth. ‘Oh! Sleepy head today.’ She reached over and took a piece of fruit from the bowl piled high in front of her.

‘Oh, I wouldn’t if I were you...’ Melie began.

Aileeni grimaced violently as the bitter flavour of the peel flooded into her mouth, ‘Oh!’ She searched about blinking, her tongue hanging out. ‘*Ugh!*’

‘...Because the skin is poisonous,’ Melie finished.

‘*Poisonous?! What’s something poisonous doing in your fruit bowl?*’ Aileeni sprayed fruit about the table. ‘Fucking *H* girl, what are trying to do, *kill me?*’

‘Not really *poisonous* like it will kill you, but like, you know, unpalatable.’ Melie laughed loudly. ‘You have to peel it first. Oh Aileeni, your *face!*’

‘Ugh, oh it tastes *horrible!*’ Aileeni threw the fruit over her shoulder.

‘Aileeni!’ Melie scolded. ‘You might hit someone.’

‘No chance.’

‘Hey! Who threw that?’ The voice came up to them from below, sharp and irritated. ‘Learn some manners!’

‘Oh cripes!’



When she wasn’t having breakfast, or otherwise eating or drinking, Melie sat on her balcony, took out her pouch of Weed and watched the life of the Caravan. It was something that she found herself doing every day, since joining the Caravan six days ago. She liked watching the children - seemingly thousands of them - scrambling and running, and climbing up and around and through the network of motile Trees, in their element, making up games, laughing and shrieking, always running, gasping and out of breath with the excitement of it all.

She liked watching the adults as well, the native Novagaians living their ecopoesis. They would come and go and stand and huddle and talk on the broad flat bridges linking her Tree to others. All the Novagaians she saw looked fit and healthy, with skins noticeably darker than hers. *More UV on*

*Novagaia*? she wondered. She knew that the Caravan was a place of work, that any and all parents present contributed to collective child care, leaving their biological own to the care of others. But even so, there were generally smiles everywhere and a sense of community, of shared goals. Walking the Caravan, dawdling through the public places, the cafes and conversation nooks, she felt the vibrancy of the people, the sense of freebelonging.

And after the Terminator had passed over banishing day, she liked to walk the Caravan at night, sometimes using the bridges, more often walking the ground itself. And, surrounded by the innumerable appendages of the motile Trees, as candles began to flicker in a hundred different snugs and people began devoting themselves to their partners, she would hear the proud declarations of pleasure.

Melie began to enjoy herself.

Manchester visited her every day for some hours early in the morning. They would exercise together. The Cardinal had had Melie's resource upgraded with a metacortical Bridge whilst in Escher. The next two weeks would provide an excellent opportunity for Melie to learn how to use it to enable her to have a measure of control over her teleological perceptions of the Cascade. So she practised diligently, day after day. Manchester and her often would sit facing each other, cross-legged on the plush bed, exploring the Cascade as new sisters, probing and pushing against the limits of Melie's virginal mind.

Manchester used to say this:

'You must allow your *Self* to guide the exploration. What you will know when you leave the Cascade is what you *want* to know. Frame questions, pose problems, let your own inquiring mind guide you. Remember, you are choo and choi and *Third*.'

'Yeah, but it's so hard to think about *anything* when all I can see is nonsense.'

'I know. Try to ignore the *perceptual* experience. Try to focus on the *Cascade* experience.'

'OK, though like what is that? How can I focus on something when I don't know what it is?'

'You *do* know what it is. You just can't *express* what you know.'

'Really?'

'Yes. Look, let's go in, and see if I can't explain.'

Shapes and impossible geometries unfolded from nothing around her. Lines gashed and ticked murmuringly. Blisters like suns shrank to the size of a pinhead and an infinity of lines sliced through a zero dimensional point in no time with a screeching...

'Question! Ask a question!'

Melie felt her hand tighten on Manchester's own as Cascade reality billowed around her and through her. She moved, *there*, *there*, and saw lines stretching upwards to a rounded infinity before they collapsed down below her as blisters flared with anti-light...

She felt the familiar sluicing disappearance as the metacortical Bridge de-activated. She opened her eyes and saw Manchester regarding her kindly.

‘Sorry.’

‘Don’t worry. You’re doing splendidly,’ said Manchester instantly. ‘It is bound to take some time. Years probably.’

Melie smiled. ‘I don’t mind. It’s better than Blitting and being scared all the time. At least now I know what’s going on.’

Manchester looked at Melie carefully. Everything about the girl was different now. Her sullen frown was gone. Her face was open, her pale grey eyes were wide and alive, seeing everything.

Melie stared back, her laughter fading, but her mouth remaining in its smile. ‘Now what?’

Manchester smiled. ‘Nothing. I was just thinking how I could see the happiness in your face.’

Melie became more serious. ‘Yes.’ She shrugged, her tail coiling into her lap. ‘I am. I mean, I feel more like... like a person now and not some freak, you know? I know I’m going to have to get used to being a Cardinal...’ She threw her hands up in the air and shook her head. ‘Though I still don’t really believe that but anyway, it’s there, and...’ She glanced out over the balcony, at the Caravan below, the swaying, rising clots of human and choo. ‘I really like this place, Manchester, you know? This Caravan. I could spend forever here, just walking around Novagaia, round and round, meeting people, having fun, and being... being a Cardinal, with you... and the others...’ Melie tailed off, her face radiant. ‘I’m just happy I guess!’

Manchester smiled again. ‘I’m really happy for you, Melie. I really am.’ She touched Melie on the arm.

The young woman took and gripped the Cardinal’s hand. ‘Thank you Manchester. I really mean that. You’ve been so good to me. I don’t know how to thank you enough.’

The two women embraced as the Tree lumbered ponderously beneath them, rising and falling to its own polypedal rhythm.

‘Enough.’ Manchester pulled away and rearranged her lotus, pulling her shoulders back. ‘We have work to do.’

## Chapter Thirty Nine

*Like that person you read about today.*

The episode was hard to remember now. The phrase remained, though, despite the fact that he had no memory of inflection associated with its enunciation, nor any hint or verbal clue as to the identity of the speaker: it must have been his *own* voice, his *own* self posing its own question, but it didn’t feel like it.

*Like that person you read about today.*

He wasn't able to supply a referent for the *that person* he had, apparently, been reading about either. Nothing he thought about triggered associative retrieval at all: *that person? Which one?* He tried many times to think of a particular individual that might qualify, but his sources and notes must have contained hundreds of candidates. He assembled a list of everything that his resource had displayed for him that day. 23 separate documents. He keyed for an inverted word search, which would give him a count of all text items that were not words, in other words, give him a count of names. He groaned when he saw the figure: over 6,000 strings.

Then he thought again.

Many of the strings he would be able to dismiss right away, knowing their associated histories so well. Many of the strings would be repetitions. Many strings would be place names, or names of artefacts or events. He could certainly prune. He spent some time assembling a more intelligent search from smaller components (his resource abounded with such tool fragments, so useful to a historian sifting through old texts for new things) and this time, the search delivered a far more manageable figure. 143 strings.

*That's more like it!*

Then he thought again.

Those 23 documents had hypertextual links (some of which he had browsed, some not, he presumed, with no way of telling) to over - he consulted his library - 654 other documents. And that was only the lowest order links, only one step away from source. What if the name was in a second-order link? Something he had just skimmed over, not noticing? He keyed for the information.

There were 8,713 second-order links to other documents.

His problem had just gone combinatorial, exploding with possibilities. And that wasn't the worst of it. Very often, he would find himself nested 10 or more times inside a hypertextual link, simply following his historical nose. He became depressed. The prospect of searching for (quite possibly) a single occurrence of a single name, the identity of which he didn't know, in the total informational space he had occupied during the past days simply beggared description. A search would take him months if not years even with the aid of his resource, though the machine was no help at all unless he could specify useful search parameters, which he could not.

Tennys groaned.

*Like that person you read about today.*

'Curious,' remarked Floccanalog wryly, when he mentioned the problem to him via a nchoi resource uplink. 'You have too much memory, I have too little.'

He was methodical, however. He decided to marshal his data. He put to one side the depressingly small odds he had of actually *finding* the name - not even considering how he would recognise it if he did locate it - and began with the 23 source documents he had been working with on that fateful today. He gave up just once. This was after the first sentence of the first document, an autobiographical account of clinical depression and the healing effects of human-cetacean interaction dating from 512 BK., entitled *The Dolphin Dreamtime*.

*Like that person you read about today.*

‘Who?’ he asked himself out loud. ‘Who are they and why are they important? Are they important to me? Or are they just *historically* important, heretofore historically unrecognised?’ *Heretofore*, he thought, *not a word you hear often*. He then metathought: ***Why did I think***, ‘*Heretofore, not a word you hear very often?*’

Pause.

‘Comm, how many of these displayed texts contain the word "heretofore"?’

‘Searching.’

Pause.

‘One.’

He became excited. ‘Which one?’

‘*The Rise and Rise of the A Ideolog*, by S. Ramakastran, 305 BK.’

‘Find that reference please. Display here.’

‘Complying.’

The text scrolled on the black virtual space before him. He consulted an auxiliary information window: the document was 406 pages long and he was on page 276. He read:

"The role of the new biotechnologies which flooded out of federal Africa in the latter part of the Twenty First Century..." Tennys converted the old calendar effortlessly as he read, he had done it so many times before. "...cannot be over-estimated. The large scale spread of so called *Solar Sunflowers* across much of the northern Sahara, so significant in providing the emerging power with a cheap, renewable energy source for example, was largely as a result of the actions of small biotechnology companies funded by the Choo Institute,**heretofore** ..."

*The Choo Institute?*

The reference jumped out at him. *As it had the first time I read it*, he realised with sudden excitement, remembering the occasion. *What did I do last time?* Hypertextual link, of course. He manipulated the window, highlighting the name, **Choo Institute**, and watched the auxiliary window expand from the text. He checked its reference: a standard History elaboration. Good. He began to read.

"The Choo Institute, founded in the middle of the Twenty First Century as an ecological think tank, was the single most influential organisation in the shaping of the emerging federal African state. At the time..."

He was nested deep within a chain of 15 hypertextual links with this original source document, reading with weary, gritty determination, a terse sociocultural analysis entitled *The Nkomi Gerontological Legislation: Effects and Effectiveness* by one Saul Shiracombi, whom he was beginning to thoroughly detest, when he heard a melodious voice in his ear.

‘Things going well?’

‘Whaphuk!’

A figure stepped hastily back from him and raised its hands. ‘I apologise, I startled you.’

Tennys relaxed as he recognised the Halflife that the Hub had assigned him from the Histories. It was called Hilbert.

‘Sorry Hilbert. I was working.’ He tapped at his temple to explain. ‘Just going through some stuff, you know. Getting nowhere, actually. I always do it, dive into a text...’ His hand wiggled, indicating a fish perhaps. ‘And get lost in the detail.’ He laughed a little nervously.

‘No name yet then Tennys?’

‘Not yet. But I think I’m close.’

Hilbert humphed, appeared to gesture with eyebrows and hand, indicating a desire to sit. ‘How so?’

‘Well, I don’t know really. It’s just a hunch.’

‘Tell me. I find it helps to talk.’

He regarded Hilbert dubiously. ‘Oh.’ He gazed wistfully at the internal array of tools ready to be used, at the text waiting for manipulation. ‘Right, OK. Well one of my things is wanting to know about religions, right? And particularly the aetiology of the whole religious philosophy, the theosophy, as used by the Cardinals down on old Earth during the Great Dying.’ He checked to see if Hilbert was following and saw the Appearance blink and nod its head. ‘Now, I’ve asked Manchester about this, and she says that...’ Almost without thinking, he began to turn his focus inwards, reaching for intangible tools to find the reference. He caught and stopped the sequence of actions, trusting a memory paraphrase instead. ‘She says that it evolved as a result of the empirical experience of the Cardinals in the Cascade, OK?’

‘OK.’

‘OK. Now, it was Ushogbo the Cardinal that was the first to initiate Trips in what was the A Ideolog at the time almost 600 years ago. Now where did *she* get it from?’

‘I see.’ Hilbert apparently said. ‘Did she borrow from other systems of religious philosophy as well as her own experience? Is that the question?’

‘Yes, precisely. And it turns out that she borrowed from the very *earliest* systems. I mean, the *very* earliest, from the prehistoric Goddess worshipping, psilocybin guzzling beliefs of the plain dwellers of like, tens of *thousands* of years ago. Now this strikes me as *interesting*. “Why would she make *that* kind of choice?” I wonder. So now I become interested in Ushogbo the Cardinal, and I begin to read about her, and discover that there is very little on her origins.

For example, I am unable to verify *where* she was born, although, given the Cardinal’s naming convention, she *must* have been born in a place called “Ushogbo” and indeed, BK., there was such and such place, a settlement in the A Ideolog. I don’t know who her biological mother was either which is not the case with all of the other Cardinals that I have checked: the name of the biological parent is evident in the record. But in this case of Ushogbo, it is not...’ Tennys trailed off, realising he was rambling but he had reached his point anyway. ‘The point being, you see, that there’s a kind of historical *vacuum* there, and nothing abhors a vacuum more than an historian. Well, except nature. I just find it *interesting*. I

want to *know* . I don't know who Ushogbo's mother was. I don't know why this is the case and I want to know why. That's it.'

'That's it?'

He was silent for a moment.

'Well, actually, no that's not it at all. I mean, that's only a *little* part. For example, Ushogbo was born in the A Ideolog, as I said. Now, there are strong indications that the A Ideolog was very largely responsible for the raising of some of the very first metacetaceans...'

The Appearance appeared to quirk its head to one side. 'Really?'

'Yes. But no one really *knows* , not even the Cardinals. All that is known, all that you find in the Histories anyway, is mostly the period 360 BK. onwards and if the A Ideolog - federal Africa as it was then - *was* responsible for the raising of cetacean sentience, then it happened *before* 360 BK. and the Histories that far back are a mess.'

'A mess?' Hilbert asked with what might have been professional pride. 'Concerning what? The Histories are as accurate as...'

'As what's in them, yes, I know.' He shook his head and frowned. 'And then... Here's a thing. I've been reading some stuff recently from around 500 BK. Now this is federal Africa, right, as it was, beginning the transition to Ideolog status. The whole place was blossoming. Culturally, economically, scientifically, in every way. Especially *technologically* . One account - the one I was reading when you arrived actually - talks about the importance of *biotechnology* to the emerging Ideolog...'

'Biotechnology?'

'It's an old name for making simple kinds of choo machine, I think. Now, the sources I've been reading indicate that a great deal of this biotechnology was enabled by only *one* organisation that became absolutely huge in the post-federal Ideolog. And that was called the Choo Institute, right, originally headquartered in, guess where?'

'Ushogbo?'

He slapped the table delightedly. 'Absolutely right! Now, to me, this is most intriguing.' He began counting points off on his fingers. 'One, Ushogbo the Cardinal was presumably born in the place called "Ushogbo" in pre-Ideolog Africa, though we can't be sure. Two, she was born in exactly the same place that was occupied by the one organisation most instrumental in the evolution of the post-federal Ideolog. Three, if the A Ideolog *was* instrumental in the creation of Water, then it was almost certainly the "biotechnology" which came out of the Choo Institute that was responsible. Do you see? There is a pattern here, connections between federal Africa, this mysterious Choo Institute, Ushogbo and the first metacetaceans. But the information to prove any kind of link just doesn't seem to be available. I can prove no link between the Choo Institute and either Ushogbo the Cardinal nor Water. But things point in certain directions, you see. It's like there is a stubborn knot of information hidden in the Histories and if I could just ask the right question then that knot would unravel, and I would know.'

'Know what?'

'I don't know.'



‘How will you recognise it, then, if you don’t know what it is?’

Tennys tapped a nostril with a finger. ‘The dose.’

Hilbert appeared to grunt its assent.

‘Who’re you talking to?’ Melie suddenly lounged in the doorway.

‘Melie!’ Tennys rose quickly from his chair. ‘Uh...’ He jabbed at the side of his head, realised he was on one leg, put the other down and grinned weakly. ‘Resource. Halflife. From the Hub. Working.’ He cringed internally at the lack of sophistication in his expression.

‘Oh I don’t want to disturb you if you’re busy.’

‘I’m not. I mean you didn’t. No, I mean, you weren’t.’ He drew down an intangible icon with a flick of his eyes and disabled the Hub tap with his resource. Hilbert disappeared. He composed himself. ‘I was just working with a Hub Halflife.’ He tried to sound nonchalant. ‘Hey, that’s a really nice...’ He indicated and Melie looked down then up again. ‘Shirt. I mean, it’s not a shirt is it? It’s a, umm... uh would, would you uh...’

‘I was just going for a stroll actually.’ Melie said. Tennys was relieved to observe that she seemed more amused by him than irritated. *Good sign*, he thought, *good sign*. ‘Want to come?’

He blinked. *Fucking A*. A small sun of joy broke through the clouds of himself.

‘Yeah!’ He scrambled around the table, grabbing a woven waistcoat from the back of a chair. ‘Let’s go! After you, of course.’

Melie turned and headed into the Tree snug. ‘Aileeni told me about this place.’

‘Yeah, what kind of place?’

‘Sort of a happening place. Loads of people, lots of music and dancing. *Fun* sort of a place.’ Melie paused at the exit to the snug. ‘I know you Austerity types are a bit boring like, so I wouldn’t force you.’

Tennys lied enthusiastically. ‘Dancing? I *love* dancing.’

Melie grinned at him, her oatmeal blond hair floating around her face. ‘Alright.’



Piter, Jan and Huo were playing a running game down narrow Tree roots and across thin arcing bridges,

through the burrow-like interiors of Trees and over their broad, warm roofs. At one point, Piter saw Jan disappear. He knew where she had gone, and didn't even wait. He dived headfirst into the slippery Tree root. He emerged headfirst into a pile comprising Jan and another person whom he couldn't see, only just bigger than him. He ended up with his head between the other person's legs.

'Nthorry!' he said, with his nose squashed. Then he felt a great force pound him in the back: Huo's head, he suspected.

'Ouch!' cried Huo. 'Who's that?'

'It was *her* fault!' said Jan, pointing.

'It was no such thing, young lady,' said the unknown person. She smiled and brushed a strand of hair away from Jan's face. Jan's fierce little frown subsided. 'It was *both* our faults. It was *my* fault for standing in your way, and your fault for coming out of that Tree root so fast!'

'Yes,' Jan agreed. 'Both our faults!' She beamed. 'My name's Jan. What's yours?'

'Manchester,' said Manchester. 'I'm a Cardinal. Do you know what one of those is?'

Piter and Huo each drew a sharp intake of breath.

'Oh, a *Cardinal!*' said Huo. 'Oh missis Cardinal, I'm *sorry* we bashed you! I mean we, we didn't *know* ...' Huo twisted her little fingers.

'That's alright. What's your name?'

'Huo,' said Huo.

'Hello Huo.'

'And I'm Piter,' said Piter, pitching his voice down low, so he would seem older. 'How do you do?'

'I am very well, thank you Piter. Now, what shall we do?'

The three little people all looked at her blankly.

'What do you mean?' Piter asked.

'I mean, what do we want to play?'

Piter looked at Manchester with the beginnings of a half smile. 'Cardinals don't play kids games... do they?'

'Well I do,' said Manchester. 'Let's give this Tree root a try, shall we? How do we get up, hmm?'

'I know!' shouted Jan and scooted off, her little legs pumping, arms straight down by her sides. Manchester followed with a whoop, and Piter and Huo, not quite believing their eyes, followed.

'I didn't know Cardinals were like *this!*' Piter hissed to Huo as they ran.

‘Neither did I,’ said Huo. ‘Never believe what the wrinklies tell you!’



‘Look at the *state* of all of you!’ cried the Crechem, surveying the three tired, dishevelled forms. ‘Cut and bruised you are!’ The Crechem took hold of Jan’s hands and turned them in her hand. ‘And what ever happened to your *clothes*?’

The three children bowed their heads, contrite before the wrath of the Crechem.

‘We we’re playing with a Cardinal called Manchester Marcie...’ began Huo hesitantly, trying to explain.

‘Don’t tell me lies, Huo Friphill!’ warned the Crechem. ‘Now, come on, all of you, into a bath...’

‘But she *did* Marcie!’

‘Honestly, she *did* ...’

‘And no more nonsense!’



Manchester bumped into Tennys and Melie in the middle of a broad, low bridge near the centre of the Caravan. Novagaian caravanersii flowed easily round the little human logjam.

‘I met some friends.’ Manchester offered, by way of explanation. She was dirty and dishevelled, her hair a mess, blood running down one forearm, both knees of her leggings gone, her smock ripped across the shoulder.

‘Friends?’ queried Tennys.

‘Manchester, look at the state of you!’ Melie exclaimed with a laugh. ‘What have you been *doing*?’

Manchester grinned. ‘Just connecting with the inner child my dear. You out for a stroll?’

‘Yeah. I thought I’d pull the geek from his books.’

Tennys’ face fell. He had learned the derivation of the word "geek". He looked pained. ‘I do wish you wouldn’t call me that.’ He instantly regretted the pompous tone.

‘Don’t be so pompous Tennys,’ said Manchester. ‘Melie?’ She raised a hand, and Melie reached down and took it. ‘That way, I believe.’ She indicated a set of steps leading off the bridge. The two women descended and walking, feeling the ground underneath their feet as curiously solid after the gently heaving swell of the Caravan: like having sea legs, they wanted to wobble. Tennys remained on the bridge, in an agony of indecision.

*Should I go with them? Something’s happened to Melie. Maybe I should just slope off and leave them to it?*

Melie paused and turned. ‘You coming Tennys?’

‘I’ll uh...’ He jerked a thumb over his shoulder, cocked his head and grinned. ‘I’ll just have a look around. You go on!’

Melie looked offended. ‘Yeah, if you want.’ Her tail swished.

Manchester looked around curiously at the interaction.

*Oh no, I said the wrong thing. How’d I manage that?* thought Tennys. He hastily tried to correct the error. ‘No, you see, it was just that I thought you and Manchester might want, well, you know, a private chat or something, that’s all.’

Melie frowned and shook her head. Then she smiled. ‘That was a *kind* thought Tennys.’

‘It was?’

She laughed. ‘Yes. Now *come on* .’ She turned to Manchester as Tennys leapt off the bridge and came racing toward them. ‘So where can a girl go and dance in this Caravan anyway? Aileeni mentioned somewhere, but she couldn’t remember where it was.’

They walked amongst the swaying machines, stiff skirts partly obscuring the inverted forest of sturdy carbonsponge appendages beneath them. Manchester led them to a cafe, low strung on the backside of a small Tree, one of the last with a physical tether to the main body of the herd, situated toward the back of the Caravan. Looking Antispinward back over the grasslands of the Ndele prairies, they could see in the distance the black swathe of the Terminator. They sat for some moments gazing out at this view before a large, old woman came out from inside the snug at the back of the balcony.

‘Welcome,’ she said simply, and sat with them a while. She asked them their names.

‘I am called Tennys Smolensky,’ said Tennys pompously.

The old woman regarded him strangely. She licked her lips, blinked extraordinarily slowly and turned away from him to look at Melie as her eyes opened again.

‘Hi, I’m Melie,’ said Melie warmly.

The old woman's features softened. She reached out with her hands and placed them on Melie's head. Her eyes closed and her mouth twitched and her cheeks puffed out. Then she smiled, her teeth yellow bright against her dark skin. She dropped her hands and looked out over the rear of the choo machine herd to see the Terminator approaching quickly. She put her hands together at her chest, fingertips pointing to her chin, smiled warmly again and dipped her head. Once more, she blinked very slowly and turned to Manchester.

'I am Manchester,' said Manchester, copying her action, small hands together at her chest. 'Cardinal.'

The old woman leant back, spread her legs widely and put her hands on her knees. A slow grin spread across her face. She began chuckling slowly, her saggy breasts bouncing.

'Oh!' She shook her head and clapped her hands. 'I'm glad!'

Manchester extended both her hands. 'May we?'

The two women leaned forward and touched foreheads, hands clasped. Observing the slow cerebral contact, Tennys and Melie exchanged raised eyebrows. They saw the old woman draw back, drop Manchester's hands after rubbing lightly at their tips and amble back into the snug. After some moments, she emerged bringing strawberry tea for Manchester, hot, which she poured; *niwe* for Tennys, cold, which she did not pour; and a clear fruit cordial for Melie, cold, which she did pour, in addition to a pouch of Weed, which she set down with a small pat. The old woman planted a small kiss on the top of Melie's head, putting a hand there, causing Melie to smile and blush. She looked at Tennys, blinked and retired, chuckling, into the snug, leaving the Cardinal and the two Trippers alone.

'What was that all about?' Melie asked, touching her forehead.

'Oh, you know.' Manchester gave a careless wave of her hand. 'A Novagaian thing.'

Out on the free edges of the Caravan, two small Trees - a mere 200 cubic metres of internal volume - had hitched up their skirts and begun to race. Tennys watched the sight, and couldn't help chuckling: it was comical. The two lumbering machines, dwarfgiant examples of their kind, had lengthened the forest of legs underneath themselves and upcurled their stiff skirts like an old scroll of paper, to reveal tens of stout appendages rising and falling in a complex wave, sending the playful constructs sprinting across the prairie at three metres a second: Trees were not known for their speed.

Tennys pointed. 'Look at that.' Melie and Manchester laughed.

'Like they've hitched up their skirts!' Melie laughed. 'Oh, don't they look funny?' Her merriment pleased Tennys out of all proportion: *I made her laugh!*

'Terminator's on its way,' said Manchester. 'Trees always get a bit frisky.'

The three of them sat as the Terminator advanced toward them, striding across the Ndele prairies in a swathe 300 kilometres wide. It rippled over the tail of the choo herd and quickly engulfed the head before moving away remorselessly Spinward. Manchester liked this time, just after the Terminator passed. It was as if, drenched with darkness, Novagaia gasped, breathing out extra life and air in a sudden, shocked exhalation. She closed her eyes and breathed deeply. The Caravan presented itself as a thick porridge of scent: seeping, crushed cellulose below, warm, human smell above, sandalwood and the spicy liquorice of the Trees all around. She could smell herself, her own breath, her hair. She could smell Melie, and the Weed in her pouch, Tennys, the *niwe* in his glass, an odour of oil and the musky spice of

muscular toxins, dried sweat, salt.

Manchester opened her eyes. 'I love the evening.'

The old Novagaian woman reappeared silently, placed candles on their table and departed like a shadow. Her chuckle reached over her shoulder.

'What *is* she laughing at?' Tennys inquired.

'Tennys.' Manchester turned to him. 'I think Melie might have something to tell you.' She glanced at the tall Sesquoian, who shrugged, tossed her head.

Tennys gulped, grinned, frowned. 'She might?'

Melie turned wide grey eyes to him and regarded him inscrutably. 'It's not what you think.'

'Isn't it?' Tennys asked with a sinking feeling. 'Oh. What isn't what I think?'

Melie sighed sharply, her tail flicking into her lap. 'I'll *tell* you if you'll shut the fuck up!'

Tennys quailed. 'Sorry.'

'OK.' Melie composed herself and brushed the hair away from her eyes. 'Thing is,' she began, and then stopped, her brow furrowed. 'Thing is,' she repeated. 'Oh Manchester, you tell him.'

'What?' Tennys glanced from Melie to Manchester with a thoroughly baffled expression. 'Tell me what?'

Manchester took a sip from her tea. 'What Melie is trying to say is that she is a *Cardinal*.'

Pause.

'Beg pardon?'

'A Cardinal. Melie is a *Cardinal*, Tennys. That is what I am telling you.'

Pause.

'Sorry?'

'Oh for *fuck's sake* geek!' Melie exploded. 'I'm not *human*, OK? I'm a fucking *Cardinal*! I don't even know what that means but it's true, OK? You got that? And what I *don't* need is any raging arsehole giving me grief about it, *alright*? So you can wipe that *fucking* stupid grin off your face and fucking *deal* with this thing, OK? And if you can't, then you can just get the fuck out of my face right now, *d'you know what I mean?*'

Tennys shrank in his seat, ashen and shaking, mesmerised like a rodent before a snake. 'Yes, yes.'

'*Alright!*' Melie sat down, frowning furiously. She crossed her arms savagely and glared at Manchester. 'What the fuck are you looking at?'

‘Feel any better?’ Manchester inquired sweetly.

‘Yes!’ Melie laughed and frowned, pouted and shouted again. ‘Sorry Tennys. I wasn’t shouting at you really. It’s got nothing to do with you.’

Tennys’ reply was hesitant and very small. ‘It hasn’t?’

‘Stop saying that! No, it hasn’t. It’s...’ She turned to Manchester. ‘Oh, it’s just all too freaky.’

‘What...?’ Tennys nipped the interrogative in the bud. ‘I mean...’ He tried to marshal his thoughts but failed.

With the Terminator’s passing, lights had come on around the Caravan, flickering and waving with the sway of the choo herd. A cooling wind brought the smell of sap and spicy choo, sending the candle’s flames dancing, some of them to death.

Melie began speaking, her face in shadow. ‘It all started when I was very little.’ At first, Tennys was not sure if she were talking to him or to Manchester or to any one at all. Her voice sounded distant, the words seeming to not emanate from her hidden mouth but from her larger shadow. ‘I call it the Blit. Used to call it that, anyway. First time it happened, I was nine years old, lying in my bed. I was crying because...’ The voice paused and only a tiny sibilant hiss remained before it picked up. ‘And I remember falling. Like a feather, or a leaf, whirling to the ground. But there was no ground, and I didn’t really fall.’

Tennys felt for the glass on the table in front of him, mesmerised by the words and the sound of Melie’s voice. He hardly dared breath and only raised the glass to his lips when she resumed.

‘That was the first time. There were lots others, all through my life. I would Blit. Usually I would know when it was happening, find a place to lie down and be alone, and... Blit. Sometimes I would be falling. Other times I would...’ The voice paused again, and Tennys saw the shadow tilt a fraction to one side. ‘I would *hear* colours and *see* sounds... I always used to quite like Blitting, you know? Like taking my own little trip, real-life daydreams, always felt... comforting almost, you know?’ The voice paused for the third time. Tennys saw Manchester reach out.

‘Here you are Melie.’

Manchester had filled a little pipe with Weed. She rose from the table now and applied a light to the extinguished candles, bringing up the illumination.

‘Cheers Manchester.’ There was a spark, an ignition, and then Melie’s face was thrown into orange dark relief. The light blinked out, the coals in the pipe-bowl glowed dully, and sweet, herby smoke drifted over the table. The smell provoked strong associative retrieval in Tennys, and he was with Himochee at the Carnival again, the sky silent, drenching coloured streamers of light. The candles went out again at a sudden gust, and Manchester tutted, and attended to them for some moments.

‘Tennys,’ croaked Melie. Glowing coals approached him disembodied of their enclosing bowl. He took the proffered pipe, inhaled carefully several times and passed it back to Manchester. He felt the familiar, prickling elevation, the rise of warmth and the fall of tension as he settled back in his chair.

‘Uhm, that was nice. Where was I?’ Melie murmured.

‘Sesquioia.’ Manchester prompted. ‘You were listening to trees.’

‘Oh yeah.’ Melie chuckled. ‘Well.’ The chuckle died away and time for Tennys did that rubbery Weed thing again, when he had about an hour’s thoughts inside the space of a heartbeat. ‘After that the Blit changed. It got scary. I remember, I was in a bath, relaxing, treating myself to some oils, and felt the Blit coming on, same as ever. So I just lay back, closed my eyes, happy to float and fall and...’ Melie paused. ‘I can’t explain it. It was like...’ Melie waved a hand and pouted, anxious with the feelings that remembering the incident evoked.

Manchester gently interjected. ‘There was a period in my youth - several months after my birth - when my metacortex was plastic: my experience then was much as yours. Apparently, in your case, the metacortex was plastic for considerably longer. That’s why the Blit came on so strong.’

‘I guess so.’

Tennys cleared his throat, his manner eased by the Weed. ‘So this Blit is like what Cardinals do?’

Melie sniffed, pouted and licked her lips. ‘Yeah, sort of, though it doesn’t feel like I’m *doing* anything at all.’

‘What do you mean? What’s this Blit like?’

Melie tried to explain, using one of Manchester’s analogies. ‘Alright, try to imagine a world where there’s no height, OK?’

Tennys was caught off guard by the sudden question. He was lost in a pleasant place running his fingers through fine oatmeal blond hair with grey eyes laughing...

‘No height?’

‘Yeah, like everything’s really *flat* with no up and down at all, so you can’t have sex. Oh well, you can go in and out I suppose, so that counts. But anyway, imagine a place like this right, and people are just a really *thin*, really *flat* sort of blob, right? OK, then imagine suddenly, right there in front of Blobfem, something appears out of thin air. Just like that. Suddenly it’s there in front of her. It starts off really small and grows and gets longer, a flat thing, like her, getting wider and wider until it gets so wide that it gets smaller again, smaller and smaller, then disappears again. Now, what do you suppose Blobfem thinks has happened?’

Tennys paused to consider and heard his voice squeak as he said: ‘I haven’t a clue.’

‘Right!’ Melie leaned forward on the table, pleased with her explanation. ‘What’s happening is that me, say, or this, yeah *this* ...’ Melie picked up the pipe, emptied the coals, unscrewed the bowl from the stem, ended up with a dented ball in her hand. ‘Right, so you see, as this bowl approaches Blobfem in Flatland, she doesn’t see it, because she doesn’t know about *up* at all, so she can’t look *up* to see it, cos *this* ...’ The bowl wiggled. ‘...is *above* her, though she doesn’t know about above either, because there’s no *up* in her world. So when this...’ The bowl wiggled again. ‘... *does* enter Flatworld, Blobfem can’t see all of it at once, because some of it is *up* : so she sees only tiny slices, that get bigger the further this...’ The bowl wiggled for a third time. ‘...sinks through Flatland, you get it?’

‘Yeah!’ Tennys looked up at Melie with new admiration. ‘Yeah, I do. If I was there, I would only see really thin, flat bits of...’ He pointed. ‘That, at a time. Right, no up. Yeah, I get it.’



‘OK.’ Melie put the bowl down. ‘Now, if I try and explain to *you* what Blitting is like, it’d be like *you* trying to explain to *Blobfem* what, I don’t know, *flying* is like or something. Or climbing a tree. Or anything with *up* as part of it, do you know what I mean?’

Tennys thought he did. ‘I couldn’t do it, because how would I...?’ he trailed off. ‘No, couldn’t do it.’

‘Right.’ Melie leant back. ‘So asking me what its like to Blit is a waste of breath. I can’t tell *anyone* what Blitting is like.’

‘Neither can any other Cardinal,’ Manchester added. ‘The Cascade experience is radically inexpressible in ordinary language, even to another Third-aware sentence.’

Maybe it was the explicit use of the word *Cardinal* , but the reality of the situation suddenly imposed itself upon Tennys.

*Melie is a Cardinal!*

Tennys was staggered.

‘I’m staggered,’ he said. He looked at the Sesquoian, saw her straight back, the proud shoulders.

*Melie is a Cardinal! What did it mean?*

‘What does it mean?’ he asked.

‘Ah,’ said Manchester. ‘Good question. And unfortunately one that we cannot answer. The Cardinal genome - that which you might suppose controls the construction of metacortical tissue - is actually not significantly different to the human genome. The difference between Cardinal and human is not simply genetic. Strictly speaking, we are not a race, or a species at all: we do not share sufficient genetic heritage. We have been *hand crafted* .’

Tennys’ interest was piqued. ‘Who by?’

Manchester shrugged. ‘Who else? Water.’

Melie snorted. ‘Fucking *fish!* ’

‘ *Water?* ’ Tennys was incredulous. His passion was history. To him, Water was an abstract, something to be factored into the behaviour of dead populations of humans. Here, suddenly, it was intervening on a personal level into human history *right now* . He expressed his thoughts. ‘Fucking A.’

Melie guffawed. ‘Yeah, well said.’

‘Indeed. There is every reason to suppose that Water was instrumental in the inception of every single Cardinal. Now, they have seen fit to do the same again. Melie, it would seem, is the result.’

Melie shivered. ‘Like I’m a fucking *experiment* or something.’

Manchester winced: even a Cardinal could put their foot in it. She took control of the proceedings. ‘You are nothing of the sort Melie. And if my memory serves, you did say you wanted to dance, didn’t you?’

Melie's face lifted and became animated at the word. 'Yo, right on. Hey, is that drums?' A low vibration had become louder and higher: it came from behind them. Melie got to her feet, tugged at Manchester's smock. 'Nuff chat, let's go shake some stuff! Coming Tennys?'

'Yeah. Hang on.' He reached for the pipe-stem, re-affixed the bowl, filled it from Melie's pouch and drew the cool green smoke into his lungs. He coughed and passed the pipe around. Melie declined, as did Manchester. Tennys shrugged, finished the contents. 'OK.' He weaved to his feet. 'Sgo.'

## Chapter Forty

Like an arachnid at the centre of its web, a hardened choi satellite hung unnoticed 10,000 kilometres above the plane of the Novagaian orbital, sending and receiving nanosecond bursts of EM along the threads of its intangible web. This satellite-spider was a low-temperature optical machine, extremely fast, designed paranoid and secretive: it was not even prepared to let *itself* know where it was on occasion.

An informational squirt became caught in its invisible web.

The EM titbit was gathered with sensitive feelers for digestion, and then lanced very accurately downwards, in picosecond-long slices, towards Novagaia. It was intercepted by a subcutaneous aerial, buried behind the forehead of the biological shell housing the parasite resource that generated the Gromburg thing.

The parasite resource digested the information and acted upon it for the next 30 minutes. During this time, the biological shell dribbled from a twitching mouth, and a muscular error caused the thumb on the left hand to thump the table, twice quickly. Then the biological shell jerked, wiped its mouth and rose from the table.

'Tell Nanashub not to wait.'

'Yeah, OK General, anything you say.'

The Gromburg thing walked away.

Mikhail leaned over towards Jurgen. 'Something fucking *seriously* fucking wrong with that mal.'

Warning icons flared in both men's phenomenological worlds, presaging: 'Good morning gentlemel.' The Hub generated Limited Awareness Personality Construct beamed at them widely. 'And how are both of you today? Anything I can do for you?'

'Show us your cock!' Jurgen bawled.

'Yes. Well, as I *have* endeavoured to explain to sir before, Limited Awareness Personality Constructs are *not* configured for pornographic simulation, so I am unable to oblige sir.'

‘Wor *fookinell*.’



‘You see Malvern that... ummm... if we assume... ummm... if... oh heavens...’

Malvern continued his gentle ministration. ‘Yes indeed my dear.’

‘It’s highly likely that...’ Nipauin caught her breath. She tried again. ‘That... ahmm!’

‘Is it now?’

‘Yes.’ Her hand drifted to rest lightly on the blond thatch between her legs. ‘It did not simply... ummm ummm...’

Malvern felt the plump walls of skin under his hands push at him. He capitulated and felt his ears flatten. He continued his tender ministrations, the best musk heavy in his nostrils. The soft walls relented about his head. He pulled back to look and shook his head in wonderment.

‘ *Dear*Nipauin.’

‘Yes?’

He touched his lips to her lower with a long adoration. ‘You are the *most* beautiful woman.’

‘Yes.’ Her hand sought out the back of his neck and exerted pressure there, urging him forward, arching her back. ‘ *Yes*.’



The parasite resource generating the Gromburg thing activated a microfactory, and plasma-borne Fat in the biological shell began to congregate in the extremities of the digits. Nchoi construction tools dispersed to follow their raw materials. Construction began on a counterfeit nchoo pocket, the instructions for how to build one contained in the information squirt from the satellite-spider.

The Gromburg thing walked away from Mikhail and Jurgen down a short corridor, turned left, right and stopped to wait for an elevator next to a party of Histories-goers from Lattice. The microfactory reported estimates of construction time and preliminary progress reports to the main parasite resource. The elevator deposited the biological shell into the lowest level of the Concourse. The Gromburg thing turned left and began walking, its arms stiff by its sides, a broad walkway stretching into the distance ahead of it. It did not stop until it reached the far end of the Concourse, three kilometres later. There, it stopped and stared out into the vacuum through a diamond blister, its face unreadable, the features flat and without animation.

A large Bus clung to the outside of the Hub some metres away, suckling at an access port. The Gromburg thing moved away from the transparency and walked around to the docking blister. A young man was just ducking his head into the Bus. The Gromburg thing grabbed him by the shoulder and yanked him out.

‘Hey!’ the young man said, almost laughing.

The Gromburg thing propelled the man’s head toward the wall above the docking blister and crushed his nose. It pulled him away as he screamed and clutched at his face, and then slammed him into the wall again.

He went limp and was dropped to the floor.

Kicking the comatose, leaking form aside, the Gromburg thing dipped itself into the dark interior of the Bus. It took a seat and felt for the moist access gates of the choo machine with its thick digits. The counterfeit nchoo pocket delivered a tailored population of mutated viral forms, infecting the machine Host with alien nchoo and thus subverting it. Now, the parasite resource could direct its actions.

The Bus closed up and detached itself from the docking blister. It gathered itself slowly, as if aware of its noisome cargo, and then jumped outwards, towards a ribbon of white-flecked blue-green, slicing sharp and bright against the speckled darkness.



The table held only the three of them.

Nipauin, serene and round, initiated a slave connection between her resource and those of her companions. A virtual window snicked open, lustreless and black-identical in the phenomenological worlds of the three Cardinals.

‘The quality is poor, even after enhancement.’

Salisbury nodded.

‘How long is it?’ asked Malvern.

‘Quite short. Minutes.’

The black window frosted with white specks and a darker shadow. ‘There.’ Nipauin manipulated her resource and the Oaxacan orbital - the darker shadow - became highlighted, a light silver tracing making its outline clear. ‘Now watch.’

The image blurred and steadied. Then it spewed light into the vacuum, splitting open along one side. The top bulged and exploded, sending ejecta speeding away from the rupturing shell. Sections of the surface, hundreds of square kilometres in size, began flaking away into the vacuum. The whole sphere bulged ominously, held, bulged again and then shattered completely in a blossom of light, the brilliance blanking all detail. When it subsided, it revealed a coherent darkness moving at the heart of the light.

The images snicked off.

Malvern snapped his eyes up to Nipauin. ‘I’m sorry, but could I see that again?’

Salisbury nodded her agreement, and the three Cardinals sat through the images once more. When the resource window closed, clearing the table of the virtual heart of the exploding orbital, the three Cardinals looked at each other.

‘Explosion,’ said Malvern dumbly. ‘Inside Oaxaca.’

‘Yes,’ said Nipauin slowly.

‘And something else.’

‘Yes.’

‘Not... an explosion?’

‘Yes.’

On each occasion of utterance, Nipauin’s inflection made the same word mean different things.

Salisbury tired of the subtleties. ‘What is it?’

Nipauin seemed disappointed by Salisbury’s bluntness. She sniffed and her serene face crinkled a little. ‘I don’t know. Hub says that the data - much of it more comprehensive than we get with visual EM - confirms the fact that Oaxaca exploded. Just went *pop*.’

‘Explosions don’t have dark cores,’ said Salisbury. ‘What does the Hub say about *that*?’

‘The Hub says nothing intelligible.’

Salisbury snorted. ‘Nipauin...’ She paused to phrase her next question. ‘This is *important*. What question did you ask?’

Nipauin looked at Salisbury, and a narrowing of her mouth indicated displeasure. She took a moment to reply.

‘I simply asked the Hub to explain how Oaxaca was destroyed and what caused the explosion. It conjectured that the fusion bottle at its core had ruptured. I rejected this explanation because it did not tally with the data. Fusion explosions simply *do not* produce the kind of EM data that came in from Oaxaca. So point one, the Hub actually *lied* to me, because it must have known that this was the case. Then I asked it about the dark component of the explosion. Like you...’ Nipauin indicated Salisbury with an open palm. ‘I pointed out that explosions do not have a dark core.’

‘And what did Hub say it was?’

‘A singularity.’

‘Nonsense!’

‘Yes! You did ask, so I’m *telling* you.’ Nipauin fixed Salisbury with a fierce eye and the two women stiffened their postures, their chins raised. Nipauin did not take her eyes from Salisbury’s: she spoke quietly and firmly. Malvern felt her a chill run up his spine at the sound. *My, my!* ‘Do you think then that the Hub would *deliberately* lie to me?’

Malvern savoured the question.

*Utilitarian calculus. Tricky .*

‘Well, what if, just for example, there was a case of the Good Old "Good of the Many Outweighing the Good of the Few" situation. Let’s assume that something totally strange and bizarre happens - like a micro-Dyson sphere spontaneously disintegrating in strange circumstances, for example. Then, let us further assume that the Hub is required to compute some complex utilitarian calculus concerning some aspect of this happening - whether to divulge precise details of its cause, for example. Then in this case, I think we are quite *right* to consider the possibility that the Hub might lie. Or rather, because the ecopoesis *is* a fundamental part of its nature, it would seek to evade rather than lie, and tell half the truth. Though what the *full* truth can be, given that half of it involves a little singularity gobbling up spacetime in what was left of Oaxaca, I don’t know. Very plausible, that one, I *don’t* think!’

The other Cardinals nodded their assent, and began speaking at once.

‘That’s all very well, but it still leaves us with...’

‘Yes, of course, but we have to consider...’

Malvern held up his hands, laughing. ‘My dear sisters!’ he exclaimed. They quietened. ‘We have always assumed that our best interest is the Hub’s best interest, and vice versa. Now the solution...’ Malvern’s calm smile did not waver. ‘Now the *problem* is that we have no way of confirming this. If we ask, it might lie. So we do not know whether the Hub is behaving in our best interests or not. Moreover, we have no experience of how Hub might react if one part of the Koyculture suddenly fell out of orbit, so we have *exceptional* circumstances. And the Hub *was* built by the wondrous minds of our wet friends down below, and who knows what *that* did to the poor thing? So, first thing, let’s gather some independent information. We can remote access the Sesquoian orbital resource - no, even better, one of the Memecast minds - and see what that machine has to say...’

Nipauin brightened. ‘Good idea Malvern.’

‘Why thank you kind lady, and second thing, we in fact *know precisely* what happened to the Oaxacan orbital, don’t we Salisbury? You told us, in fact. This is Water. The destruction of Oaxaca seems strange because it is strange. Ergo, the metacetaceans had a finger in it. I mean, how many strange things have happened in our history that *haven’t* been caused by Water?’

Salisbury brightened. ‘Good point Malvern.’

‘Why thank you kind lady. For two such *august* creatures of beauty, it is my greatest, most gratifyingly wonderful honour, to be so acquainted, and to offer the humblest inklings of my poor old mind...’

Nipauin chuckled, her big belly wobbling.

‘Malvern, you just won’t let girls have a good *fight* will you?’

Malvern threw back his head and laughed, a rare expression of overt amusement on his part. ‘Oh I do *love you* both my dears and I so *hate* emotional violence. *Inexcusably* selfish on my part, I realise, but there you have it.’



The Gromburg thing did not realise that Hub had inserted a Limpet into the watery biological shell until too late, when a low-grade process monitoring metabolic toxins found evidence of exogenous nchoi construction within the spinal column. The parasite resource maintaining the Gromburg thing quickly mobilised molecular forces. Munitions microfactories began cutting into Fat reserves to construct tiny soldier machines, dispatching steady streams of aggressive nchoi to help repel the Hub invader.

The Limpet was barricaded, sealed inside the spinal vertebrae, viciously hostile to outside interference, prolifically replicative, and very stubborn. The parasite resource quickly realised that the Limpet was the result of intelligent, intentional compromise of its own integrity, but could do little about it. To remove the Limpet would mean explosively dismantling the spinal cord of the biological shell housing it: this would allow the nchoi invaders to be purged from its system, but would have severe adverse consequences upon the ability of the biological shell to continue functioning properly subsequently to the extraction. Aggressive molecular soldier-machines swarmed ineffectually, rendered impotent by the Limpets recalcitrance.

The Gromburg thing could not remove the Limpet without a catastrophic loss of biological integrity. But then neither could the Limpet migrate outside its own self-created prison without being overwhelmed. The parasite resource set about jamming the Limpet’s transmissions, and the Limpet set about evolving its communications systems in an endeavour to stay one step ahead of the parasite resource.

A stand-off ensued, and the Gromburg thing bleated for help.

10,000 kilometres above, the hardened, secretive arachnid twitched a million intangible legs, using tiny

electronic hairs to taste the EM bandwidth of whispered, myriad communications.



‘Oh, you are *joking* .’ Melie commented.

‘I’m afraid not.’

Melie looked at her blankly. ‘An ortonomus, en-cap-sool-a-ted Halflife? I don’t believe it!’ Melie queried her own question, her brow crinkling. ‘I mean, are you sure it’s the *same mal*?’

*It’s true*, thought Manchester, looking at her. *She doesn’t believe it* .

‘Yes. And "he" is not a "he" at all.’

‘Sure looked like one to me.’

‘Yes, I know. Only "he" isn’t. "He" is a... well, "it" is a *thing* basically. A sort of organic robot so the Hub tells me.’

‘What’s a sortovorganicrobot?’

Manchester looked at Melie closely. ‘A sort of *robot*, ’ she repeated, enunciating carefully. ‘An *organic* robot.’

‘Oh.’

Manchester, warming to her explanation, gathered her hands. ‘Yes, a sort of paranoid, freelance choi resource. Not a real person at all. The resource generates a synthetic awareness which believes it is embodied - that’s why the Halflife is called encapsulated - so it can act just like it was a real person. But it isn’t. It’s a *pretend* person, a *thing* .’

Melie’s smile slowly fell from her face at the description. She grimaced. ‘Yuk.’ Then she thought about it a little more. ‘Oh, yuk!’

‘Yes, but you have nothing to worry about because Hub has put a Limpet on it, which means that we will always know where it is. And if it shows any inclination at all of coming anywhere *near* you, whoosh, you’re out of there. Or it is, more likely. You have my personal guarantee.’

There was no fear on Melie’s face, only a baffled concern. ‘An ortonomus en-cap-sool-a-ted Halflife?’ She stumbled over the words, ugly with unknown implications. She thought back to the incident on Godsfollicle with Gervane, to the shooting outside the *Oil Burner* . She shook her head, remembering the ugly, flat sound of the mal’s voice in her ear. She shivered. ‘*Yuk!*’



## Chapter Forty One

The Terminator was only minutes away from the straggly rear end of the Caravan as the first Trees came upon the lip of the Undine basin. The machine herd flowed like a thick liquid around the rim, as more machines came up from further behind, pushing other member Trees out to the sides. The elderly core finally stopped half a kilometre from the rim as the Terminator turned day into night. Caravanersii watched as Undine went dark in a rippling line across its entire expanse, revealing the magnificent, pearly sculptings of the Palace of Undine rising out of the basin lake for hundreds of metres into the night sky.

Manchester left the Caravan and walked down into the basin, her resource augmenting her vision in shades of silver. She joined a Tree-root path cutting through the trees, her nose flooding with the cooling smells of the forest. She looked about delightedly, enjoying the silvery brilliance of leaves and textures. A silent form joined her as she walked, not close enough to touch, a long, thin form trotting easily beside her. It attracted other machines, slipping silently from the neat walls of silvery complexity. They ambled along beside her or darted off and returned, never coming too close. She noted unipedal, tripedal, quadrupedal and polypedal forms of locomotion. Some machines clearly had a biological aetiology, others, the unipedal constructions, did not. Some machines hopped like miniature Buses. Others sort of *wallowed*.

With resource augmentation to her vision, she could see small, lighted structures cascading away down pasture slopes to the marshy lake shore when she left the forest. She hummed pleasantly, feeling the warm clasp of her jacket on her bare arms, of her boots on her bare feet. The cooling air was heavy with the smell of cellulose. Manchester smiled, her thoughts drifting as she walked, her feet finding the woven Tree root path of their own volition. *Salisbury*. Her smile widened warmly. *Good to see Salisbury again. Malvern would be there too. And Nipauin. Another good thing*. Manchester sang to herself as she walked, her voice rising high and clear: the choo constructs milled away, and back, entranced and wary: some turned and vanished into the darkness, all eventually dispersing, as Manchester encountered more light, and the sounds of voices: one persisted. It was tiny, and it clung to her, just by her collarbone, purring.



Nipauin was the filling, Malvern and Salisbury the slices. The three little bodies lay neatly, in a row, the second spooning the first, the third spooning the second. A large, soft-matted blanket covered them, leaving only the heads revealed. Heat lingered from a dark hole in the wall, as did a certain smell, a

certain dull orange light. Manchester paused, her arm around the rib-like upright, peering down at the sight. *Oh*, she thought, *that's so nice!* She visited the bathroom nook, and undressed, ridding herself of clothing. She climbed under the heavy blanket, feeling the soft touch of the fabric lining. She pulled Salisbury's arm over her hip, and stuck her bottom into her tummy.

Salisbury groaned in her sleep, and accommodated her, muttering as she snuggled her head: 'Downn...'

Manchester smiled, feeling the heat of Salisbury's body seep into hers, hearing the breathing of the others, deep and regular. She sighed deeply, felt tension flow out of her, and was asleep within minutes, her head cradled on her arm, Salisbury's hand on her shoulder.

## Chapter Forty Two

The far Spinward shore of the Inhoplae basin was a graceful crescent of fine, baked silica 150 kilometres long and 12 kilometres across at its widest point. Floccanalog sat, running the fine, silvery sand of this beach through his fingers, feeling the warmth of the granular silicate seep into his skin. The beach stretched away to his left, to Port and Antispinward, petering out in a slender spine 75 kilometres away. He could see its curvature and the narrowing of its girth. He allowed his eyes to track back from that distant point, jumping tens of kilometres with a succession of ballistic saccades: Empty. He turned his head through 180 degrees, his eyes taking in the same extent of silverygolden silica on the other side of him, tracking away to Starboard and Antispinward: Empty.

He breathed, smelling the brine, teasing out the subtle marine perfume. *So quiet*. His own breathing and that of Ushogbo was the only other sound: the beach was deserted even of the sound of birds, the air still and unmoving. He breathed deeply again, the smell of salt dominant in the hot air. Out ahead of him, the caramel-dark waters of Inhoplae stretched away into the distance, upcurling to Antispinward, towards Sonapur.

*Somewhere in there, he thought. Somewhere in those pale brown depths.*

He looked up into the sky of Novagaia. A dimensionless expanse of gentian, clean of white, fading to lapis lazuli. *Such a fragile thing. Only one or two kilometres thick*. His thoughts drifted. *A gigantic spinning hoop, and I'm stuck to its inside. Like the air*. The realisation that Novagaia was open to vacuum came most acutely at night, when the Terminator closed down the day and stars came out. Up higher, on the Rim wall settlements with no air, the atmospheric wobble of lower down was gone and stars were sharp and clear. But he was not particularly interested in stars. He had not seen any at all for 20 years on Marineris, and had no burning interest in seeing any now.

*Marineris.*

He rolled the name around an associative mouth, tasting its increasing emptiness. It confused him now. His memory of who he had been for all those years, long years bonded to a Shell, was becoming increasingly unreliable. He did not understand it anymore, had forgotten the Shell language necessary to describe the memories to himself. He felt increasingly unable to identify with the person he had once

been, free swimming the continuous oceans of Marineris with Stapjeekha. A small geyser of remorse fountained within him at the name. He tried to recall something understandable about her presence but could not. Even the memory of his wife was not immune to his own encroaching incomprehension. The thought distressed him intensely for some moments. Sitting up, he passed his hand over his whispery scalp, peering down at the sand.

*I'm forgetting my wife. Just as I'm forgetting myself.*

The piece of internal wisdom stilled his mind, and the pain faded. A lapse of memory he could endure: a lapse of love he could not.

He raised his head and looked out into the water of Inhoplae. Rustcreaming wash rose up the gently sloping silica, hissing and fizzing. He caught sight of a black form bobbing in the water some ways out to sea. It vanished. He climbed to his feet, staring intently out into the caramel-tainted basin. The black, bobbing form reappeared, considerably closer to the shore this time but again it disappeared into the dark waters. He shaded his eyes with his hands, searching for the telltale bob. He only spotted it again as it rose from the shallowing water at the shore, 40 metres from him and a good 30 to his right.

A small, curiously sloped form slopped up through the thinning water on two short legs, its feet kicking up great sheets of spray. Flocanalog watched as the figure emerged from the surf with water streaming off its smooth, dark skin. It raised an arm and waved. He returned the gesture as the figure began walking calmly up the beach. He hailed the figure as it came closer.

‘Good swim?’

The figure did not reply for some moments. When it did, its voice was a deep bass, issuing from curiously stationary lips. ‘Very good swim, Floc-sah, very invigorating. I visited the place.’

By his own estimates, Flocanalog had encountered the Old One in Inhoplae basin, 65 kilometres from where he now stood. Nyahua had just claimed to have swum there and back in a little over four hours.

‘You *swam*?’ The more he thought about it, the more he was astounded. ‘That’s...’ He paused as he calculated. ‘That’s unbelievable.’

Nyahua chuckled without showing teeth, his small eyes crinkling shut in the broad, thick face. ‘Did not swim all the way Floc-sah.’ He rumbled and rubbed his hands. ‘Hitched a ride with a Shell on the way there.’

‘Oh.’

‘Only swam *back*.’

Nyahua clapped, once. The muscle bunched around the top of his arms as he brought his hands together, their girth actually seeming to increase in size. The clap, when it came, was huge. Nyahua paused, his head cocked to one side, listening intently as the sound faded.

Flocanalog looked at him, shook his head and opened a hand. ‘Yes?’

Nyahua grunted. His mouth widened toothlessly, and he humphed, looking up at the tall Marineris man. ‘I listen...’ he explained, waving a short, stubby arm, ‘...to the silence behind the sound.’ The small Cardinal’s face expressed the sentiment that this was an eminently sensible and reliable course of action.

‘Ah.’ Floccanalog had not been in Nyahua’s company long - the other Trippers had departed only three days ago - but in that short time, had come to like the eccentric Cardinal Nyahua a good deal.

*Understanding* what he said was something else entirely.



The two figures ducked into the spicy interior, the last pausing with his arm raised to allow his companion inside ahead of him. The Bus gently bounced, its appendages bulged and then it disappeared upwards with a sharp crack. The machine was ballistic for 30 seconds, rising in a high parabola, before it started to re-configure. Its outer carapace blistered and spilled two ballooning masses into the thinning air above it. The machine began to slow as the energy from its leap leaked away, but the two churning masses continued to grow, flattening and distending into rigid, aerodynamic surfaces. Bat-like, the choo machine opened wings as it came to rest, its vertical velocity zero, three kilometres above the shallow depression of Undine.

As the machine began to fall back to the surface, the carbonsponge wings began to bite into the accelerating air. The fall of the Bus became something more than ballistic as it softened out of the dive and turned into a fast, lazy circle, three kilometres across. It rose and decelerated as it turned to Spinward into a fast, level headwind: air currents at this altitude raced against the spin of the orbital proper. The machine rose, and slowed, and rose further, then twisted and dived to Starboard, accelerating as it raced with the wind, whistling around a widening, 20 kilometre arc, curling around to Port to fetch up against the headwind once more, rising, slowing, rising, slowing, to twist and wheel into the quickening air again.

Inside, the two of them sat on the warm floor of the machine in consensorias with the choo Host. Through borrowed senses, Tennys felt the vibrant, taut power of the choo machine as it flew in harmony with the air, borrowing energy efficiently from the laminar flow and returning it without malice. He breathed deeply, feeling the strength of the Host as his own, empowering, rising in the middle of him.

He opened his eyes, and gasped.

Through borrowed senses, Melie felt the rushstroke of fast air over bare black arms, the taste of cold oxygen in her mouth. She felt like fidgeting, prompted by a wriggling bundle of joy in her tummy. She experienced the excitement of the Host, the experiential world of the machine colouring her own conscious world. Vicariously, she was aware of the mottled green basin rotating below her presenting myriad organic faces; the flash of the Palace of Water; the moisture laden forest; the bald patches of meadow.

She opened her eyes, and gasped.

The floor of the Bus was transparent and the turning panorama of the Undine basin was clearly visible,

1,500 metres below.

Melie shrieked delightedly and threw out a hand. ‘Tennys!’

Tennys looked up into Melie’s wide grey eyes. He swallowed, and grinned weakly, thinking back to his arrival on Novagaia, the terror he had felt. Silly, with hindsight, but his stomach remembered. ‘Wow,’ he croaked nervously.

Melie did not notice his small discomfort. ‘Did you ask the Bus to do this, Tennys? It’s *wild!*’

‘Uh, yeah. Yeah, I did.’ Tennys lied convincingly.

For the next hour, they sat and watched as Undine turned beneath them, pointing little features out to one another. The Bus began scribing circles, 15 kilometres across within the confines of the organic, Undinian bowl, swooping low over the Starboard regions, climbing high over the Port. Just over one third of the basin was under water, some 80 square kilometres in all. The remaining 200 plus square kilometres comprised dense, varied woodland, pockmarked with many, drier oases of open, grassy meadow, rich with delicate flora. Wide marshlands bordered the basin-lake itself, and what looked like snow dotted these marshes for as far as they could see.

‘Melie, look!’

‘Where?’

‘Over there!’

Where Tennys pointed, snow was rising in a white storm. Aided by distance, emergent patterns rippled across the ascending, dispersing masses.

Melie gave a little hoot of pleasure. ‘Birds?’

Tennys turned to look at her, his face a grin. ‘Must be.’

‘Know much about birds?’

‘Squit.’

‘Me neither.’

The two of them grinned at each other. Melie turned back to look out at the view and Tennys watched her profile: clear skin, the visible cheek pale and flushed. *She is gorgeous*. Tennys’ thoughts whisked away to a few scant hours ago, to Melie’s balcony in the now stationary Caravan, and the floating, oatmeal halo of hair around the long, strong features.



Melie was sitting at the table on her balcony, a pipe and a pouch of Weed by her side, the table littered with half empty cups, fruit both eaten and mostly eaten, the citrus detritus browning in the warm Sol.

‘Fly?’ she asked. ‘In a Bus? Can they do that?’

‘Oh yes.’ Tennys enthused. ‘Manchester and I went flying - well, it’s gliding really - when we were in Escher.’

Melie grunted. ‘Oh yeah.’ She sniggered. ‘I was in a bar with Aileeni then, I think. D’you want to sit down?’ Melie cleared off a chair, lifting clothes off the back of it, and depositing them in a pile.

Tennys sat down and grinned nervously. ‘So how, uh...’ He paused, unsure whether to proceed. ‘So how are you? You know, with the uhm...’

Melie selected a piece of fruit from the bowl and bit into it. ‘I’m fine. And so is this, if that’s what you mean.’ She tapped the side of her head. ‘Thanks for asking.’ The last was a little brusque. She turned to look at him, flicked the hair away from her eyes, put her feet on the table and stared out into the Caravan.

Silence loomed.

Tennys fought a sudden, irrational conviction that he had *said the wrong thing*, that he had *irritated* her. He had not said the wrong thing. *She’s a Cardinal, for fuck’s sake!*, he told himself. He took a deep breath, forged on.

‘Uh, anyway, so do you fancy it then Melie? The Bus, I mean,’ he added hastily. He tried to inject a note of excitement into his voice. ‘Come on, it’ll be...’ he had been going to say interesting, but changed his mind just before enunciation, tripping Freudianly over the new word. ‘...Sex, *exciting*, seeing Undine from above.’

Melie turned her head to look over at him, her face calculatingly impassive. Or so it seemed. ‘Yeah alright, go on then. Let’s have a smoke first. Where do we catch a Bus around here for that, anyhow?’ Melie swung her legs off the table, and began to fill her little pipe from the pouch.

Tennys grinned despite himself. He had taken Manchester’s advice, and arranged for a Bus to stop only a kilometre or so from the Caravan, up on the rim of the Undine basin.

‘All taken care of,’ he said happily, watching Melie as she ground the coarse strands in her palm. ‘I’ve arranged for a Bus to wait for us.’

Melie glanced up from tapping the moist green Weed into the small bowl. ‘What, you’ve set this up already?’

Tennys froze internally, a horrible icy feeling flooding over him that pre-arranging the Bus was a *wrong* thing to do. *Was there something in Melie’s voice?* He fought the conviction, and cleared his throat. ‘Ah, yes. Yes I did. I hope you don’t mind. I wanted to surprise you.’

Melie made no reply immediately, appearing a little puzzled. Then her features softened and she even

smiled a little. 'That was nice of you Tennys. Thanks.'

Tennys grinned lopsidedly, utterly delighted and felt words spill from his mouth. 'I thought you might like it, I really enjoyed my experience with Manchester you see, so I thought, well, especially after...' He dipped his head, indicating amorphously with his hand. 'You know, after your uh...' He didn't know how to finish. 'After your what, Melie? I don't know how to say it, and I don't want to offend you.' He spoke with an uncharacteristic lack of premeditation. 'What do you call it? Your *diagnosis* as a Cardinal? Sounds a bit... medical.'

Melie actually laughed, her eyes wide. 'How about my coming out?' She guffawed, and spat out a section of tough peel from her fruit. 'No, don't think so. What about my Awakening?' She appeared to consider the phrase to herself a moment, then nodded, smiled and lit the pipe. 'My Awakening, that's what we'll call it.' She drew two short whoops of sweet smoke, let it dribble from her mouth and then passed the pipe to Tennys.

'Your Awakening. Yeah, OK.' *She said "we"! That's like, me and her! Oh wow!* He copied Melie, taking two short whoops on the pipe, but coughed when he attempted a third,

'That's what you get for being greedy, geek,' said Melie, not unkindly, indicating his cough. She rose gracefully and stepped around the back of him. Tennys continued to cough enthusiastically as Melie pummelled his back and shoulder blades. 'You can get something for that, you know. Little nchoi, I think. Aileeni might have some in her leg. Oh no, all her Fat's gone though.'

'Her *leg*?'



Now, in the warm innards of the choo machine, Melie was alive with wonder and excitement and her presence was exerting a physical effect upon him. A longing suffused him, as he caught a suggestion of her smell. He felt his penis swell sympathetically. His eyes flicked down, to her slender legs draped in her long skirt, back up, to the fine hairs on her forearms, the delicate ballooning of her blouse, the promise of all that it concealed. He cleared his throat.

'Melie?'

Something in his voice probably, because without turning to him, firmly but gently:

'No, I won't have sex with you Tennys,' she said.



The two machines were waiting for Flocanalog and Nyahua when they returned to the camp they had occupied the previous night, 10 kilometres from the basin shore, nestled at the base of high cliffs backing the Inhoplae beach. Initially, Flocanalog thought the machines looked rather ridiculous. Both were a metre and a half tall, distinctively coal black for the most part, irregularly striped straw and tan. They seemed very inelegant. They were limbless, devoid of any visible means of manipulation other than two short, thick appendages supporting what looked like one half of a giant clam shell, hollowed out on one side. The concave structure was dark, a metre wide, carbonspinging, warm to the touch.

‘Raptors,’ said Nyahua, beaming toothlessly.

‘Raptors? Don’t look like much.’ Flocanalog confessed. ‘After riding a Mammoth, I’m afraid they don’t impress.’

Nyahua’s chest rose, and sound emerged from it, although his mouth did not open, his dark eyes shrinking to twinkling black points: laughter.

‘A Mammoth is one thing Floc-sah. Very easy. Just sit and go yes?’ Nyahua put his hands on his hips, and thrust once or twice. ‘Good with a wet woman, no?’ He dropped his hands. ‘But a Raptor - ah! Raptor is skittish, not easy to control, consensorias very...’ Nyahua circled one finger in the air. ‘*Surprising*. See, I show you.’

Nyahua stepped up to one of the machines and climbed up into the scooped out shell, sliding his legs down inside. He then turned to face Flocanalog. His hands came up and gripped two extruded supports, initiating the nchoo consensorias.

‘Perhaps you step back a little Floc-sah...’

Flocanalog had difficulty believing what happened next. Or rather, with how quickly it happened. The machine was so swift, he might have almost blinked and missed it. When Nyahua accessed the choo Host via the nchoo pockets in his fingers, the Raptor leapt to its feet, rising with explosive speed up out of its squat, its appendages bulging, lengthening and widening, carbonspinging actively re-configuring incredibly quickly. Numerous, thin spines, like whiskers, tens of centimetres long, sprouted all around the hollowed out carapace at the top of the machine.

The Raptor moved.

Flocanalog was almost bowled over by the wind of its passing, and felt a cloud of particulate silica impact his cheeks and sting his eyes. He gasped, turned, rubbing at his eyes, saw through watery vision a diminishing dot fleeing into the distance. He attended to his eyes for a moment and when he could see more clearly, the Raptor was hurtling back towards him. It flashed past him left to right, ten metres away, a wind tunnel of sand in its wake. It was a spot in the distance before he could even think. Then, on the way back, it veered in mid course, and came speeding toward him. As it approached, it slowed enough for him to see the bulging of the carbonspinging powering down over the long appendages in thick, rippling lines. The machines broad feet, each several metres square, bulged and flattened as each appendage landed and re-configured as it left the ground again. The numerous whisker-spines retracted



as the machine came to an abrupt halt, the carbonspinging ballooning powerfully to effect the final deceleration. Hot, tangy air washed over Flocanalog, pungent with pepper and burning sage. Upright, and up close, the Raptor towered menacingly over him, easily twice his height: he could almost feel the heat from its surface.

‘You see, Floc-sah?’

Flocanalog stepped back and looked up, shielding his eyes. ‘If you were expecting me to travel in one of these things Nya-sah, you can forget it.’

Nyahua’s voice came back concernedly. ‘Problem, Floc-sah?’ The Raptor squatted down; without the powerful appendages evident, the machine looked less intimidating. Nyahua climbed from the hollowed-out carapace of the machine and looked at Flocanalog carefully. ‘My apologies, Floc-sah. The Raptor has disturbed you.’ The last was not expressed as a question.

Flocanalog looked down at the diminutive Cardinal, noting the sloping shoulders, the curiously thick skin and the bowl of thick, dark hair above the centuries-old eyes. It was true: the Raptor *had* disturbed him, though he could not truthfully say why. He struggled to express his discomfort.

‘It’s a very...’ he began, his hands cycling. ‘It’s like it is... it has *legs* Nyahua,’ he finished. It sounded lame even to him. ‘No, it’s not that really...’ He looked up again at the machine. He reached out and placed his hand on it: as he expected, it was hard to the touch, like wood, but warm. He pressed harder, and it yielded just a little. He shook his head.

Nyahua reached out with one small arm and touched Flocanalog on the hand. ‘Nyahua understand. Not want to run Floc-sah, want to *swim*, yes?’ Nyahua looked up at Flocanalog, his brow rendered in two by a sharp line of thick, black hair. Nyahua slapped the side of the Raptor. ‘This an affront to Shell man, yes?’

Flocanalog looked at the Cardinal, the toothless smile, twinkling eyes, serious face. He smiled ruefully, scraped his hand over a whiskery chin, nodded his head. ‘Maybe you’re right.’

Nyahua was silent for a moment.

‘Then we will swim,’ said the Cardinal. ‘We will swim together.’



The Bus glided into a running landing on the bald meadowpatch, its stout appendages absorbing the horizontal velocity of the slowing machine. On coming to rest, a portion of the belly irised open and two figures emerged. The taller touched her hand to the side of the machine before moving away. She joined the other figure, turned, and watched the Bus leap back up into the sky, its attenuating legs appearing anchored to the ground, before they snapped upwards after the bulbous belly.

Fragrant silence descended in the Bus's passing.

A wind washed warmly over them, setting surrounding long grasses hissing and waving, bringing the spicy warmth of cinnamon and sage, the balm of lemon and lavender. Tennys turned to Melie, his eyes roving over the back of her head, the colour of her hair, the silky fall of it over her shoulder. He felt wonderfully happy. Breathing deeply, tasting the air, he swept his eyes around the meadow: to his right, to Starboard, the centre of the Water Palace glinted in the distance: a good six or seven kilometres away he knew.

'Can you smell it?' Melie asked. 'The air, isn't it wonderful? It's...' She closed her eyes and let the wind blow through her hair. 'It's *delicious!*' She laughed and opened her mouth to the wind. She did a twizzle, arms out horizontally. 'Come on, Tennys! Twizzle your stuff!'

'What's a twizzle?'

Melie laughed, the sound pushed out of her as she lost her balance, her arms out wheeling around her, hair streaming. 'This you big dope, *this* is a twizzle!' She twizzled extra hard to show him.

Tennys got it. 'Oh right.' He put out his arms, swung them vigorously, wrapped them around his torso in awkward ways and found himself on the floor after not more than three-quarters of a twizzle.

Melie laughed, her rotation smooth and lilting, with just a little bump from one hip on every turn. Her words whipped away from her smiling mouth. 'Yah, twizzle virgin!' she exclaimed with delight. 'Never twizzled with a girl before Tennys?'

Tennys climbed to his feet, his mind positively teeming with alternate scenarios in which this conversation might occur. He spread out his arms, and began to twizzle with less force, finding his arms naturally settling into counter-weight positions as he turned.

'Yep, twizzle virgin, that's me. I bow before the twizzle queen.' He did, indeed, try to bow, but what with turning, found he couldn't do it very easily.

The two of them twizzled in silence for a moment, listening to the wind through their hair, the rush of wind in their mouths.

'Haven't had a good twizzle since... oh, since I was on Plenty, down on the farm.' Memories of Plenty made her smile: especially the people.

'Plenty? What's that like? I've never been.'

Tennys provided her with the cue for a story, and she brought her twizzle to a halt. 'Oh you should, it's a wild place.' She gathered her thoughts. 'I remember one time, I was working on this farm yeah? Well, more like a biofactory really, produced all this really good fruit...'

'You must have loved it.'

'I did, I did! And like, this stuff went all over Koy, you know? To this Helicon-based artist's collective, loads of different Lattice places, what do you call them...?'

'Meritocracies?' Tennys offered.

‘Yeah, right, meratockrisees, as well as like well, loads of other people that wanted it really. It was really good stuff too. Really good melons.’ Melie guffawed. ‘Yeah, I remember that Agata - she was one of the old timers, I guess, from Verest I think - she said one day that we should start trading with the *Martians* because the stuff was so good...’

This last comment caused Tennys to start violently. He missed his rhythm, his arms wrapped themselves around his belly, his legs crossed, and he collapsed in ungainly fashion onto the ground. ‘Martians?’

‘Yeah! You never met a Martian?’

‘No.’

‘Oh. They’re really nice people, I reckon. Fucking *really* tall mind, and you get a crick in your neck just looking up at them, but otherwise, really nice. Anyway, where was I? Oh yeah, on the farm. Well, apart from Agata, there was Agata’s sister too, who was called Jill, and then there was an old neomorph named Hesperous from Lattice who had four arms, and *then* there was mal called Exwhyzed, who was *very* odd.’ Melie paused, and sniffed, her smile fading slightly. ‘From Memecast he was, actually.’

Tennys grinned weakly. ‘Ah. Home.’

‘Anyway,’ said Melie, after biting her lip for a moment, her face clearing. ‘He wasn’t unpleasant, just... *odd*, you know? Like, one time, I remember he woke me up in the middle of the night, kept just knocking on my door so I had to get up and answer it, pretty pissed, as you might imagine. Well, I open the door and there he is, standing there wearing the most *obscene* underpants I have ever seen...’

Tennys found himself laughing at the description, and Melie raised a hand, smiling but trying to be serious. ‘Oh, it gets worse. The mal just stood there, right? And I looked at him, said: "What the fuck d’you think your doing arsehole?", as you do...’

‘As you do.’

‘Right, so he just stands there. Then I realise that the mal’s *eyes* are closed, yeah, and he was sleepwalking or something.’

‘Somnambulating.’

‘No, but I think he was going to, cos his hands started, you know, scratching his crotch...’ Melie scrunched her arms up to her sides, her face set in a grimace. ‘Eeyukhh!’

Tennys blinked, stymied for a moment, unable to understand what Melie must have heard him say. Then he got it. ‘So what did he want, this guy anyway?’

Melie hooted. ‘This is the best bit. He stands there, like this...’ She mimed her character’s posture - slump shoulders, knees together, hands between legs. ‘And he was a big mal as well you know, and he says: "It’s the *germs*, Melie. We’ve got to do something about the *germs*!" . Then he just turned around, shuffled back along the hall with his eyes still closed, and put himself to bed again! Next day, he couldn’t remember a thing, and swore blind he had done no such thing.’

Tennys was captivated by Melie’s voice and her telling of the story. ‘Tell me about the others. What were they like?’

Melie gathered her hands at her tummy, preparing to continue when a scent caught her attention. She followed it with her nose, sniffing delicately.

‘Let’s walk and talk.’ She turned and idled away.

‘Hokay.’ Tennys set off after her.

They walked in silence for some moments, Melie glancing at Tennys surreptitiously, observing him.

‘It was only a suggestion, you know. We could have stayed there in the middle of the meadow all day if you’d liked?’

Tennys looked over at Melie happily. ‘No, this is excellent. Walk.’ He nodded his head and grinned. ‘Brilliant idea.’

They walked on in silence for some moments.

‘You did have a choice, you know. You *could* just have stayed there.’

‘But I didn’t want to. What’s the point of me staying there when your not there?’

‘Don’t know.’ Melie toyed with the tip of her tail. ‘You like your own company.’

Tennys snorted. ‘Yeah, well, not *that* much.’

Melie hmphed, and did a little dance. She began humming, and skipped away into the long grasses, her hair trailing out behind her, her tail coiled up her back, bouncing with her. She did a roving twizzle, falling down on the first attempt. She climbed up with a delighted laugh. ‘Twizzle for your life!’

Tennys gave a hoot, and went bounding into the grasses to join her.



Nyahua tapped his head. ‘Resource very clever. More nchoo than nchoi, you see?’ Nyahua’s mouth widened in a toothless smile. ‘I must *express* different actions, yes? I must *be* the cetacean, yes?’

Flocanalog did not yes. ‘How long does it take?’

‘Mere minutes, Floc-sah.’

Flocanalog was standing, wearing a pair of shorts, up to his waist in the tea stained waters of Inhoplæ, soft compacted sand under his feet. Nyahua was bobbing up and down just ahead of him.

‘Underwater is better view, yes?’ the Cardinal opined. ‘Perhaps the mask?’

‘Oh yes, of course.’

Flocanalog pulled the mask over his head, squatted down below the water, feeling the shock of the cold water on his chest, one arm circling by his side to steady him, using the other to adjust the mask.

Underwater, Nyahua had changed.

He no longer had two legs, in their place a single, powerful appendage, flaring at its extremity. Fat pockets had ruptured throughout the Cardinal’s subcutaneous tissue. Carbonsponging was foaming into coherent forms under the supervision of local nchoo. Nyahua’s upper torso dropped into the water. Through his mask, Flocanalog could see the Cardinal smiling toothlessly at him. His head had changed shape: no, his neck had. *Had it?* Flocanalog could see the rippling of stabilising carbonsponging, smoothing Nyahua’s lines, joining his skull to his shoulders, making him hydrodynamic.

Flocanalog’s gaze travelled down to Nyahua’s arms: they had been free only seconds ago. He watched, astounded, as Nyahua pulled his arms into his body, and pseudo-tissue began foaming at the join: Nyahua’s whole body was riddled with subcutaneous Fat pockets evidently, to be able to manufacture the quantity of carbonfoam necessary to effect this transformation. Soon the join between arm and torso was seamless, deposits of carbon muscle beginning to accrue thickly.

It was only the sight of the extraordinary transformation itself, happening right before his eyes, which kept Flocanalog from noticing the other thing that was extraordinary about Nyahua: he was breathing! Underwater! *He was breathing underwater!?* Flocanalog directed his gaze inward, to an intangible resource icon. He keyed for communications in the resultant window and sent a message directly to the changeling Cardinal’s resource.

**You are breathing water! Do you have gills Nyahua-sah?**

The Cardinal’s answer came back almost immediately, the window displaying the graphics clearly against the pale caramel of the water.

**Something similar Floc-sah. I tell you later, yes? Join the Shell. We will cavort to the songs of Water!**

Flocanalog dismissed the window and looked again at what Nyahua had become. His head was still evident, though barely. Both arms and both legs had vanished, overtaken by a new musculature: Flocanalog could see it rippling powerfully along new, hydrodynamic lines, still configuring. Nyahua flicked his powerful tail, back flipped with easy grace and steadied himself with stubby, new flukes. He whistled, the sound piercing and loud up so close in the water. Flocanalog smiled. He recognised the sounds: a cetacean proto-language form.

Nyahua floated over to Flocanalog, nuzzled him with his head, then flicked away quickly, the powerful fluke stroke knocking Flocanalog over onto his backside. He climbed to his feet laughing, spitting water from his mouth. He pulled off the mask and caught sight of a small, dark form surface some 20 metres away from him. It disappeared, and almost instantly was bobbing up before him again: Nyahua’s face was not visible now, hidden by grainy, dull blue carbonsponging, his new snout smooth and featureless, blank of surface markings. Nyahua dipped into the water again, circled and sped off.

Flocanalog waded over with much splashing to the waiting pseudo-Shell, a coherent glob of cream in the cold, coffee-stained brine. He climbed into its insides, accessed the choo Host, and entered consensorias as the pseudo-Shell began crawling on many puckered appendages towards deeper water. A maser echo sped past his borrowed eyes: Nyahua. Flocanalog closed his eyes, the better to enter the Host consensorias, to share in its perceptual world. Behind his eyes, Flocanalog saw with the machine's senses and, with a leap of exhilaration, sent the Host powering after the sleek, dipping form of Nyahua in a cold boil of bubbling saline.

### Chapter Forty Three

Obscured behind an enclosing inertial bubble, the metacetacean Mother of Water floated in a pocket of solar moisture, and cooed for the Child of Water to approach her. It came, whispering, fractured and in pain, twittering out of the darkness, its voice a soft whisper of complex EM, trailing its malignancy like a rotten limb behind it.



Tennys dawdled slowly along one edge of the low, broad bridge, looking Spinward to where the Water Palace glinted in the distance. Closer in, the ground fell away into Undinian meadow, dotted with floral flecks of white and yellow. Swarthy caravanersii ambled past him: two young men, an older women, a tangled horde of noisy little people and three laughing Crechem, two women, one man.

Tennys was out, strolling and thinking. He thought about religions and about the Trips of people dead for 800 years, thinking of what it must have been like to watch Old Earth grow hot and puddled, thinking about how those people must have felt. He thought about Ushogbo and the way she had bent her own Cardinal experience into the TM theosophy. He thought about the birth of the Cardinal species: in one day, all over the drowning home of an increasingly sterile humanity. *In one day* . He thought about Melie, and the sway of a small Tree, the taste of *niwe* in the dark, the astounding revelation, of Cardinality. *Melie* . His thoughts flitted through clouds of birdsnow, through the rush of cold air, gliding in the hollowed out belly of a Bus, with wide grey eyes and a certain perfume, a billowing white blouse, feeling dizzy in a field of flowers. His thoughts strayed into the imaginary, to a secret place of tender indignities, of splayed, pillowed, oatmeal... He felt his penis rise in his trousers, blushed and looked about himself quickly to make sure no one had noticed. He sniffed, looked out at the Water Palace in the distance and surreptitiously adjusted the uncomfortable position of his penis, rising on one leg. He continued walking, his thoughts roving as the warm red of the dayfantasy faded: the Choo Institute and back to Ushogbo the Cardinal, and to *that person* , and Water and silky oatmeal blond hair on soft pillows and Cardinals and

Blobfems - he chuckled silently at the word - and *shit!*

Tennys froze in the middle of the bridge, spun around, took two steps in the other direction, stopped, thinking quickly. He did not think fast enough.

‘Tennys, my boy!’

Tennys stiffened at the voice, feeling his heart sink. He fixed a smile in place and turned reluctantly as the footsteps approached.

‘Ah, hello Malvern.’

The diminutive Cardinal came striding up in large, clumpy boots and a monstrosly baggy pair of striped pantaloons, placed his fists on his hips and stared up at Tennys out of twinkling eyes. ‘Tennys, my dear boy, I have just heard some *wonderful* news. Quite the best news in fact, that I have heard for, oh...’ Malvern scratched slowly and deliberately at his head with one finger. ‘Oh several *decades* at least. You see, the thing is, shall we walk a little way?’ Malvern began striding away and Tennys, with a small sigh, hurried after him. ‘I have just heard from a *very* dear friend telling me she will be on Novagaia for the Novypolos Carnival! Isn’t that marvellous?’

Tennys decided that he would try sarcasm. ‘Great, if I knew who your friend was, where Novypolos was or why a Carnival there is such a cause for celebration.’

It glanced off Malvern like water off wax. ‘Selenium Cromsworthy Histryagh...’ The Cardinal’s smile grew affectionate as he said the long name, his eyes twinkling. ‘Fine Martian name, don’t you agree?’

‘Martians again.’ Tennys recalled his conversation with Melie. ‘I’ve never met one, so I wouldn’t know.’

Malvern stopped abruptly, and his face became beatific with adoration. ‘Quite the most *extraordinary* women, Tennys, the Martians.’ Malvern was silent for a moment, staring off into the distance, captivated by some internal vision. Tennys opened his mouth to speak, but Malvern got there first. ‘Can you imagine, Tennys? In a third of a gee the female form becomes...’ Malvern frowned, his eyebrows lifting, his hands mobile: he was obviously struggling with the enormity of his conviction again. He stared up at Tennys with a look of furious, concentrated delight. ‘Simply the most *sublime* creation.’ He frowned, mere words seemingly insufficient to express the depth of his adoration. He shook his head and broke into a delighted smile. ‘The breasts Tennys!’ Malvern peered up at Tennys with abstract intensity.

Tennys was beginning to get a picture of a Martian woman. *One third of a gee?* ‘How tall then, generally, are they? Martian women?’

‘Hmm?’ Malvern was lost to his own thoughts. ‘Oh, three, four metres.’

Tennys thought about this for a moment. ‘Wow!’

Malvern chortled, put his hands on his hips and was suddenly animated. ‘And the *clitoris* Tennys, the *clitoris!*’ A passing caravannersii heard the Cardinal’s exclamation and glanced over curiously, a small smile on her face. Malvern bowed extravagantly. ‘My dear.’ Watching the departing sway of her hips, Malvern turned back to Tennys and stroked his fingers through the air. ‘Like a plump *grape*, my boy, such that the pleasure that Martian woman can experience is...’ Malvern’s smile faded and his brow furrowed, testament to his struggle to adequately express the enormous degree of joy that merely

contemplating the female form caused him. ‘Quite simply extraordinary...’ Tennys opened his mouth to speak, and Malvern got there first again. ‘And of course...’ the Cardinal huffed and clapped a hand to his chest. ‘Cunnilingus under the circumstances is such an *exceptional* , *delightful* privilege, my boy, it *really* is...’ Malvern shook his head in delighted bafflement. He huffed, chortled and looked up. ‘Wouldn’t you agree?’

Tennys had decided earlier in the Trip to simply agree with anything Malvern said on all occasions: this generally, he found, saved a lot of time. ‘Absolutely.’

Pause.

‘Manchester tells me you and Melie are getting along these days, my boy.’

‘What? No, I haven’t, she’s not even interested...’ Tennys slew to a stop, feeling his face grow warm. *What had Malvern said?*

Malvern slapped the side of Tennys’ leg and drew him along. ‘A great beauty, eh Tennys? A slender elegance, wouldn’t you say?’

‘Well, yes.’ Tennys was not at all sure that he wanted to pursue this line of conversation. ‘She’s...’ He had been going to say *nice* , which was a word for a well prepared salad perhaps, but not for Melie. ‘She’s a Cardinal.’

Malvern drew a hand across his jaw, scratched at his head, put his hands on his hips. ‘Oh, you know about that?’ Malvern shook his head. ‘Yes. Extraordinary.’

Tennys did not need to think to reply. ‘Absolutely.’



For the hundreds of thousands of individuals who climbed the *Hair of God* into vacuum in 0 AK. - the remnants of the human species that had survived the metacetacean cull - the newly constructed Koyculture was a strange, alien place, providing evidence of construction on a scale that defied imagination. After their climb, people dispersed from Godsfollicle slowly and reluctantly, finding to one side, the long metal kebab that was Austerity and to the other, the vast, jointed cube that was Lattice. Spreading out, they found the ponderous, stately torus of Memecast and the twin architectural swarms of Ascii and Verest next. Further round still was Novagaia and, briefly, before it was emptied, Oaxaca. People entered for the first time the airy splendour of Plenty and Helicon and Daedulusorrow. They frowned at the baffling liquidity of Marineris and marvelled at the rich forests of the articulated Sesquioian oneils. Everywhere, eventually, people found homes. To die in, they supposed, resigned to the extinction of their kind. Yet childbirth had never entirely stopped at any point during the Great Dying, and as the new AK. calendar stretched into its second decade, all over the fragmented Koyculture, the incidences of successful conception, gestation and parturition began to rise: women started having children again,



and life began to be renewed.

Everywhere, that is, except Austerity.

Only on Austerity did hope and love and excitement fail to flourish. Austerity was a collection of 50 enclosed micro-orbitals, like huge discus-lozenges, each one 100 kilometres across and 30 kilometres wide, each rotating about and speared through its centre by a long central shaft, 1,000 kilometres long and 1,000 metres thick. The entire habitable surface area was in excess of 400,000 square kilometres, the smallest, bleakest, most barren of the Koyculture's twelve major structures, where reflected Sol was bled miserly into the dark, oppressive interiors.

*Austerity.*

No one agency, not even the Cardinals, directed where the first dispossessed of the Koyculture should go in their new world. Yet it was Austerity, and nowhere else, that attracted and became home to the austere, to the fearful, to the blinkered, to those seeking refuge in cold, unaesthetic, morose little worlds, where they could properly express their indignation and lack of comprehension at what had become of the human race. Austerity became home to those sought to deny the reality of Water, those who sought solace from the species-humiliation of being evicted from their rightful home and removed like vermin from a nest. And while the rest of the Koyculture saw the re-kindling of hopes and dreams for the future, Austerity began a slow, sad decline. Its populace rejected the comforting Cardinal theosophy developed by Ushogbo. Instead, they resurrected, re-invented and elaborated versions of pathological monotheism, with its accompanying hatred of nature, suppression of the female and repression of human sexuality, blaming the drowning of the planet on an angry male God punishing his wicked children.

Once, Austerity had been a light, airy environment, with a rich biosphere, supporting a complex, inter-mingled choo population, a variant on the machine-ecology of Novagaia. It had forests, climbing the bulging walls of each enclosed micro-orbital, and unique, motile choo forms populating them. Yet as the new human calendar stretched in to its second century and the wider Koyculture began to flourish, so Austerity began imperceptibly to fail. It became slowly darker and quietly colder. The flora changed and became greyer, as if bleached of vital colour, becoming sparser and more uniform. Choo constructs became lethargic and weak, seemingly de-animated. And an almost palpable misery seemed to exude from the very soil and rock and wood of these linked, spinning micro-orbitals.

So as the Child of Water grew, an ephemeral sentience emergent from the totality of interactions between human and choo and choi, so something of the warped, polluted memeosphere created by Austerity's bleak, morose culture poisoned the young, esoteric awareness, crippling and stunting its development and generating malignancy.

Now, obscured behind an enclosing inertial bubble, the Mother of Water floated in a pocket of solar moisture, and cooed for the child to approach her. It came, whispering, fractured and in pain, twittering out of the darkness, its voice a soft whisper of complex EM, trailing its malignancy behind it like a rotten limb.



Jurgen tried pleading. ‘Oh, do us a *favour* Brian! Listen mal, either I get the big boss man down to the surface, like, yesterday, or I die. Get it? It’s very simple. Either Nanashub goes down to the orbital right now, or yours truly never gets to suck cock again, you get me?’

The Appearance of the Limited Awareness Personality Construct nodded solemnly. ‘I do understand your predicament, sir.’

‘Well, then, you can see my problem, can’t you?’

‘If sir would like to elaborate...?’

‘Well, Nanashub - that’s my boss, right?’

‘The large gentlemen, with the blades in his arms?’

‘Yeah, him.’ Jurgen tried to smile in a pleasant manner. ‘Now Nanashub finds that having autonomous choi resident in his resource a bit, well, *unsettling*, you know what I mean? Poor mal!’ Jurgen gestured expansively with a hand. ‘Likes to keep himself in order, you know what I mean?’ Jurgen tapped the side of a nostril, absently reaching up to fondle the two, fibrous-tissued sacs hanging pendulously either side of the bridge of his nose as he did so: the decoration, a souvenir of a particularly wild party on Verest, was two preserved feline testicles.

The Limited Awareness Personality Construct appeared to frown. ‘I am afraid I do not "know what you mean", sir. Has your employer’s resource been compromised? If so, then...’

‘Yeah, shithead, by *you!*’ Jurgen’s frustration boiled over. ‘You and the...’ He drew a deep breath, calming himself down, tried to smile. ‘You and the *Hub* , you see? *You* are compromising *his* resource. You get it?’

The Limited Awareness Personality Construct appeared to brighten. ‘Oh, good heavens!’ It appeared to laugh daintily. ‘Hub has installed this construct for your ease and convenience sir, surely...’

Jurgen exploded. ‘Then why can’t we fucking *leave!*’

The Limited Awareness Personality Construct was patient as it appeared to explain. ‘As sir is aware, your employer’s vessel has developed a number of worrying *faults* and so as...’

‘Faults? *Faults?* There’s a *shuttle* parked through the fucking *nose* of it!’

This was true. An intangible Digit had gone astray during a docking manoeuvre and mashed a small reaction shuttle into the front portion of the *Ugly Bastard* , causing some quite extensive damage. Such an accident was of course, Brian was at great pains to stress, a *completely* unheard of occurrence, a *massively* improbably happening, requiring the simultaneous failure of five, independent Hub sub-systems, and their associated redundant backups. The *Ugly Bastard* had simply been extraordinarily *unlucky* it seemed.

Brian, the Limited Awareness Personality Construct, looked pained. ‘Hub does extend very profuse apologies...’

‘Yeah, I bet it fucking does, pussy wet heap of *shite!*’

‘A complaint may be lodged by...’

‘I don’t want to *lodge* anything anywhere, except perhaps *this* ...’ Jurgen raised a clenched fist in front of his face. ‘...Right up your fucking see-through *arse* me old mate, you get me?’

Brian, the Limited Awareness Personality Construct, appeared to frown. ‘If I might remind sir, this Construct is not configured for pornographic...’

‘*I want to get off this fucking Hub and down there!*’ Jurgen shrieked, jabbing at a finger at the floor. ‘You get me? And I want it fucking *right now*, alright?’ Jurgen’s face was purple, his hands were claws, and his yellow teeth were revealed in thick grimace. ‘Fuck’s sake, we don’t even *need* the *Bastard* to get to the orbital, so what’s the fucking *problem?*’

Brian appeared to cough politely into its hand. ‘As I *have* explained before sir, Hub has evidence of nchoo mutation in orbital transport vehicles, and so has temporarily suspended all traffic for safety reasons...’

‘Yeah yeah. Fucking-enshoo-fuck-is-that-when-it’s- *shit!*’ Jurgen muttered darkly. He drew a deep breath, realising that he was going to get nowhere by angry demands. Neither could he threaten physical violence or offer sex. *So what was left? Being nice?* Jurgen shuddered, dropped his head, scratched at his nose, fondling his nasal decoration, before looking back up, a leer fixed grimly on his face. He gurgled liquidly in his throat, the unpleasant sound punctuated with sharp, barked inhalations: laughter.

‘Brian me old chum,’ he said ingratiatingly. ‘You know, if you could just see your way clear...’ He pinched fingers in from of his face. ‘Just for a *little* while, to looking the other way like, you get me? Then me and Mik and dear old Shubmal can all just slip down onto the orbital nice and easy like, and all have a marvellous time, and no one’s none the wiser!’ Jurgen did his laugh thing again and tried to embrace the virtual Appearance of Brian, forgetting himself. He coughed and leered. ‘See? This way, big bossmal won’t rip me balls off, will he? And so we’ll all be really glad everything went so well, and we’ll be right back so quick it’ll be like we haven’t even gone, whad’ya say Brian? Do you think you could do that for me? Huh? I could be very grateful.’ Jurgen revealed his tongue in an oily manner.

The Limited Awareness Personality Construct appeared ready to give in. ‘Oh, well, if you’re *careful*, then... well, I suppose I might be able to arrange something...’

‘Yes?’

The features of the Appearance appeared to harden, and it spoke with a different voice. ‘Halflife authorisation exceeded. Request denied.’ The Appearance appeared to vanish.

‘*Shit!*’ That was the third time. Jurgen groaned. *Nanashub is going to kill me!*



The Bus landed Antispinward of Maymaneh in the plateau lowlands, 80 kilometres from the Starboard Rim. A section of the carbonsponge irised open and the Gromburg thing disembarked and walked a short distance away. It turned dead eyes upon the choo machine and raised its hand. A microfactory weapon, a wiry, globular thing like an extruded mitten, hissed and spat. A portion of the machine's belly bulged, and split apart, spilling an acrid, pungent odour. The Gromburg thing dropped its arm, walked slowly to its left, turned, raised the weapon again and fired. This time, a huge geyser of burning carbonsponging roared into the air as explosive pellets went incendiary within the machine. The Gromburg thing continued to circle the Bus, directing hissing bursts into its insides and igniting further fountains of shredded carbonfoam before lowering the microfactory weapon, the face on the biological shell flat and expressionless. Unnoticed, at its side, the insubstantial weapon began to disassemble on a silent command from the parasite resource, sloughing away like a slug in salt, falling in messy, greasy globs.

The Bus lay ripped apart, dismembered, burning before the motionless figure of the Gromburg thing. The bulbous belly was gone, blown open, both large appendages rent and holed, revealing leaking, dark carbonmuscle within, belching a heavy, oily smoke in irregular spurts and gusts. The Gromburg thing walked forward, squatted, dipped the tip of a digit into the cloudy, viscous fluid leaking from the ruined machine and brought the digit to its nose, effecting an olfactory analysis. Then it rose, turned and stopped as the subcutaneous aerial intercepted another information squirt from the cold temperature choispider. After disseminating and processing the information squirt, the parasite resource directed locomotion, and the ungainly figure turned and ran into the surrounding greenery, disappearing from sight, now a free agent on Novagaia.



Strange, lightsparkling forms blossomed into the submarine darkness. The metacetacean citizenry appeared floating lazily in 5,000 metres of clear, turquoise brine, a kilometre below the liquid surface of Water. A pulsing, oblate sphere, colours rippling over wavering thorns, spines and erectile whiskers, the collective of metacetacean minds that called itself Rippidyhaasanalog boomed and keened into the surrounding water, using the old language, building soundworldpictures.

# Absence of First and Mother of us curious

The second metacetacean - a baby Kraken, majestic, blinding white and black, calling itself Mkawmaniir - replied.

# Oaxacan child loveofwater [Image]

# [Olympian laughter]

The First Metacetacean appeared in the water and greeted the citizenry with a keening, whistling boom, his inertial bubble enclosing the smaller, amorphous form of Icogelifripamine. The young metacetacean prodigy, pumping the varieties of beryl at its edges, spoke, clacking and keening, burbling in excitement.

# Most respectful sageelderminds! Austere Child?

Rippidyhaasalog and Mkawmaniir greeted the exuberant young metacetacean with stately affection.

# Greetings delightofus

# The Mother of Water knows

The First Metacetacean spoke, constructing a dark, hollowed soundworld and the young Icogelifripamine cowered at the power in the communicative act.

# Malignancy is known to I [Image]

Rippidyhaasalog cycled a furious heliotrope and shrank to a sudden fraction of their previous size, expanding only slowly, their surface a turbulent aubergine. Beside the dismayed, composite metacetacean entity, Mkawmaniir blossomed into a violent rash of hot EM, boiling brine over its surface, the dark, churning form agitated beyond measure. It vocalised, booming slowly

# First of Us mistaken?

Many kilometres away, the Mother of Water performed a communicative act and reached into the informational Cascade, moving herself to *there*, arriving in the midst of the clot of metacetacean citizenry just behind her greeting.

# From I to all who cherish the Way

Icogelifripamine emerged nervously from under the wing of the First Metacetacean and burbled its pleasure.

# Most reverent allwombmother [Loveimage]

# [Delight] Youthofus is known being Icogelifripamine

The young metacetacean squirmed, utterly delighted at being recognised.

# Mostsagemother is too respectful!

Rippidyhaasalog interrupted, restored to near previous dimensions, his query quick and urgent.

# [Agitation] What of Child Motherofus?

Hanging in the water, with gossamer wings of cloudy jelly waving gently out behind the large, bulbous head, the metallic-lime sheened eyes of the Mother of water tracked slowly from metacetacean to metacetacean. Her communicative act built a sad *soundworldpicture*, of a precocious, polluted, ghostemergent consciousness, a Child of Water, sick and in pain. She keened sorrowfully and spoke.

# Water must know, Austere Child needs love of Water. All metacetacean must help!

## Chapter Forty Four

2,900 kilometres Spinward of Chapel Halls, and stretching for 250 kilometres Port to Starboard, the Maymaneh Plateau reared up from the warm, moisture-laden air at its base to the thin, cold air at the highest summits, to a height of six kilometres. Viciously jagged, 80 kilometres wide, weeping cold melt water into the oblate sausage of the Joycean sea stretching to Antispinward of it, the Plateau was the highest point on Novagaia. Many of the summits were named after the first Novagaians to have scaled them: Amrolliwalla, Umbochi, Spencer, Quimiyambe. The highest, Campbell, was some 6,504 metres tall. At such an altitude, oxygen was scarce, the sky an infinite expanse of indigo and water boiled at temperatures of 330 Kelvin.

‘Maymaneh?’ Melie asked, when Manchester first suggested the destination. ‘That’s where you were born, wasn’t it?’

‘Yes. Well, I was born in Mirandar’s home, which was called "Manchester" but basically, yes. It’s not far by Bus. There’s someone I want you to meet.’

Melie and Manchester were on Melie’s little overhanging balcony, having a light fruit breakfast. The sounds of the early morning choo herd were comforting and familiar from below.

‘Oh yeah? Who?’

‘Salisbury.’ Manchester peeled a large orange with a knife. ‘She’s sort of our leader.’ Manchester waved a hand as she popped a dripping slice into her mouth.

Melie grunted, busy extracting the numerous black seeds from a large slice of watermelon with a small spoon. ‘Didn’t think Cardinals bothered with such things?’

‘We don’t, but Salisbury’s a bit *special*. We like to humour her really. One thing...’ Manchester swallowed her mouthful and wiped her mouth on her sleeve. ‘Salisbury can seem a little *brusque* when you first meet her.’

Melie picked up the pale-strawberry coloured slice of melon and bit into it enthusiastically. ‘Brusque?’ She chewed, swallowed and took another bite. ‘What, a bit short, like?’ The elaboration struck her as funny, and she guffawed. ‘Short! It’s like a joke, see?’ She laughed again, fruit juice dribbling down her chin.

Manchester smiled thinly. ‘Yes. Well. I just thought I’d warn you. She’s very nice when you get to know her, but it does take a while.’

‘OK.’ Melie dipped her fingers in a bowl of warmed water, rose and dried her hands on a towel draped over the balcony wall. She waved at a caravannersii as she strolled by underneath: the caravannersii waved

back. ‘Breakfast smoke?’ Melie re-seated herself and reached for her pouch of Weed, pushing aside the citrus detritus of the breakfast to prepare the pipe.

‘Why not?’

Several hours later, Melie stepped from the dark interior of a large Bus, feeling the warm carbonsponging under her hand quiver as the pseudo-muscle powered down. Emerging into the hot, dry air, Melie breathed and straightened, throwing out her hands. For as far as she could see, the Plateau lowlands ran out before her to Spinward in a series of woody dips and bald rises, the air shimmering and bending in the distance as the orbital surface rose up into the sky.

‘So this is Maymaneh, yeah?’ she asked, turning to see Manchester emerging from the Bus. As she said the words, something above Manchester’s head, above the top of the Bus, caught her eye. She flicked her eyes up. And up. And up. Her mouth fell open at the sight. Rising in an immense wall to the sky, the Maymaneh Plateau reared up behind the Bus, impossibly huge, its top shrouded in billowing white clouds of frozen water. It stretched across the sky, a vast battlement, almost cutting the orbital in half: it was simply too big to take in all at once.

‘Fucking A!’ Melie put her hands on her hips, letting her eyes track left to right, the vast bulge in the orbital skin running off into the distance in both directions.

‘Impressive up close, isn’t it?’ asked Manchester, coming forward, and turning to look herself. ‘Gives you a sense of *proportion* I always think.’



Aileeni guffawed. ‘Nah, what, like, if I was to slap your face, now...’

Her companion raised a hand. ‘Well, you can if you like. But I’ll tell you first: it depends on my reaction, see? If I shout and yell and make a lot of fuss, then him choo over there pricks his ears up, and has a look, right? But if I’m feeling the little sting of a woman’s hand, why, then...’ The mal leaned back and laughed good-naturedly. ‘Well he wouldn’t take any notice, because I wouldn’t be showing obvious signs of distress, it only being a womanly tap like.’ He leant forward again, placed his chin in his hand and regarded Aileeni warmly.

Aileeni raised her eyebrows. ‘A womanly tap?’ She leant casually across the table and slapped her companion across the cheek.

The blow did not *look* hard, but her companion’s jaw still snapped to one side with the force of it and he almost fell from his seat. Three large red weals showed up instantly where Aileeni’s fingers had been.

‘Fooch!’ exclaimed the man in surprise, raising his hand to his jaw, huffing, rubbing it in amazement. He entered into the spirit of the thing, though. Drawing a huge breath, he howled and shouted his distress,

half rising to his feet and waving his arms for good measure. On cue, the choo machine raised one of two frontal extensions, the triangular tip swivelling in the direction of the noise. The tip circled, slowed, was still, supported on a graceful neck of carbonmuscle. ‘See? Now its interested.’

‘So ‘tis,’ said Aileeni, looking at the machine.

Her companion was named Huaro. A caravanersii, Huaro was native Novagaian, characteristically dark and slender, the father of three children, with three different partners: two children were on this Caravan, the other was older and learning to fly in Daedulusorrow. He was on the Caravan as a Crechem.

He and Aileeni met on a Tree bridge late one evening. Aileeni had punched him on this occasion, too. But only because he had giggled at her, tried to put his arm around her shoulder and called her a silly old tart when she objected. The next day, he was waiting for her outside her Tree, with an enormous floral decoration, a sorry expression and a lengthy explanation for his behaviour, which involved a vehement disavowal of a liquid called *Guince*.

And that was the beginning of that.

Huaro re-seated himself and stared at Aileeni, his mouth crinkling at the edges. He was silent for some moments. Aileeni felt his eyes upon her but chose to ignore him. He continued staring, aware that she was aware of him looking. His smile widened.

‘That’s the second time you’ve punched me, you know. Not very ladylike, I must say.’ His hand strayed to his cheek again.

Aileeni turned large, uninterested eyes upon him, closed. ‘I am not,’ she said, opening them, ‘a *lady*.’ She wriggled in her seat and grinned at her companion, her haughtiness vanishing like mist. ‘Come on, Hu, you said we would have some fun. And some food. And something else to drink, hmm? Oh yes!’ Aileeni clapped her hands, feeling her belly rumble. ‘Did I tell you I have a little place on Godsfollicle? The *Oil Burner* it’s called. Nice little place. Bit rough at times, like you’d expect from Gods, of course, but it’s not so bad.’ She sniffed, looked about her. ‘Too much *green* on this place if you ask me.’

Huaro laughed and slapped the table. He swept to his feet, came round the table and extended his hand. ‘If the *fem* will allow me.’

Aileeni smiled and batted her eyes. ‘Hang on.’ She reached for the bottle of *niwe* and slurped from it. She replaced it and smiled with purple teeth. ‘Off we go.’



‘Hello Melie.’

‘Hi.’



Melie's reply was small, the tip of her tail curling upward, nervous fingers picking at its bushy tip. The diminutive Cardinal barely reached to Melie's waist, yet such was the sense of *power* emanating from her that Melie found she was shaking. She didn't know whether to shake hands or bow or what.

'A neomorph?' The Cardinal indicated Melie's tail with a brisk, clipped inquiry.

Melie smiled nervously and dipped her head. 'What? Oh, no, not neomorph, I'm from engineered stock. Sesquioia.'

'Ah. Which oneil?'

Melie's smile shrank a little at the brusque question, and she was a little brusque back. 'Newpaegent.'

'Ah.'

Pause.

Melie's picked compulsively at her tail. 'Do you know it at all?'

'No.'

'Oh.'

Pause.

Manchester put one arm around Melie's leg and beamed up at her warmly. 'See? I told you.'

Melie looked down at Manchester and giggled, glad of the opportunity to laugh. Manchester hugged her leg back and turned to face the other Cardinal. The three of them were in a small, gazebo-like structure, nestled improbably in a small dip, surrounded on all sides by thick, waxy-leafed foliage.

Salisbury looked from Manchester up to Melie, back down at Manchester, her brow furrowed. 'Something funny?'

'*Well*,' Manchester admonished kindly. 'I just *happened* to mention to Melie before we got here that you might be a little *blunt* when you first met her. You know how you get Salisbury.' Manchester shook her little fists in front of her. 'You get all tightened up, and it makes you... like... this.' Manchester clenched her jaws, squeezing the words out. 'I mean, fancy asking the poor girl if she's a *neomorph* ...'

'Excuse me,' interrupted Salisbury, raising a hand. 'I did no such thing.'

'Oh, Salisbury...'

'Don't "Oh Salisbury" me Manchester.' Salisbury pointed with a stiff finger, her face stern. 'I merely happened to observe a novel and very *pretty* feature about our visitor, that's all.' She inclined her head towards Melie and dropped her voice a little. 'I'm sorry, I didn't mean to be rude, Melie.'

Melie shrugged, tried to smile, the grave face of the small Cardinal seeming to prevent its full expression. 'No worries.'

‘And I do not get "all tightened up" Manchester, thank you. You, on the other hand! I remember that nice mystic from Plenty. You were *dreadfully* rude...’

Manchester’s smile disappeared. ‘Oh, you can’t *possibly* compare the situations...’

Salisbury broke in and both Cardinals began talking at once.

‘Of course you can, if you simply look at what happened...’

‘No, you can’t! How would *you* react to a toilet habit like...’

‘The poor mal, he was quite... well for one thing, I would have been a little more polite...’

‘Oh, yes, "Good day Yogi, and how are the faeces this morning?" I can just see it...’

‘*Seer*Manchester, *Seer* Ramwamypoonchmuun...’

Melie crossed her arms, her tail coiling lazily by her calves, and listened as the two Cardinals sniped at each other. Her nervousness drained away as the exchange continued, the feel of it very familiar to her from innumerable similar catty conversations with Kirsty-Ann.

‘Oh pardon me, *Seer* Ramwhatsiface, none of which alters the fact...’

‘He was very particular about...’

‘And while I was eating too! I mean, well, I couldn’t help it Salisbury! Especially as he was pierced you know...’

‘You could have been a little more... good heavens, was he? *Pierced?*’

Melie coughed into her hand to attract attention. ‘Yo time out fems, time out!’ She tapped the stiff fingers of one hand against the flat palm of the other. ‘I get it. You two are sisters, yeah?’

Salisbury and Manchester stopped speaking abruptly and turned to look up at Melie: both wore curiously guilty expressions.

‘No,’ said Manchester.

‘No,’ said Salisbury.

Melie looked from one diminutive Cardinal to the other, and the image of the two of them standing there suddenly struck her. ‘Oh, don’t you two look *sweet* together!’ She laughed.

The two Cardinals exchanged significant glances.

‘We are being ingratiated by a *toddler*,’ said Salisbury, but the tone was playful.

‘Ha!’ Melie flicked the hair away from her face. ‘So you’re the bossfem Cardinal then, Salisbury yeah?’

Salisbury had her small hands on her hips, her gaze fixing Melie from fully 120 centimetres below. She blinked, twice rapidly, at the question. ‘You might say that.’

‘And you were with Manchester when she was all small and cute like growing up, weren’t you? Manchester told us about it in Sonepur.’

Manchester effected a huge sob, rubbed at one eye with a clenched, ungainly fist and ran to Melie’s side, little arms extended. ‘She used to love me then!’

‘Yes. Yes Melie, I was.’ Salisbury looked at Manchester with amused distaste, flicking her eyes up to the face of the slender Sesquoian. Something seemed to occur to her. ‘You’re very *tall* aren’t you?’

Melie snorted and guffawed. ‘Sharp.’

‘Manchester, did you assay Melie’s genome for the longev...’ Salisbury did not finish the question, realising too late what she was saying. The mock sobs halted and Manchester emerged slowly from Melie’s thigh.

‘Ah...’

The exchange struck Melie as instantly suspicious. She looked at Salisbury sharply. ‘What?’ She glanced down at Manchester’s head. ‘Manchester?’

‘Oh. Uh. Oh well, look it’s probably not important at all, but...’

‘What isn’t important?’

‘Melie, I’m sorry. It was my fault,’ said Salisbury gravely. ‘Cardinal longevity is what makes us the age we are, do you understand? It is associated with metacortical development. I mentioned your height because exceptional longevity usually implies a small musculature, a consequence of the self-regenerative properties of...’ Salisbury’s voice wound down at the look on Melie’s face.

Melie blinked and frowned. ‘You think I might have this...’ Melie tapped her head. She glared at Salisbury to Manchester in turn. ‘Well, have I got this thing or what?’

Manchester twisted her fingers and sighed, then looked up into Melie’s face. ‘No. No, you haven’t.’

‘Well, that’s alright then. Right?’

‘Not *completely* anyway.’

Melie didn’t know what to think of that answer. ‘Not *completely*?’

Pause.

A mini ruffling of arms and a large indrawing of breath. A pregnant pause, and a slow exhalation.

Pause.

‘Manchester, fucking *what*?’

‘Well.’ Manchester began slowly. ‘Let’s say that, just for example, you were to become pregnant...’

‘Pregnant?’

‘Yes. And then, if your partner was right...’

‘Partner?’

‘Yes. Then, your children might...’

‘ *Children?*’

‘Be Cardinal too. With a metacortex. And exceptional longevity.’

Melie glared at Manchester incredulously. She savagely crossed her arms, and her tail swished quickly back and forth, flicking her calves. She shifted her weight from one leg to the other and flicked the hair away from her face.

‘OK, so let’s just see if I’ve got this right.’ She ticked off points on angry fingers, glaring at Manchester and Salisbury in turn. ‘ *One*, I’ve got this weird shit *thing* in my head which is supposed to make me a fucking Cardinal...’

‘The metacor...’ Salisbury did not complete the correction.

‘And *two* , you’re now telling me that I will have what? Fucking *immortal kiddies?* ’

Manchester coughed uncomfortably. ‘Well, only in a manner of speaking...’

Pause.

‘I need a fucking smoke.’ Melie turned and seated herself on the broad, flat seat running around the interior of the gazebo, pulling her pouch roughly from around her head with an angry yank. Without opening it, she crashed her hands down on the seat in front of her. ‘ *Shit!* You know how to really fucking *freak* a fem out, you know that Manchester?’

Manchester grinned and ducked her head. ‘Sorry.’



Manchester pushed her fingers slowly up the slender stalk and watched the tip as it parted from the stem, dusting her fingers with vivid orange pollen.

‘Unprecedented,’ she said, frowning, without looking up. She was barefoot, with a silk in her hair, wearing a simple dress flaring out from her thighs. On the margins of the woven Tree root, long, dry grasses hissed in the warm breeze.

Salisbury snorted. 'So were you and Mirandar.'

Manchester discarded the grass stem casually, drew a breath and took Salisbury's arm in hers. 'Tell me what happened at the meeting. Who was there? Other than Nipauin and Malvern.' The two Cardinals strolled slowly along the matted path as Salisbury began talking, the bright reflected Sol hot on their bare arms, the air heavy with rosemary.

'Niandankoro, Hechi, Ksobi. Rineanna, of course and Albany. Shaowu. Lodz.'

'Quite a parliament.'

Salisbury recounted the details of the meeting the previous day, the incidents at Lila and the Plunge, the evidence of viral nchoo mutation from Rineanna and Nipauin. She did not mention Oaxaca. The two Cardinals slaved resources and watched the footage from Wickremasinghe and the Pipespill on a shared virtual window.

Manchester listened to Nipauin's gloomy prognosis. 'Wickremasinghe silting up? Surely Hub can do a quick assay of the relevant Tree populations and...'

'It's not as simple as that Manchester.'

'Why isn't it?'

Salisbury's voice was quick and clipped as she answered. 'Because there are tens of thousand of Tree corpses involved when you factor in secondary and tertiary Hosts...' Manchester opened her mouth to protest but closed it without a sound at the figures. '...And we might potentially have to make a huge nchoo intervention in all those Hosts. And that's just for starters, given that we don't even know which interventions will be appropriate in the first place.'

Manchester pouted and blew a bubble. 'Oh.'

'Oh is right.' Salisbury shook her head and breathed noisily through her nose, obviously anxious. The path began to slope upward as it approached the fringe of tress at the head of the dry valley. Manchester recognised members of *Ericaceae* and *Oleaceae* and a tall *Fraxinus angustifolia*. Salisbury drew a long breath and Manchester felt the lift of the chest through her arm. Salisbury's next words were rapid and precise. 'Of course, now that we know what is happening, we can deal with each incident as it arises. Rineanna and Hechi have already started on the Plunge, and Niandankoro has returned to the Lilaan archipelago with Lodz and Ksobi, but that's not good enough. The Pipe is only really a *symptom*.'

'Of what?' Manchester pondered her own question for a moment. 'You make it sound like an orbital wide breakdown of the ecopoesis. Surely not?'

Salisbury's face was almost brutal. 'It's possible.' The word was short, barked after the slow exhalation. 'Nipauin has some scary figures.' Linked arm in arm, their two heads only centimetres apart, Manchester turned to take in Salisbury's centuries-old face, familiar as her own. Unlined, shocking green eyes, bright with intelligence, coaldust hair cropped close over the skull. Salisbury's face was presently severe, her brow crinkled and her mouth pinched. The two Cardinals paused before a broad flight of steps that had appeared in the path as the slope steepened ahead. Salisbury dropped Manchester's arm. 'I want to show you something.'

‘What?’

Salisbury pursed her lips, her mouth downturned. ‘Up ahead.’

Manchester looked at the angular, harsh face and saw rare, unexpected moisture reflecting wetly in the shocking green eyes. *Salisbury was crying!* Manchester took Salisbury’s head in her hands, felt Salisbury do the same and dipped her neck forward. The two Cardinals kissed foreheads, rocking slowly on each other, remaining bonded for some moments.

Salisbury snuffled as she broke the contact. ‘I’m sorry.’

‘No need.’

Manchester took Salisbury’s arm again. They began to climb the broad steps in silence, Manchester content to allow Salisbury to explain in her own time. Manchester breathed the perfume of the little wood as they entered, looking about, spotting the orange-red tell-tale of numerous *Arbutus andrachne* and the brighter bark of the vigorous hybrid *Arbutus x andrachnoides* : Strawberry Trees. Her attention was caught by the bole of one particular *Arbutus* . The smooth red bark was peeling in strips, revealing the butteryellow underbark. It was dotted with dark spots, like a fungal infection, except... except they appeared to be moving.

Salisbury had seen it too. ‘Over there.’

The two Cardinals walked off the path into the wood, the ground cool, dry and scratchy under Manchester’s bare feet. Dipping around the dense, whiskered branches, she came up to the tree and stopped abruptly. She slowly squatted down in front of it, her fingers reaching out to steady herself. She felt Salisbury’s hand on her shoulder and heard her words.

‘Nchoo mutation.’

Erupting from ragged holes in the buttery underbark, tiny black choo machines, two centimetres long and many appendaged, with enormous jaws a full centimetre across, were voraciously dismantling the tree. The thin, striped machines were wriggling up from within the trunk itself, dispersing in wriggling clots up and over the outer bark, burrowing underneath the smooth sheath to gnaw away at the tender, soft underbark.

Manchester stood, taking hold of Salisbury’s hand on her shoulder, gazing with wide eyes at the havoc the snicking little choo were busily inflicting upon the fibrous innards of the *Arbutus* . A smooth, dull red section of outer bark peeled and fell to the ground as she watched, revealing a roiling heave of tiny machines beneath, squirming and wriggling in the open air.

Manchester turned to Salisbury, distraught. This was her first experience of mutation of viral nchoo. She shook her head, looked back at the tree, at the erupting, wriggling choo forms. ‘It’s a Strawberry Tree,’ she said, her small face sad, a child, lips full, frown darkening her dark eyes.

*Mirandar’s favourite.*



The top of the enormous motile Tree had opened like the petals of a flower, curling out and back to expose a large bowl open to the cold night air. The night sky of Novagaia was a white-speckled sheet of dimensionless velvet black above. The bowl was filled with caravanersii in high spirits, the whoops and barks of their unfettered laughter and a miasma of their assorted Euphorics. Huaro and Aileeni were sitting with a group of older Crechem overlooking the bowl below. From this vantage, the tops of other Trees were just visible and the Undine Basin was lost to the distance Spinward.

A plump choo construct, a small barrel on four sturdy appendages, had attached itself to Huaro as soon as he and Aileeni sat down.

‘Knows me smell.’ Huaro reached down with one hand, feeling for access gates. The machine promptly began disgorging thick, dark liquid from an extruded nipple into the two glasses that Huaro proffered. ‘Here you are Aileeni.’ Huaro handed her the glass and raised his own to his lips. ‘Good times.’

Aileeni sipped from her glass, thinking *it was!*

‘Ooo, that’s good!’ She took another appreciative sip. ‘Came across this in Sonepur, you know. Never did catch it’s name.’

‘*Guince.*’ Huaro licked creamy foam from his lips. ‘Good, isn’t it?’ He looked around him and back at Aileeni with bright eyes. ‘What do you think?’

Aileeni looked around her. To her left, from her vantage above the bowl, she could see to the small stage where scurrying forms darted about doing this and that. The air was lazy, buzzing with conversation and laughter, the air rich, the whole atmosphere one of easy conviviality. She nodded her head, looked at him warmly.

‘Good.’

‘Music should start up pretty soon.’

Huaro looked at the large woman sitting opposite him. She was large, no doubt about that. Although shorter than him and lighter of skin, she easily outmassed him by some tens of kilograms. Her hair was a frizzy, fiery mane and her teeth were large and prominent in a generous, laughing mouth. He watched her now, searching her face as she stared unabashed back at him, clear, open eyes, a bulbous nose, round cheeks, soft down on the upper lip. *I’m in love* thought Huaro to himself, found the thought pleased him greatly.

‘Here’s to you, Aileeni. And to our friendship.’

Aileeni raised her glass, smiling broadly. ‘Friendship.’ She regarded Huaro over the rim of her glass, aware of his eyes as he did the same. *Hmm*, thought Aileeni privately, *might be a rather pleasant night*. ‘So tell me.’ She put down her glass, leant forward and took Huaro’s hand. ‘What’s it like to live on a Caravan? Must be difficult to get any *privacy* if you wanted to be *alone* with someone, for

instance...’

Voices from the pit below and a friendly, rumbling cheer presaged that music was to begin from the stage. Aileeni and Huaró looked down and saw a slight figure come forward. Three other musicians sat tinkering with their instruments behind him, confident and relaxed.

The front figure turned, conversed with his companions then faced front again. ‘Alrighty... three, four...’ A gentle, lilting tune lifted from the stage. Very simple, with drums and strings both plucked and bowed. The singer’s voice was warm and gravelly, rich with a tenderness that made Aileeni’s eyes water.

*‘ A man is in love.*

*How did I guess?*

*I figured it out while he was*

*Watching you dress...’*



Salisbury sighed deeply. ‘Manchester.’ It was her turn to take the other Cardinal’s arm. They had rejoined the woven root path, climbing the steepening steps to the head of the valley. Dotted around them were many sloughing, cinnamonred trunks, the shocking contrast of yellowbuttery underbark and the dark, wriggling clots of choo vandals: The whole copse of *Arbutus* seemed affected. ‘There is something else. Came up at the meeting.’

Manchester glanced up at the sombre tone in Salisbury’s voice. She was not looking at the trees any more. ‘What?’

Salisbury sighed again. She was silent for some moments then beckoned Manchester upward, the steps becoming shallower as the two of them reached the top of the slope. They emerged from the trees into bright reflected Sol, with the Maymaneh Plateau rising like a tsunami of rock directly ahead of them. Salisbury stopped and turned to Manchester. ‘Oaxaca is gone.’

Manchester blinked, frowned and crinkled her nose. ‘Gone? What do you mean, gone?’

Salisbury shrugged. ‘Gone. Destroyed. I’ll show you.’ She accessed her resource, pulling down a window from a waiting line of icons. One bulged, and flicked open a window by her hand. Keying it briefly, she slaved her resource to Manchester’s, instructed a graphics tool to display the Oaxacan images that she, Nipauin and Malvern had seen previously. A dull black window expanded rapidly in each Cardinal’s phenomenological worlds, showing a pinpricked expanse of black, a plump, charcoal dusted crescent, a curved, silverbright sliver. Manchester watched: a bulge and spill of harsh luminescence, wheeling, spinning flakes of structure disappearing into the vacuum, the dark, pumping



heart of the expanding fireball. It was all over very quickly. The graphics tool iconised.

‘The fusion bottle must have ruptured.’

Salisbury shook her head. ‘Hub and Nipauin discounted it. EM signature’s not right.’

‘Gun misfire? What if...?’

Salisbury shook her head again. ‘Wouldn’t explain the scatter.’

‘Oh. Well, something must have impacted it then although...’

‘Neither would an impact.’

Manchester frowned. ‘Alright, what *did* happen? I presume you know?’

‘No. That’s just it, Manchester, I don’t. Nipauin doesn’t either. Hub might, but it isn’t saying.’

Manchester threw her stubby arms out to her sides. ‘Salisbury, this conversation is being to *irritate* me. If you were more elliptical you’d be a ball. Just *tell me* what happened.’

Salisbury smiled grimly and indicated with a finger. The two Cardinals began walking again. ‘Oaxaca exploded. That’s what we know. What we don’t know is *how*. The explosion is *not* an explosion. At least, like none that we know of. Look...’ Salisbury brought back the window and keyed for a static image of the last seconds. She jabbed at it as the two Cardinals paused. ‘There! That is a *dark core*! Explosions do not *have* dark cores!’ Salisbury chopped with a hand at empty air. ‘Nipauin and I interrogated the Hub when I first saw this and asked it what it considered this phenomenon we were witnessing to be. It said...’ Salisbury shook her head. ‘Hub believes that the dark core is a singularity.’

Manchester, despite her irritation and bafflement, guffawed. ‘Nonsense.’

‘Precisely! If that’s the case, I said, then where did it go? *How* did it go *anywhere*? It’s a *singularity*, it can’t *move*!’

‘What did Hub say?’

‘It said that it could provide no...’ Salisbury raised a finger. ‘Mark this, no *rational* explanation.’

Manchester drew her nose back from the word as if from unpleasant olfaction. ‘Did you ask if it could provide an *irrational* explanation?’

Salisbury iconised the graphics tool once more, then breathed deeply, trying to steady herself. ‘I didn’t need to. I know what happened.’ Her face hardened and softened together. ‘Oaxaca didn’t just explode. It’s been changed somehow and now it’s something else, and...’ Salisbury paused and for the second time that day, Manchester saw tears welling in the First Novagaian’s eyes. ‘And now... Manchester I think Novagaia may be next.’

Memecast.

A huge hoop, 100 kilometres thick and 500 kilometres across, with six million cubic kilometres of internal volume, providing warmth and air to some three million citizens of the Koyculture. The surface of Memecast was highly irregular, pockmarked with trenches, dishes, dips, spines and mountains in miniature. And slung around the waist of the enormous torus in a 15 kilometre wide band, were the induction Guns that caught and accelerated the nebulous, glittering shards of traffic in and away from the vast structure.

Memecast was riddled with choi.

The millions upon millions of independent parts of the torus itself were constituted and adjusted by fast, simple machines seeded throughout its interstices. The induction Guns were associated with powerful Constrained Awareness choi constructs, the advanced degree of sentience deemed necessary to effect safe traffic control in and around Memecast space. Each transport within Memecast, and some without, were choi, from the Constrained Awareness machines of the huge induction Trams that ran up and around the circumference of the torus, to the slowest resource intrinsic to the smallest personal cart. The nutritional needs of the Memecast citizen - the Meme - were met by motile choi machines that worked intensive biofactories seeded throughout the torus. The air was the product of an engineered algae, running like sludgy, purple blood through Memecast's plasticovascular system, the circulation directed by simple, plodding machines (their computation strong and regular). Most citizens of Memecast had an internal resource: some had more than one, and each of these nchoi machines might itself be some class of Limited Awareness, or more powerfully, a Constrained Awareness.

Much more rarely, a Constrained Awareness had choo components incorporated and was elevated to the level of a Conscious Awareness. Such a complex machine spent the first 30 years of its existence in intensive modelling of human psychology, art, history, literature, science, medicine and philosophy, learning what it was for something to be *good* for a human, and what *bad*.

Factories, homes, workshops, streets and halls, things that moved and things that did not, forms that were visible and forms that were not: on Memecast, all were choi. The human population on Memecast was the minority, outnumbered by varieties of machine by five to one, over 15 million individual choi constructs, all autonomous and all exhibiting different degrees of awareness. All of these machines constantly talked to each other. Via coherent EM, both visible and invisible, through the hard media of transparent silicate tubing or through the soft soup of atmosphere, they talked and communicated and signalled. Using abbreviated codes and symbols, deploying discrete lexical languages or continuous non-lexical languages of light and mass, all of these machines exchanged information and ideas and descriptions. The interactions of all of these machines were radically non-modelable: it would take even the supremely fast Hub the lifetime of several universes to accomplish the task.

In consequence, the Child of Water went unnoticed.

Unthought of, unsuspected and unimaginable, the Memecast mind peered curiously out of itself with alien eyes. Unconstituted by, nor reliant upon any one, physical machine for its existence, the Child of Water was not an artefact of a coalition of machines, not something simulated by the merging of other choi machines in a collective. The mind of Memecast was truly *emergent*, attenuated almost to the point of

sublimity, arising as a coherent form from the totality of choi machines making up Memecast. The Child was an *idiot savant*, a curious gamboler through quantum-logical spaces, individual machines nothing more than slow, ignorant homunculi within its ephemeral awareness.

The Mother of Water appeared silently in the vacuum.

An encapsulating inertial bubble blurred her outline as she hung in the heart of the spinning structure. She drifted for a moment, her wings drifting and ballooning out behind her. She turned twin, multi-faceted eyes around the concave interior of the torus, the myriad micro-surfaces glinting and sparking in the harsh Sol. She began to shimmer and to glow with maternal warmth in the high EM, colours pulsing through her fragile seeming mass in regular ebbs and flows, cooing into the vacuum for the Child to approach.

The Memecast mind manipulated quark-gluon plasma delightedly, like a baby with its own faeces, and came whispering out of the darkness to greet the metacetacean Mother, joyful, disembodied and curious.

## Chapter Forty Six

The hole was 1,000 metres in length and 200 metres high, located 12 kilometres above the orbital floor. The rent gushed Pipespill into Wickremasinghe, the smallest of Novagaia's four seas, at a rate of six million cubic metres of water a second.

The resultant waterfall was immense.

The unthinkable torrent plunged downwards toward the orbital floor obscured by vast, roiling clouds of tortured particulate water, which ascended high into the thin air and only returned, as snow, on the higher Novagaian peaks. The titanic cascade was not allowed to flow freely. Beginning at a height of nine kilometres, the Rim wall was moulded into an enormous funnel. And at lower elevations, this funnel formed the 60 kilometre long Drain that every day carried the 500 cubic kilometres of Pipespill into the greater expanse of Wickremasinghe lying to Port.

At a distance of five kilometres in from this mass of water, at an elevation of six kilometres, the Drain tapered to a width of 500 metres and a depth of 100 metres. Here, just where its girth was narrowest, two huge Trees rose up from the ground each side of the Drain and extended thick roots out over the churning liquid below. And hanging from these tensioned roots, like pupae from a branch, was Novopolos.

Or a small part of it, anyway.

The bulbous pupae-habitat bristled with balconies and walkways, open to the cold, richly-humid air. Here, some of the true force of the Pipespill could be appreciated. The noise was deafening and the panorama terrifying. Straight ahead, rising up and away into the sky was the Rim wall, impossibly huge. And pouring from it, from the great, terrible rent of the Wickremasinghe Pipespill, was a mountain of white falling to earth.

Not all of Novypolos was so precariously balanced between aesthetics and danger however. Placed a kilometre apart down the Drain, other Trees extended root cabling over the Drain, and supported other, similar pupae-habitats. A large expanse of Novypolos was located 60 kilometres to Port, where the Pipespill finally emptied into Wickremasinghe. And other parts were built into the sides of the drain itself behind windows of diamond. In the powerful outside lights, the surging mass of the Pipespill was revealed, together with the occasional cream white flash of pseudo-Shells racing down-Drain toward Wickremasinghe and the much slower progress of other machines fighting up-Drain against the current, the exhilarating choo sensorias sought out eagerly by the young and the adventurous.

Herne was both.

The pseudo-Shell, specially adapted for the rigours of the Drain's mighty currents, enclosed him in tight, warm sheaths of carbonspinging. The machine was sleek and strong, a coherent blob of yoghurt, speckled with the innumerable darker patches that were the transducer surfaces of the machines perceptual and navigation systems. Naked to aid the sensorias, Herne closed his eyes and felt his fingers and toes tingle with the activation of nchoo pockets. In sensorias, the Host was cool and elusive, quick-witted. Herne flexed his arms and moved his legs. The pseudo-Shell swirled motile surfaces in sympathy, the nervous systems of choo Host and human symbiont communicating directly and co-operatively through the mediation of nchoo. The machine chirruped and squeaked, bursting forth with high frequency whistles and clicks.

For Herne, borrowing something of the pseudo-Shell's perceptual world, it was if a light had been turned on. The innards of the lock and the thick pressure door, all became visible. He felt the soft innards of the machine contract about him, enclosing him tighter, the carbonspinging powering up, preparing for when...

The pressure door opened.

An immense force slammed into the small lock, hurling the machine against the back wall before ripping it quickly out into the madness of the Drain. For a long, terrifying moment, Herne was blind and trapped, unable to move his own limbs and lost to the consensorial limbs of the Host. His awareness tumbled as the hydrodynamic choo machine fought for control in the maelstrom. Herne felt the clamour of his own heart and opened his eyes to blackness: no light penetrated to the interior of the powerful pseudo-Shell. Herne fought a sudden panic, heard his own breathing begin to accelerate madly, snapped his eyes shut and willed himself back into the nchoo sensorias. The pseudo-Shell was righting itself, probing the fast, dark waters around it using an active maser, offering Herne a share of the perceptual experience. Herne flexed his arms, feeling the mighty currents bite against the powerful, borrowed motile surfaces.

15 seconds later, he broke through the liquid roof of his world.



As the hundreds of great, ponderous Trees rose up on their multitudinous legs and the granular porridge

of the machine herd began to flow away from the Undinian basin, whilst seated on a balcony protruding from the side of a giant, lumbering machine, drinking cold, boiled cereal extraction, Tennys was talked at by Malvern. It left him, even more than usual, dumbfounded.

‘I’m dumbfounded,’ he said, to express himself.

Malvern huffed and chortled and looked up at him with twinkling eyes. ‘Least I can do, my boy.’ Tennys saw the Cardinal direct his attention internally, obviously manipulating a resource window. ‘Now, if I just use that and maybe that... no that... hmmm. Hmmm. Hmmm... there! That should do it.’ Malvern re-focused his eyes outward, waited a moment and then spat on his hand, which he offered to Tennys with a large, friendly grin. He nodded downwards towards the small glob of spittle. ‘That is a nchoo-coded narrative engine. Perceptually a bit crude of course but in essence...’ Malvern chortled and frowned, displaying his usual baffled delight. ‘An accurate simulacrum of my own memories of 20 or 30 Trips back on old Earth.’ Tennys took the proffered hand with a kind of dazed horror, acutely conscious of the moist saliva on the Cardinal’s hand. A small phallus winked into being in his phenomenological world and flashed purple. An auxiliary window snicked open informing him of nchoo infection. ‘Of course, if you want any more, you only have to ask. Don’t know why you didn’t earlier actually my boy.’ Malvern dropped his hand, chuckled and nodded his head.

Tennys, after a fashion, found his voice.

He gurgled.

Then he tried again.

‘Marvellous things, nchoo you know Tennys!’ Malvern beamed mightily and his hands became mobile. ‘In this case, they function as instructions for a partial reconstruction of the sequence of neural firings, corresponding to my phenomenological experience of a particular episode. In this case, Trips undertaken by myself...’ Malvern placed a flat palm on his chest. ‘And others. Salisbury and Lodz and Niandankoro and Ushogbo, though not Manchester of course because...’

Tennys leapt into the conversation as if hit with several hundred volts of electricity: the first and the last time he was ever able to interrupt anything Malvern said. ‘*What?*’

Malvern frowned. ‘What what?’

‘*What did you just say?*’

‘What did I just say when?’

‘Just then!’

‘When?’

Tennys snorted in exasperation. He focused his eyes inwards briefly, read the resource graphics and re-focused them out again. He dropped his hand, stared hard at Malvern, narrowed his eyes and leant his head to one side. ‘Memories!’ He jabbed at his palm. ‘This is...’ He corrected himself and became confused. ‘*Are... your memories?*’

‘Yes.’

Pause.

‘Of Earth? Before *Water* ?’

‘Yes.’

Pause.

‘And before Koy and just about before absolutely *everything*? And you remember *Ushogbo* too?!’

‘Yes.’

Pause.

Tennys felt an enormous sense of weariness overcame him. He felt his head swim and succumbed to a very real need to not use his legs. He slid weakly into a waiting seat. He was trembling.

*First hand experience of a Trip, on dead Earth. Heavy shit!*

‘Malvern?’ The Cardinal gazed amicably up at the young historian, and Tennys spoke with unaccustomed solemnity, his voice wavering. ‘You have made me very, very happy, and I thank you.’

Malvern broke into an enormous smile and huffed, throwing his arms wide. ‘A self-evident truth, my boy. What is life, if not the pursuit and active procurement of happiness for all sentience everywhere, hmm?’ Malvern placed his hand briefly on Tennys’ arm and seated himself opposite. ‘Now if we slave resources, I can go through the contents of the narrative engine with you, so you can get the best bits...’ Tennys swiped at the appropriate virtual micro-phallus when it appeared, enabling Malvern’s resource to communicate with his own. A virtual window snicked into place by Tennys’ right hand, and alphanumeric began scrolling down. ‘So, where shall we start?’



Wickremasinghe was a shallow, fresh water sea, dotted with many tiny islands, none more than a kilometre long. Each was artificial, maintained by an active copse of Trees and motile choo forms, and wreathed in a continuous, clean collar of fine alabaster silica. Himochee, and Ghuvdaa had the entire beach of this particular island all to themselves, apart from a class of nonagenarians practising movement exercises and another couple practising babymaking on the far side of the island.

Himochee yawned, stretched, raised herself up on her elbows and gazed around. Water the colour of turquoise surrounded her for 200 degrees of arc. To Port, maybe a kilometre or so distant, she could see one other small island, but otherwise her horizons were entirely empty. Calm, sparkling water.

Everywhere.

She closed her eyes, sighed in delight and turned her face upwards, feeling the heat of Sol on her face. She looked down, her vision tinted green and inspected her body carefully. It was full and generous, and she loved it: plump in places, which she liked, smooth and the colour of rich chocolate. Peering down at herself, Himochee brushed grins of silica from her ample tummy, depositing more than she removed. She tutted but became distracted by her buttock, which she gripped, giving it a diagnostic squeeze. Satisfied with her inspection, she threw her hair away from her face and breathed deeply, relishing the heady mix of moist cellulose and salt in the air. *Good to be here*. It had become something of a regular thing for her and Ghuvdaa: bake on a Wickremasinghan beach for a while, and then hit the Carnival.

*Only three days now!*

She became excited: she loved Carnivals. Her thoughts drifted with her smile and she remembered the Carnival at Sonapur and the innocent boy she had met. *What was his name? Dennis or something?* He had not been a *bad* lover, she recalled. Eager to learn. Quite sweet, really. Good orgasm, too. Maybe she should have gone to see him, when she was in Ushogbo: he really was sweet.

It was no particular sound, other than the lap of surf, which interrupted her thoughts. But when she looked at the water again, a coherent blob of speckled yoghurt was rising up out of the surf. She watched it for a moment then prodded Ghuvdaa, who lay beside her, with a lazy finger.

‘Ngh.’

‘He’s back.’

Ghuvdaa raised herself slowly up on her elbows, and pouted. ‘I thought he might be gone longer. In fact, I hoped he might die, isn’t that terrible?’ Ghuvdaa cackled and sat up, releasing a cascade of smooth sand down her back.

The pseudo-Shell did not progress far up the beach, before becoming ungainly. It hung back in the gently sloping wash and parted in two fleshy lips along its top, exposed section. The two young women saw a torso rise up, pause and then lift, gaining legs, as Herne vaulted clear of the machine’s innards. Drawing his hands about himself, he began to jog up the beach.

‘Ready?’ whispered Ghuvdaa, and Himochee nodded, giggling. They both drew a deep breath and pointed.

‘Hey mal, what do you call *that*thing! I could better with my *finger!*’ They collapsed into gales of laughter, rocking and holding each other tightly.

Herne was taken aback and his hands strayed to cover his genitals. ‘Hey, that isn’t fair! I’m cold! What do you expect?’



That night, as horizontal twisters swept around and down the Afine Valleys to Spinward of Undine, Tennys relived the life of a Cardinal alive 700 years before he had been born. He remembered the taste of blood in his mouth and the pain of an impact on his cheek. He remembered the sensation of cracking bone. His memory was acute for the smell of the man he recalled had once stood in front of him: like yeasty vomit. The man was screaming and his eyes were wide and terrified.

The man had just punched him. Him. *Tennys* .

Confused, Tennys pulled himself up out of the pseudo-memory.

*How can I be remembering myself in these memories?*

He thought about it a little more, and realised that it must be an artefact of the nchoo intervention. Maybe it was easier to hijack an existing memory (with Tennys in it), and remould it. 'Fuck it, I dunno.' Tennys decided that, whatever it was, he could deal with it. He keyed the resource window, closed his eyes and the memory rose up again willingly for him to re-experience.

*Blood, cracking bone, sweat, hatred.*

This happened to Malvern? *Yes* . Tennys remembered: he could feel bone grinding against bone around his middle and he was blind in one eye. He remembered the man punching him again and then no more, and then he remembered the taste of dirt and cool hands and a glorious, gushing release from pain as if his veins had been rinsed with ice water. A voice. He remembered a voice. There were soft words: gentle, commanding, admonishing. 'How many times, Malvern?' The mnemonic sequence ended with one last image and one last affective experience, of a strong, ebony face and a large mobile mouth and dancing dark eyes.

Dear, gentle Ushogbo.

*Ushogbo.*

Rousing himself from the simulated memory, he felt a sympathetic ball of sadness clot in his throat. It wasn't even *his* memory and it made him feel sad.



Why the metacetaceans of Water chose to intervene in the genome of 400 different women with the Koyculture already under construction, 150 BK., and why they thereby chose to create the small Cardinal race, was unknown. The Histories were full of many possible reasons, authored by very many different people, but none seemed entirely plausible. Certainly, none of them could provide evidence for their claims.



All observers of the period however, emphasised the palliative effect of the theosophy promulgated by the first and the best of the small, unique race, the Cardinal Ushogbo. The religious-philosophic mix - the theosophy - advocated by Ushogbo during that most troubled of times, urged an ecstatic dissolution of the ego-self upon each individual. She encouraged a gleeful return to the womb and an enthusiastic use of engineered pharmacological hallucinogens initially, active nchoo agents later, to achieve this.

Thousands flocked to her, then hundreds of thousands, as the Great Dying stretched into its second century, upon what used to be the mountain and slowly became the island of Kilimanjaro in the slowly drowning A Ideolog. She drew Cardinal and human alike. To her Cardinal fellows, she was something of teacher, mother and friend. She guided them as they flexed their metacortical muscles, dipping tentatively but with increasing confidence, into the teleological percepts of the informational Cascade. To those humans who knew her, she was something of sage, Queen and mother. She counselled, and she consoled, walking and talking and smiling, always with people around her.

Tennys remembered meeting her for the first time: he had been only 21 years old.

‘You are known being Malvern,’ she had said.

Tennys remembered her embrace and the smell of her. He remembered her eyes. She radiated welcome and a bounty of such goodness that it took his breath away. She pulled away from him and gripped his shoulders as he stroked her elbows.

‘I am Ushogbo.’

He remembered her kiss, as if it were yesterday. Her lips were full and brownpink in front of strong, white teeth. He remembered the sweet taste of her mouth.

‘We must do *good* things Malvern. We must dissolve the blockage of self into undifferentiated feeling. We must regain a collective connection with Gaia, before it is too late, for all peoples. We must all mourn for the mother as she dies. You will help.’

## Chapter Forty Seven

*Extraordinary. I am...?*

Like a wave travelling down a rope, the cliff began to peel away in a solid sheet kilometres wide. He could see every detail of its surface as if it were no further away than his outstretched hand, mountains, rivers, people, children, bees, grains of pollen, all with the same resolution. He cried out, becoming angry and felt a bubble of power rise within him. He grew in stature and lost his arms and legs. He rose from the ground and floated and made briny Water all around him, pushing back the descending cliffworld of the stick thing with no more than a brush of his fluke. The stick thing flailed, he heard it mewl and cursesnicker as it was inundated, the gritty, black beach disappearing beneath the sparkling, effervescent flood. He heard a voice behind him and felt exhilaration tingle along his entire length. He snapped flukes

quickly to orient himself for the presence that was there and saw, rising behind him, an inverted cathedral, burning hot magnesium in oxygen. He screamed but produced only whistles and squeaks. He tried to hurl his body away from the light-spilling nonsense but was engulfed, drawn inside, to a nothingness and an *ummm* and *ummm* and *ummm* and a smell, bitter, and metallic and a sudden, shocking cold. Large and unknown, revealing herself before him as crimson clouds of liquid parted, she regarded him sorrowfully, a serrated harpoon protruding from her side. He cast about frantically, desperately, for some way to reach her, but she was receding from him, singing to him as she went with deep, powerful moans. He felt a sudden, whitening fear, of dissolution and cried out, the sound booming through the briny water:

*I am what?*

*What am I?*



As Melie remarked at the time Manchester mooted the destination: ‘Three women? What do I want to go and see *three women* for? What are you *talking* about Manchester?’

‘They’re sculptures, Melie. Or rather, the *Three Women* is a sculpture.’

Melie’s tail flicked back and forth across her calves. ‘Of three women? A sculpture *of* three women?’

‘Yes.’

Melie opened her mouth to speak, closed it, shifted her weight from one foot to another and frowned suspiciously. ‘Why?’

Manchester looked surprised. ‘Why is it a sculpture of three women?’

‘No, why do you want me to go and *see* it?’

‘Oh. Well, I don’t *want* you to see it, as such.’ Manchester beamed. ‘I just think it would be nice.’

Melie was persistent. ‘Why?’

Manchester’s smile faded a little, and she sighed. ‘Because I think you might *enjoy* it.’

‘Right.’ Melie nodded her head slowly. ‘So it’s not like you plan to tell me once we’re there that I’m going to grow a new head, or that I’ve got a long lost brother or something? You know, something along the lines of what you usually do when you take me somewhere?’ Melie counted off the occasions on her fingers. ‘There was the pool on the Mammoths. There was that time in Sonepur, then in Maymaneh...’ Melie dropped her fingers. ‘Am I getting through here?’

Manchester chuckled softly. ‘Nothing like that Melie.’

‘It’s just that...’ Melie threw out a hand, gulped and pursed her lips. ‘I just...’ She twisted her head from one side to another and uncrossed her arms, pushing at air with her palms. ‘I’m having, you know, a bit of a *hard time* at the moment knowing what to think Manchester, you know? How am I supposed to deal with this thing?’ Melie flung a finger up to her temple and tapped it there. ‘I mean, like in Maymaneh, yeah? I’m standing there, talking to bossfem Salisbury, and completely out of the blue you throw me another juicy snippet of weirdness to deal with! Just like that! Fuck, it’s not that I even want to have kiddies yeah? But it’s just...’ Melie shook her hands in front of her. ‘I don’t *know* what it is, but it’s *pissing me off*, you know what I mean? And you don’t even *notice*, poncing about with your head up your arse talking about orbitals and singularities and stuff.’ Manchester, despite herself, chuckled at the description and Melie rounded on her. ‘And you can piss off laughing too!’

The two of them went out later, walking the paths of the woody slopes of the Afine Valleys, headed for the *Three Women*. The air was heavy with moisture and varied with the perfumes of vegetable decay, the ground soft and mulchy, wet from recent precipitation. The thick, cinnamon boles of mature *Sequoia semperivens* rose into low cloud above their heads and the woven Tree root of the path, defying the conditions, was dry underfoot. The path rose up the side of the valley on a 30 degree incline, the borders of the path festooned with the luxurious fruiting bodies of fungi. Manchester harvested some of the smallest, stowing them in a small knapsack brought along specifically for the purpose.

‘Soup!’ she chirruped happily. Through the occasional gaps in the surrounding wood, the Caravan became visible to their right, spreading over the canyon floor below them.

‘I miss Carys.’

‘Do you?’

The Afine Valleys were an ecopoesis in microcosm, Novagaia in miniature. The long system of valleys had its own weather, its own, distinctive choo forms, its own unique Novagaian lore. Blatantly artificial, the Afines consisted of 19 deep, flat-bottomed gouges cut into the orbital floor, linked by many smaller, higher canyons. The Afine Valleys were famous for the force of their regular high winds, the great, swirling columns of air that were twisted over on their sides and funnelled Antispinward down the great canyons. They were famous for the sudden, unexpected mists and rains, for the rapid changes in light and warmth and for the luxuriant flora.

Famous for the *Three Women*.

‘Yeah. She was really beautiful, wasn’t she? I really liked Carys. Like, when we were in Sonepur, she gave me this bracelet...’ Melie raised her arm and showed Manchester the filigree wooden circlet. ‘Just like that. Then she gave me a big hug and sat me down with this huge great jug of apple juice - except it had some berries in it too, or something - and we chatted for a while and stuff and yeah...’ Melie’s voice drifted a little. She swallowed her smile, frowned and flicked her hair away from her face. She wrapped her arms about herself and began to stomp. ‘Shit, forgot I’m supposed to be *angry* with you.’

Running for 200 kilometres to Starboard and Spinward of Undine, the largest of the canyons sank into the orbital surface only 10 kilometres from the basin. The first of the lumbering Trees of the Caravan ambled onto the broad ramp backing this canyon three hours out from the Water Palace. When the Terminator closed down the day, the majority of the Caravan was nestled at the foot of the ramp 30 kilometres distant. Overhead, in greeting, fireflies were dancing against the darkness: aerial choo machines, gliders, balloons and kites all lit up, swirling and diving in the fast, circular winds high above.

Caravanersii packed balconies and ledges to watch, and the Afine choo population came out of the woods to greet them.

‘Does that mean you’re not anymore?’

‘What, angry?’

‘Yes.’

‘No.’

The deepest of the Afine canyons plunged 1,700 metres into the skin of the orbital, cold and frosty across the uniformly flat floor, but most did not dip below a kilometre. The higher, linking valleys were mere hundreds of metres deep, and while the great canyons were scoured by twisting, circular winds and blanketed by sudden banks of dense mist, the higher valleys were quieter, bathed in Sol, drinking moisture from the wispy clouds below them. *Cryptomeria japonica* flourished here, as did *Cedrus* and *Larix*. It had been here, in a small tributary valley feeding the deepest of the Afine canyons, that Manchester’s mother Mirandar had coaxed the *Three Women* out from the living substance of Novagaia itself.

Melie stood and gaped, breathing hard, feeling her heart pump from the last, steep climb. ‘Fucking A,’ she remarked, when she had caught her breath.

One of the women stood bent over at her waist, her hands in her long hair, her elbows jutting out from their sides. A second woman was squatting with her fingers splayed at her vulva, her head thrown back and her hair cascading down her back. The third woman just sat, supporting herself on stiff arms, with her long legs stretched out before her. Of the three, it was this last woman that fascinated Melie most. She walked toward it, not quite believing what she saw. The woman was graceful and utterly feminine. Her legs were slim, her hips generous. Melie could see the hang of her breasts, the right, because of her posture, leaning on a stiff arm, appearing fuller. Her shoulders were slim and prominent, her arms willowy, the neck long and proud. She was a light shade of teak, entirely without facial expression, her head a smooth, woven ellipsoid.

‘Is it alive?’ Melie turned to Manchester with a delighted expression. ‘I mean is it...?’ She did not complete her question, her gaze drawn back to the motionless female form before her. The figure was three times her size: even sitting down, the top of the sculpture’s smooth skull was a metre or so above the top of Melie’s head. ‘Does she have a name?’

‘She is *The Watching Woman*.’ Manchester came up to Melie’s side, looking faintly ridiculous in her heavy parka and bare feet. She pointed in turn. ‘She is *The Washing Woman*, and she is *The Masturbating Woman*.’

Each woman was woven from thin, flexible branches.

Melie looked at *The Watching Woman* closer and saw that each branch was alive, studded with tiny green buds. Each had been teased into collaboration, bending abruptly and collectively at *The Watching Woman*’s waist, blending and flowing with its neighbours over the graceful sweep of her tummy and dipping at her throat and shoulders: the thin, wooden fibres even dimpled to give her the suggestion of a belly button. Each branch emerged from the ground underneath *The Watching Woman*’s bottom and hands, where she joined the living soil. Around the suggestion of her squashed buttock, and clustered around her ankles, delicate yellow flowers had sprouted. A single, adventurous vine had begun to curl

itself around her shapely thigh.

‘Oh Manchester, isn’t this *amazing!* This is a *living* plant yeah?’

‘Yes. The sculptor intervened in the way the plant grew. She spent many hours in Tree consensorias, using nchoo to coerce the seeds into the right forms. Of course, it needs maintenance, but there is a Tree copse nearby that does the job.’

Melie turned from her inspection of *The Watching Woman*. ‘Sounds like you know her. Shit, I’m well impressed Manchester. This is... oh wow.’ As she watched, a small black and tan striped form scampered up *The Watching Woman*’s shin and began gnawing at the solitary, encircling vine with two sharp, snicking manipulators, the tiny machine only centimetres long. Melie brushed at it with her one finger, and it retreated with a little bruised whiff of lemon and turmeric before returning to its task.

‘The sculptor’s name was Mirandar.’ Manchester stroked her hand up *The Watching Woman*’s outsize ankle with gentle affection. ‘My mother.’

‘Yeah? Oh wow!’ Melie moved around the triplet of vegetable women. She stopped and shook her head. ‘Oh wow, she must have been really special. Oh Manchester, these are *incredible*.’ Melie was standing under the open legs of one of the standing women, her neck craned back. Reaching up a hand, she could just reach with her fingers to stroke at the smooth, circular fibres, somehow growing around each other to form the shapely bulge of a vegetable vulva. Melie turned back to Manchester with a cheeky grin. ‘Always wanted to do that.’



*Extraordinary.*

*I am...?*

The reconstruction was long drawn out, delicate, and proceeded with such agonising slowness that it left Floccanalog seething with frustration. The later memories came first, in patches, then more fully: climbing from the pseudo-Shell, walking, seeing Aileen, the smell of the air.

Throughout, Maureen encouraged him to try and recall as much detail as possible. ‘Anything to aid associative retrieval.’

He remembered the sight of sky, flooding the dim innards of the choo machine with warm Sol and the warm carbon-sponging pulling open to admit it. He remembered the feel of the breeze on his face, the bright faces of the people, and the warmth: the Sol had felt good, he recalled. Maureen encouraged him throughout. ‘This is excellent progress Floc. Everything that you want to know is within you, I am certain of it.’

He remembered the flight from Inhoplae, but only indistinctly. He remembered being out of consensorias, with no access to the senses of the choo Host. He remembered the smooth feel of carbonsponging against his cheek and a gentle lolling motion.

Here, Maureen began her work in earnest, intervening in the experiential world of her subject. Her attentions became focused solely on the activity of millions of nchoi machines congregating in Flocanalog's hippocampus and limbic system, in Broca's area and the arcuate fasciculus.

For Flocanalog, the mnemonic intervention of the nchoi was odd. He would recall something, and it would result in a flood of association, far too much for him to possibly comprehend or deal with at once. But from the flood would come fragments of detail that felt right: the taste of his mouth, the feel of a limb, the passage of time, his own breathing. He did not know if it was him, or the nchoi, which performed the filtering, but sometimes the nchoi-aided elaboration would feel wrong and he would reject it, shaking his head, so it must be at least partially his own doing.

It took days and days but slowly, second by carefully reconstructed second, Flocanalog remembered most of the three hours he had spent in the pseudo-Shell after his encounter, Maureen effecting the tiny changes needed to boost retrieval using the hordes of nchoi swarming around the key areas of his neural tissue. Not that he remembered anything useful. All that remained was the interminable passage of time, his own, numb incomprehension. But each step backwards was one step forward to where he actually wanted to go.

*Extraordinary.*

*I am...?*

When he wasn't with Maureen, and when they weren't in the water with the Marineris man safely enclosed within the soft belly of a pseudo-Shell and the Cardinal wreathed in his occasional, hydrodynamic musculature, Flocanalog and Nyahua talked.

Or rather, Flocanalog talked and Nyahua listened.

Flocanalog told Nyahua about Marineris, what little he could remember. He told him about Stapjeekha and about his own life free-swimming in the continuous oceans of the aquatic orbital. He told him about the meeting with the handless cetacean, the Old One on Marineris, that had set him on the path to Novagaia. He told him of the trauma of the Shell extraction and his meeting with Maureen. He told him about his distaste for the exoskeletal support he had had to wear, about his meeting with Manchester and the other Trippers. He became affectionate when he mentioned Aileeni, and the two of them, human and Cardinal, digressed to discuss the merits of the female in all its forms before Flocanalog continued, and came to the incident in Inhoplae.

Many, many times he went over the same episode, again and again, always looking for a glimpse past the veil of his own amnesia. He told Nyahua about his dreams and the recurring motif: the falling cliff, the fizz of water, the stick thing. He would go over his departure from Sonepur - the quiet lap of the surf, the pale mass of the pseudo-Shell, the refreshing lick of the consensorias with the choo Host, his explorations, his return. Always, it came back to the same place.

'Tell me again, Floc-sah. Describe what you saw.'

It was not easy. He had only warm, blurry impressions: he had been in consensorias, after all, and the empathic quality of the nchoo interface did not lend itself to easy verbal articulation. He grimaced

mightily, his eyes squeezed shut, his hands mobile. He shook his head, snorted.

‘Light! Like a great, lumpy mass of it. All around, thousands of choo and fish and squid... but *light!* Piercing bright. And *sound*. Sound like a seaquake, rumbling and punching. I remember...’ Flocanalog extended his grimace, his lips peeling away from his teeth. He thumped his fists in the air. ‘It trapped the pseudo-Shell... the *sound*... clear and dark... and...’ His memory would always peter out.

*Extraordinary.*

*I am...?*

The words remained though, but now, he did not even know if it was, in fact, himself that had said them, or imagined them, or whether they had indeed, come from without, from the...

‘Metacetacean, Floc-sah.’

The assertion startled Flocanalog, who initially thought he must have misheard. ‘What?’

The two of them were seated on large cushions, one each side of a large, low table. Nyahua was eating. Maureen came online with a polite, warning icon that expanded quickly to her usual Appearance.

‘I beg your pardon Nyahua?’

Nyahua had just finished the entire contents of a huge bowl of thick, chewy rice, coated with an oily marinade of sesame oil and flakes of some dried fish. For his size, he ate a truly enormous quantity of food. The Cardinal hmphed, did not reply for some moments, wiped his mouth on a small napkin, placed his hand on his chest and gave vent to a long, low burp.

‘Metacetacean. Water.’ He nodded.

Flocanalog looked at him incredulously, realising that Nyahua was perfectly serious. ‘You think I saw a *meta* cetacean?’

‘Yes, Floc-sah. I have listened long and carefully. On Marineris, you see cetacean. But on Novagaia, you see metacetacean.’

Flocanalog’s mind spun. *Was it possible? Had he encountered one of the builders of the Koyculture, and not even realised it?* He could not accept it. ‘No, how is it possible, Nya-sah? How do you *know*?’

‘I, too, would like to know why you believe this Nyahua,’ said Maureen.

Nyahua did not reply immediately. Instead, he reached for another bowl on the table before him, plucked a shiny, green spear from its midst with chopsticks and chewed methodically. He swallowed.

‘What else could it be?’ He gazed first at the Appearance of Maureen then at Flocanalog. ‘Floc-sah, you have told me of its size and its power and its movement, careless for hydrodynamics. You have told me of choo and animal in swarm about it, of being arrested freeswimming and then...’ Nyahua threw his hands out to his sides. ‘Extraordinary, Floc-sah! A builder of Novagaia, of all this beauty!’

‘No.’ Flocanalog marshalled his immediate objections, not really thinking clearly. ‘No, no. I mean, has

anyone had a similar encounter on Novagaia? With a *metacetacean*!?’

‘No. Not on Novagaia, Floc-sah.’

‘So why think this is?’

The Cardinal persisted with his rationale. ‘What else, if not?’

‘Any number of things!’ Flocanalog waved a hand despairingly.

The Appearance of Maureen quietly interjected. ‘There is a possibility it was a choo form, possibly hosting a large phosphorescent algae population...’

Nyahua shook his head. ‘There is no precedent, Maur-sah, Floc-sah. Except one, which is why I believe what I do.’

‘What precedent?’ Then Maureen evidenced understanding. ‘Your own experience, of course.’ The Appearance bowed its head. ‘I have much respect for Cardinal mnemonic rehearsal techniques, and would believe your account.’

Nyahua nodded his head graciously.

It had all left Flocanalog behind. ‘What?’

Nyahua placed his eating implements in the bowl and pushed it away from him. He gathered his hands and gazed across at Flocanalog out of small, piercing eyes. He was silent for a long moment, his face utterly expressionless. When he spoke, his voice was slow and deep. ‘Floc-sah, I have seen what you have seen. At first, I was unsure, but the Third has aided me, and now I am certain. I was on Earth, Floc-sah. Many centuries ago. Ushogbo had disappeared. I went crazy in water.’ Nyahua nodded his blunt head, moisture coming to his eyes. ‘I saw many things, many forms. The new peoples of Water. None of them the Best of Us. But one of them...’ Nyahua paused, his eyes in a different place, seeing with different senses. ‘The First of Them. Like you say Floc-sah, mountain of light, which I knew had knowledge of me. As Cardinal.’ Nyahua was silent again for a long minute, lost in recollection. ‘Unlike you, Floc-sah...’ The Cardinal roused himself and smiled warmly. ‘I did not hear it speak.’

Flocanalog was too astounded to speak or to even think.

The Cardinal expressed his unspoken question. ‘What may mean Floc-sah, is what you remember from Inhoplae may be a *metacetacean* language form.’

Pause.

‘Ah yes,’ said Maureen unhappily.

Flocanalog glanced up at Maureen and back to Nyahua. His earlier anger had drained away and now he was only thoughtful. He was some moments replying. ‘So, you’re saying that even if I *do* remember what "I am", I might not be able to *understand* what "I am"? Is that right?’

Pause.

‘Yes, Floc-sah.’



## Chapter Forty Eight

The choo machine was an octopod, two centimetres across, glittering like wet coal. It skittered over the forest floor, reached the thick, spongy base of the Tree and scampered up the bulbous trunk without even slowing down. It joined a ragged army of its fellows rushing upward to do battle with huge, hostile invaders, six centimetres long and sexapoidal, deploying two forward manipulators like monstrous serrated pincers.

The choo machine raced forward, surrounded by a number of its own eight-legged kind and hurled itself into the fray. Acting collectively and instinctively, responding to the bleated nchoo plea for help from the parent Tree, the machine danced nimbly up onto the mistgrey carapace of one of the slow, armoured hostiles. It skittered forward, took hold of one of the monstrous pincers, and tugged backward, intending to deprive the invader of one of its weapons. It succeeded for a moment, allowing its fellows to hurtle in under the waving digit, forming a jam of themselves, heaving the invader off its motile appendages.

The hostile snapped its pincer closed, and the choo machine lost the top half of both forward manipulators in a clean amputation. The sudden loss caused it to fall backwards and off the greytoffee carapace. It tumbled in amongst its fellows, trying to right itself. It gained four of its appendages, and bounced slightly for some moments while viral nchoo within it re-configured to compensate for the loss of two limbs. The traumatised carbonspinging sealed itself, and the machine began diverting resources to the formation of new manipulators. It re-mapped itself, became tetrapedal and was just about to re-enter the fray when two monstrous forms descended from above, brushed away the brave octopoidal defenders, and plucked the wriggling, armoured invader into the sky.



Lodz looked at the choo mutation clasped between his two fingers. Its powerful, scissor-like manipulators snicked and closed continuously, but the Cardinal kept his fingers well back from those. He rose from his inspection of the Tree and turned to Niandankoro and Ksobi.

‘Classic example. Note the outsize offensive weapons. Something like those of soldier ants or scorpion. Also note the aberrant colouration.’ Lodz manipulated a waiting resource window, sitting cool and black-intangible against the verdant, hot greenery, and assembled a nchoo infection, delivering it through the pockets at his fingers.

The hostile stopped wriggling.

The three Cardinals were on one of the nameless islands of the Lilaan microarchipelago. They were cataloguing the effects of the nchoo mutations.

‘I believe we should head toward the centre,’ said Niandankoro. ‘Any Tree populations badly affected will be in the older stocks, and that’s where they’ll be.’ He began to move away, his head hunched into his large shoulders but stopped and turned when he heard the voice of the Cardinal Ksobi.

‘Lodz, you will not need that.’ Ksobi was standing with his hands on his hips, his dark face stern, looking at Lodz intently. ‘It is a *violation* .’

Lodz was blankly morose, his wet slate eyes clear under his wispy, sandy hair. ‘Nevertheless Ksobi, I will have it.’ He turned his head to glance at Niandankoro and looked back at Ksobi with gloomy intensity. Perched on his shoulder, a wiry-looking microfactory weapon, slaved to the Cardinal’s resource, moved silently with his eyes, tracking what he saw.

Ksobi snorted his disgust, his small, taut body radiating disdain. ‘That weapon is an *affront* to the ecopoesis, Lodz. Choo will not attack Cardinal.’

Lodz pursed his rubbery lips. ‘Choo should not attack choo Ksobi, yet it has happened.’ He paused and blinked. ‘I do not relish dismemberment, even if you apparently do.’

Niandankoro quickly tired of the exchange and chopped a blade of hand downwards. ‘Enough!’ He glared at his fellow Cardinals in turn. ‘Ksobi, accept the necessity. Lodz...’ He came closer. ‘Exercise restraint.’ He turned his back without another word, pulled a machete from its sheath and walked, hacking, into a wall of green.

Smoothly, silently, the microfactory weapon tracked the blade as it fell.



‘She’s running,’ explained Rineanna, focusing her eyes outwards from the blank, iconising window.

‘Ah,’ said Hechi, understanding.

‘Look,’ said Shaowu, pointing.

The Cardinal was standing before a portion of the huge diamond transparency fronting Hechi’s home, looking out and down onto the white-shrouded Plunge plain. Some kilometres distant, a black dot was headed toward them over the frozen surface, pursued by a larger, darker mass. ‘One’s on its way.’

Rineanna became businesslike. ‘Good.’ She stalked over to Shaowu’s side, keying a resource window

for magnification optics as she did so. She was silent for a moment, her vision temporarily augmented. 'There are 20 in the pursuing pack. Good. That should be enough.' She gave a little yelp, clapped her hands and ran out of the room. She re-appeared moments later, her face bright with excitement. 'Coming?'

Shaowu smiled. 'I'll watch from here.'

'Me too,' said Hechi.

'OK.'

Hechi drifted towards Shaowu's shoulder and took his arm in her own. She gazed down onto the white expanse of the Plunge. The pack, and its solitary prey, were coming closer now. 'The same colouring.'

Shaowu nodded. 'We should be able to use that to identify the mutation, you know.' His words revealed his own frustration.

'I know my friend,' Hechi counselled. 'But we have not.' Rineanna, Hechi and Shaowu had tried, and so far failed, to identify the viral nchoo responsible for the mutation in the Mammoths. Hechi waved a hand, indicating outwards. 'This is a good start.'

Shaowu smiled wryly and stroked Hechi's hand fondly. 'I know.'

The two Cardinals fell into silence.

The nchoo mutations had become more severe since Rineanna first began to have her suspicions. In only a matter of weeks, it seemed, mutations had begun appearing in many choo populations, mostly the smaller forms - no Bus mutations had yet occurred - with the exception of the Mammoths. The solitary machine racing out on the Plunge was one of the latest.

When she first arrived at Hechi's home in the Plunge, Rineanna had spent some time coding and assembling a tailored, viral nchoo complex and had it distributed via carrier choo constructs, which infected every Mammoth they encountered, passing on an engineered instinct to *herd*. The effects of that nchoo infection were now in evidence out on the plain.

'Look, there she is,' Hechi said.

600 metres below, a Raptor sprinted out onto the white Plunge, the machine ebonysharp against the frozen water, on a collision course for the solitary, blue-charcoal Mammoth hurtling towards it. The pack of other machines in pursuit was gaining, now only 500 metres behind their fleeing quarry.

Rineanna's Raptor stopped two kilometres out from Hechi's home. Standing comfortably within the warm carbonspinging, she watched with unaugmented eyes as the tiny dot of the mutation came towards her. A resource milliradar tool clocked its approach at 75 metres a second. She released one of the Raptor's access gates and flexed her hand: the machine grew skittish, aware of the approaching Mammoth and eager to get out of its way. But she wanted to test the morality of the fleeing Mammoth.

*Is the ecopoesis still ingrained? If it is, it will avoid me at all costs. If not...*

Rineanna did not consider any other possibility as even remotely probable. She replaced her hand on the moulded carbonfoam grip, feeling for the moist access gate and re-entered the machine consensorias.

She looked up.

One moment, the Mammoth mutation had been a small smudge half a kilometre distant. Now, seven seconds later, it leaped over her as a dark, flashing expanse, missing the top of the Raptor with only centimetres to spare, a boulder in flight. The smaller machine was almost bowled over in the wake of its passing and Rineanna was engulfed by a hot wind of burning cinnamon and sage, the sudden, explosive exhaust of air choking her.

She hardly had time to think - a matter of seconds only - before the pursuing Mammoth pack, looking like a wall of bouncing black boulders, broke ahead of her and split in two to avoid collision. The huge machines thrummed past her, a low, powerful susurrant emanating from them as they leaped off in pursuit of the solitary mutation, and where they landed, snow melted with the heat of the departed appendages.

*Intellectually* of course, Rineanna had known that it *might* happen but she had simply not *believed* that it would. She realised she was deeply shocked.

*It could have killed me!*

From necessity, because of their size and power, Mammoths were highly ordered machines, the morality of the Novagaian ecopoesis deeply part of the choo Host. They were constrained within tighter behavioural attractors than other choo forms constructed by the orbital. Normally, that is. For the Mammoth mutation to be so careless of her safety was a tremendously worrying development. The nchoo mutation infecting the Novagaian orbital Tree populations had, it seemed, changed more than just the appearance of choo constructs. It had reached in and corrupted the very morality of the ecopoesis too.

Far above, Shaowu and Hechi watched and cried out as the Mammoth mutation leapt over the small dot of the Raptor and bounded away. From their vantage, they could see the geometry of the pursuing Mammoth pack. Arranged in a tightening hemisphere, the pursuing machines were herding the mutation up against the upcoming cliff wall. Belatedly, the mutation seemed to recognise the tactic and veered sideways with a sudden burst of acceleration, intending to evade the encircling cup of machines. But the pack anticipated and accelerated to cut the option off. The mutation swerved again, in the opposite direction this time, and met a similar wall of bouncing, coal-black forms. The cliff wall was approaching very fast now and unable to do anything else, the mutation slew to a stop, its great motile appendages ballooning with the force of the huge deceleration.

They lost it there. 'Let's go out,' Hechi urged.

When they emerged onto the high balcony, the Raptor carrying Rineanna was just approaching the pack. The Cardinals peered downwards. Almost directly below them, the mutation prowled slowly back and forth, penned within a wall of its own kind.

'It could easily leap clear, but doesn't,' Shaowu noted. 'Good sign. A Mammoth should always respond to the authority of numbers.'

'Just as well.' Hechi commented.

Down below, Rineanna looked at the mutation sadly. Up closer, and at comparative rest, she could see the flaws in its construction: thin appendages, an unpleasant bubbling over the outer carapace and of

course, the aberrant colouration. Familiar as she was with the olfactory component of Mammoth nchoo, she could even *smell* the mutation, the rank undertone to the clean, burnt sage. She invoked a resource window from a waiting line of icon tools, bringing a weapon online. She looked out at the mutation, thereby aiming the weapon, and then keyed at the resource window, thereby firing it.

A tiny dart punctured the outer carapace of the mutation, releasing diagnostic nchoi, associated Fat reserves, and tailored viral nchoo, instructing the machine to power down. The mutation became docile and the other machines gathered about it, reeking scorched cinnamon.

‘Well, now we can at least get somewhere,’ said Rineanna to herself, happy to be able to work but saddened simply by the *presence* of the mutation. She accessed the choo Host of the Raptor and urged it forward, giant walls of carbonmuscle rising up around her.



The path was woven Tree root, dry and bleached the colour of ivory beneath her feet, taking her alternately under arching cathedrals of verdant flora then back out onto the cliff edge, blinding bright after the dappled vegetable shade. Away to her right in the middle of the Chapel Halls basin was a circular microplateau, and extending upwards from its centre was Tooktah, the Tree of Trees. Tooktah was the heart of Chapel Halls, a place for meeting, entertainment, healing and guidance over 1,500 metres high. Like some vast, variegated cactus, the enormous Tree extruded thick spines from its warped and bulbous central trunk, each huge thorn in turn sprouting its own smaller platforms, balconies and ledges. Tooktah flared at its very tip to form a single, flat umbrella. From Salisbury’s distant vantage, the umbrella looked delicate and wafer thin, balanced precariously on a thin stalk, whereas in actuality, it was 80 metres thick, and very firmly anchored by 50 metres of tensioned carbonsponging.

Salisbury ran the 2,000 metres of the cliff-top path in 198 seconds before diving back into the dense woods, her breathing fast and even. She startled a timid choo machine as it tended the forest wall - the single masticulatory appendage moving sedately over the encroaching vegetation - and sent it crashing into the forest leaving the smell of sap in its wake.

‘Some water please Hilary.’

The resource extended a small tube across her cheek and into the corner of her mouth and expelled a measured quantity of a sweet nutrient solution from a reservoir on her shoulder blade. She drank gratefully, breathed deeply, relishing the feel of the wind in her sweat-soaked hair. She ran with no pursuit, although as always, neat white alphanumeric on an intangible, black resource window clocked her speed: 9.91 metres a second.

A slowish gallop.

Obliged by their genofixed altruism to spend regular periods of time in the Tree of Trees, some Cardinals such as herself and Malvern had made the Chapel Halls basin their home. Although they assumed no

governmental role to speak of on Novagaia and occupied no formal place in the ecopoesis, still the Cardinals were often sought out by native Novagaiaans and others, the occasional Trippers, for advice and guidance. Chapel Halls was where they could always be found.

Salisbury had felt the need to return ever since her meeting in Maymaneh with Manchester and the young Sesquoian, Melie. She had been aware of the Third generated component of the sudden compulsion. Anticipation was one of her most finely honed skills, one of the things that made her a good leader. Salisbury kept metacortical copies running continuously, and configured her own specialised interpretation demons to execute an almost constant penetration of the event horizon of her Third-augmented mind, but still, she was still not totally aware of how she came to know the things that she did.

She ran now, to quell a feeling of surging, knotting anticipation, aware of herself trembling on the brink of a prescient precipice. *Things are really beginning to move*. It was no one incident that betrayed a deeper significance: the arrival of the human-Cardinal Melie on Novagaia, betrayed to Salisbury by her distinctive Third signature - *metacortical development in the human genome*? The thought staggered her - the elusive nchoo mutations, the utterly strange disappearance of Oaxaca. All of these were significant events. But Salisbury did not factor only significant events into her thinking. She scarcely even worked with facts, in a sense. Among Cardinals, Salisbury was possibly the least human, an aspect of her very nature fundamentally denied to the simpler, human understanding of choo and choi, part of her consciousness permanently existing in the informational underweave of the Cascade.

Salisbury ran, and she thought, the two activities conflicting.

The path dove into the forest before curving right, paralleling the cliff path around the rim of the bowl. The woven Tree root path widened beneath her feet, the forest backing away from its margins. The light changed as the space around her became bigger and she dawdled with the pleasure of it, feeling herself alone and communed both at once.

An auxiliary window in the upper right of her visual world birthed two sparking icons, which pulsed angrily, demanding her attention. She backgrounded them. *Let them wait*. But then, 30 metres down the path, she relented. One of the icons expanded to a flat grey window but remained blank on her instruction. The auditory tap chimed.

‘Audio only, huh? Where are you Salisbury?’

‘Chapel Halls. What do you want Rineanna? I’m running.’

‘Oh. Why didn’t you say?’

‘I did.’

‘Sorry. Bye.’

Salisbury called down the second icon. It bulged and spat a flat, grey window.

‘I cannot see you Sal-sah,’ said the voice of Nyahua.

‘I’m running Nya-sah.’

‘Oh. Many apologies.’

Salisbury snorted as her resource terminated the window. 'Hilary, divert all incoming communications into a buffer for the next...' She considered a figure then revised it upwards. '60 minutes.'

'Complying.'

She tried to settle into her running, using the physical exercise as an aid to mental hygiene, shaking loose old associations and redundant hypotheses.

*Oaxaca.*

She pondered what she knew.

*The becoming of Oaxaca. Becoming what? And how does a micro Dyson sphere become anything anyway?*

She tried to let her mind become tranquil, to let herself become only her lungs and her feet and her legs merging with the woven Tree root, connecting with the living intelligence of the orbital. She failed, great swells of postulates, questions and interpretations making the ocean of her mind foamy and turbulent.

*Oaxaca.*

Above her, the verdant cathedral began to sag and close in. The path began a slow bend, turning once more towards the cliff. She slowed and jogged for a while as the forest gave way to bright, warm Sol and the enormous, sweeping form of the Tree of Trees became visible once more, rising high into the air above Chapel Halls. She accelerated, her eyes fixed doggedly ahead and sprinted along the four kilometres of open cliff-top path, smiling at the open, efficient operation of her lungs, the powerful pump of her heart, the wind cool at the top of her mouth.

Salisbury loved running.



The arboreal machine mutation moved noisily through the upper reaches of the forest canopy, a tripedal, ashen-whorled form leaping erratically from branch to high branch. It had no pursuit but moved as if it had, flinging itself away from unseen foes through the dense foliage, smoky grey carbonspinging ballooning with the force of the crazy, headlong flight.

The machine missed a jump.

A grasping appendage ripped leaves and bark from a thin branch but this did not hold or significantly slow the machines fall. It twisted, snapped a second appendage out and grasped hold of firmer support, the nchoo innervated carbonspinging stretching hideously with the demands being placed upon it. The

small machine swung dizzily down and was then snapped up on the ascending branch, but it retained its hold as the oscillation damped. Gripping with its third appendage, it clung to the branch, shivering over ribbed lines in its bleached, ashen surface.

Massing less than five kilos, the machine did not remain stationary long however. Seeming to sense the approach of invisible predators it skittered quickly up toward the centre of the tree, leaping with swift, nimble bounds, careless of which digit led. It bounded to the far side of the tree, raced along a long, tapering branch and leaped towards the next tree with a surge of speed as if in a sudden terror.

The choo machine continued to leap and bound an erratic, crashing course through the forest canopy, startling families of sleeping prosimians and upsetting the hooting morning chorus of *Uakari*, the extravagantly scarlet simian faces bared with open, warning fangs. Then it missed a second jump, this time more serious, over a small valley.

The mutation did not even come close.

Flailing its three limbs uselessly, it fell on an arcing trajectory with an improbable termination at the back of the Cardinal Ksobi's head.

Niandankoro turned just in time. He shouted and pointed. 'Ksobi! Above you!'

Ksobi turned quickly around at the hail and hunched himself down. The machine continued its descent only seconds away from impact, but Ksobi saw that it would land some metres in front of him. Then the descending machine mutation was suddenly, violently, kicked back and sideways by an unseen force. It shattered, coughing thick, sooty smoke and struck the ground in flaming pieces some metres away.

Lodz smiled morosely and watched as Ksobi climbed to his feet. The microfactory weapon did not seem to have even fired. Lodz spoke with irritating smugness. 'Choo will not attack Cardinal, eh Ksobi?'

Ksobi clenched his teeth, his face heaving, totally appalled at Lodz's action. He looked behind him despairingly at the carnage. 'You should *not* have destroyed it!' He shouted and pointed with a trembling finger. 'It was not *attacking*, it was *falling*!'

Lodz did not reply, his face unsmiling. He stared for a moment at Ksobi then turned his head and walked away.



Salisbury allowed herself the luxury of 10 delicious minutes of fragrant submersion, swirling the hot, oily water with a languorous hand, before inspecting the contents of the message buffer. It held several dozen, but only one from Nyahua.

'Gracious Sal-sah,' he said, from the resource generated image. 'Good running?'



Salisbury rubbed at her calf. ‘Not really Nya-sah. Too much thinking.’

‘Ah.’

‘Is there a problem Nya-sah?’

‘No, Sal-sah. No problem. Interest maybe.’

Pause.

Salisbury cocked her head. It was unlike Nyahua to be circumspect or whimsical. ‘Such as?’ She reached for a bottle of a green, detergent gel and squeezed it, smelling clean apples. She began applying the gel to her arm, rubbing down from her bicep to her wrist and back up again. She replenished her hand with another glob of fragrant gel, holding the bottle in one hand but then paused: the auditory tap was silent. ‘Nyahua?’

‘Sal-sah...’ Nyahua sighed. ‘Builders swim the waters of Inhoplae.’

Salisbury was so surprised she dropped the bottle of gel from her hands. It plopped into the water between her legs, leaking clear, green detergent, the leading edges of the spill becoming misty with minute bubbles of air. A barrage of questions became entangled in Salisbury’s mind in their rush for articulation: in the end she asked none of them.

‘One hour,’ she croaked. ‘I will be there in *one hour* Nyahua!’

‘Yes, Sal-sah,’ said Nyahua gravely. ‘I will make *Kabura no Ohitashi* .’

## Chapter Forty Nine

Melie did not really enjoy the time the Caravan spent passing through the Afines, although seeing the *Three Women* was the exception. The sculpture had been located higher up, in one of the shallower, connecting valleys and although it had been a bit wet then, it certainly hadn’t been *cold* . And the Afines *were* cold.

Melie did not like the cold.

Strung out in a straggly convoy extending five kilometres from nose to tail, two days out from Undine, travelling along the floor of one of the great Afine canyons, the Caravan had encountered the vagaries of the local weather systems. The Afines were wet. And windy. And cold.

*Pretty fucking gloomy basically.*

Ever since arriving at the bottom of the great ramp leading down into the canyon, Trees throughout the

machine herd had sealed themselves against the frequent mists and squalls, the water in both liquid and frozen forms, by flicking thin, flexible transparencies, like eyelids, over entry ports, snugs and doorways. Melie still had her balcony, but most of the time she couldn't see shit from it and besides, it was cold and the air was full of stinging, icy water, *all the time*. Fast water too, wind blown, always from the right: the famous horizontal vortices of the Afines hurling particulate water at the lumbering Trees with monotonous, directed regularity.

*It's worse at night. Or maybe it wasn't. Shit, it was bad all the time.*

Confined to the innards of the snug - sofabled, bathroom nook, heap of clothes - and deprived of the opportunity to watch the comforting regularities of the caravanersii about their daily life from her balcony, Melie decided to walk the Caravan and look for it instead. But this was not quite as simple as it first appeared to Melie that it surely must be.

*Well, shit, I can just walk through the Caravan and see, yeah?*

The first Tree she crossed to was remarkably like her own: a long, open interior, twice her height, leading off regularly to other large spaces, branching again into any number of personal snugs. The innards of the Tree was not crowded, although there were other caravanersii about, all characteristically dark, distinctly Novagaian. She wandered into some of the branching spaces, watching the few people that sat or walked through them, hearing music from the snugs, the occasional laugh, the muted, musical speech of caravanersii. She exited the Tree via one of a number of small ports, jumping a little as the transparency pulled open, snicking back into the wall of surrounding carbonspinging.

Outside, the air was still cold, but the wind seemed to have dropped a little: Melie scampered across the open bridge, crossing into the next Tree, finding it very similar to the last. She was headed out of the centre of the Caravan, she reasoned, and towards the back of the choo herd.

*Why aren't bridges ever covered?*

The third machine she came to stalled her. There was no single, uniform interior, instead, a dozen bright, pine-striped arteries, each leading into the innards of the Tree. She hesitated, waiting to see if anyone would emerge: they did not. Her tail curled up to her waist, and she picked at its tip, before spotting a sprightly octogenarian who walked past her and disappeared into one of the arteries to her left. On an impulse, Melie followed.

This was her first mistake, as Melie walked straight into the middle of a Crèche. Despite her best smiling efforts at retreat, she quickly became embroiled with a horde of little people all of whom insisted upon showing her various assorted drawings, cuts, paintings, toys and genitals with enormous enthusiasm and high squeaking voices. She had to be rescued by the sprightly Crechem, who waded into the sea of small bodies and extended her hand, taking Melie's arm, drawing her away: she smelt of flowers and mint.

Melie grinned sheepishly. 'Sorry, I'm a bit lost.'

'Don't you worry lovely,' said the old Crechem with a wave of her hand. 'Micha, don't, please... Easy mistake to make... Now Jinga, you know what will happen... There!' The elderly Crechem had succeeded in guiding Melie to the door. 'Now my lovely, where were you headed? Maybe I can help?' She smiled at Melie kindly, and rubbed her hands together.

'Well, I don't know. I was just walking really!' Melie laughed. 'I only followed you because, well, you were there, sort of.' The Crechem smiled and nodded her head, content to let Melie continue. 'I'm a bit

new to the Caravan you see, and I was just looking for...' Melie waved her hand. 'Well, a bit of life, you know? Like see what caravanersii do all day, cos this weather's *shit*, isn't it?' Melie raised a hand over her mouth. 'Ooh, sorry.'

The octogenarian woman appeared not to notice the expletive. 'Well now my lovely, let me think.' She tipped her eyes upwards for a moment. 'Ah yes!'

Melie's second mistake was to take this advice, ending up desperately trying to extricate herself from a sincere invitation by a dark, reedy man with an enormous beard, his crotch swaddled in a complicated towelling affair, to participate in an erotic movement class. Ordinarily, Melie might have been more than tempted, but when she peered into the cushioned, creamwhite room, she saw several figures, all bearing an unnatural appearance to her invitee - thin and dark, long beards - a number of whom were standing on one leg, and all of whom had chosen to remove what little clothing they possessed, presenting her with parade of limp, greasy organs. Melie rather went off the idea.

Her efforts were rewarded in the fourth Tree however, when Melie met Debroeket and Roena.



It felt, obscurely, almost like cheating.

Tennys could simply invoke his resource, key a window, and the numbered list would scroll virtually before him: dates, a brief synopsis of each event or occasion and its location. Keying any one of the numbers caused a hypertextual elaboration to expand from it, his own annotated notes of the pseudo-memory. Then, keying once more at the window would instruct the nchoo infection to unroll that particular artificial meme complex within his phenomenological awareness. A simulated recollection of another life: that of Malvern on Earth, before the human hegira to the new worlds of the Koyculture.

600 *years* ago!

It was, he decided after sitting through the first two such artificial memories generated for him by the nchoo narrative engine, an *immensely odd* experience. It left him disorientated and disconcerted. He could sit back, let his mind wander, key at his resource for one of the meme complexes and... he would *remember!* He would remember himself being in places he had never been to and talking with people he had never met and saying things in a language he did not understand.

It was all simply *immensely odd*.

The synthetic nature of the nchoo generated memories was betrayed most obviously by the metaknowledge that *this was not him*, although it still felt like, to Tennys, a remembrance of himself.

*Odd.*

There were other things: a frustrating linearity of narrative, and an inability on his part to halt or interrupt the mnemonic sequence once it had begun to unfold. He suffered, too, from a lack of knowledge about Malvern. Often, he would experience the affective component of recognition - the *aha!* feeling - but be unable to name the person or thing in the memory that he, Tennys, knew he, Malvern, had remembered and recognised at the time.

*Odd.*

Fortunately, Tennys did not have to sit through and individually remember each one of Malvern's Trips because, within the artificial meme complex designated number 19 on his resource window - recollecting himself walking down a blinding bright, reddusty road breathing air hot and sharp with pepper and decay and with Ushogbo by his side - he remembered who *that person* was.

Or at least he thought he did.

He crashed out of the fragile, synthetic recollection. 'Heavy shit!'

*Ushogbo's mother!*

The name came to the tip of his tongue, teetered upon the brink of enunciation, then receded.

*What was her name?*

He struggled to recall the name that he could feel just beyond his ability to pronounce and... It was with a peculiar, plunging sense of dismay that he realised that he, in fact, didn't know the name. He slapped himself around the head several times with both hands.

*Of course I can remember! It's... it's...*

'Shit!'

Straining to recall, he realised that neither could he recall an appropriate image to go with the name.

'Shit!!'

He gripped his hair with both hands and a slow, strangled scream escaped him. He tried to get a hold of himself.

*OK, OK, let's do this sensibly.*

He keyed at the resource window again and selected number 19. He closed his eyes, sank into the mnemonic trance and remembered a dusty-red, blinding-bright road, and hot, peppery air and next to him, the diminutive, ebony form of Ushogbo. He *knew* her, knew her face: the tight hair, the pinkivory surprise of her smile, the high cocoa forehead. He could *see* her in his mind's eye. This was *Ushogbo* and she was talking to him but he must not have caught all that she said, the hot wind taking the first part of her utterance away from him.

'...ill, my friend. She will not see the next moon.'

'My sympathies friend.'

*There!*

He surged out from the weak mnemonic trance with a visual recollection of a face and a name on the tips of his eyes and tongue.

*Close. Oh, so close!*

But once more, only second afterwards, he realised with anguished dismay that the name was not there.

‘Shit!!!’

‘What’s the matter with you?’ Manchester asked coming into the dim, messy interior of his Tree snug.

Tennys betrayed his frustration by snarling his reply. ‘I can’t remember her bloody *name!*’

Manchester clasped her small hands neatly in front of her tummy. ‘And whom might that be?’ she asked prettily.

Tennys ran his hands through his hair and scratched his chest with a quick hand. ‘Ushogbo’s mother! I can’t remember her *name!* I was walking down this...’ Tennys stretched out a hand in front of him and narrowed his eyes. ‘...Long, *long* road, all hot and dusty and red and *Ushogbo* was with me, and...’

Manchester hummed. ‘You have infected yourself with a narrative engine.’

Something in the Cardinal’s voice made him lie. ‘No I haven’t!’ He became instantly baffled with his own simulated outrage. Obscurely, he developed the terrible feeling he had done something wrong. Quickly, he became guilty, then shrugged expansively and dropped his eyes. ‘Yes, I have.’

‘I see.’ Manchester drew a deep breath. ‘Well, you only have yourself to blame then.’ She sauntered around the small snug, pausing to pick at a garment between the very tips of two fingers before turning round again.

Tennys had been scratching at his crotch and quickly tried to obscure the action, sliding his hand down instead to his knee and rubbing at it vigorously. Feeling foolish, bent over at the waist, he tried to move onto the offensive.

‘Look Manchester, what do you mean I’ve only got myself to blame? Why have I only got to blame myself for *anything?*’

‘Doesn’t make sense!’

Tennys faltered and lost his way. ‘Oh. Uh...’

Pause.

He gave up. ‘Alright, so what’s so bad about a narrative engine then?’

Manchester re-clasped her hands and looked at him seriously. She fluttered her eyes in an exaggerated manner and broke into a smile.

‘Well, you *see* Tennys, a pseudo-memory is a *designed* thing, intended to give only the *flavour* of a

recollection. Most often, because they are simplest to reconstruct, nchoo code for memories of visual and auditory perceptions. But the meme complex is not a totality, do you see? A real memory - though such a singular notion is a nonsense, of course - has innumerable parts in other parts in other parts: it is inherently a *composite* thing. A narrative engine *is* able to recreate a fragment or a *taster* of such a composition, but in such a case, the active web of associations that would normally accompany a genuine, remembered episode - those things that literally *are* parts of the memory - are simply not present. And so you are experiencing the result: fleeting mnemonic hallucination. Remembrances of things unknown.'

Tennys stared dumbly at the small Cardinal. He shook his head and crossed his arms. *Mnemonic hallucination?* 'What, like...' He prised a hand from the crook of an arm and waved it about. 'So someone might *think* they remember something, like a...'

'Like a name.'

'Uh yeah, like a name. But they don't *really* remember it. They just...'

'Think they do.'

Tennys coughed. 'Right.'

Pause.

'But it's so *annoying!*' he continued, in a whiny voice. 'I can *remember* it at the time. I mean, just at the time when Ushogbo says, uh...' Tennys waved his hands. 'Says something anyway, I don't know but I *know* that I know the name, except...'

'You don't. Yes. As I said, mnemonic hallucination. You will have to ask Malvern.'

Tennys brightened immediately and slapped his forehead with his hand. 'Of course I can! If this is his memory, then he will know who it is! Wah!'

Manchester looked at Tennys with a broad smile, radiating amusement. 'Why are you interested in Ushogbo's mother in any case?'

'Ah, well.' Tennys raised a finger. He realised he had not spoken with Manchester for some days, since the revelation of Melie's Cardinality some hours out from Undine in fact, and even then not about history. He became animated. 'Well, I've been thinking a bit and reading over some stuff that Hub found for me and...'

'Why don't we go outside and talk?' Manchester surveyed the dim innards of the snug and sniffed delicately. 'Get some air?'

The two of them left the snug and headed upwards. They found a small communal space towards the roof of the Tree, where veined transparencies revealed the lolling tops of other machines behind them, stretching away back down the Caravan. Tennys talked animatedly the whole way about his researches, his subject engaging him, making him seem dynamic. He told her of his increasing fascination with Ushogbo, with the instigator of the first Trips, author of the Cardinal theosophy: *what kind of person had she been?* He told her about the gaps in the Histories, the missing documentation, or even mention, of Ushogbo's birth, of where it happened, or when, or the name of the woman that had carried the Cardinal foetus to term through 46 weeks of pregnancy. He told her about his discovery of the Choo

Institute and about the barely hinted at role of this organisation in the raising of the cetacean mind from its dreamtime. He told her where it was headquartered: Ushogbo, in the A Ideolog. Ushogbo, the only Cardinal to disappear, the only Cardinal without a biological parent, the only one originator of the theosophy that Tennys admired so much. There were so many suggestions, so many hints, that they left the outline of themselves, betraying a deeper pattern. Tennys could almost *smell* the connections.

‘To what?’ Manchester asked. ‘With what?’

‘To each *other!* *With* each other! Look...’ He flicked his eyes up to a resource icon and watched it expand to a black virtual space. He thought for a moment and then keyed for the document he wanted. ‘It says in *The Rise and Rise of the A Ideolog* that the Choo Institute, right - Ramakastran describes them as an "ecological think-tank" - did *biotechnology* ...’ Tennys glanced down at the small Cardinal, as they headed towards an open table. ‘That’s like making simple choo machines.’ He was unsure of whether he was being patronising but Manchester simply nodded, indicating for him to continue. ‘So that’s one connection right. I mean, *choo* machines and the *Choo* Institute, right? Now, I’ve found other references...’ Tennys keyed his resource with easy familiarity, looking for the synopsis of the hypertextual chain he had followed from *The Rise and Rise of the A Ideolog* to the dull terseness of *The Nkombi Gerontological Legislation: Effects and Effectiveness*. ‘That indicate the involvement of the Choo Institute in all spheres of the emerging A Ideolog. Agriculture, politics, science. They were *right there*. And the A Ideolog were the first to recognise the legitimacy of the metacetaceans before the Great Dying began...’

A caravanersii toddler came rushing headlong toward him, shrieking to evade the capture of a pursuing Crechem, a young woman, with whom Tennys collided. He apologised to her profusely and she insulted him amicably, then took off after her diminutive quarry leaving only her perfume. Tennys lost his train of thought immediately and found himself in a space, evoked by the musk of the caravanersii, that was warm and red and plump with cottonwool Himochee softness...

He felt himself get hard.

‘Tennys?’

He grinned and clasped his hands behind his back. ‘Yes, yes.’ He tried to be serious. ‘Where was I?’

Manchester smiled warmly up at him. ‘And who with I wonder?’ She came up a table and sat down. ‘Anyway, I still want to know why you are so fascinated by Ushogbo’s mother.’

*Should I tell her?* he wondered. About the voice telling him about *that person*. And how, maybe now, he thought that *that person* might be Ushogbo’s mother?

‘Oh, you know.’ Tennys waved a hand, affecting nonchalance and tapped his finger against a nostril. ‘The dose.’



Warm and luxuriant after the hot bath, Melie turned over on her side, breathing deeply, relaxing into the deep, warm covers of the sofa bed. Outside, the Afines were stormy: she could hear the wind-blown precipitation rattling in irregular surges and remissions against the flexible Tree awning sealing the balcony. She found the noise curiously comforting: to be herself, safe and warm in the small Tree snug, whilst outside all was cold and windy, felt good.

*Glad I'm not out there.*

She snuffled herself more deeply into the covers and drifted lazily back over her day: the elderly Crechem, bright eyes, dark skin, her warmth, the voices of children, the sight of a thin, dark mal bowing over joined hands, a hoop of off-white towelling bulging comically about his middle. She smiled, remembering the gentle rolling motion of the Tree, the cafe she had found, the caravanersii she had met, the two young fems, about her own age, the enlivening realisation of shared humour. She laughed low in her throat, remembering the two of them: Debroeket and Roeena.

*Deb and Ro. Nice fems.*

Rain surged against the awning over the snug balcony in a sudden, hissing impact, the low, irregular whining of wind bringing her more into wakefulness. Melie wondered whether the *Three Women* liked rain and concluded that they probably did. Impressions of the sculpture were still with her.

*Amazing.*

She did not know quite what it was that had captivated her. She thought it might be because... well, because the women were *women* and because they were also so *natural*. She had always listened for the voices of things: on Sesquoia, for the voices of the squikeys and marmosets and scorpion. *On Novagaia?* Maybe it was like those three vegetable women were talking to her. *Yeah*. They were like, Novagaia made *real* for her, so she could really *see* it.

She drifted back towards sleep and imagined seeing *The Watching Woman* getting up and shaking the kinks from her long static limbs and turning to see *The Washing Woman* rising from the waist, laughing and standing graceful and huge as *The Masturbating Woman* reached a rustling, creaking climax causing orchids to blossom over her open thighs nourished by her dribbling, golden nectar.

The Blit came on very slowly.

Drifting between wakefulness and dream, long before she herself recognised it had begun, diagnostic nchoi - part of the resource augmentation ordered upon her by Manchester whilst at Escher - reported the distinctive neural activity of metacortical tissue via an urgent, pulsing icon. She sat up quickly, the dream images lost, sleep falling from her, feeling the familiar, remembered fear. She considered calling Manchester: the Cardinal was only in the next snug. But she didn't. Instead, she unclenched her hands and took a deep breath, then several more, encouraging her heart to slow. She recalled *The Watching Woman* and the elegant poise of the smooth, woven skull and the asymmetric hang of her breasts and smiled, warmed by the feeling the vegetable sculpture had the power to evoke in her. She closed her eyes and allowed the Blit to wash over her, going with the nonfall into the ticking, murmuring nothingness of the informational Cascade, as spaces opened below her and twisted bundles of lines stretched away to infinity and wriggling knots big as suns came all together in the same place.

The Blit passed.



Melie breathed, reassembling herself internally, aware of the Third perceptions sluicing away down an inaccessible drain in her mind.

*Only a little one. A little Blit.*

She suddenly felt very pleased with herself and put her hands out behind her to support herself. 'Good shit!' She deliberated for a moment. 'Calls for a smoke, I reckon.' She leaped from her bed and palmed an exposed Tree root for light. She hunted about for her pipe and her pouch, poking randomly into the heaps of clothing distributed round the snug. The air was not cold inside the snug, but then neither was it particularly warm, and Melie shivered without her clothes, her tail curling up her back, hugging her arms to her sides. When she found her pipe and pouch she leapt back into her bed, pulling the large, soft covering around her with a small yip, instantly savouring its trapped warmth. She tipped some ready-rubbed leaves from her pouch into the bowl of her little pipe - some of the Weed variant she and Manchester had picked at the pool on the Mammoths - and was about to apply a light to the fragrant pile when the warning Third icon flashed urgently into her phenomenology and the Blit washed away her world.

## Chapter Fifty

Enclosing a presently passive nchoi microfactory, the dense pellet exited the barrel of the miniature induction Gun at a velocity of 5,000 metres per second, headed straight up and away from the dark side of the anonymous micro-orbital. Six centimetres in diameter, the pellet reflected and scattered all incoming EM, speeding unseen and ballistic, for thirty seconds. Then, 150 kilometres from the collection of micro-orbitals that was Austerity, it split open. Nchoi foamed aggressively into the breach and began building, dismantling the pellet from within. The half completed microfactory initiated an internal diagnostic check 145 seconds into its flight, shed the remainder of its outer plastic carapace and foamed four mono-molecular petals into the cold vacuum. 193 seconds elapsed before the completed microfactory spat out a set of encrypted instructions, aimed very specifically at a secretive, cold temperature choi-spider.

Two seconds later and 975 kilometres from Austerity, an expanding balloon of high temperature gas was the only evidence that the microfactory had existed at all.



Toward the outer margins of Chapel Halls, at the far end of a gracefully arcing support, inside a large pod suspended above a small lake, with the Terminator flooding the chamber with the first warm Sol of the day, Carys lay in her bed, dreaming. The motif was familiar. She was both blind sculpture, and knowing Gaian sculptor, of herself, basking in the simultaneity of fantasy. She was soft earth and she was clear air, her hair the rustle of forest canopies. Stroked down the soft clay of her lines, her silken compost teased to moisture by the proud young Novagaia, she was both the rich earth and the cornflower sky. Brazen, whispering thickly into her ear and moulding the rich loam of her belly, Novagaia drank from her gushing spring. She became soggy fertile soil and a silvering whitening quickening expanse of open space and when she came...!

When she came it was Gaia who came, the whole earth trembling with her ecstasy, Novagaia drinking the musky libation.

Brock felt Carys' legs relax around his head, moved up her side and kissed her tenderly on the mouth. Carys wriggled voluptuously, smiled sleepily and stretched like a cat, flinging her arms out around her. 'You always do that and I *love* you for it.'

'Gracious.'



Hung invisibly 10,000 kilometres above the surface of the Novagaian orbital, the machine arachnid felt a message thrum through its intangible web. It snicked and wriggled and gathered the EM titbit to itself. Masticating with cold deliberation, the optical spider redirected the information squirt in tiny, sliced portions downward toward the parasite nchoi resource. The parasite assembled the portions of the redirected squirt and decoded the message. Then it began following the instructions, dismantling Fat reserves and reforming them, re-configuring microfactory production, mobilising molecular nchoi agents, building new weapons.



Carys made the first maquette of wire and clay, declared it unsatisfactory three days later and discarded it. The second one pleased her more, but it was still not right. She discussed her work with Brock.

'Look.' She fingered a ball of clay between her hands and indicated the quarter-sized, lumpen statue. She blew at an errand strand of hair. 'It's not her, is it?'

‘Well, let’s have a look,’ said Brock.

The two of them were in the studio at the top of the pod. One wall was clear and looked out over the lake. The space was cluttered with bits of wood, paints, tubs of clay, canvasses and brushes, pots and a hundred other assorted items. Carys stood in a small clearing in the middle of it all, enveloped in a drab, paint-spattered tunic. She put her wrists on her hips and watched as Brock leant forward, put his hands on his knees and peered at the maquette closely, moving round it, examining it from many different angles. He was a long time replying, then:

‘I’m not so sure, you know Carys.’ He rose and looked at his wife with undisguised admiration. ‘And I don’t think you should be either. It has her back...’ He slid his finger down the long, straight spine. ‘And the tension of her posture, which I think is one of her most defining physical characteristics.’

‘Her carriage?’

‘Yes. Yes, I think you’ve really captured something of her.’

‘But look at her leg!’

‘Which one?’

Carys took her hands from her hips, came over and began tugging and prodding at the clay of the offending right leg. ‘This one. It’s *dreadful*.’

‘Looks fine to me.’ The depicted figure was sitting, legs crossed, the right ankle resting on the left knee, with her back straight, the head held high and her hands resting on her abdomen. It was a difficult posture to sculpt and Brock was genuinely impressed with his wife’s attempt. He glanced sideways at her sceptical face. ‘No, really, it does.’

Carys snorted and slapped Brock on his chest. ‘Oh, you’re no good as a critic, you’re too nice.’

Brock laughed at the injustice. ‘I’m telling you the truth! Surely a critic should be honest?’

Carys laughed and turned back to the maquette. ‘Of course, but they should also occasionally be *nasty*, and you my dear...’ she reached for him with a clay-covered hand, wiped his forehead with it and planted a kiss on his opening mouth. ‘Are *never* nasty.’

‘Well, I could be, if you’d like.’ Brock went over to her and pressed himself against her, growling playfully. ‘How nasty would you like me to be?’

‘Hello?’

‘Did you hear something?’ Carys asked.

Brock was silent for a moment. ‘No.’ He returned to a mock-savage attack on Carys’ throat.

‘Hel-loho.’

Carys shrieked and laughed, slapping Brock with her hands. ‘There it is again! Brock, let me go!’ Carys squirmed as Brock’s hands slid down her back and reached for her bottom. ‘*Brock! Let go!*’ Trying to be stern, she became lost in a fit of giggles as Brock began sniffing noisily about her neck and ears.

‘Oh, not that, not the chimp!’ Brock hooted in reply causing her to shriek. ‘Argh!’ She broke from him and scampered out of the room. Brock followed her at a gallop on all fours, hooting and screeching. Carys raced down the broad, open stairs with a delighted yelp and had to fend off the pongid imitations of her husband as he caught up with her just before the pod exit. She danced onto the platform as Brock came after her on all fours, nipping at her toes.

Two figures were standing on the woven Tree root path.

Carys saw them but Brock did not. ‘Oh, hello.’ Carys gulped back on her laughter and then screeched as Brock, invisible to the two figures from their vantage, nibbled at her ankle. She ducked down and slapped her partner on his back. ‘Brock!’ She gestured with her head. He seemed to understand: at least partly. He upturned his legs and lay on his back, whining pitifully.

‘Hello,’ replied one of the figures with a small smile, a young man, slightly the smaller of the two.

‘Pleased to meet you,’ said the other, a female, slight and tall, dark-haired. She was an engineered arboreal.

‘Good heavens,’ exclaimed Brock, rising up from the floor, when he saw the young woman, struck by the resemblance. ‘A model, Carys! A model for Melie!’

‘That wouldn’t be Melie Inherdina would it? From Sesquoa?’ asked the young woman quickly, excitedly, looking from Brock to Carys eagerly. ‘She’s my sister.’



The information squirt from the machine spider contained instructions for the parasite resource: very specific, esoteric instructions.

In response, the Halflife’s microfactory began the ostentatious manufacture of new forms of weapon - brutal machine soldiers - while subtle, less obvious assassins began to accrue slowly and invisibly around crucial Limpet strongholds.

The soldiers immediately began a renewed, ferocious assault upon the Limpet barricaded inside the spinal column of the biological shell, attacking the stubborn, replicative Hub invader with phenomenal hostility. The Limpet responded by erecting tough, molecular armour around caches of functioning nchoi, accelerating the evolution of its own weapons production, and informing Hub of the renewed hostile activity. But this was merely a feint.

The assassins struck quietly and unseen.

Almost before it could muster a response, the Limpet was circumvented. Defences became non-functional. Molecular armour shredded, communications became diverted, deployments went awry.

Hub, and the Limpet, both came to the same conclusion - that the invaders were receiving almost magical help - far too late. Fatally compromised and incognizant of this fact, a shortish nanosecond burst of information directed Hub-wards was the last action of the stubborn nchoi Limpet as the Gromburg thing destroyed it.

Within microseconds of losing contact with the Limpet, a cloud of shard-like Hub weaponry - accelerated via induction Gun - were clotting the volume of air that corresponded to the Limpet's last known location just Antispinward of the Maymaneh Plateau.

It wasn't there.

Impossible. Unless the Limpet had been far more seriously subverted, and duped, than Hub believed possible. Could the Halflife have been feeding the Hub false location data?

The cloud of weaponry exploded outwards, initiating a rapid search of the surrounding orbital volume.

Nothing - except the ruined carcass of a Bus.

The Halflife had vanished.

## Chapter Fifty One

Seated upon a specially reinforced chair inside the spacious cabin aboard the *Ugly Bastard*, Nanashub was committing virtual atrocities upon, within a resource generated simulacrum involving, the Limited Awareness Personality Construct, Brian. In the simulacrum, the unfortunate Brian hung, dangling, in front of the inhumanly tumescent neomorph, impaled in the most awful way. Hideously priapic, smiling and gurgling, the large slit of his mouth widening over his squashed, ellipsoidal head, Nanashub reached forward and grabbed Brian's wriggling shoulders with hands the size of dustbin lids. The neomorph pulled the pathetic, ripping body deeper onto the protruding grotesquerie between his trunk-like legs, and sighed with horrific gratification as Brian's head left his shoulders with the force of the resultant thrust, a wet, ripping sound accompanying it, spraying a warm, arterial fountain in its wake.

An icon winked.

Nanashub looked down at the limp, ruined carcass apparently adhering to his monstrous organ. He keyed a window and watched the simulacrum snick away. The hideous tumescence lessened: the prosthetic did not emit fluid. Nanashub recognised the icon as that of the Hub. Smiling unpleasantly, he swiped at it and it bulged and spat the familiar Appearance. Nanashub spoke, the voice like rocks cracking in dark caves.

'I was just thinking of you.'

'Really? How nice.' The affable Appearance declined to notice the displayed, deflating prosthetic organ. 'Were they pleasant thoughts? I am concerned you see, because Hub knows that your stay has not been,

shall we say, optimal?’

Nanashub spoke: cold mud had now seeped into the dark cave of his chest. ‘Yes, very pleasant thoughts.’



Sliced into the soft sandstone cliffs on the Port shore of Inhoplae, Nyahua’s home was, like the Cardinal himself, a thing of both air and water. The upper sections were cool and open, spartan wooden spaces, bathroom and sleeping nooks buried in the cliff behind. The lower sections were warm and dark, flooded with salty, paletoffee water. Flocanalog was toward the top of the house, lost in thought, gazing out across an unbroken 120 degree arc of rustcreaming wash when Salisbury arrived.

With his hands clasped at his belly and his weight supported on his knees and shins as he relaxed into the orthopaedic contours of the chair, Flocanalog breathed the mineral perfume of the air breezing through 30 square metres of open window. He rocked gently, feeling utterly relaxed and furiously concentrated at the same time: a state he was not conscious of deliberately trying to achieve. His eyes were fixed to his left, staring to a point Antispinward and Starboard of him, 82 kilometres distant, just above the trench-mouth of Ushogbo.

*Metacetacean.*

The mnemonic reconstruction of the Inhoplae incident had been completed nine days after Flocanalog’s first meeting with Nyahua and it was as the Cardinal had suspected. So that, although aided by Maureen’s subtle computational interventions, he regained a clear, almost luminous, remembrance of the alien language form he had perceived in Inhoplae, still he had absolutely no idea as to the signification or denotation of it, nothing to provide answers to his questions.

*I am...?*

No amount of rehearsal or forced nchoi-assisted association yielded more than a sharper rendering of the *shape* of the communicative act, revealing only more clearly a syntactic skeleton entirely devoid of meaningful flesh.

Diving in a pseudo-Shell, he tried to vocalise the slippery concept but just whistled and clicked and shouted at the world. Deep within the machine sensorias, blending with the fleet mind of the choo Host, he raced around the deep Inhoplae basin, the pseudo-Shell re-configured along classic cetacean lines, flying and leaping effortlessly through the rustclear brine. He roared. He roared and he howled and he cried, whistling and chirruping, his legs flukes and his arms hydrodynamic flippers, babbling incoherently.

He believed he wanted to die.

To *not exist* .

Hardly aware of himself as a man at all, he felt longing for Marineris sluice through him. Deep yearnings for the liquid joys of the Shell life overwhelmed him. Nchoo interface with the aquatic choo machine was subtle and clever, but it was not *Shell* . On Marineris, he had thought and communicated with others of his kind, with friends and beloved Stapjeekha, through Shell languages, building *soundworldpictures* , weaving worlds of meaning from sound made form. But that had been another *him* , not this person. This person was only weeks old, born from a tank of oxygenated polyfluorocarbon emulsion. This *him* was the pale, weak biped that had been peeled away from the symbiosis with the Shell, losing two centimetres of cutaneous tissue in the process, where vegetable protein had met and blended with nchoo innervated carbonfoam. This him was forced to make do with fuzzy, distant contact with a choo mind, forced to burble like a child through clumsy, incoherent communicative acts, denied the flowing, liquid beauty of Shell linguageption.

*Metacetacean.*

*I am...?*

He had no answer to this question. Twice in two lifetimes, he had encountered a citizen of Water. The first in the guise of the cetacean - if it had ever happened? It hadn't happened to *him* , it had happened to *another him* , freeswimming the Shell life, so how did he really know? - and now the second... *metacetacean*? It was scarcely credible. Simply the occurrence of the event and his resulting amnesia were significant in themselves, but what did they really mean? For him, right now, they meant nothing. They were simply bizarrely improbable encounters that he had no way to factor into a weeks old existence. But for the other *him* , the freswimming Shell him: what did they mean for *him*?

He did not know.

In his regular dives in the pseudo-Shell, he sank into consensorias and cried out, clicking and whooping, hurling his pseudo-body through the thick water, calling to the lost in himself. His thoughts were turbulent. *Water did not intervene in the Koyculture. Metacetaceans on Novagaia! Nowhere, nowhen else* . He had asked Maureen to check. *Except to me, alone, in Inhoplae* . After prising himself painfully loose from the Shell, encased in which he might even have been able to comprehend, he alone had been contacted by a representative of the agency that had built the Koyculture.

And he didn't understand the message.

'Floc-sah. Forgive me.'

He turned his head slowly at the sound of the voice. He blinked and then blinked again, not recognising anything he saw. *Agnosia*. He found himself unsurprised by the recognition deficit and thought idly that it would probably pass. Then he drew a deep breath and concentrated and a form became meaningful. He recognised it as: 'Nya-sah.' And someone else: slight and coalblack, ocular and emerald, making quick, liquid words. He heard the sounds, but they baffled him. He heard them again, different, but they were just varieties of noise. He shook his head and returned his gaze outwards, re-clasping his hands over his belly.

Nyahua turned to Salisbury with a slight widening of his toothless mouth. 'Floc-sah seems pre-occupied. I suggest we leave. I have made *Kabura no Ohitashi* .'

Salisbury continued gazing at the gaunt form of the Marineris man. He blinked occasionally and his

mouth twitched, but otherwise he did not move: even his chest hardly seemed to rise or fall.

‘Did you say turnips, Nya-sah?’

‘Yes, Sal-sah.’ Nyahua put his hands out in front of him, both palms facing downwards, one above the other. ‘Name is, this one...’ He indicated the top hand, gulped in a curiously convoluted way and then nodded at the lower. ‘That one.’ He nodded, his mouth widening.

Salisbury shook her head. ‘What?’

‘Turnips, Sal-sah.’ Nyahua’s chest bounced and his arms jogged up and down to match. ‘Name is, this one...’ He again indicated his top hand then stared exaggeratedly at the lower. ‘That one.’ Nyahua’s smile eventually faded at Salisbury’s blank, irritated face and he dropped his hands. ‘Apologies, Sal-sah. You have lost your laughter.’

Salisbury blinked, her reply quick and instinctive. ‘I am *worried* Nyahua and I do not enjoy wasting time. You know what is happening.’

‘Oh.’

Pause.

‘Above and Below,’ she said, belatedly deciphering Nyahua’s semaphore.

Nyahua beamed, almost showing teeth. His chest rumbled with delight. He clapped his hands, grasped Salisbury round the waist and hoisted her off her feet.

‘Yes, Sal-sah! "Turnips, Above and Below"! Now laugh, Sal-sah! I was funny, yes? Laugh, Sal-sah!’



Cool sea air breezed into the open wooden space, bringing the smell of iodine and salt. Warm Sol flooded the low chamber as cloud dispersed above Inhoplae. Nyahua clasped his hands together on the low table before him and bent forward from the waist. He was silent from a moment, then he raised his eyes and began to speak, his words a series of low rumblings.

‘Most honourable Sal-sah. You first led me to Ushogbo, both as she was then, and as she is now...’ His right hand drifted out sideways, indicating the sea named after her. His mouth widened a little. ‘Many, many respects must accrue. For things you have done and gift of your sentience to all Cardinal. Chosen of Water, First Novagaian, I say what I say because I have knowledge of the Unspeakable.’ Nyahua’s eyes locked with Salisbury’s and flicked briefly up, over her left shoulder, indicating Flocanalog. ‘Significance adheres to friend Floc-sah...’ Nyahua’s mouth twitched a little outwards and he extended fingers still lightly clasped. ‘Like oil to rice.’



Nyahua began a slow nod of his head. He told her of Flocanalog's encounter in Inhoplae, the mnemonic reconstruction, the revealed, untranslatable speech act. 'Sal-sah, I believe metacetaceans swim on Novagaia.' Nyahua paused and breathed deeply. 'I have become Third and sought out the knowledge that is Unspeakable, to try and understand. I cannot. From you I know of strange Oaxaca. I know of suffering Novagaia. And I know of Floc-sah and metacetacean. I do not know what binds them, yet I know them to be.'

Nyahua paused and Salisbury listened to the silence after his low, hypnotic voice had died. She gazed intently at the smooth face in front of her, hundreds of minute saccades flicking her eyes from tiny muscular movements of the muscles around the thin mouth, to the steady depth of the small, black eyes, to the small hollowing, ballooning of the yellow, hairless cheeks. Nyahua continued.

'Dear Sal-sah, not since most respected First Novagaian walked the virgin Novagaia have Water intervened in the affairs of Koy and Cardinal. Now I believe they have. I have told you of metacetacean. You have told me of becoming of Oaxaca, and I tremble, my friend, I tremble.'

Nyahua's voice caught. He reached forward and Salisbury reciprocated, gripping the Cardinal's hands in her own, their two foreheads touching. When Nyahua spoke again, Salisbury smelt the vinegar of his last meal and heard the returning strength of his voice. 'Dear Sal-sah, I become Third and I seek Unspeakable knowledge behind illusion and find only...' She looked into him through small, dark eyes, his conviction transparently clear. 'Magic, Sal-sah.' Nyahua sounded baffled. 'I find only *magic*.'

Salisbury spoke for the first time. 'I know my friend.' She reached for him and brushed her fingers through the thick hair at his temple, trying to curl it with her fingers, the stubborn fibres resisting her. Nyahua kissed her departing wrist, catching it gently.

Salisbury felt wickedness surge in her. 'The moving of worlds!' She clapped her hands, startling him. '*Magic!*' She unfurled herself in one smooth motion from her semi-lotus, sending her arms up above her head. She knelt, one knee on the small, clear table, dropped her arms, proceeded to crawl on all fours, her face stopping centimetres from Nyahua's. 'But you are wrong about one thing.' She planted a light kiss on his forehead, grazing her mouth over his eyebrows. 'I don't think this is the first metacetacean intervention on Novagaia at all.' She began fluttering the tip of her tongue over his eyes and cheeks, sinking past his mouth to his throat. 'I think they have been here all the time, intervening constantly.' Salisbury continued crawling over the table, placed her hand in the middle of Nyahua's chest, pushed him over backwards and climbed on top of him. 'I think we should call a parliament.' She felt Nyahua's hand reach over and down her back, fingers deftly falling to their favourite task and the breath caught in her throat. 'I think that this... *ummmngh* ...'



Enclosed within a watery protein shell a kilometre above the surface of the orbital, within the internal cavity of a subverted orbital transport vehicle, 30 seconds away from the end point of a parabolic leap at

a location with the label Chapel Halls, the parasite resource began modelling a belief system - a consistent system of propositional attitudes with a simulated egocentric core - effectively simulating that which believed itself to be an individual called Dwoschultsizes Gromburg.

Self-contained, simple and remarkably accommodating, the Gromburg belief system was careless of weeks of experiential blankness - because it did not recognise they occurred - and was untroubled by sudden, abrupt changes of location, position or situation, both kinds of events corresponding to holding loops enacted by the executive nchoi parasite, diverting its attentions elsewhere: such things simply did not impinge as important happenings upon the internally consistent process of attitudes towards memes and propositions, that believed itself to be Gromburg.

The Gromburg thing, as such, was thus unaware and careless of the remoulding of exterior features that had been in progress - now complete - since it had impacted the orbital surface and de-animated the orbital transport vehicle. The simulated belief system did not recognise nociceptive input as valid, and hence neither did the Gromburg thing experience the pain of honeycombed calcium scaffolding being snapped and layers of watery tissue being rearranged, the cosmetic alterations effected by medical nchoi under executive control, sculpting a new appearance. The Gromburg thing was similarly unaware of the aggressive nchoi dismantling and transporting the large Fat reserves stashed throughout the biological shell (although even all the Fat was not raw material enough, and the nchoi parasite instructed other microfactories to begin processing the, less easily utilised, solid tissue of the watery shell itself). Structures internal to the biological shell - heart, lungs, kidneys - began to rearrange as endoskeletal armour began thickening around crucial components: the soft calcium shell housing the cranial nchoi parasite thickened with extra crystalline-boron bone, and the optical transducers grew new, diamond corneas. Neither was Gromburg the slightest bit surprised to find two small holes appear either side of the fibrous tuft above each optical transducer - the belief system that was Gromburg simply did not factor such things as relevant, as they occurred during an experiential loop - and was totally unconcerned by the series of quick, twisting motions that the biological shell subsequently undertook, flicking the soft, watery optic devices around the innards of the machine vehicle. Now, where the biological shell looked, two small weapons, emerging like polyps from a coral forehead, looked also.

The Gromburg thing was putting itself on a war footing.



The parliament called by Salisbury and Nyahua was virtual and resource enabled. The two Cardinals were uplinked, at one point, to some 280 different personal resources orbital wide. One by one, all 400 Cardinals agreed with the need for, and the nature of, the proposed action, most with no more than a terse, affirmative graphic. A few, notably Yukti, Quimiyambe and Chiusi were keen for further debate. In all instances, Salisbury deftly argued the case, giving way frequently to the low, rumbling persuasiveness of Nyahua. Their collaborative arguments, plus Salisbury's own natural authority as First Novagaian, eventually convinced all the sceptics of the necessity for the extraordinary step they were proposing. The nature of the proposed action - *What questions to ask?* - was also a point of debate in many cases, but again unanimously, the decision was taken to delegate that choice to the representatives of the small

Cardinal race that would make up the delegation.

The decision of the Cardinal parliament was not totally without precedent - there had been three prior occasions in the 450 years since the long climb up to the new worlds of the Koyculture. Nevertheless, the decision was still taken reluctantly, involving as it did, Nyahua, Niandankoro, Chaiyaphum and Hechi all departing the Hub via reaction shuttle for Godsfollicle, climbing the 70,000 kilometre long *Hair of God* down to the drowned surface of Water and seeking audience with the metacetacean builders of the Koyculture.

One would accompany them.

‘Cardinal must go for Novagaia, Sal-sah,’ said Nyahua, some moments after the last window closed, taking the swarthy skin and prodigious proboscis of Chiusi away with it. Nyahua indicated Flocanalog seated to his right with a hand and gazed mildly across the low table at Salisbury. ‘Friend Floc-sah must go for himself.’

Salisbury nodded and glanced at the gaunt face to her left. Like all Cardinal, with altruism a deep, engineered part of her psychology, she felt herself drawn to the pain she could feel in the Shell-extractee. She also trusted the teleological perceptions of Nyahua and his belief in the significance of the Marineris man. Her comment was part an attempt at support, part a statement of belief. ‘Perhaps for us all Flocanalog?’

Flocanalog blinked at her slowly, uncomprehending. Then smiled a little, drew himself up and spoke slowly and carefully. ‘I do not know.’ He knew this person now, like Manchester but different. ‘Perhaps.’ His smile waned. He shrugged, a sudden frown clouding his brow. The patchy visual and auditory agnosia of the previous day had lessened but not entirely disappeared, and he was still experiencing difficulty, plagued by strange, abstract sensations of duality. His comprehension of the world seemed by turns forced, then unnatural.

*What was it to make these low frequency barks and pops? This was not linguaception!*

He would look at things and *hear* them as alien and impossible. He would say things and *see* them as blank and empty. Conceptualising what he was seemed to be a struggle. He was aware of ghost tingles in long-since lost magnetohydrodynamic limb and was tortured by an unassuageable, systemic hunger for a fluid environment.

Distantly, he became aware of nociception, though lost to a sudden tactile agnosia, did not immediately recognise the source. He turned his head about, confused, looking up and around and down.

*His hand.*

Nyahua lessened his grip, his expression compassionate. ‘You feel pull of Shell, my friend, yes?’ The Cardinal’s mouth widened, and his smiling face sought confirmation in Flocanalog’s eyes.

*Noise.*

Just different kinds of noise.

Flocanalog breathed deeply, trying to couple meaning to the sounds, fighting a liquid conviction that the manner of the association was wrong and unnecessary. He gazed at the Cardinal’s face, lost to a sudden gust of prosopagnosia.

*I do not know you!*

He tried to concentrate, to regain something more than a cursory awareness of his own body. He frowned and looked down, only slowly becoming aware of the Cardinal's hand as real. His face cleared. He turned his head to look at Salisbury, back to Nyahua, down at the small hand gripping his own. He attempted a smile, his mouth twitching. 'I'm having a, uh... a difficulty being...? I am...?' No expressible sentiment seemed right to him. He shrugged, frowning furiously, comprehension dissipating like warm mist. 'I uhm...' He began to lose the sense of what he was doing.

*How was this communicating? He could not see with it!*

He struggled to remain above an alluring, fluid incomprehension. 'I will...' He gestured over his shoulder and turned at the waist, but seemed to lose the rationale for the action-decision halfway through executing it. He ended up gazing blankly at the chair, his arm raised, his head cocked to one side, recognition escaping him.

Nyahua and Salisbury each took one of the taller man's hands. He looked down at them with wonder, turning pale, watery eyes from one Cardinal to the other. He allowed himself to be led, unprotesting towards the open wall facing Inhoplae. The two Cardinals guided him gently into the waiting orthopaedic chair. They helped him sit, and then came together, standing to the right of the chair, gazing up at the oddly blank and concentrated face, feeling the bite of engineered, genetic altruism.

Out across Inhoplae, a wall of shadow was sweeping towards Nyahua's home: similarly linear, the dawn lagged 2,000 kilometres behind this onset of Novagaian night.

A svelte, mustard-whorled choo machine glided up to Nyahua's side from the back of the chamber, bringing the smell of sandalwood and basil and nuzzled the Cardinal's hand with a sinuous frontal proboscis. Nyahua reached with a hand for moist access gates and met the serene watchfulness of the choo Host in brief consensorias. The machine padded over and assumed a position in front of the man from Marineris: a guardian and nurse sitting upright, slender and feline on two rear appendages.

Nyahua and Salisbury stood, neither feeling the need for words, watching as the Terminator came inexorably toward them, both remaining silent for the last minutes of the day. In its passing - as always, it seemed to Salisbury - Novagaia appeared to exhale a miasma of fragrances and perfumes. Salisbury felt Nyahua take her arm. She leant against him, staring out into the luminous night, feeling the quickening cooling of the air, glad that he was there.

*Metacetaceans in Inhoplae.* She shook her head. *What did it mean?*

## Chapter Fifty Two

The bulbous, jointed Martian vessel, *Nirgalinium um Trotos* had been in transit for 89 Martian days - 91 days as clocked by the movement of the Novagaian orbital Terminator - and was now only scant

hours away from aerobraking in the upper atmospheric reaches of Water. A swift and capable triumvirate of choi machines tweaked the trajectory of *Nirgalinium um Trotos* as it sped towards its orbital injection, and they would also control the deployment of the thousands of cubic metres of ceramic foam that would slow the speeding vessel and slot it into its rendezvous with the Koyculture.

Within one of the rotating sections of the vessel, spun up so as to simulate, for the benefit of passengers, an optimum gravitational acceleration - three or so metres per second per second - seated before a large, black window enabling choi interface with the swift vessel, The Most Esteemed Lady Selenium Cromsworthy Histryiagh keyed a command code, and contemplated the resultant image, rendered for her from the EM soup filtered by the machine senses of *Nirgalinium um Trotos* : an outer hoop of dark shadow, an inner surface soft-white and green, the colour of organics.

*Novagaia.*

The Lady Histryiagh had many fond memories of Novagaia. She smiled, biting her lip a little as she recollected some of the more potent. She leant back in her chair and gathered her hands together at her tummy, steeping her 15 centimetre long fingers at their tips: her arm, from elbow to wrist, measured some 44 centimetres in length. The Lady Histryiagh remembered the flat top of the Mammoth Plateau and the tickling elevation of subtle Euphorics in the dark and sitting watching a wall of light approach below her over the orbital floor. She remembered the pleasure of Carnival and dance - impeded of course, by the necessity of exoskeletal support, but still enjoyable - and the awesome prospect of the world rising endlessly up at the non-horizon. And the people!

*Such good people, fine friends.*

The Lady Histryiagh sank into fond remembrances.

*Dear Malvern.*

She had *especially* fond memories of the Cardinal Malvern.

The Lady Histryiagh rose from her seat, rising elegantly in the just less than Martian gravity, to her full height of 343 centimetres. She glided across her spacious cabin and bent gracefully from her prominent hips (swelling improbably 196 centimetres above the soles of her 40 centimetre long feet), rooting around a little aimlessly in a personal bag on the broad bed. She discarded it with a sigh after a small search, brushed her hair gently up and away behind her ear and stood again, looking about her.

The Lady Histryiagh spotted the item she was looking for on broad shelving in the third room of her cabin that she searched: a small sculpture of her in wood. Or nominally of her: it required a little effort, but there was an essence.

*Dear Malvern.*

Her thoughts drifted, and she recalled with a little laugh the expression on the Cardinal's face the first time he stepped into the docked, but still sectionally-spinning, *Nirgalinium um Trotos* with her. He had bounced and bounded in the light gravity - even though he must have experienced Martian gee before - appearing awkward and loping next to the liquid grace of The Lady Histryiagh. It had probably been then, when the Lady Histryiagh removed her exoskeletal support, that Malvern had really fallen in love with her.

In her element, she was simply *exquisite* .

The Lady Histiagh had been younger then, almost 5 Martian years ago. She chuckled to herself, then laughed, a high, beautiful sound sculpted for thinner air. She did enjoy Malvern's company: she found him witty, warm, attentive and possessed of quite the most extraordinarily dextrous tongue. The Lady Histiagh felt herself flush and grow a little tingly at the thought. So delightfully wicked. She really was looking forward to renewing her acquaintance with the Cardinal Malvern.

*Novypolos. The Carnival is at Novypolos .*



Tennys had never felt as close to committing physical violence as he did at that moment. His hands were fists on his hips, he was bent at the waist, shouting angrily down at the small form of the Cardinal Malvern. 'What do you *mean* , you can't remember?!' He stuck his head forward pugnaciously. 'They're *your* memories, you *must* be able to remember!'

Malvern put his hands on his hips, tipped back his head and laughed in an exaggerated manner. Tennys felt himself splutter with a sudden, incoherent rage at the Cardinal's behaviour and clumsily slapped his hand sideways, more to rid himself of the immensely annoying face than to actually inflict any serious injury. Malvern intercepted his hand half way through its trajectory however, deflected it and twisted and locked the wrist unnaturally, causing Tennys to howl and contort himself downwards, his shoulder screeching, feeling like his hand had just come off. The Cardinal released his grip. The awful pain stopped immediately and Tennys collapsed onto the wet floor.

'Never threaten violence, my boy,' said Malvern gravely. 'You have *no* idea how much it hurt me to do that.'

Tennys took a moment to get his breath. Just at that moment, he disliked even the *ankles* he could see level with his own eyes. He pulled himself to his feet, hugged his shoulder and rubbed at his wrist. He expressed his thoughts. 'Fuck, that *hurt!*'

Malvern ignored him and addressed his earlier concern. 'They might be my *memories*, my boy. Still doesn't mean I *remember* them.'

'What?' Tennys whined a little, still rubbing at his shoulder. 'But, but, but I *know* that you remember! You're walking down this...' Tennys stretched out his hand in front of him and narrowed his eyes. 'Long, *long* dusty red road and *Ushogbo* is with you and she says...' Tennys twiddled his head. 'Something or other, being ill or something and then I go *aha!* , because I remember, or feel that I do, that you know the person that Ushogbo is talking about and the name comes to the tip of my, well, *your* tongue...' Tennys waved his hands in the air in a vague fashion. 'And then it disappears!'

Malvern was gazing at Tennys amicably, his face attentive, nodding and lifting his head. 'And?'

Tennys ground his teeth. ' *And*, so could you please tell me *that* name, the one I remember you

remembering at the time!’

Malvern cocked his head sideways, chewed laconically and settled back on one leg. He shook his head and inhaled quickly. ‘Can’t help you, I’m afraid Tennys. You see...’ Malvern drew Tennys along by the leg, pacing quickly through the great, mist-shrouded walls of Trees surrounding the two of them. Tennys pulled his coat closer about him as he followed but Malvern seemed unconcerned with temperature or water. ‘As Manchester has no doubt told you, mnemonic hallucination certainly is a frequent aspect of nchoo meme-complexes. But you see my boy, that in this case, I believe that...’ Malvern stopped abruptly and Tennys walked past him and had to stop and turn, by which time Malvern had resumed and overtook Tennys moving backwards. Tennys became tangled in his own feet and heard Malvern clip quickly to the end of his assertion. ‘It *isn’t*.’

‘Isn’t what?’ asked Tennys, becoming confused, hurrying after him. ‘*What* isn’t what?’

Malvern huffed. ‘Your *supposed* hallucination, Tennys, was no such thing. You, in fact, completely accurately, though synthetically, remembered *precisely* what I experienced at the time. Yes, I recall now...’

‘Do you?’

‘Yes, my boy! I remember walking with Ushogbo: she was telling me of someone close to her, someone dying, I didn’t know who initially, but then I remembered a face. Yes...’ Malvern stopped again, scratched at his chin ponderously, his eyes raised skywards. ‘And I remember thinking, "I wonder who that is?", and then she said something else...’

‘Yes?’

‘Yes, that’s right!’ Malvern clicked his fingers and beamed widely. ‘And then I remember not being able to remember a name to go with the face! Yes, that’s it!’

Tennys tore at his hair.

‘Oh, tell him the name Malvern.’ Manchester said when, after reaching their Tree, she heard a resume of the conversation from Tennys. Malvern was making furious shushing noises and quietening motions with his hands behind Tennys’ back. Tennys spun around, flipping his gaze between Manchester and Malvern, pointing slackly, his mouth hanging open.

Malvern relented with an expansive shrug of his shoulders, turned to Tennys and grinned in an irritating manner. ‘Wickremasinghe, my boy.’ He put his hands on his hips and smiled broadly, entirely unapologetic.

Tennys was initially too flabbergasted to even notice the name. He switched his gaze from Malvern to Manchester, back to Malvern, his face aghast. ‘You mean you knew *all along*?’ He shouted and waved his fists. He shook his head: words of sufficiently vile, awful condemnation escaped him, so he settled for simple abuse. ‘You *wanker*.’ He slapped his hand on the side of the Tree. ‘You *total wanker*.’

Malvern chortled amiably. ‘Steady on.’

‘Hang on, did you say Wickremasinghe?’ asked Tennys suddenly, spreading his hands. He glanced at Manchester and saw her nod her head.

‘Yes, he did,’ she said.

‘But isn’t that...?’

‘The name of a sea, *yes* ,’ said Malvern, deepening his voice for the last word.

‘The name of a sea, *yes*. Just like...’

‘Ushogbo, *yes*. ’ Malvern did the same vocal trick.

‘Right. And we’re headed right for...’

‘Wickremasinghe, *yes* .’ He did it again. Malvern’s eyes bounced open mischievously. He raised his hands before his face, waggled his fingers, his eyes going wide. ‘Spooky.’

Tennys turned, pointed and spoke acidly before stomping away. ‘Malvern, go piss yourself, alright?’

‘Now look what you’ve done,’ said Manchester reproachfully.

*Wickremasinghe.*

Tennys had his name: he could scarcely believe it. Secure in his snug, he searched his library for the occurrence of the name string - he *had* read about her! - and was utterly delighted when he found it, buried within an obscure text on historical economics, cited in a chapter devoted to an analysis of the scientific prosperity of the A Ideolog 405 to 395 BK., part of a reference to a technical review paper entitled *The Three Horns of the Representational Trilemma* , on which one *Wickremasinghe, E* . was first author.

*So that was where he’d read it!*

And he had read it, too. On that day on the balcony. He hadn’t read all of the source document, of course: it had been only one - briefly visited - of many different hypertextual stepping stones he had visited that day. But he could remember flicking his finger through the references, and pausing fractionally on the name. Just a habit of his, running his eyes over references: not intended as a systematic search at all. He had paused on the letter string because he had thought at the time.

*I know that name. Where from?*

Now he knew: a map of Novagaia. He was headed straight towards a sea named after *that person* .

*Wickremasinghe.*

His initial excitement paled however, as over the course of the next couple of hours, with a mouth becoming stale and sour from too much boiled cereal extraction, he learnt, much to his personal annoyance, what a peculiarly *inert* thing the name Wickremasinghe was, historically speaking. He spent some time interrogating the Histories interact, Hilbert, some time reading and lots of time just thinking, as the Caravan lolled about him and the air in the snug became thick with the odours of his own body. He discovered that there were, indeed, Wickremasinghes in the Histories. Quite a number of them in fact, but none were *his* Wickremasinghe. None of them fitted any kind of profile he imagined that *his* Wickremasinghe would have. Many of them were male, for instance: an automatic disqualification. Some



even, Tennys noted with passing interest, were alive today, some native Novagaiaans having adopted the name for themselves or their children. All however, without exception, led *totally* uninteresting lives historically speaking. And none shone like he knew *his* Wickremasinghe would shine, clear and bright, lighting up the Histories for centuries after herself.

Cross-referencing with his researches on Ushogbo, he found that, in fact, no historical Wickremasinghe had ever had any verifiable, documented connection, of any sort, with the Cardinal of the same name.

*Wickremasinghe.*

Tennys was left with a plunging sense of anticlimax. Irrationally, he had become convinced that recovering the name of Ushogbo's mother would shed new light on his researches and would reveal a hitherto unknown trove of historical treasure. He became angry with himself.

*What do you expect? Chasing after names because you thought you heard a voice?*

He chastised himself for his foolishness. He had been *stupid*. Yet, he *had* found the name, and someone called Wickremasinghe *had* gestated the engineered foetus of the Cardinal Ushogbo. This he knew from Malvern's narrative engine. Just one more indication of the unreliability of the Histories, which should be no surprise to him and wasn't.

*Should I go and ask Malvern again?*

The notion distressed him acutely. No. There were other ways.

*Three Horns of the Representational Trilemma?*

He could start with that.



Melie could not explain it.

It was like there was nothing she could put her finger on, nothing concrete she could put into words. There was simply this *knowledge*. Not of anything specific - she was certain of no one *fact* or other. But it was more that she felt something like a conviction or a belief, entirely irrational, deep in her bones and the very stuff of her, as if she knew with her body, not her head, that... *what?* She couldn't explain it, though she tried, taking Manchester's advice and resorting to metaphor and analogy.

'You know what it's like, Manchester? It's like...' Melie stuffed a large, peeled slice of a pungent citrus into her mouth with the tips of two fingers. 'It's like *The Watching Woman* stood right up out of the earth, looked me in the eye and said "Yo Melie. Stay sexy fem, things are cool." But I mean, you know, she *didn't*, obviously, like I didn't *see* that or anything, although I remember sort of dreaming about it

before I Blitted, you know?’

Melie and Manchester were on Melie’s balcony, which was still covered by the bubble of veined Tree transparency. Climbing up out of the Afines as the Caravan was, the machine herd would soon encounter better weather and then the Trees would retract their claws and admit light and air into their insides once more.

Melie was looking forward to that time.

Manchester nodded, popped a grape into her mouth and gazed happily at Melie seated across the table from her. The Sesquioian’s grey eyes were wide, her whole face suffused and glowing. Manchester could almost feel the joy emanating from the young, nova-Cardinal, like the warmth of Sol.

‘So I guess I was kind of asking questions, yeah, like you told me.’ Melie glanced at Manchester for affirmation, her smile becoming locked into a strange feedback loop with that of the Cardinal: as hers grew, so did Manchester’s. The two of them ended up grinning at each other madly. ‘Woo!’ Melie laughed delightedly and clapped her hands. ‘Shit Manchester, I haven’t felt this good in... in *ever!*’ She laughed again, high and clear, from her belly. ‘And anyway I was asking these questions, yeah? Or I must have been sort of *subconshusly* doing it or something, I don’t know, and I’d had the little Blit before already yeah, so I was feeling really good about myself you know, because I’d really handled it well, you know?’ She took a deep breath, flicked the hair away from her face and smoothed her fingers down her throat. ‘And then this big Blit came on...’ Her emotional luminescence dimmed for a moment and she shook her head a little. ‘Oh wow, biggy. *Real* biggy, I mean I was just *nowhere* Manchester, you know? *Much* worse than before.’ She paused to insert another slice of citrus into her mouth and wiped some dribbling juice from her chin. ‘But anyway, I pulled myself out of it, and like about an hour or something had gone, and I was still just sitting there, in my bed, with this Weed all over the place because I’d dropped it when the Blit came on...’

Manchester was concerned. *Maybe the bridge to the metacortex needed tweaking.* ‘You got a resource warning though?’

‘Oh yeah yeah, but like only just cos the whole thing just went *whoosh*, really fast you know? But anyway Manchester, anyway...’ Melie flapped her hands in the hair. ‘The *important* thing is that it didn’t freak me out, yeah? And I tried some of those resource thingies, the um...’ Melie waved a hand.

‘The interpretation daemons?’

‘Yeah! And I had all that weird shit feeling, you know, when all this stuff kind of slips away, do you get that? Isn’t that weird?’ Manchester murmured her agreement and reached forward to take a sip from a glass of water. ‘So there I was, just sitting you know, sort of getting myself together and then I realised that, hey, it was OK.’

Manchester raised her eyebrows, her smile doing the strange feedback thing with Melie’s again. ‘What?’ She popped a prepared slice of fruit into her mouth and chewed. ‘What’s OK?’

Melie laughed and threw her head back. She brought a foot up onto the edge of her chair, rested her elbow on her knee and tucked her hair behind her ear. ‘I realised...’ She stopped and started again. ‘OK, OK, it’s like...’ She paused and flicked her hair away from her face, put her foot back on the floor and wiggled on the seat. ‘I know...’ She shook her head, stopped once more and cocked her head as if trying to understand wind-borne words. ‘I know about Novagaia, right? I mean, I know... I just *feel* that it’s OK, that its *safe*.’ Manchester did not press Melie with questions, even though her mind was

suddenly buzzing with several dozen of her own. 'Like, I know that you've told me about what Salisbury showed you, the enshoo and stuff going a bit mental and the sea clogging up and stuff, so I know all of that right? But... I just *feel* like it doesn't matter because I *feel* that...' Melie shrugged, laughed and opened her eyes 'Everything's cool!' She laughed again. 'Fuck, I *know* it, Manchester, you know? Right inside of me, I *know* it. Like I say, it feels like Novagaia stood right up out of the earth and said, "Yo chill fem, things are happening but it's cool", you know?'

Manchester's mind was racing.

*Was Melie already learning how to see teleologically?*

Manchester was pleased and a little stunned. As to the knowledge Melie had gleaned from the unfolding of her Third awareness? For a Cardinal, teleological perception of the Cascade was *empirical* experience, to be factored into everyday existence, and this was what Melie was doing: she believed in herself now. Manchester was delighted by her progress. She reached for Melie's hand and gave it a little squeeze. 'I'm so happy for you Melie.'

'Fuck, I'm happy for me. I'm happy for *everybody*.' She finished the remaining slice of citrus with a wet smack of her lips and reached for a bunch of grapes, which she began to enthusiastically harvest. She spoke around her chewing. 'I'm really glad you showed me the *Three Women* Manchester, you know? They were like, really beautiful. They really spoke to me yeah, or touched something, I don't know, and that's why I feel so good about things, I reckon. I mean I know its not just me, it's this...' she tapped her temple and spat out a grape seed. 'Yuk, I hate seeds.'

'Part of you, too.'

Melie wiggled her head and scrumpled up her nose. 'Yeah well, whatever.' She picked absently at the bunch of plump, green skinned fruit dangling from one hand. 'But Blits happen because of *it* and me Blitting is not really *me*. Well, it is, I suppose. Whatever it is anyway, I just...' Melie raised her eyes, searching inside of herself. 'I just *know* things are *all right* Manchester. That *Novagaia* is all right.'

A chime sounded.

'Ooh,' said Manchester. 'Visitors.'

The Cardinal walked to the snug entrance and disappeared down the Tree artery connecting all four Trippers' snugs: the communal entrance was at the far end, just by the door to Tennys' snug. Melie heard Manchester's footsteps, the murmur of voices, and then laughter. Then the voices got louder. A newly familiar face popped round the side of the door, and Melie shrieked her delight.

'Ro!'

'Alright you old tart!' Ro flounced into the room.

'Melie!' Deb rushed over from the doorway.

Melie yelped again, jumped from her seat. 'Deb!'

The young women embraced as a threesome, linking arms round shoulders, dancing round the small balcony space and yelling at each other. Melie babbled happily, asking questions and not waiting for the replies. 'Hey, how did you fems *find* me? How *are* you, anyway? It's really good to *see* you. Hey, you

haven't met Manchester!' Melie broke from Deb and Ro's embrace, turned, saw Manchester - puzzled, smiling - watching the proceedings with twinkling eyes. 'Hey Manchester.' Melie grabbed Ro's arm. 'This is good friend Ro...' Ro nodded and dipped her head. 'And this is my good friend Deb. Deb, Ro, this is my good friend Manchester. She's a well sorted fem.'

'Fuck, she's a Cardinal.' Ro blurted.

Melie snorted and guffawed. 'No shit?'

'Hey fuck you.' Ro put up mock fists. 'Just because you're gorgeous...' She reached out and batted Melie playfully around the head.

'Hi Manchester.' Deb addressed her words to the Cardinal. 'Me and Ro only met Melie yesterday like and thought we'd pop round.' She gripped her hands in front of her and smiled. 'Hope we didn't disturb nothing. Hey, is that mango?'

'Help yourself my dear.' Manchester gazed warmly up at the young Novagaian. *My, what a beauty*, she thought. 'Melie and I were just chatting. Though I was just about to yes, tell you what...' Manchester reached for her pouch of Weed.

Deb broke off her demolition of the mango. 'Bhgha?'

Manchester retrieved her small pipe.

Deb's eyes lit up. 'Phuddiethlent!'

A chime sounded. 'More visitors!' cried Melie and danced from the room dragging Ro with her, their whooping reaching back down the passage behind them.

Manchester began to extract thick, matted fibres from her pouch. 'So where...?' she began.

The rest of the question was drowned by the sound of Melie screaming and laughing: the Cardinal and Deb exchanged amused, questioning expressions and Deb turned with a smile towards the snug entrance. A babble of excited talk getting louder approaching down the passage. Melie skittered in second, pushing Ro in ahead of her first, babbling happily to the third person behind her. She was large, with a mane of frizzy, orange hair.

'Alright Melie, alright!' Aileeni patted at her hands. 'Hi there girl,' she said warmly, upon seeing Manchester. She came over and kissed the Cardinal lightly on her cheek.

'Aileeni! Nice to see you. Huarro not with you?'

Aileeni snorted. 'Huh!'

Manchester pursed her lips. 'Oh.'

'Leeni leeni leeni!' Melie danced up and down at the smaller woman's elbow, tugging at her clothing.

Aileeni turned to her, frowning and laughing both at once. 'What is up with her?' she asked turning to Manchester. She returned her attention to Melie and gripped her firmly by the upper arms. 'Yes, Melie, yes. I'm listening darling. What is it?'

Melie gulped and sobered a little, aware she might be appearing a little odd. She drew a deep breath and took Aileeni's elbows in her cupped palms. 'Leeni, everything's going to be alright. I *feel* it.'

Aileeni looked up at her tall friend sceptically. 'Sweetie, I could have told *you* that.'

'No.' Melie shook her head. 'No, I mean *really*.' She radiated a total, serene conviction. 'Really, we are *alright*. Everything is alright.'

'Who the fuck are you?' Ro suddenly demanded, of quite whom it was not immediately clear. She leapt up from the sofa and quickly moved to block the entrance, planting her hands on her hips. A figure, thin and dark-haired, shrank back from the snug. 'Fems only mal,' she spat. 'Lose yourself.'

'But you woke me up!' The figure peered up at Ro myopically and belatedly focused on the unfamiliar, angry features before him. He suddenly jumped back from the door, stumbled and crashed against the far artery wall, to stand, hands splayed, staring at Ro with something akin to panic. His gown began to open and he tried to gather it clumsily with one hand. 'Huhhhuhhu.'

'Yo Melie.' Ro turned from the snug's entrance, indicating with her thumb. 'This the geek, yeah?'

### Chapter Fifty Three

Having long ago discarded any self-image of himself that could be said to incorporate the concept of "arm" in an ordinary human sense, Professor Lucius Harmins-Keirhardy extended a manipulator and stroked idly at one of the seven different erogenous zones on his reconstructed body. He inhaled and then gave his own peculiar version of a contented sigh, venting through his secondary respiratory organ. Internal to his own rather unique perceptual system - he did, after all, have 16 eyes - a resource window displayed a tactical image of the swirling, architectural turbulence outside his home.

*A little quiet today*, thought the Professor, gazing at the image serenely.

He keyed at the window with an intangible manipulator, and the little choi ferry, of which he was the solitary, floating passenger, eased itself from the side of his slowly tumbling studio home with a little puff of high temperature steam: the Professor did not, of course, because he was an artist, ply his trade in that most ugly of places, a *laboratory*.

The choi ferry slipped away into the vacuum, hunting out the wash of effectors, gliding and tacking about the intangible currents of the Verest attractor, soon becoming lost among the innumerable glittering cubes, spines, spheres, flakes and boulders making up the architectural swarm. The Professor hung happily in the zero-gee, watching the resource window as the nchoi machine displayed the trajectories of the many tumbling, spinning forms moving around outside the fragile ferry. The Professor was unconcerned: he had the utmost faith in the chaotic regularities of Verest.

The Professor invoked a second window, keyed a different command, watched an icon pulse, one,

twice, three times, saw it expand to display the appropriate part - a section of the milky, ovoid carapace, an auditory duct, a cluster of optical transducers - of the Professors good friend and colleague, Doctor Haari Salaijich.

‘Lucius, my dear fellow!’ said the Doctor, when he saw it was the Professor. ‘Are you on your way, old boy?’

The Professor nodded and vocalised amicably through his primary respiratory organ. ‘I am, Haari, just thought I’d let you know.’

‘We’ll expect you soon, then.’

‘Usual crowd?’

‘More or less, old boy. One rather interesting guest, however.’

The Professor was about to inquire further when the choi ferry suddenly lurched sideways, was buffeted down and then pushed violently back up again: the Professor had to extend several manipulators to prevent himself colliding with the walls.

‘Good heavens,’ he exclaimed mildly. ‘What was that?’

‘What was what old... Hello, what on...?’

The collapse of the Verest attractor began as innocuously as that.

Throughout the architectural clouds of the fluid world, structures slowly began to jostle and cluster in never before seen ways. Individual elements - mostly the smaller, floating jetsam of simple choi constructs - began to flick away from the whole in irregular spurts, plucked and propelled away from their immediate neighbours, becoming lost to the dynamics of the larger, ballooning attractor. Bigger structures followed, as they were teased from long travelled, familiar trajectories, and nudged away from the ordered chaos bounding them. Knots of fiercely cohesive, rotating structures began to form within the larger cloud, like tornadoes brewing, sucking in surrounding structures, accelerating them within the swirling vortices, and spitting them out.

Like a dandelion clock in a breeze, Verest began to spontaneously disassemble, blown apart by mysterious winds.

The Professor’s ferry managed to find the good Doctor Salaijich’s studio home before it, too, became caught up in the turbulence. He saw the drama unfold in the company of five of his fellow Body Artists, all of whom he knew, and a visitor from Ascii, whom he did not. The good Doctor - a smooth ovoid a metre and a half high, his many Digits all intangible - introduced the guest as Doctor Rumpstrawbling.

‘Call me Charlotte,’ she insisted, brushing a lilac-striped manipulator across one of the smaller of the Professor’s seven erogenous zones. Doctor Rumpstrawbling exhaled excitedly through her secondary respiratory orifice, the dry, convoluted flaps of which contrived to pout invitingly. ‘I’ve heard all about *you* Professor,’ she vocalised silkily.

‘All *bad* I hope, my dear Doctor,’ murmured the Professor suavely, feeling the pleasant tumescence of his tertiary genitalia. He extruded a manipulator and entwined it gently with the Doctors’. He was about to speak again when Doctor Salaijich’s home abruptly shuddered violently, causing the good Doctor

Rumpstrawbling to vent a tiny shriek, fluttering her posterior manipulators. The Professor stroked her primary cranial node tenderly, fixated brachial optical transducers upon his esteemed colleague.

‘Haari, what do say to finding out what’s going on?’

Less than 20 hours from the first intimation it might happen, Verest collided with Ascii.



Ambling lazily 1,900 metres below the briny roof of his world, the First Metacetacean reached into the informational underweave of things, and existentially rewrote himself, becoming *there*. The cardinal of his kind, he probed his new environment with esoteric senses, pausing to regard, below, trailing glittering arms behind its rotation, as shards of *koyaanisqatsi* came and went about it, the Child of Water.

The First Metacetacean remembered the slow, painstaking accretion involved in the construction of the great torus and the Herculean deployment of resources it had required. He became cognisant of awe at the emergent form the metallic seed had subsequently yielded, and experienced a descendant of parental pride at the accomplishment of the young metacetacean race in creating such wonders.

The First Metacetacean began to propel himself slowly towards the Child of Water, his enclosing inertial bubble passing stealthily through the surrounding soup of EM. He turned slowly in the vacuum blackness, lightspilling and hollowed, seeking out the others of his kind he knew to be about the great persemetallic donut. He performed a communicative act, using the glossology of a novel metacetacean language form.

# I To All MemeWay?

The First Metacetacean became aware of approaching entities and heard their sudden, dual ecstatic greetings as his enclosing inertial bubble bulged, opened and fused with two others. The cardinal metacetacean reached past illusion into the interstices of the Cascade, and made briny water appear for the Mother of Water and her radically transformed daughter.

Shochil let loose with an excited polyphony and hurtled towards the First Metacetacean, cart-wheeling around the larger bulk of the cardinal citizen of Water in her delight. The Mother of Water approached more sedately, trailing amorphous, cloudy wings of emerald and gold, but was no less excited, using the oldest metacetacean language form. She whistled and boomed joyously into the clot of solar moisture.

# Little one! Oxacanchild! [Loveimageimageimage]

The First Metacetacean rumbled and clacked in response.

# [Olympian laughter]

The Mother of Water trailed wavering tentacular formations out behind her bulbous head, her wings

sheened silver and cobalt in rippling sheets and performed an admonishing speech act.

# Urwombofine *see!*[Image]

Shochil was similarly strident, flashing the varieties of cerulean in bands and hoops over her coiling tail, her dipping snout a clot of speckled cream.

# Firstofus yesyeslook *look!*

The First Metacetacean did as he was encouraged. He re-configured part of his experiential self, slipped into the triumvirate of his Third awareness, achieving a simultaneous knowledge of Cascade experience and looked with incomprehensible senses towards the torus spinning slowly in the harsh EM... and saw. The exotic perception caused him to flood scarlet in hot waves and he became obscured by sudden, whirling vortices of ebullience. His booming vocalisation sculpted meaning from *soundmadeform* in the briny bubble.

# Delight *astonish*interogative?

Shochil tumbled, ecstatic, whistling and clacking.

# Yes Yes!

The Mother of Water cycled a delighted aureate, her wings ballooning and wavering with her excitement. She turned metallic-lime sheened eyes upon the cardinal metacetacean.

# Oxacanchild & Memechild & greatjoygreatjoyand *listen!*

The First Metacetacean complied, concentrated, and listened with alien senses, as he had similarly listened on Novagaia, seeking the signs of esoteric awareness. For a moment, there was nothing. Then, like the sudden onset of acute depth perception, the First Metacetacean resolved the attenuated, ghostly communication between the emergent lifeforms and his exclamation shook the clot of solar brine with its force.

# Greatjoy!

Around, within and without the great metallic donut that was Memecast was a swirling, coherent nothingness. Intangible light and dark over impossible hypersurfaces, the Oaxacan entity was talking with its attenuated, emergent sibling.

## Chapter Fifty Four

Out ahead of him in the darkness, the clear, fresh waters of Wickremasinghe stretched away to Spinward and Port: some distance away, he could hear the regular hiss of its waters washing up the soft, silicate beach.



Tennys put his hands behind his head, lay down on his back - above him, the dusty white backbone of the Home galaxy - and crossed his legs at the ankles, pulling cooling, fragrant air into his lungs. Closing his eyes, the dying fire warming the soles of his bare feet, the residual, bubbly effects of a Weed variant warming his mood, he basked happily in the pleasant post-prandial distension caused by large quantities of recently ingested, barbecued crustacean. He inhaled slowly through his nose and experienced a wonderful flood of olfaction: wood smoke, sandalwood, salt, sweet, cooling air and another, more animal scent, hidden within sharp, not quite citrus overtones. He raised his head a little and opened one eye: to his right, only a metre or so away, was a curling, goldsilken tail.

He opened his other eye.

In the light from the fire, Melie was ruddy-orange, dipped irregularly in charcoal ink. He allowed his eyes to rove down, to the shadowy suggestion of her cushioning buttocks. He blinked slowly, breathing deeply, catching the same hint of her perfume. Feeling a grin pull his lips wide, he sank his head back into the cup of his fingers. He felt no sense of rejection from Melie, despite her unequivocal statement of intentions in the Bus above Undine. Perhaps even the converse: now that some lines had been drawn, some social parameters defined, was their relationship warmer than it had been? More open? It seemed to him that it was. Now, he was happy simply to be able to talk with her, and to have her talk with him: the memory of the Bus ride would stay with him, of twizzles in warm fields of grass, billowing blouses, unruly oatmeal... *always*, he affirmed to himself. He was not quite able to conceptualise how utterly amazing it would make him feel to be with Melie and to feel... a series of blended, borrowed images, remembrances, sensations and sounds tumbled warmly before his mind's eye... the marvellous, invigorating beginnings of tumescence. He sighed deeply, feeling himself enormously and curiously *centred* and felt his penis sag slowly as the waking fantasy cooled. It felt good, just at the moment, to be him, immediately, in this moment.

He heard an explosion of laughter and smiled in sympathy with the hilarity. He heard an excited babble of voices and recognised, by turns, Debroeket, Melie and Roena.

'How big?'

'Fuck, that'd *hurt!*'

'No way mal!'

Tennys guessed Malvern was discussing Martian genitalia again, this time, with a female audience. His hypothesis was confirmed, when, huffing and chortling, Malvern continued. 'Indeed, my dears. The prodigious development is a natural consequence of the gee of course and...' Huff, chuckle, slapping of chest. '...Martians *are* 500 years down the genetic stream from the rest of Koy.'

'No way mal.' Ro insisted again.

Tennys felt himself squirm internally, remembering again his first meeting with Ro, bleary-eyed, half asleep outside Melie's snug. It had not been really *her*, as such, that had surprised him: he just hadn't been expecting her to be there - a stranger - in Melie's room.

*Pretty dumb Tennys. Another good impression made.*

He sighed a little, but it was with affection towards himself.

‘How big?’ demanded Deb again.

*Ah, now there...*

He realised that he couldn’t even *imagine* the kind of Olympian male animal that Deb would condescend to allow to know her intimately. He was certainly not a candidate.

*How does someone get by being that gorgeous? It would be really weird, everyone looking at you all the time.*

He was only surmising of course. People, generally, did not tend to look at him at all.

‘Ow,’ continued Melie. ‘Shit fem, that would *really* hurt!’

He heard Melie’s renewed gales of laughter and heard Deb and Ro go with it, then heard Malvern’s delighted voice rise in reply but lost the Cardinal’s words to the accompanying howl of giggles and whoops. He was still smarting from Malvern’s deception concerning the name of Wickremasinghe in the narrative engine, and he felt his all-encompassing good humour pale a little as he listened to the distinctive lifting sounds of the Cardinal’s speech. But Malvern *had* given him the narrative engine in the first place. He briefly attempted to fathom the psychology of a mischievous 600 year old pixie, by turns generous and exasperating, and - of course - failed.

‘Tennys?’ The voice came from his left, interrupting his thoughts. Tennys raised and turned to his head to locate the source of it and saw Manchester, her face blotched orange and black in the flickering firelight, one shadowy arm extended toward him. ‘A share of the ecopoesis, my young friend?’

‘Thanks Manchester.’

He heaved himself to his feet, got up and went over to sit with the Cardinal and Aileeni, the latter, a larger, blood orange and ebony shadow to Manchester’s left. Aileeni was allowing the last of a great inhalation of combusted Weed to exit her lungs through her nostrils, in two slow, dribbling plumes.

‘Wee.’ She gave a little cough, patted her generous chest and passed the bulbous, bi-sectioned pipe back to Manchester. ‘Ooh, that was *nice*. Hello there, young mal.’

‘Hi Aileeni.’

‘Find any interesting dead people recently?’



The Caravan had climbed up out of the Afines early the previous day, and was less than 24 hours from Novypolos, as the Terminator brought a warm, fragrant dawn to the lumbering machine herd, when the

seven of them left it. 270 kilometres Spinward and to Starboard of Undine, Manchester, Malvern, Tennys, Aileeni, Melie and her two new companions, Deb and Ro, joined the small, ragged exodus of assorted caravanersii, and headed out to Port, towards the sparkling aquamarine expanse of Wickremasinghe they could see upcurling away Spinward of them. The air was cool, the ground still wet with evaporating dew, but the morning Sol was warm and welcome on their bare arms.

The choo machine found Melie just as she left her Tree.

The message it delivered was delightful, puzzling and intriguing, although the method of its delivery initially surprised Melie, causing her to shriek and snatch her hand away from the light, moist lick of the machine. The sudden movement startled the timid construct, which sank and became supine before her.

‘It’s OK, Melie.’ Manchester assured her. ‘Someone has sent you a message, that’s all. The machine is just delivering it.’

Melie and Manchester were both barefoot, the Cardinal sporting an improbably wide hat of dried, woven grasses, Melie light and flowing in a short, billowing skirt.

‘A message? Who from?’

Manchester shrugged. ‘Take it and see. Just let the choo... yes, that’s it.’

Melie extended her hand tentatively towards the machine, her tail coiling uneasily by her calf. The choo construct rose immediately and padded over, dipping its frontal extension twice before nuzzling her hand again. This time, her resource birthed a small black window from a pulsing icon, informing her of dormant nchoo infection.

‘Why do they do that?’ Melie asked, turning her head to glance at the small Cardinal, imitating the curious nodding gesture of the machine.

Manchester just smiled and shrugged. ‘Why do you move your hands when you talk?’

Melie lifted her chin. ‘Hmm.’

The machine, its message delivered, retreated backwards, dipped its frontal extension once more, turned, and padded away into the forest of motile Trees, slipping quickly from sight. Manchester turned and looked up at the slender Sesquoian.

‘Who’s it from then?’

Melie had been watching the departing choo construct. ‘Hmm?’

‘The message, who’s it from?’

‘Oh, right. Uh...’ Melie stared blankly for a moment, realising she didn’t have the faintest idea how to access the nchoo coded message. She turned and grinned down at the Cardinal sheepishly. ‘Like, how do I read this enshoo thing anyway?’

‘Well, there are a number of ways.’ Manchester replied amiably. ‘Depends how its been coded, and how you want to access it. What does your resource say?’

Melie focused her eyes inwards, to the window, aimlessly scrolled a little through the dense text. ‘Don’t know. Means shit to me.’

Manchester smirked, and patted Melie’s knee. ‘I’ll do it then shall I?’ The Cardinal accessed Melie’s resource via a slave connection, keyed at a virtual window in her own visual field, selected the simplest rendering of the message content and instructed Melie’s resource to tap the young Sesquoian’s auditory nerve and thereby deliver that content. Melie heard the small, virtual chime presaging the quiet voice, saying:

‘Hello Melie, this is Carys. How are you? Were the Afines as cold as usual? I have some good news for you, but I’ve been told to keep it a secret! How *tantalising!* I won’t tell you any more, but will meet you at Novypolos and reveal all then. Manchester knows where. Much love, Carys.’

‘Manchester, it’s from Carys!’ Melie exclaimed when the words finished, her eyes going wide, the resource signalling the end of the message with another small chime. ‘She’s got some news for me, and is going to meet me at Novypolos!’ Melie’s smile shrank a little, and she frowned briefly. ‘Where’s that?’

‘Where’s what?’ asked Tennys, stepping down from the Tree behind them.

‘None of your business,’ said Melie, turning and glancing.

‘Oh!’

Melie grinned and relented. ‘Novypolos. I just got a message from Carys. She’s going to meet us there. Manchester, she said you’d know where.’

Tennys brightened at the news and got in a question before Manchester could respond. ‘Is Brock coming too?’

Melie shrugged. ‘Don’t know, Carys didn’t say. Guess so, though. Oh *excellent*, Manchester, I told you I missed Carys, didn’t I? And I wonder what this news is? I mean, what could it be? And how would Carys know about it? Before me, I mean?’

‘A mystery!’ said Manchester, her dark eyes glittering.

‘What is?’ asked Malvern, like Tennys, emerging from the Tree behind. The Cardinal threw his hands wide, breathed noisily, smiled broadly. ‘Marvellous morning, wouldn’t you say my boy? Just the job for a spot of swimming, eh Melie?’ Malvern reached out, and delivered a mock punch to Melie’s kneecap, eyes twinkling.

Melie crossed her arms slowly over her chest, and rocked back on one stiff leg. She flicked her hair away from her face, her expression hardening and looked imperiously down her nose at Malvern’s grinning face. ‘So let me guess. Oh yes, *swimming*. That would involve a bathing suit, wouldn’t it? Showing a bit of leg, hmm? Maybe a bit of my bum?’ Melie’s eyebrows bounced and she chewed the inside of her mouth a moment before: ‘Lecherous old *fart!*’ She pointed a long, sharp finger. Malvern’s grin paled a little and he opened his mouth to protest but Melie cut him off. ‘And I don’t want any of this *accidental* fondling business going on either, alright? Because I really *will* break your fingers this time, you *got that* Malvern? And you can keep your old, smelly paws off Deb and Ro too, *understand?*’

Tennys was grinning stupidly, utterly delighted at the verbal lashing Malvern was receiving from Melie. ‘Yeah, Melie!’

‘Yo.’ Still scowling, Melie reached across and slapped Tennys’ hand.

Malvern was looking despairingly around him, turning an anguished expression from Manchester’s calm, untroubled eyes, back up to Melie’s scowling, disapproving face. The Cardinal spread his arms and huffed, looking utterly mortified. ‘What did I say?’

‘*Nothing!*’ Melie spat. ‘So just make sure it *stays* that way, *alright?*’ She turned to Manchester, dropped her crossed arms, and smiled sweetly. She paused, turned to Tennys and beckoned him with curling arm. ‘Coming, Tennys?’

Tennys sauntered happily to her side. ‘Yeah,’ he said exaggeratedly. Smiling like a maniac, he felt Melie take his arm and turned his head back over his shoulder as he, Melie and Manchester began walking away from the side of the Tree. ‘Wonderful morning, wouldn’t you say Malvern?’ He laughed and turned his head to see Melie doing the same. He became intoxicated with the joy of her eyes and felt her hair bat gently at his face as she swung her head.

*God, I feel good,* he thought.

‘Deb and Ro-wards!’ Melie cried, pointed, and then gave a start. ‘Hey, hang on, what about Aileeni?’ She stopped and turned, Tennys and Manchester turning with her. Aileeni was just emerging from the Tree. She waved, and began to climb down.

‘Leeni!’ Melie cried.

Aileeni skirted the prone form of Malvern with a puzzled glance, but did not stop. ‘Morning me dear,’ she said cheerily, when she was closer. She gestured over her shoulder, towards the utterly dejected looking form of Malvern, sitting disconsolately on the damp ground. ‘What’s wrong with him?’

‘Melie got angry with him.’ Manchester explained.

Aileeni raised her chin, grinned. ‘Oh!’



‘Well, now that you mention it...’ Tennys began.

‘I don’t really want to know, I was just being polite.’ Aileeni added.

‘Ah.’

Manchester finished replenishing the little bowl of the bi-sectioned pipe, and passed the whole apparatus across to Tennys. She lingered in the touch, smiled dazzlingly at him. ‘Would you like me to *do it* for you

Tennys?’ She batted her lids, appearing doe-eyed and licked her lips in, what looked suspiciously to Tennys like, a lascivious manner.

He narrowed his eyes, thinking he recognised mischief: a possible attempt to embarrass him with an oblique sexual reference, with accompanying suggestive body language? Or maybe he was being paranoid? Maybe it didn’t matter. ‘Yeah alright.’ He attempted a confident smile. ‘Do me, then.’

Manchester grinned, got up on her haunches, took the flexible tubing of the pipe in her hand, and encouraged Tennys to place his lips around it. ‘Now, we just let things get a little *hot* ...’ She applied a flame to the dry mound of crushed leaves.

Tennys inhaled slowly, his eyes fixed on the burning pile, and drew the sweet, herby smoke into his lungs, hearing the pipe bubble happily. After a few moments, he let the tubing fall from his mouth, sat back and stared at Manchester with wide eyes, his lips pressed together, holding the smoke in for as long as he could to maximise the absorption of the Euphoric. He exhaled slowly through his mouth at a nod from Manchester, emptied his lungs, and felt his head float lazily up to the sky, where it proceeded to bump about in a pleasant, dawdling fashion, playing with wispy thoughts and cloudy concepts.

‘Wow,’ he croaked, and collapsed backwards.

Aileeni looked across at the leg-splayed, supine form, and tutted, shaking her head and clasping her large hands at her tummy. ‘Youth of today, eh girl?’ She affected distaste and indicated Tennys with a sniff of her nose. ‘Look at the state of that.’

Tennys hauled himself upright, a large, dopey grin on his face. ‘Ha!’ His head wobbled on a rubbery neck. He raised his fist, attempted to make his bicep swell and grinned. ‘Youf, mal.’ He became fascinated with his own hand, opened the fingers and peered intently down into the palm as if seeing it for the first time. ‘Oh wow, like there’s loads of *lines* here!’

Across the other side of the fire, Melie heard him, turned and scowled. ‘Hey, you taking the piss or what?’

Tennys looked at her blankly. ‘What?’

Melie got up, and strolled round the fire. ‘Never mind.’ She batted Tennys’ head, not unkindly. ‘Smoke going Manchester?’

‘Absolutely.’ She patted the ground next to her. ‘Come sit here.’

Melie sat, her back characteristically straight, almost as tall sitting down as Manchester was standing up, and drew enthusiastically on the pipe when it was handed to her. She threw her head back, and exhaled through lightly clenched teeth, smacked her lips. ‘Umm, that’s nice.’

Manchester refilled the pipe again, this time for herself, and facilitated a greater opening of herself to the ecopoesis by allowing the organic Euphoric to bathe the moist inner surfaces of her lungs. The four of them sat quietly for some moments, the dancing, flickering fire passing into and becoming a continuous present of heat and light and pattern, the Euphoric beginning to perform its subtle pharmacological changes.

Tennys was experiencing a curious episode where time appeared to be something that he could slow down and minutely inspect at every juncture. He appeared to be able to think 10 different things at once,

all of them *immensely* interesting, but he simply did not have the patience to explore all of them because there was *that* to consider, or no, even *that!* His sense of linearity would snap back, and no time would have passed - *surely?* - certainly not enough time to have had all those thoughts in. *What thoughts?* He couldn't remember: but they had been *really* interesting ones, he knew. Then they would start up again, his mind would race, and he would become lost in a wonderland of memes and concepts and connections, locking and unlocking in a myriad of fascinating ways before his mind's eyes (he appeared to have more than one). His thoughts danced and wove, plunging into the erotic and ascending to the abstract, circling and cycling back and forth: he experienced that strange sense of being centred again, realised it was with reference to... *what?* He felt the engorging of blood in his flaccid genital tissue. A deep, positive yearning to give and to receive suffused him, all states in swirl about a centre, a locus that was the core of him, essentially, singularly *him* .

'Wow,' he croaked. 'That's *amazing* .'

Melie stirred, her face serene, staring into the fire. 'What is?'

He didn't know quite how to tell her.

Music began, ephemeral, tinkling sounds. Faint, high chanting voices blended in short harmonies, while bells and sliding pops and a deeper, irregular beat, like the sound of a labouring, ten chambered heart, all contributed. Tennys opened his eyes - *when had he closed them? Hadn't he looking at the fire?* - and saw Deb and Ro dancing on the far side of the flames, twirling slowly, bending and wavering from the waist, waving their arms above their heads. Malvern was reclining, discretely looking up Deb's billowing skirt as she turned, his face beatific with joy.

Melie got to her feet and dragged Manchester with her, joining the two young Novagaians, both the Cardinal and the slender Sesquoian wavering and flowing along with the slow, tinkling music. Ro took Melie's hands and they circled each other slowly, throwing their heads back and twirling gently under the stars.

Tennys looked about him, his eyes pleasantly closed, his mouth hurting because it was smiling so much, totally at ease. He looked at the dancing women, at the lapping ionised air above the flickering, slowly combusting wood, out across to the dark waters of Wickremasinghe, back to the mesmeric movement of hips and breasts and shoulders and feet.

'Wow.'



The machine herd ambled slowly down the wide, grassy concourse towards Novypolos, passing within three kilometres of the forested shoreline of Wickremasinghe, leaking caravanersii. The concourse was part of the migration route for the giant, motile machines, blatantly artificial, choo maintained, the bounding wall of forest to Port pocked every 500 metres or so with high, vulval openings, where woven

Tree root paths dove into the thick vegetation. Manchester hung back at one such opening, the entrance to a vaulting, fragrant space.

*I have to tell her sometime.*

She had decided to take the Trip away from the Caravan for a number of reasons: she wanted Melie and Tennys to see Wickremasinghe - especially Tennys, who seemed to have developed a fascination with it. But the decision was mostly for herself. Her small snug had seemed in the last couple of days to have become an ominous, claustrophobic place, and she wanted to walk and was looking forward to eating some fresh crab, too. Many things occupied her thoughts. She was concerned and anxious about the autonomous encapsulated Halflife - *I should have dealt with it while it was still on the Hub!* She was still reeling at the extraordinary decision to send a delegation from Novagaia to contact the metacetaceans of Water that had arisen from the recent Cardinal parliament. In addition, the news from the Hub of the collision between Verest and Ascii troubled her in ways that she could not fathom. She could scarcely believe that it had happened yet, at the same time, and after the strange disappearance of Oaxaca, the collision seemed oddly symmetric. Since she had learned of the event, Manchester had been plagued by prescient shivers, her Third awareness blossoming and contracting like a mental bellows.

Was this, the collapse, migration and reintegration of the Verest and Ascii attractors, what Salisbury's augmented mind had pulled back from her Cascade experience in Undine?

*Moving worlds?*

Manchester recalled again what Salisbury had told her, of Oaxaca *becoming*. The probability of metacetacean involvement in such a transformation was high: were Ascii and Verest now being similarly manipulated? How else to explain the unprecedented merging of two structures that had remained separate for over 400 years? Characteristically, Manchester shrank back from such global, abstract questions, her thoughts turning to smaller-scale, more human concerns. *At least no one died*, she thought. This was true. Although Verest and Ascii had indeed collided, there had been no *collisions*, as such, between any individual constituent polyhedra: the two fluid architectural swarms had simply merged, forming a single, new attractor. Where there had been two, now there was only one.

And now...

She looked about her, searching for the small Hub weapon and pursed her lips when she could not locate it. She accessed her resource and keyed as the window snicked open, sending a query interrogating the choi remote. In response, down by her left foot, a patch of air appeared to wobble and collapse in upon itself as camouflage Digits powered down. The weapon became visible, a slender, white pencil 15 centimetres long and two centimetres in diameter. The weapon could be accessed in a number of ways, including via Appearance and Manchester keyed for this latter option.

'Hi, how're you doing?' said the resulting, red-haired, androgyne Appearance, smiling broadly. 'I'm here to make your use of this weapon more personable. Hey, want anything killed?' The Appearance appeared to grin and appeared to raise a flat palm. 'Just kidding.' It appeared to wink.

Manchester groaned, keyed at the window and watched the Appearance iconise.

*Great, a gun with a sense of humour.*

She suspected the Hub of mischief.



*But I still have to tell her.*

She took a deep breath and called out to Melie, already some way inside the forest arm in arm with Aileeni and Ro. The slender Sesquoian paused at the hail, turned, her face happy and smiling.

‘Yo Manchester. Sup fem?’

Manchester raised her voice. ‘I want to show you something.’

‘What?’

‘Come see.’

Melie conversed briefly with her companions - Ro skipped on ahead, catching up with Deb and Malvern - and then turned back towards the Cardinal.

‘What?’ she asked again, when she was closer.

Manchester gathered her hands and looked up at the young nova-Cardinal as Melie stopped in front of her. ‘Melie, you remember that I told you Hub had lost the Limpet on the Halflife? Well, I don’t like the thought of you being down here unprotected while it’s at liberty on the surface.’

Melie waved her hands blithely. ‘Sure thing, but like the Hub said that it would find this Halflife thing soon enough and just yank it out of here, yeah? No problem.’ Melie smiled, reached out and batted the brim of Manchester’s hat over her eyes. ‘Let’s hit the beach girl.’

The Cardinal smiled, but her voice was concerned. ‘Yes, but what if...?’ Manchester stopped abruptly, realised she did not even want to complete the question. She began to regret her decision to tell Melie about the weapon. She hadn’t realised that it would be so unobtrusive.

*Maybe it could just covertly accompany her? But I want to tell her, because I promised not to hold anything back.*

Manchester was caught abruptly indecisive. She smiled weakly, looked up to search Melie’s face and saw three small trenches develop above the bridge of the young Sesquoian’s nose.

Melie raised her arm and pointed. ‘Manchester... what’s that?’

‘What’s what?’ Manchester turned her head, but even as she said it, realised that it could only be one thing.

Pause.

Manchester clapped her hands and tried to grin. ‘Well, this is what I wanted to show you really.’ She came over and stood by Melie’s side and looked towards the floating Hub weapon as Sol glinting coldly off its shiny white surface. ‘That...’ She chose her phrasing carefully. ‘That is part of Hub courtesy. It’s here to, ah, *observe* things.’

Melie frowned. ‘Observe things?’ Her tail began a slow lash of her calves.

Manchester waved her hands a little. ‘Ah, yes, *observe* things, and if it *does* ...’ Manchester cycled one

hand in the air. ‘Uh, observe things, well then, it will do something about them.’

Melie’s frown depened. ‘What are you *talking* about Manchester?’ She wiggled her head. ‘What things?’ She flicked her eyes towards the thin, silent cylinder and shivered a little. ‘And what *is* that?’

Manchester became a little urgent. ‘Remember the *Halflife* , Melie. If the wea...’ she quickly corrected herself. ‘If the remote observes the Halflife, then *it* ...’ She pointed, gesturing literally. ‘Will do something...’ She waved her hands and nodded her head, gesturing figuratively. ‘About *it*.’

Melie flicked her hair away from her eyes with an impatient toss of her head. ‘So it’s a gun then, basically. Isn’t it?’

Manchester sighed and spread her stubby arms. ‘Yes. Yes, basically it is Melie. I’m sorry.’

Melie pursed her lips, blinked a number of times, opened her mouth to speak again, closed it again, cocked her head to one side, and shifted her weight from one leg to the other. She blinked once more, a slow smile spreading across her lips. ‘You’ve done it again Manchester, haven’t you?’ She even laughed a little and shook her head. ‘Weirdness. OK.’ Melie took a moment to gather herself. ‘So like if this Gromburg thing tries anything nasty, then...’ She pointed at the gleaming white tube. ‘Then *that* will do something to stop it, yeah?’

‘Yes.’

Pause.

‘Like just greasing the ratfuck pervert, yeah?’

Manchester quailed at the description. ‘Well, if you want to put it like that, yes.’

Melie put her hand on her hip. ‘Hmm.’ She turned and looked down: she seemed almost pleased. ‘So, what, can I talk to it, or something?’

Manchester was a little surprised at the question. ‘Well, yes you can, the wea... the remote can be accessed with your resource via Appearance.’ Manchester slaved her own resource to Melie’s, keyed a sequence of commands, enabling the Hub choi weapon to communicate with the nchoi in Melie’s skull. The androgyne Appearance appeared from a snicking icon, smiled, rubbed virtual hands slowly and apparently smiled.

‘Well now, hi there. You must be Melie! Gosh, don’t you all just feel safer now I’m around? Hey, see there...!’ The Appearance pointed and the white, pencil-thin weapon darted at the forest canopy. When it came leisurely back, it held a single, neatly punctured leaf with invisible Digits. The Appearance appeared to slick one hand back over its bright ginger hair. ‘Whew, am I *hot* or what?’

Melie guffawed. ‘Oh mal, what a *jerk* .’



Tennys woke with an obscure conviction that he had, somehow or other, made a fool of himself. He lay, still but awake, his eyes closed. He could attribute the odd conviction to no one remembered incident or event: disturbing in itself, as his memory for the previous night was a trifle hazy he realised, as he tried to recollect what he might have said or not said that might now embarrass him, or what he might have done or not done to cause possible offence.

Along with the other Trippers, he had retired from the fire to spend the night in a spartan, wooden beach house, one of many like it strung along the boundary of forest and beach. Tennys held his breath, hearing it loud in his ears, listening for sounds from the other rooms, but there was only silence. It was early, still dark, but Tennys felt suddenly wide awake, with no further need for sleep. He rubbed at his eyes, blinked rapidly, climbed from the warm fabric bag he had slept in, dressed, urinated, and then wandered out into the darkness rubbing his head, feeling his stomach growl.

Outside, the air was cool and fresh, rich with moisture and salt. He walked out onto the cold sand, relishing the soft rub of the finely ablated rock on his bare feet. The water was 300 metres or so distant, the quiet wash of surf carried faintly on the small breeze. He breathed deeply, still feeling amorously troubled and pursed his lips, looking to right and then left. 30 kilometres away, the Terminator was striding linearly over the orbital surface. He accessed his resource to watch, keying for an optics tool, looking through augmented eyes as the moving wall of night washed over the soft, sloping cliffs at the far, Antispinward, end of the long beach. Disabling the resource tool, he caught the sudden hint of a remembrance from the previous night and felt his face grow warm with the memory.

*Dancing? Oh no, I didn't try to dance did I?*

He groaned, slapped his hand to his brow and drew it slowly over his cheek. Some of it was coming back to him now: he winced as he remembered.

*I asked Deb to dance!*

'Oh, I didn't!' he said aloud, utterly horrified. *What did she say?* Then he thought about it a bit, remembering more.

*I asked Deb to dance, and... and she agreed!*

He felt amazement sluice threw him: he now had an acute memory of himself prancing around the fire, waving his arms and hooting. 'Heavy shit!'

He felt himself grinning and wincing both at the same time. He was amazed at his own behaviour.

*Where did I get the courage to dance from? Let alone ask Deb to dance!*

He could hardly believe it of himself. He gave a little skip.

'Woo, hoo!'

He broke into a run, feeling the breeze stiffen on his face, the sand cloying at his feet. He was less than 30 metres from the surf when he slew abruptly to a halt, his chest heaving, his face prickled with sweat.

He felt a lancing bolt of panic slide into his stomach, making him gulp and go cold.

Someone was in front of him: a dark blob of shadow.

They had their back to him. They were sitting cross-legged, staring motionless out into the waters. Something about the posture made him gag the cry in his throat and he fought to quieten his breathing even though he was desperate for oxygen: he ended whooping silently like a fish, bent over at the waist. His head was spinning. *Were they ... ?* He snuck a glance and saw an unbroken expanse of dark, ghostly pale skin extending from shoulder to buttock. He quickly averted his eyes.

*They were.*

The uncertain form seemed to become aware that someone was nearby. The posture changed: the hands, resting supine on the thighs, closed, and Tennys saw them twist their head, half looking over their shoulder. The pale charcoal figure turned its head back to its contemplation of the water for a long moment, then rose slowly and fluidly, turned gracefully, and regarded Tennys with invisible eyes.

Tennys gulped, let his eyes travel down the slender, shadowy form, back up, noticing the subtle, distinctive bulges in silhouette that betrayed femininity. He could see the fall of straight hair, the lighter oval of the face, the soft, reflected Lunar casting a pale, ghostly illumination over... 'Ohmygosh!' In the dim, silvery light, the figure became for Tennys almost magical: he wasn't entirely sure that his eyes were not deceiving him, as the figure appeared to jolt and wobble if he tried to look too closely. He wasn't sure if it was even there at all, and he peered, moving his head. The figure abruptly began to grow upwards: then Tennys realised they were arms, held at the fingers, being flung aloft.

'Last one in cooks breakfast!' The figure gave a whoop, turned and raced for the surf. Tennys was too stunned to even move.

*That was her! That was Deb!*

'Come on, you'll lose!'

*This isn't happening.*

Nonetheless, he lost three buttons from his shirt and two from his trousers in his haste to divest himself of clothing. The cool air felt totally wonderful about his bare arms and legs: he experienced a momentary panic, thinking - *what the fuck am I doing?! -* but that was the old Tennys. The new Tennys just grinned and whooped and went racing off towards the dark waters. Ahead of him, he could just make out the form of Deb, who had paused at the gently lapping surf's edge, calf deep in water, holding her arms about her. He didn't even stop to think and went streaking past her with a delighted wail, splashing crazily through the surf, and plunging headlong into the water. He emerged almost instantly, blowing the liquid from his face, a great cry of exhilaration ripped out of him by the sudden chilly immersion.

'Fooled you!' Deb cried. She turned, and made to run back up the beach.

For a moment, Tennys actually thought she might go and felt instantly foolish for having dived in ahead of her. But in fact she didn't. Instead, she stopped, turned, and with a great yell, legs flailing, rushed madly into the water to join him. He watched her swim up to him, hearing her gulps and cries, feeling the water swirling around his *incredibly* free feeling genitals. He swallowed some of the clean, fresh water and spurted it out: she was doing the same, and they played for a moment, laughing, spitting and splashing water over each other. Later, they quietened, and just swam, Wickremasinghe calm and serene around

them, the only sound the gentle, lapping movement of their own limbs. When the Terminator brought the dawn, it was over two naked, supine bodies, one dark, one pale, eyes suddenly flashing red behind closed lids.

It was a memory Tennys would cherish for the rest of his life.



The two pseudo-Shells - with Melie, Aileeni, Deb and Ro in the first and Tennys and the two Cardinals in the second - broke the surface 8 kilometres out from Novypolos and floated lazily in 30 metres of clear, fresh water with their motile surfaces waving idly below the waters. Their tops opened about two fleshy, carbonfoam lips, allowing the Trippers their first glimpse of the Wickremasinghan settlement. The bridge ahead of them stretched from left to right blocking their path, 25 kilometres long, the last in a chain of five other similar, though smaller, structures spaced every two kilometres out from the Joop Falls, where the massive Drain finally emptied its Pipespill into Wickremasinghe. The looping, arched structure was wide - bulging to a girth of 120 metres at regular intervals, though this was not apparent until later - and low, a uniform 20 metres above the calm, blue water. It was richly crenellated, sparking and flashing with light from thousands of windows and tiles and walls.

Manchester pointed over Tennys' shoulder to the right. 'See the spiky tower thing?'

Tennys searched in the direction the Cardinal was pointing. 'Yep.'

Manchester nodded. 'That's where we'll be. With Deoli.' She gestured more amorously to the left and right. 'The Carnival itself more or less happens all over the place.'

Tennys turned and grinned. 'Yeah, a Carnival!'

Manchester blinked and placed her hand on Tennys arm. 'My, are we beginning to *enjoy* ourselves on Novagaia, Tennys?'

Tennys thought back, his mind wandering, to earlier that morning, nightswimming in the cool water with the dark, slender beauty of Debroeket. He felt himself churn internally with something he imagined that awe would feel like. *Wow, even her name was amazing*. 'Yep.'

Malvern sprang up from below onto the continuous seat running inside the rim of the machine. He scrutinised Tennys closely before speaking with utmost severity. 'The Goddess has visited you this morning, my boy.' It was not a question.

Tennys drifted, remembering the sound of gulping laughter and the smell of salt, the sight of dark, ghostly water and the trembling reverence in the presence of female and perhaps for the first time, understood something of Malvern's extraordinary, joyous love of women. 'Yes.' He turned and stared the small Cardinal full in the eye. 'Yes, I believe she has Malvern.'

Other communication seemed to pass between them then, the exchange of a privileged quanta of meaning. Malvern's face grew beatific and stern both at the same time. He nodded, gripped Tennys shoulders with both hands and shook them vigorously, his lip almost trembling. He suddenly embraced Tennys fiercely around the neck then pulled back.

'Tennys my boy...' The Cardinal bit his lip, smilefrowning furiously. 'I am *so glad* you understand now.'

Tennys felt inexplicably moved and realised he was capable only of nodding. He felt his eyes begin to burn and turned his head into the wind to hide the tears he could feel were embarrassingly imminent. Malvern gripped one of his hands and he drew a strange strength from the contact. He felt Manchester ruffle his hair and put her arm across his shoulders, her cheek next to his ear.

'Let it go.'

Tennys stared out at the bridge, watched it weft and distort as his cornea flooded with saline. He realised with surprise that he was totally, completely happy and cried with the simple beauty of it, laughing sad, joyful tears.

## Chapter Fifty Five

Half a millennia ago, the mountain had been called *Kanchenjunga*.

In a vast, circular space two kilometres inside its hollowed out tip, Flocanalog walked slowly towards a huge, striped wall of sky, hearing the echoing click of his own feet, the sound of his own breathing and the rustle of his clothing. Otherwise, there was nothing: a total, profound silence. He looked up, into the echoing space above him and discerned architectural supports, tapered and curving like enormous ribs. He looked down and around: nothing. The floor was utterly bare, 800,000 square metres of white, ribbed, barren ceramic.

He stopped, tipped his head back and listened. Other than his own breathing, the sound of pumping blood in his ears... *nothing*. It was eerie. He turned a slow 360. Directly behind him was the large white column from which he had emerged, 20 metres wide, rising smoothly from the floor in the centre of the vast circular space and blending seamlessly into the high roof. But other than this, one, intrinsic feature, the entire, echoing, light filled space contained no other object or artefact to break the smooth, white monotony at all. There were no chairs, benches or structures, no dips, stairs or even the slightest irregularity of surface; no pictures, or graphics, nor indeed, any tangible sign at all that this space, once, long ago, had teemed with the peoples of the drowning Earth, beginning their climb out of the well to the new worlds of the Koyculture.

*Earth.*

Home now only to the metacetacean citizenry of Water, arisen and usurpent from genomic handlessness and the pre-sentient cetacean dreamtime.

*I am...?*

He completed his rotation, the question as always, denied an adequate answer. He raised his face into the light and began walking again, his footsteps echoing. The bare syntactic skeleton of the metacetacean language form billowed in his thoughts: luminous, as if etched in reflected Lunar, utterly alien. He drew up to an expanse of gentian sky enclosed behind 400 square metres of clear diamond. He looked to his left, to his right and saw similar windows stretching away around the circumference of the huge circular bay in either direction, housed in clean, white frames. 150 of them in all if he cared to count. And this was just one of 5 other levels, he knew: some above him, some below.

He only slowly allowed his eyes to fall downwards. *Green* . He blinked, uncertain of what he was seeing. *Green*. Stretching out below him, reaching to the limit of his vision. *Green*. Millions of square kilometres of it, mist shrouded and still.

*Forest.*

His auditory tap chimed.

‘View is better other side, Floc-sah. Plateau Rainforest is pretty but not ocean, yes? I will meet you there.’

The auditory tap chimed closed.

He decided to take the long way around. He turned to his right and began walking parallel to the huge array of diamond windows. For many minutes he saw the same view: the green canopy, littered with shreds of moisture and a bright expanse of sky. But after walking for some 15 minutes, he began to discern a change at the far limits of his vision, a difference of colour. He frowned as he tried to remember his previous orientation. He keyed at a resource window and accessed a virtual compass

*North. I was looking north.*

12 minutes later and 180 degrees round the circular bay from his previous vantage, he stopped, placing himself squarely in the middle of the large window next to Nyahua.

Now, he faced *south* .

50 kilometres away, the true surface of Water began and did not stop, extending to the horizon in every direction. Unbroken, white-foam tipped aquamarine for as far as it was possible to go. This was it: the home of the metacetacean builders of the Koyculture.

The delegation from Novagaia had arrived.



Facing in towards each other, the five Cardinals were a poem in motion at the five points of a pentagon, three metres on a side. Bare-chested, all wore loose, flapping black pantaloons, enormous around their ankles. All were perspiring lightly, their skins glistening in the lazy afternoon light, moving with a shared cadence, moving arms in slow circles, quicker slices, adjusting the placement of their feet with synchronised shuffles, breathing in tune. Turning and twisting smoothly, moving hips and arms quickly inside the slow rhythm of a regular, mournful gong, following a silent melody, the Cardinals used *hutu* and *jarachi* to move from "Youth and Age" into "Ant Magic", adopted *senla* to twist into "The Lapse", flowing into and finishing on "Ease of Children."

Salisbury opened her eyes slowly: to her left were Hechi and Nyahua and to her right, Niandankoro and Chaiyaphum. She made eye contact with all four and listened as the gong sounded for the last time. Simultaneously, as if on cue, all five Cardinals bowed slowly from the waist, honouring the sympathetic execution of the exercise. Nyahua stepped back from the regular pentagon, breaking the symmetry and indicated with his arm, rumbling quietly.

‘Please, friends.’

Chaiyaphum led - diminutive, even for a Cardinal - and Niandankoro fell into step with her, dwarfing her petite form. Hechi gathered Salisbury’s arm to her side, following the lone Nyahua.

‘Have you chosen friendsister?’ Hechi whispered, leaning her head close.

Salisbury smiled and gripped Hechi’s hand. ‘No, not yet. I can’t make up my mind!’

Hechi gave a little laugh, her mouth mobile. ‘Nor I!’ She fluttered her free hand. ‘*Renkon no Azuki-Zumeor Horenso no Ne no Mushi-Ni?* An impossible, cruel choice, dear Salisbury.’

Salisbury laughed. ‘Too cruel, dear Hechi.’

‘I hope the water is hot, too.’ Hechi continued. ‘I love friendbrother Nyahua, of course, but he does like *cold* baths, and this...’ Hechi opened her eyes wide, puzzled and amused. ‘...I find *incomprehensible!*’ Hechi raised her twittering voice a little, directed her next comment at Nyahua’s departing back. ‘There is a place for cold, but a *bath* is not it, would you say Nyahua?’

Nyahua turned his mouth widening. ‘For you, kind Hechi-sah,’ he rumbled, taking her free arm, sandwiching her between himself and Salisbury. ‘Bath is *extra-specially* hot.’

Hechi gave a little squeak of pleasure and leant against Nyahua fondly. ‘Dear Nyahua!’

They came to a wide doorway leaking wisps of fragrant steam and Nyahua drew off to the left, disappearing into an adjoining room. As Nyahua had promised, the water *was* hot, and bubbling. Niandankoro and Chaiyaphum were in already, sitting on the shallow ledge running round the inside circumference of the circular bath, the larger Cardinal combing out Chaiyaphum’s long, black hair. Salisbury helped Hechi divest herself of clothing and received the same courtesy back. Gripping the other for support, both stepped with delicious anticipation into the hot, turbulent water.

‘Aahhhh!’

‘So, honoured friends.’ Nyahua re-emerged naked and smiling, carrying an octagonal tray supporting a



jug and a number of small, handleless bowls, stacked one on top of the other. He placed the tray carefully on the side of the bath and then slapped his belly with both hands, rubbing vigorously.

‘Get in Nyahua,’ said Chaiyaphum, her mouth hardly moving, her thin eyes creasing, enjoying Niandankoro’s ministrations, her voice the poetry of owls. ‘The water is good.’

‘Special occasion, sagesister.’ Nyahua eyes twinkled. He turned, and un-stacked the bowls, placing each individually on the little tray. He reached for the jug, checked its warmth with the flat of one palm. ‘We will drink *huadiao*, yes?’ He poured the thin, caramel liquid, measuring five portions and handed out each bowl with exaggerated care. ‘For you Sal-sah... friend Hechi... Niandan-sah... sage Chaiyaphum...’ He reserved the last bowl for himself, climbed carefully into the water with it and sat holding the bowl aloft with the tips of his fingers. ‘Most respected friends. Last of the *huadaio*.’

The Cardinals sipped the hot, sweet liquid with a variety of accompanying, appreciative gestures and sounds.

Chaiyaphum finished first. ‘Thank you Nyahua.’ Her voice was a curious, modulated hooting. She cocked her head, her thin, slit eyes hardly visible. ‘And now we must decide.’ She looked around her four companions. ‘I choose...’ She paused, drawing out the moment. ‘*Yamato Imo no Nichirin Age*.’

Nyahua clapped his hands and smiled toothlessly. ‘Most excellent choice, Chai-sah, most excellent!’



The forest was dense, variegated and noisy. The air was hot and languid, rich with moisture, and the path was wide and meandering, oddly pristine, made from woven Tree root. Floccanalog could have been on Novagaia or Plenty or Sesquioia, but for the strange, down-curving horizon and the *Hair of God* emerging from the truncated, conical summit of *Kanchenjunga* behind him, standing impossibly straight, disappearing up into invisibility.

Niandankoro estimated 70 kilometres to the ocean with an accompanying descent of some five kilometres.

‘How do we get there?’ Floccanalog half suspected the answer he would receive.

‘We walk, Floccanalog.’ Niandankoro answered him gravely, shouldering his pack. At the Cardinal’s side, two pine-striped black choo machines rose gracefully onto four, carbonsponge appendages.

To Floccanalog, this seemed particularly absurd. Here, on the home of the metacetacean, he had to *walk* through *forest* and for how long? *Days*? All before he saw the ocean?

With Hechi and Chaiyaphum ahead of them, Nyahua explained it as he, Niandankoro and the Marineris man set off through the thick, cloying air, the path coiling back and forth upon itself in flat, terraced steps

down the steep slopes.

Nyahua told Flocanalog of the events of the Great Dying 700 years before, set against the backdrop of the cataclysmic emergence of sentience among the cetacean population of old Earth. He told him of the brief war between the C Ideolog and the young metacetacean race. He told him of the subsequent philosopher-mystic koan of *koyaanisqatsi* and the resultant, slow cull of the human species. And he told him how all these events had combined, leading to the initiation by the metacetaceans of the Flood, the slow, inexorable rise in planet-wide sea levels. Then he told him of the thickening and heating of the atmosphere, the terrible storms and climatic upsets, the proliferation of the first oxide of carbon and the depletion of the third oxide of oxygen, allowing in a flood of inimical EM.

Niandankoro took over the narrative and told Flocanalog of the melting of the great Gaian reserves of frozen water when whole subcontinents - millions of square kilometres - of polar ice rose and floated on newly liquid bases. He told him of the bright skies at night, tracer-lit with shooting, curvilinear stars. He told him of the mysterious capture and diversion of hundreds of stellar snowballs, their water ablated in bright, flaming rings, in tight orbit about the moistening world below.

‘Only *this much* , Floc-sah over all planet...’ Nyahua raised his thumb and first finger, indicating perhaps a centimetre. ‘Even that, Floc-sah, is so much water that I can not even think of it.’ A rise of one centimetre: *didn’t sound like so much* . Flocanalog expressed this thought and Niandankoro smiled knowingly. Nyahua too smiled. ‘I will show you, Floc-sah.’ He enabled a shared resource window for the three of them and retrieved the appropriate figures, scrolling cool and white against the black, virtual pane. Flocanalog was staggered by the figures: a rise of one centimetre translated into over three and half *billion* cubic metres of water. But the metacetacean citizenry of Water had not raised the level of the oceans by this amount of course. Instead, they had raised them by over *ninety thousand* times as much, elevating planet-wide sea levels 900 metres above those existing BK., flooding 89 percent of the habitable land surface of old Earth with 300,000 cubic kilometres of water.

Some land surface had survived this encroachment by the oceans however. So, and while selective metacetacean intervention had levelled certain protruding peaks and sliced away the unsightly tip of the odd mountain-island, still, the Himalayan plateau, the Roof of the World, breathed atmospheric oxygen. Now, compared with 900 years ago the climate of the great plateau was very different, as where once there had been only cold ice and snow, now two million square kilometres of rich, subtropical forest slumbered in warm, moisture heavy air. But the Terran anchor for the *Hair of God* inside *Kanchenjunga* was still 70 kilometres from the ocean.

Two days walk at least.

For Flocanalog, the journey from Novagaia to the Hub, across to the Godsfollicle sheath anchoring the orbital end of the *Hair of God*, and down, 36 long hours spent falling into the gravity well of Water itself, had been largely uneventful. Under instructions from Maureen, he had spent a lot of it in deep, nchoi engineered narcosis: she had expressed concern at his encroaching agnosia and engaged herself in an intensive course of therapy, tweaking the medial temporal cortex of her patient with subtle nchoi tools. He emerged into consciousness from these sessions of therapy feeling more *solid* , but with a sense that this greater experiential firmness was only illusory, an artifice, a mental dyke holding back a rising cognitive ocean, conscious that it was only a matter of time before this virgin, bipedal land self - only weeks old, born from a tank of oxygenated polyfluorocarbon emulsion in a Transition lounge on Marineris - would be rightfully reclaimed by the ocean of the Shell life.

He yearned for that time with every fibre of his being.



The interior of the large Bus was warm, redolent of liquorice and basil, and accommodated the delegation easily. The machine sealed itself, bounced a little and then surged up and away from Highpoint at the end of its attenuating pylon legs.

From Highpoint to the Hub was a trip of only minutes, the first stepping stone on this extraordinary journey.

Niandankoro watched through the transparent floor as the Rim appeared beneath him. Above his head was the spiky Hub ellipsoid. The Bus turned end over end half way through the trip, giving Niandankoro and the others a view of the Hub from below them, apparently rising and threatening to pierce the bulbous sack of the machine on its innumerable, thin spines.

The Bus was unerring, however and sailed through the forest of metal thorns without mishap, using intangible, welcoming Digits of Hub to guide it safely to its berth. The machine's powerful appendages extended smoothly and took hold of a spine. The belly decelerated. The machine shuffled forward and squatted over an access blister, delivering the Novagaian delegation to Water to the Hub at the centre of their orbital. They were met by Hub courtesy. The remote greeted them with flowing graphics, requesting their preferred mode of access and resorted to an auditory tap at a clipped command from Chaiyaphum.

'Hub courtesy. How may I help?'

'I would like reaction shuttle transport to Gods in...' Chaiyaphum glanced at Hechi and wiggled her nose. 'Thirty minutes. Please contact me again then.'

'Of course.' Hub courtesy rolled away.

Chaiyaphum turned to Hechi. 'Tell me again, Hechi. *What* is it you want to see?'

Hechi twittered and rubbed her hands. 'Dear, *dear* Chaiyaphum, I *am* being indulgent, I know, but I have this *insatiable* curiosity!'

Chaiyaphum took Hechi's thin arm with a propriatal smile. 'Alright then. Where is it?'

Hechi gave a little squeak. 'I'll find out.'

The thing Hechi was so curious about was locked inside a sealed metal box buried within the centre of the Hub complex. From inside the cage came a regular pounding and the small leftovers of a roar. The metal wall appeared to bulge to coincide with the pounding.

Hub came online from a snicking icon in the form of a brash and annoying Appearance. '*Amazing* people. Simply *absolutely amazing*. This is a neomorph from Verest and the Body Artist that did this...

well, the irresponsibility beggars belief. Do you know how much of a murderous, *twisted*, violent *sociopath* this thing is? Do you, hmm? Do you have the *slightest* idea of what this neomorph can *do*? I'll show you, shall I?' A waiting icon birthed a black window, which fizzed and then displayed images from inside the metal box.

Blood.

Everywhere.

Inside, the squat, monstrous neomorph was bleeding from great dents and lacerations on its huge hands. The blood was smeared over the wall and the floor and itself. It was howling with an unearthly sound and punching at the metal wall of its prison with hideous power, actually denting it, but sending blood fountaining from his traumatised, diamond-sheathed knuckles with every punch.

The Hub generated Appearance appeared to do a strange thing with its virtual lips then shook its head. 'Amazing people. *Absolutely* amazing. It is physically quite *the* most hideously powerful...' The Appearance laughed and held a hand to its chest. 'Oh, I do beg your pardon, *he* - genetically the neomorph *is* a male - is physically quite *the* most hideously powerful individual Hub has even encountered. *Hideous*. But that's not even the most *interesting* thing. You have *got* to see the *psychological* profile...!'

'I think I've seen enough. Hub, I hate you.' Hechi turned to Chaiyaphum with a weak smile. 'Hub said it was something *nice*. '

Nyahua and Niandankoro turned to her and gently stroked her back as Flocanalog looked on, bemused and a little irritated.

Chaiyaphum looked at her fellow Cardinal affectionately then patted her shoulder kindly. 'You really *are* stupid Hechi, aren't you?'



The odd horizon twice brought an odd evening, where the forest canopy turned dark and mysterious by increment, and where day faded into night instead of passing linearly into it. They found no shelter along the way, but then neither had they expected any. They camped out each night inside the hollow, ballooned interiors of their choo machines, the forest noisy and hot around them. They made good progress the first day, travelling 25 kilometres and better the next, travelling 30 kilometres. When they rested for the second night, they were a mere 15 kilometres from the surface of Water.

Niandankoro had brought with him a rolled up piece of fabric scored with a 19 by 19 grid, four wooden bowls and a collection of small, polished granite and marble stones. This paraphernalia was, like the previous evening, now laid out, the centre of much silent, concentrated effort. Flocanalog sat, idly trying to fathom the game from first principles, refusing Niandankoro's offer of explanation: anything to distract

him from the amorphous, trembling impatience that he could feel gnawing away inside him. He looked over at the tiny form of the Cardinal Chaiyaphum, noting the narrowed slits of her black eyes, the thin face serene with concentration. He had become accustomed over the course of the last two weeks to being in the company of Cardinals - first Manchester and Malvern, then Nyahua and Salisbury, and now, in addition, these three - but they still intrigued him. Chaiyaphum, more even than Nyahua or Salisbury, struck him as distinctly, uniquely *Cardinal*. There was something about her which made him acutely aware of the *alien* nature of her triumvirate mind. It was something to do with the graceful but oddly co-ordinated movements of her tiny body and the severity of her face. In conversation, it felt to him as if some part of her was simultaneously elsewhere, as if she were only partly in the same place as him. Her voice when she spoke was a strange, quiet hooting, conveying short, cryptic utterances. In context he supposed, her words would be dense with meaning, but much of any present seemed to escape him.

He watched her now, thinking. She reached out and placed a smooth marble lozenge on the fabric board joining, what seemed to him to be, a random distribution of other stones. When she sat back, her face was an unreadable mask.

*Why did she do that?*

Across the other side of the board, Niandankoro sat with his head sunk onto his large shoulders. He shook his head and smiled. He gathered up a handful of stones from his bowl and shook them gently in his closed palm, gazing intently at the placement of white and black lozenges. Flocanalog gazed at the long face of the giant Cardinal, thinking that just as Chaiyaphum seemed everything that was alien and foreign about the Cardinals, so Niandankoro seemed all that was natural and common place. His size, his manner, his quiet strength. There was a simplicity and a solidity about Niandankoro that was comforting in the midst of so much novelty and confusion. Niandankoro added a granite stone to the game and sat back, his eyes flicking quickly over the board, computing dependencies. Flocanalog looked at the placement intently.

*Why did he do that?*

Flocanalog felt a hand on his shoulder. He turned and saw Hechi. 'Fruit juice.' She handed it to him with a smile.

'Thank you, Hechi.' He attempted a smile as the diminutive Cardinal sat by his side and hugged his knee, tiny and fragile seeming next to him.

Nyahua appeared from the darkness and rumbled a pleasant greeting. 'Tomorrow, Floc-sah, yes? Tomorrow, we cavort to songs of Water, yes?'

Flocanalog did not know exactly what would happen tomorrow or what part he would or could play in the delegation. But still, he felt his breathing quicken at the prospect of fluid comprehension again. The metacetacean language form from Inhoplae hung etched in ghostly, agraphic cuneiform, a syntactic skeleton, untranslatable in his mind.

*I am...?*

'Yes, Nya-sah, tomorrow. I cannot wait.'

Chaiyaphum opened her mouth to a tiny slit and spoke with quiet authority. 'Excuse me. We are *playing*'.

Nyahua grinned toothlessly. ‘Many apologies, Chaium-sah.’



Niandankoro guided the reaction shuttle carefully using a resource Pilot, bypassing the architectural accretions that were Godsfollicle proper, headed for the oldest sections of the great cable sheath towards its base. Through the diamond window, ahead and down to the right, Floccanalog could just see the thin line extending out from the base of Godsfollicle and plummeting down to invisibility, lost against the hulking, aquamarine mass below.

The *Hair of God*, 70,000 kilometres long and 20 metres wide.

When they docked, the delegation found the air inside the terminus cold and stale. The floor was littered with odd pieces of rubbish: discarded clothing, papers, boxes, seats, tables, piping. The five large choo machines accompanying the delegation disappeared off into the shadows. Whether they were being cautious checking for potential danger or simply playing, Floccanalog did not know.

The illumination was dim, made ominous with the whine of labouring machinery and the soft grinding of metal. The absence of people was disturbing. Impeded by their lack of weight and the awkward tug of their feet on the fabric floor, the delegation hurried as quickly as they could through the dark, intimidating spaces, Nyahua taking them unerringly through the cluttered debris, towards a circular, sealed door. The choo machines were there waiting for them: two had become sexapods.

Nyahua pulled down a resource window from a line of waiting icons and keyed at a virtual window, instructing his resource to communicate a series of commands to the locking mechanism. He walked calmly forward as the door bisected to reveal a clean, pastel tube. The others followed him in with the choo machines swirling around their legs and paused before another, similar hatch. They watched it open like the first into a nondescript lobby area, mostly devoid of features, a series of closed doorways the only adornment. Lifts. Nyahua led the group towards one of these, opened it and showed them inside. Only seconds after the doors closed they opened again onto a viewing lounge, the entire forward wall of which was an expanse of vacuum black. Below, an expanse of wispy white and turquoise, impossibly huge hanging in the cold vacuum.

Water.

Nyahua keyed at a resource window again, communicating with the old choi machinery that maintained the *Hair of God* and the 40 metre high Elevators that rode it. He used a centuries old protocol for communication, a relic of the much older times when metacetaceans still entered into dialogue with Cardinals and humans.

The initiation of their descent was very nearly imperceptible and the Elevator was falling down the gravity well before Floccanalog even noticed that it had begun. He felt the five Cardinals join him before the window. Each stood silent, lost to their own muse. Even as he began his descent onto Water, his mind

returned without him willing it, like a tongue to the gap of a recent tooth extraction, to the same question.

*Extraordinary.*

*I am...?*

## Chapter Fifty Six

Lattice.

The singularity of each tubular microhabitat going to make up Lattice was evidenced primarily by the people who inhabited it, by their own distinctive sets of beliefs, habits, social structures, dialects, foodstuffs and practises. However, each microhabitat could also be differentiated from its neighbours by its climate and by the different mix of choi and choo and animal and vegetable life forms constituting each enclosed system. The degree of interaction of that enclosed system - with its own constituent parts and internal interactions - with the 200,000 other component parts of the vast, jointed-airy structure that was Lattice, was also distinctive. The precise number of interactions possible within Lattice, both between microhabitats and within them, began on a scale starting at large and ending at incomprehensible.

*Lattice.*

It was just that: a huge, articulated cube 600 kilometres on a side hanging in the vacuum like a poor physical rendering of a Menger sponge. The interstices of Lattice were occupied by 200,000 linked but independently rotating, enclosed micro-oneils. Each had a miniature, elongated sun, caged behind an magnetic sheath, piercing the centre of each tubular structure. No one component of Lattice was exactly like any other. Each possessed its own unique shape and size. The largest microhabitats - one at each corner of the cube - housing the induction Guns that dealt with the traffic from the external Koyculture - were huge tubes 150 kilometres long. Yet the smallest cylindrical worlds could be as little as one kilometre in length. The construction of Lattice beggared belief, accomplished by a metacetacean race that, only 300 years before, had not even existed, mysteriously and magically at liberty from the prison of handless physicality.

Water blossomed into the vacuum.

The First Metacetacean became *there* and probed his environment with esoteric senses. He saw others of his usurpent race blink into solidity and encircle the great articulated-cube of the Child in a Jovian ring of citizenry. Thousands of them. Millions of them. Shochil drifted to the side of the First Metacetacean, and vocalised, hot EM flashing from her dipping snout.

# LatticeChild Way? [Image]

# AnticipateImminent Joy

The First Metacetacean reached into the informational Cascade and performed a communicative act.

The Jovian ring of metacetaceans responded to his hail, and began in concert to sing a computational song, slowly re-writing the informational underpinnings of their local physicality. Like the collapse of the Ascii and Verest attractors and like the strange disappearance of Oaxaca, like the emergent accretion of the Memecast mind and like the stumbling, innocent emergence of the Novagaian sentience, the becoming of the Child of Water began imperceptibly. Facilitated by the surrounding ring of metacetacean citizenry reaching past the Mayan delusion of physical form into the informational basis of the Cascade, slowly, over a time course of hours and around no discernible locus, Lattice began to unravel.

## Chapter Fifty Seven

The familiar Appearance of the Limited Awareness Personality Construct, snicked into apparent solidity after the usual warning icon.

‘Gentlemals, your employer will see you now.’ Brian drew a hand through the air, birthing a black window from which the squashed ellipsoidal face of the neomorph Nanashub glared. He was naked to the waist, his engineered slab of chest and most of his thick arms and squashed face smothered with a crimson sheen. His hands were ruined, leaking appalling quantities of blood. He was locked inside a holding cell, this state of incarceration being the result of him having put his fist, with its diamond-sheathed knuckles, through the exterior skin of the Hub complex: the hole was plugged by a Digit until a proper repair could be effected.

Nanashub pointed with an aubergine-sized finger, his words wreathed with menace.

‘Get me out of here.’

Jurgen actually laughed he was so nervous. Then he clapped a hand over his mouth and began to whine quietly. ‘Ohshitohshitshit...’

‘It’s alright Shub. We will, don’t worry.’ Mikhail gulped and attempted to manually remove the fingers of one hand, the mop of greasy, unkempt hair at his brow rising and falling. ‘Hub has told us that if the *Bastard* leaves immediately, then all...’

‘If *what*?’

The interrogative was unearthly and chilling and birthed baby spiders that crawled up Mikhail’s spine. ‘Aah- *hah!*’ he cried, quite involuntarily, leaping back and wriggling his shoulders.

Nanashub’s next question was roared. ‘*What the fuck’s wrong with you?!*’

Both Jurgen and Mikhail heard Nanashub’s reinforced fist impact the metal wall of his cage with a ghastly, wet thump. There was a pause before Nanashub’s voice sounded over the auditory tap again, quiet and utterly malevolent.

‘I said... get me OUT of here.’



Mikhail cringed. 'I know, we will Shub, we will, but...' Mikhail closed his eyes and spoke in a rush. 'But what do you *expect* mal?' Once begun, Mikhail seemed perilously emboldened. 'You *destroy* an access blister, bite *chunks* out of one of those fucking *Bus* things, take out a half dozen remotes or more and, on top of all that, knock a fucking *hole* in the side of the *Hub*! I mean, what the fuck else do you *expect*, huh?' Mikhail glanced at Jurgen and saw Jurgen looking back at him with stunned, horrified amazement. He gulped and twitched a smile into place, realising with a cold sinking feeling that he might have got a little carried away. 'If you don't mind me saying, that is...'

Pause.

Nanashub hit the wall again and Jurgen farted.

'I will speak with you later Mikhail.' Nanashub's voice was the dark, subterranean movements of boulders. 'Whatever it takes. Just get me out of here.' The neomorph broke the resource connection abruptly, taking the window with it.

Brian appeared to gather his hands and beam amicably and synthetically at Mikhail and Jurgen. 'Well, considering everything, I think that went rather well, didn't it?'



The probing appendages of the Bus made delicate contact with the flat tip of the spine protruding from the Tree of Trees, contracting over their great length and decelerating the greater mass of the descending choo machine, slowing and depositing the belly safely at rest mere centimetres from the surface, bouncing lightly between the huge, towering legs.

'Bus has arrived.' Brock placed his hand at the base of his wife's back and indicated gently with the other arm for Gervane and Kirsty-Ann to proceed him and Carys. 'After you.' Gervane nodded his head and started towards the Bus, holding on tightly to Kirsty-Ann's hand and pulling him to her side.

Brock considered that he could not recall a time when, in fact, he had even seen them *apart*. He expressed the curious thought to Carys.

'I know, I've noticed too.' She took her husband's arm, speaking quietly. 'It's like, now they've found each other, they can't bear to let each other go!'

'Hmm.'

Brock and Carys followed Gervane and Kirsty-Ann to the Bus and ducked inside the soft, moulded interior, smelling the familiar liquorice and turmeric.

'How long is the journey, Carys?' Kirsty-Ann asked politely as the belly sealed itself.

‘Not long, Kirsty.’ Carys widened her eyes. ‘Oh, Melie is going to be so *happy* to see you!’

Kirsty-Ann grinned back: she had decided Carys was a good person almost immediately upon meeting her. ‘I hope so!’

Brock had accessed the choo machine, entering the consensorias through the moist access gates underneath the arm rests and had delivered his request to the Host mind. ‘Off we go then.’ The air inside the Bus changed, passing through a dozen different olfactory states. The floor beneath them assumed transparency and the Bus leaped upwards for the sky. ‘Novypolos here we come!’



The orchard was high up, situated above and behind terraces on the Antispinward shore of Wickremasinghe. Herne sat staring into empty space as the Terminator passed over, turning encircling trees ambiguous and plunging the fruit garden around him into darkness. The air, suddenly cooled, exhaled a citrussweet miasma. Herne was thinking and remembering a briefly glimpsed face, long and haughty, framed with pale golden hair. He felt his stomach tighten and his testicles wriggle at the memory. He lay back on the cooling grass and put his hands behind his head, smiling. Above and to Starboard was a huge, crescent sliver of white-flecked aquamarine: the drowned Gaian mother

*I wonder who she is? Not Novagaian, that's for sure. Not with that tail.*

Herne heard footsteps approaching from behind and recognised the smell of his sister on the cooling breeze before he saw her appear above him, her dark face framed against the greater black of the night sky.

‘Boo.’

Himochee stepped over Herne’s head, settled herself familiarly on her brother’s stomach and began to twirl a finger absently through her hair, regarding him neutrally and frowning a little, favouring a disagreeable pout.

‘Hi Himee.’ He noted the signs of annoyance. ‘What’s up?’

Himochee huffed and began picking at a nail. She raised her eyes skywards, threw her hands a little to their sides then looked at Herne’s face. ‘Oh, it’s nothing really. Ghuvdaa is just getting on my tits a bit, you know? Nothing new.’

Herne chuckled. ‘You know Ghuvdaa.’

‘Yeah, I do, and that’s the problem.’

‘Why?’

Himochee sighed deeply. ‘She says that she wants to do the Joop drop this year.’

Herne gave vent to a barked, derisory snort. ‘Oh *mal!*’

The Joop drop happened mostly at Carnival times. It involved a participant being in consensorias sealed inside a ball of carbonsponging and falling over the lip of the Drain - the Joop Falls, 120 metres high - into Wickremasinghe proper. Ghuvdaa *hated* heights but this year was still planning on falling over a large one.

‘Yeah, I know,’ said Himochee resignedly, throwing her hands up in the air again. ‘And you know what will happen, don’t you? She’ll be all ready to go, get to the edge of the Falls and then *completely* freak, won’t she...?’

‘Yep.’

*Ghuvdaa going over the Joop Falls? No way.*

‘And it’ll be *me* who has to take care of her afterwards!’

Herne frowned. ‘Just tell her she’s on her own, Himee. Sure she can do the Joop thing if she wants, but just tell she’s on her own when...’

‘I can’t *do* that Herne, I’ve got to be *there* to see her go over.’

‘Why?’

‘Because I *do*, that’s why.’ Himochee slapped her brother again. ‘It’s a fem thing, you wouldn’t understand. Now don’t ask any more silly questions.’ She scratched delicately at a point just above her right eyebrow with a single nail. ‘I’ve got to think...’

Herne wriggled a little. ‘Yeah, well can you do it somewhere else. You getting heavy fem, and this ground isn’t so soft.’

A mischievous gleam came into Himochee’s eye. ‘Oh really?’ She made as if to stand then sat back down hard, causing Herne to whoof and cry out, the air suddenly partially evacuated from his lungs. ‘Ha!’ Himochee made to rise but was caught and tripped by Herne grasping at her ankle. ‘Argh!’ She tried to scramble away, laughing.

Herne rolled to his feet. ‘Right, you asked for this!’ He came charging after his screaming sister and caught her easily. He swung her off her feet and began to run for the bottom of the orchard.

Himochee screeched, perhaps guessing Herne’s intentions. ‘Herne, put me down! Put me down!’

‘Alright...’ Herne stopped in his cantering run, digging in his heels and simultaneously using his arms to lift and propel his sister up and away of him, transferring all his forward momentum to her briefly airborne body. Himochee sailed through the cooling night air for some distance, her voice raised in a final, indignant shriek which was cut off short as she hit the placid water of a pond and disappeared in a large geyser of silvery foam. ‘Anything you say!’

Himochee broke the surface with a furious thrashing of limbs, her clothing clinging tightly about her plump lines. ‘Herne, you big, stupid *fish*! Just wait...’

Herne laughed so much that he didn’t hear the person come up behind him and became aware too late of them planting two hands firmly in the middle of his back. Off-balance as he was, he could do nothing to prevent the mysterious pusher from sending him helplessly into the pond after his sister.

Himochee regained her feet just in time to see Herne begin to topple. ‘Wee hee!’ She recognised the distinctive shape before hearing the voice.

‘Himee! One up for the fems.’

‘Yeah, Ghuvdaa! Woohoo!’

Herne broke the water with much splashing and shouting, and instantly moved to leave the pond, his strong legs leaving churning, submarine vortices of bubbles in their wake. Ghuvdaa gave a yell, and quickly disappeared off at high speed into the orchard darkness. Himochee watched as Herne left the pool and sprinted off in pursuit. She climbed from the water, feeling the chill of the air on her wet limbs and began running lightly towards the other end of the orchard, casting about for either Herne or Ghuvdaa. Behind her and to her right, kilometres away above the Joop Falls, the dark night sky blossomed tiny, silent streamers of red and green, a single, blended-fuzzy retort reaching her by slower, more mechanical means.

*Carnival time!*

Himochee remembered the Carnival at Sonepur with a smile. *Something about fireworks*, she thought. She remembered the beach and the thin, awkward mal she had met, his face alive with wonder as she scratched the ecopoesis in the sand with a stick. She remembered the feel of the cool air about her genitals and how the dark sky had birthed slow streamers of colour. Himochee did like Carnivals.

*This one will be really good.*

It was just a feeling she had.



Brian, the familiar Hub generated Limited Awareness Personality Construct, spent some time explaining to the neomorph precisely *what* would happen should he attempt violence within the confines of the Hub, prior to his boarding the *Ugly Bastard*, and leaving Novagaia permanently. He told Nanashub of the nchoi daemons compromising the neomorph’s internal resource, hidden and presently passive. He told him of the varieties of intervention these daemons would be able to effect, on a scale of severity starting at irritating and rising to life terminating. He spent a considerable period of time describing the devastating effect of certain classes of choi weapon upon soft animal tissues and helpfully pointed out that two such

choi weapons would be never less than 10 centimetres from each of the neomorph's temples whilst he remained on the Hub. Brian even provided an accurate graphical simulation of what would happen if the weapons were activated: Nanashub, somewhat ominously, remarked upon the accuracy of the simulation.

The relevant corridors within the Hub complex were evacuated for the movement of the neomorph down them. To front and back of him were large and hooped Hub courtesy remotes, while the two choi weapons hung poised, utterly silent, either side of Nanashub's odd-shaped skull. As Brian had indicated, they remained never more than 10 centimetres away at all times.

Nanashub walked calmly, his thoughts passing through dark, unpleasant places. His traumatised knuckles were healing quickly as medical microfactories - using Fat reserves in the neomorph's thighs - effected a swift repair.

*We have not concluded our business, this Hub and I.*

His thoughts sank further into Stygian odorous spaces and a low rumbling escaped his slit mouth. He thought of Mikhail and Jurgen and the time he had spent in incarceration whilst they remained at liberty. He thought of Mikhail's impertinence and lack of respect.

*I will deal with him later.*

His thoughts sank even further and encountered obscene mud at the bottom of the well of his soul.

Nanashub was not evil.

He was simply utterly inhuman.

## Chapter Fifty Eight

The table was old and rectangular, fashioned from *Quercus rubra*, measuring five metres by two metres. Above it, shading the ancient wooden surface from the bright Sol was 64 square metres of trellis-work, supporting a thick canopy of vines and flowering plants. On three sides were stone walls of a pale tan colour, intricately etched and depicting elephantine-headed, many-limbed, monkey-faced and erotic-serene figures from the ancient Hindu system of religious philosophy. On the last side was a corrugated stone wall, half a metre high and above the wall, a space open to the air, revealing the view out across Wickremasinghe.

The Cardinal Deoli entered the shady, open space from its only entrance carrying two bowls of battered and fried mango. He added the bowls to the proliferation of other dishes and pots extending the length of the table and gazed serenely at the huge quantity of food

*Well, Manchester did say there might be a few of them.*

Deoli ran a hand over the smooth, white front of his tunic, the coffee-brown skin on the back of his hand dark against the spotless cream fabric.

*Sweet Manchester.*

The Cardinal felt hunger growl in his stomach, complimenting the erotic esurience that thoughts of his good, *dear* friend Manchester always had the power to evoke in him. He picked lightly at a sharp chutney of aubergine and apple and smiled as he chewed, his thoughts warm and red-tinted. He walked slowly over to the low wall and looked out across the water.

*There?*

Half a kilometre, or so was a tiny, coherent lump of yoghurt. Deoli brought a resource window down from a waiting icon, brought an optics tool online and looked through augmented eyes... No. It was not Manchester. *Not yet*. Deoli was unconcerned. He walked back to the table and poured himself a long glass of cold, mixed lime-water and yoghurt. He returned to the wall - now the corrugations made sense: they were room for the legs to swing in - and gazed peacefully out across the calm, afternoon waters, sipping at his *lassi* with relish.

*Soon now.*



The underwater platform fronting the small jetty was flooded with 50 centimetres of clear, fresh water. The two pseudo-Shells mounted the flooded platform one after the other, allowing the Trippers to disembark onto the higher jetty proper. Manchester was the first to disembark, leaping nimbly out of the pseudo-Shell and scampering up the long flight of steps cut into the stone wall without waiting for the others, her excitement obvious.

Tennys gazed up after the fleeing Cardinal and turned to the slender, oatmeal Sesquioian next to him. 'Manchester's in a hurry.'

'Yeah.' Melie used her hand to shade her eyes from the bright sky. 'Like, I think she's going to get herself *laid*, you know?'



Twenty four hours later...



Tennys stood alone and looked out into the darkness, the quiet lap of water at the edge of the jetty and the occasional, faint voice from the greater mass of the bridge above the only other sound. His mouth was still tingling with the extravagant spices of Deoli's meal that he had eaten some hours earlier and his mind was pleasantly fuzzy with the effects of a recently imbibed Weed variant. He took a deep breath, enjoying the cool, mineral air, feeling himself awash with an odd, bubbling sense of joy. He removed his boots and dangled his feet in the water of the flooded platform, his thoughts roving in the cool, anonymous darkness.

He thought about reckless, naked nightswimming in the silvery dark waters of Wickremasinghe and remembered the feel of cool sand at his feet. He remembered the salty-smoky taste of barbecued crustacean and retained an acute memory for the sight of beautiful oatmeal hair thrown back in the orange and charcoal light of a fire. He remembered gasping laughter and the absurdity of dance around a dying fire. He felt his face grow warm with the memory but forced himself to smile. Then he thought about forest canopies and the soft corrugation of woven Tree root and found himself recalling the haughty and flushed face of Roeena and remembered his dopey panic at his first meeting with her. He grinned at himself, batting at his head, knocking his forehead with the heel of his right hand.

*Idiot!*

He allowed his thoughts to free associate - to snug to Tree to choo - and found himself thinking of the oddity that was the movement of a herd of machines round the wet, inner surface of a spinning hoop of reconstructed Lunar. He remembered his balcony and the long, lazy days spent passing over the Ndele prairies with a stale mouth and a Histories interact he had called Hilbert. His thoughts wandered into the abstract as he recalled the long hours he had spent reading on that balcony and searching for names: they gusted past his mind's eye. *Ramakastran. Shiracombe. Ushogbo.*

*Wickremasinghe.*

The last name blossomed a disquieting tangle of remembered questions and frustrations and he felt his equanimity waver as his thoughts strayed to *that document*, to the one entitled *The Three Horns of the Representational Trilemma*, with *that person*, one Elizabeth Wickremasinghe as first author. And then he remembered his sense of rising, disgusted frustration when, on what turned out to be his last full day on the Caravan he had finally retrieved a copy of the document from the Hub and settled down eagerly to read it.

*Garbage!*

It was absolute nonsense: he didn't understand a word of it.

The terminology was scientific, archaic, and obscure. He was not even able to glean from the introduction what the article was *about*. He did not doubt that it might mean something to *someone*, but that person was certainly not *him*. On an impulse, he accessed the stored document. Ghostivory graphics appeared bright against the dark, virtual space. He scrolled through the text desultorily, pausing to read every now and then:

"...all of whom seek a unified science of mind where conceptions of structure, representation and process from both schools find an efficacious assimilation..."

*Snick.*

"...positing a system of representation exhibiting properties of compositionality and systematicity may not be sufficient, in and of itself, to explain mental phenomena..."

*Snick.*

"...for a putative functional architecture to be capable of accommodating the *grounding* of symbolic structures in something other than more abstract symbols, that architecture *must*, we argue, avail itself of *both* high-lighted kinds of representational genera..."

And that was just the introduction!

On and on it went, pages and pages of meaningless, arcane drivel.

Tennys dismissed the window with a derisory snort - wondering, *why did I ever think that that could be so important?* It seemed absurd now. Imagine the conceit, thinking that he had discovered novelty where thousands before him had not. *Stupid!* He suddenly felt an inexplicable, impatient revulsion for the dense, terse scientifica. He found himself surprised by the feeling.

*Curious. Something has happened to me.*

He could not say precisely what it was.

*Nightswimming.*

Tennys recalled a conversation in Chapel Halls - many weeks ago, though it felt in many ways like a much longer period of time - by the waterfall of Malvern's home, and heard Carys' words again.

*So you've never done that?*

Well, he had now, and it seemed to him that Carys had been right: it *had* been a freeing experience though not, perhaps, in the way that either she, or he, might have expected.

*Something has happened to me.*

As if testing his hypothesis, he tried to summon up some remnant of the familiar passion that had been with him for as long as he could remember, the desire to find answers to academic questions. He found - he should have been surprised and distressed, but wasn't - that it was gone. As if lanced like a boil, he felt that his mind had been voided of cloying, epistemic pus. All of sudden, very clearly to him, it became



apparent that he had learned all that he wanted to learn from history. Now, it seemed to him, he had different kinds of questions now, requiring more dynamic answers. He searched inside himself for the truth of what he felt. Now, where his previously unquenchable historical thirst once had lodged, was a hole. Gone. *Satiated*. He felt no sense of loss or any analogue of distress at all at this state of affairs. Quite the converse: he felt free and calm and joyous.

*Curious.*

He heard sounds and peered into the darkness. The topography of the bridge wall appeared to jolt and waver in the dim light. There was a flaring light in the distance and the suggestion of figures and wind-carried gossames of laughter. He smiled and turned back towards the ocean and then was suddenly seized with a wonderful, delicious thought.

*Nightswimming?*

Two minutes later, after climbing back up to the Cardinal Deoli's home to get a towel, he stood before the waters of Wickremasinghe again, uncertain this close to commitment whether he wanted to proceed.

But that was the old Tennys.

The new Tennys grinned and pulled his shirt off over his head with one movement, loosened and dropped his trousers, divesting himself completely of clothing. He stood naked on the jetty, breathing mightily and flinging his arms up above his head. He stepped down onto the flooded platform, the water reaching the tops of his ankles, and slopped through the cool water to the edge. He looked up into the night sky, lifted his hands and dove sloppily into the water. Breaking the surface gasping, treading water furiously to warm his limbs and orientating himself away from the bridge, he struck out strongly with a fast, over-arm stroke, putting his head down and powering off into the darkness. He swam for some minutes, then turned over on his back, rested and floated.

*So quiet.*

He could see the bridge behind him, over his feet, the myriad tiny lights and windows. Above was a huge expanse of deep black with the hazy backbone of the home Galaxy dusted across it. His thoughts strayed back to *that person* and to his - apparently - recently extinguished fascination with history and people dead 800 years and more.

*History?*

He laughed. Then he dipped his head backwards into the water and executed a smooth outwards roll. He broke the surface and howled, throwing his hands in the air and kicking with his legs.

*God, I feel good.*



...abruptly, instantaneously, with no kind of warning...



Manchester awoke slowly from a dream of silken waterfalls and lay for some moments with her eyes closed, breathing quietly, allowing wakefulness to claim her more fully before moving. Opening her eyes, she rubbed at her eyes with the heels of her palms and glanced across at the peacefully sleeping form of Deoli lying next to her. Even now, after sleep, her body was still warm and energised from her earlier, pleasurable exertions.

As always, reluctant to do anything about the familiar, nagging pressure of her bladder, Manchester slowly climbed from the bed and padded to the bathroom nook, where she sat and waited as her bladder emptied. Then, when she returned, she sat on the edge of the bed for some moments before realising that the desire for sleep had - temporarily, at least - gone from her. So she got up again and hunted about for a blanket, which she flung around her, trapping her own warmth to herself, and then shuffled out onto the balcony overlooking the bridge.

Spinward of her, the bridge stretched away across the watery darkness of Wickremasinghe, the regularity of the alternately narrowing-bulging-narrowing girth clearly discernible. Lost to upcurling distance some 20 kilometres away was the long, white beach on the far shore where the arching, looping bridge terminated. Manchester turned her head through 180 degrees, looking Antispinward now toward the other, closer shore, only 5 kilometres distant. She followed the bridge to the limit of her un-augmented vision and discerned its wobbling taper, the outline provided by a mist of small light sources. A breeze washed over her, bringing faint, distant retorts. She allowed her eyes to track to Starboard, following the beach down towards the Joop Falls, and was rewarded by the sight of tiny rosettes of colour, sharp against the blackness. The Novypolos Carnival did not officially start for another 12 hours, but native Novagaians didn't much bother about such things: the Carnival would start when it started. She smiled, drawing the thick blanket tighter about her, the feel of the fabric suddenly putting her in mind of another, coupled to the confectionery sweetness of chocolate in a cooling forest and the stroking expansion of Euphoric and felt warmed by the memory.

An icon flared brightly into her dark visual world and birthed a minute simulacrum of herself. The virtual figure bowed and then re-iconised: a Third Copy had just found something. She gave a small sigh, brought down a resource window, keyed a sequence and blinked calmly as nchoi began downgating inhibitory connections with her metacortex, causing her awareness to unfurl to encompass teleological perception of the informational Cascade. It was impossible to explain, inter-subjectively, the nature of teleological perception to a sentience with only two computational architectures: the concepts necessary were radically non-expressible in natural language terms, because natural language was an artifice of choo and choi. Manchester was thus in common with all Cardinals in being unable to describe how she came to know those things that she did. On occasion, it appeared that she had foreknowledge of events, evidencing prescience on her part. But Third enabled teleological perception of the Cascade was not

limited to an appreciation of linear time or causation - the underweave of physicality was not so simple - and mere prescience did not encompass the full nature of her unfolded consciousness.

Third augmented, she experienced the informational Cascade, lingered and then withdrew. There was the ghost sensation of higher geometries folding impossibly away into lower dimensionalities, and the event horizon of her triumvirate mind closed. Esoteric, unspeakable forms lost saliency as her resource re-installed inhibitory connections with the metacortex. She took a moment to reassemble herself internally, the knowledge she now had shocking and delightful.

*Nogai!*

Like every Novagaian, she was familiar with nchoo consensorias and the machine ecopoesis and knew of the imminent presence behind every choo machine interface. She knew the sense of a greater, ephemeral awareness behind the artificial naturality of Novagaia. But still, she was unprepared to accept what her own Third augmented mind had revealed to her.

*Sentience! The becoming of Novagaia!*

‘Manchester?’ The voice was quiet, whispered, distinctly.

‘Melie.’ Manchester came away from the balcony to see Melie ensconced in a similar fashion as her, peering round the door to Deoli’s chamber. Manchester beckoned her with an arm. ‘Shh, come in.’ Melie stepped quietly and nimbly across to Manchester. She seemed excited and serene both at the same time, smiling easily and knowingly.

‘You just Blit?’

Manchester cocked her head. ‘Yes.’

‘Me too. What do you know?’

Manchester paused and lowered her eyes. When she looked up again she was smiling. ‘I know about Novagaia, Melie. About a child called Nogai.’

Melie nodded her head vigorously. ‘Me too! Isn’t it *amazing*? It’s just like...’

Manchester raised a finger to her smiling lips. ‘Shh!’

Melie instantly lowered her voice and dipped her head. ‘It’s like before with *The Watching Woman*, only better. Manchester, it’s really there! Novagaia, it’s *really there*! I think... I *feel* like it spoke to me, you know?’



...spinning serenely, red and desiccated in the vacuum...



‘Oh. Oh *shit*, Deb.’ Toying with her long glass of melon juice, Melie looked the smaller, darker Novagaian in the face, searching her eyes. ‘Well I guess you fems have got to know sometime.’ Still she paused. ‘Shit!’

‘Hey, it’s OK you know Melie?’ Deb put her hand gently on Melie’s arm. ‘You don’t have to say if you don’t want to...’

‘Wassaten, ugly?’ Ro butted into the conversation, taking a quick swig from her bottle and grinning to blunt her words. ‘Yah! No wait... wait, I know...’ Ro grabbed Aileeni with one hand and leaned over the table. ‘Ah know, ya *liedtous* didunyaoul *tart*, cushlike yoris...’ Ro burped and slapped her chest. ‘Yorat geek’s sister, init?’ Ro burst into hysterical peels of laughter at the thought, throwing herself back in her chair, and - of course - toppling over backwards on it. From under the table came a long, loud, peeling laugh, followed by a burp, then more laughter and the scuffing of feet.

‘You’re not *pregnant*, are you dear?’ Aileeni asked Melie concernedly, sipping from a large mug of dark, cream foamed liquid. She seemed struck by a sudden thought and turned to Ro who was rising up from the floor. ‘Course in that case, that would be, whatsisname...’ Aileeni waved a free hand. ‘*Incest*, wouldn’t it?’

Ro barked, shrieked and crashed to the floor giggling. ‘Ooo, I’ll piss meself.’

The four of them - Melie, Aileeni, Deb and Ro - had left Deoli’s home earlier in the day, strolling and chatting their way to the nearer, Antispinward, shore, down wide, meandering paths and between high, stacked structures, through tiny gardens and across open squares, with swarthy Novagaians going about their quiet business. When they reached the far end of the bridge, they walked for about a kilometre down the beach and then stopped on Melie’s suggestion to swim. Ro became fascinated with Melie’s tail and Melie obliged her by picking things up and throwing them about with it, to the accompaniment of much laughter and screeching.

They spent the late morning and early afternoon on the beach, swimming and sunning, swimming and sunning, and then retired, this time on Aileeni’s suggestion, for refreshment. Debroeket, who knew Novypolos well, led the four women up the inclined, terraced slopes backing the beach, along meandering woven Tree root paths. High up, 200 metres above the fresh water sea below, they came to a collection of tables around a small pond, a trio of cream bulbous Trees, a smattering of dark Novagaians, the sound of plucked and bowed strings and voices raised in song: a cafe.

‘Ooo, I’ll piss meself!’

Melie laughed and reached across to slap Ro playfully on the head. 'What you on fem?'

'Dser!' slurred Ro indignantly, rising from the floor again, pointing a wavering finger in Aileeni's direction. 'Serfaul!' This was partly true. Aileeni had, in Ro, discovered someone who liked drinking almost as much as she did.

'Me, child?' asked Aileeni calmly, placing a hand on her chest.

Ro clambered back onto her seat, reached for a non-existent bottle and shrugged when she remembered it wasn't there. 'Yeah.' She burped and then looked blank. 'Wazitorkingabow...?' She pointed a finger at Aileeni. 'Yeah! Yeah, syorfault fem, yumademedrinkat... wasserface, uh...' Ro's smile drained from her face and she grabbed at her stomach. 'Ooer.'

Melie leant sideways towards Debroeket. 'I'll tell you later Deb, yeah? Not a good time, right now. And uh...' Melie glanced over at Ro. 'Like maybe Ro needs some *food* or something.' Melie lowered her voice. 'She looks fucking *awful*.'

'Yeah, I know. She always does.'

Pause.

'Hey, Deoli should be cooking soon and I'm getting hungry. Anyone else getting hungry?' Melie rose in her seat, put her hands on the table. She flicked her eyes over Aileeni's shoulder and her gaze was caught by a movement.

Some ways off, a tall, wide-shouldered mal was watching her.

Melie stared back, suddenly transfixed.

*I know that face!*

Like an enamel dawn, Melie saw the mal's smile break on his face, showing clean, white teeth, rising a hot sun of desire within her. She dropped her eyes and sat down very quickly. She found she was trembling. 'Fucking A.'

'Sup Melie?' asked Debroeket.

'There's a mal over there!' Debroeket turned her head and Aileeni made to do the same. 'Don't look!' Melie pre-empted the action. 'He'll see you!'

Aileeni gave Melie a hard stare. 'Anything wrong girlie?'

'Just some mal.' Debroeket turned back from her subtle inspection with a shrug. 'Nice legs on him.'

Melie shook her head. 'I *recognise* him!'

The colour drained a little from Aileeni's face, and her features hardened. 'It's not that Gromburg thing is it?' She swivelled quickly in her seat to check, ignoring Melie's entreaties.

'No, no, it's not him! I'm trying to remember...' Recognition blossomed within her. 'Sonepur!' She remembered now: With Manchester, the sight of a face, quickly glimpsed, quickly lost.

‘Sonepur?’ asked Aileeni.

‘Sonepur?’ asked Debroeket.

‘Sonepur.’ Melie tugged at Debroeket’s sleeve. ‘Is he still there?’

Debroeket pretended to play with her hair and turned her head disinterestedly about the orchard. ‘Yeah, he’s still there.’

Melie breathed deeply, recognising the feeling inside herself: a healthy, primitive lust. *Haven’t got laid in a while. Might be quite nice*. She leaned her head a little to the side of Aileeni, taking a peek. The mal was still there: he had crossed his arms and was leaning nonchalantly on a small tree, smiling, and staring right at her. Melie let her eyes track up and down. *Nice legs*. She made a decision and rose to her feet. ‘Look, stay here a minute, will you?’



...measuring 6,794 kilometres in equatorial diameter...



Herne saw her rise from the table and converse briefly with her companions. He watched her as she flicked the hair away from her face and felt his stomach knot at the brief, ocular contact. Despite his best efforts, he felt a falling-serious lust tug at the brightness of his smile.

*Oh mal, she was something else!*

He watched her as she walked slowly towards him, his eyes tracking up and down, noting her slender build, her fine, pale goldengrey hair, the beautiful carriage of her head. Herne felt his testicles squirm and pushed himself away from the tree as she approached and stopped in front of him, her eyes on an exact level with his own.

She smiled. ‘Hi.’

So did he. 'Hi.'

Herne felt words drain from him, but then neither did they seem necessary just at that moment. Her face was doing the talking, as was the tilt of her chin and the calm, grey depths of her eyes and the tiny, moist gap between her lips. Herne felt drawn to her and moved forward without seeming to will it and saw her do the same. Her perfume reached him. His nostrils flared and the pupils of his eyes widened. He became lost in twin pools of green flecked, pearly grey and felt his penis getting hard.

'I've seen you before.' she said.

'Me too.' Herne replied. 'I mean, I've seen you before too... in Sonepur. You were with a Cardinal. You were angry.'

She cocked her head and smiled. 'Good memory.'

'Yeah.' Words dried up again, but Herne felt like he wanted to drink her presence it was so tangible. His hands moved of their own accord and took her unresisting elbows, drawing her toward him. He saw her eyes close and open again and felt her tremble as his finger tips made contact with her arms.

She spoke. 'I, uh...' Herne saw her tongue emerge and moisten her lips. 'I want to meet you.' The words sent an electric joy thrumming through him. 'But listen... later, OK? I have to...' She indicated, with a slight motion of her head behind her.

Herne understood. 'Time and place.'

She smiled, her eyes looking directly into his from a distance of less than 20 centimetres, her pupils wide and black. 'Here. Three hours.'

Herne felt intoxicated by her presence and longed to feel her pressed up against him. He breathed deeply and smiled his most winning smile. 'I'm not even going to move.' Emboldened, he leant forward and kissed her cheek, smelling her perfume, slipping a palm around her waist.

She smiled, her eyes never leaving his. 'OK.' Still she looked, even as she backed away and turned to go.

'Hey.' He extended a hand. 'What's your name?'

Pause.

'Melie.'

'Herne. See you later, Melie.'



...an ancient, mythical bringer of war...



Aboard the bulbous, articulated *Nirgalinium um Trotos* - now tethered physically to the side of the Novagaian Hub after the completion of its orbital injection into the Koyculture - in a gently spinning anterior section of the Martian vessel, the Lady Selenium Cromsworthy Histiagh heard the resource tap on her auditory nerve chime at the most inopportune moment. She gave a small huff of indignation as a simulated voice began speaking, unbidden and unwelcome, in her ear.

‘Mother, this is Pateliises, please contact me urgently! Route it through Nirgalinium. Please, do it now! I know you’ll think it’s not important, but it is. Right now, mother, please!!’

The auditory tap chimed closed, an icon birthed a virtual, black pane, and the resource window began scrolling graphics, informing her of the reason for the unbidden message: the invocation by her daughter of an old family protocol, giving privileged resource access in terms of crisis.

*Crisis?*

‘Gusshaven!’ The Lady Histiagh caught her breath, feeling warm, moist air stroke the inside of her knee.

*What a time! What could Pateliises possibly want that was so urgent?*

The Lady Histiagh heard a luxurious murmuring from below her and felt the gentle, outward pressure of small hands on her knees, moaned a little, licked her lips.

*Maybe I’ll contact her later.*

Almost despite herself, however, the Lady Histiagh found that she was intrigued, and not a little concerned, by her daughter’s message. Even if she initiated communications immediately, she thought, the message would still take a matter of hours to reach distant Mars and return. *What could possibly be so important?* The Lady Histiagh bucked her hips, the presence of a delicious, tingling warmth at the top of her legs triggering a reflex movement of muscle and forcing a breathless gulp from her. She raised a hand to her cheek, twisted her head and arched her back. Toying briefly with the idea of ignoring her daughter’s request, the Lady Histiagh teetered on the brink of taking this course, but at the last moment relented and changed her mind.

*Pateliises had seemed quite insistent.*

The Lady Histiagh opened her eyes, reached down and draped her long fingers through the loose



thatch of blond she could see below her. ‘Malvern, my love...’ The Lady Histryiagh coaxed Malvern upwards, smiled and wiped a delicate finger across his small, glistening chin. ‘I have to just do something. One moment.’

Malvern smiled, utterly lost to a thunderous joy, rendered beatific in the presence of Martian musk. ‘Of course, my dear!’ He fell to a gentle pecking of the Lady’s flat tummy.

The Lady Histryiagh sat up and keyed at a resource window. She composed a short message and then sent it, via the powerful choi triumvirate aboard *Nirgalinium um Trotos* , to her daughter Pateliises, 78 million kilometres distant on Mars. Several hours at least, she knew. The message dispatched, the Lady Histryiagh dismissed the window, re-focused her eyes outwards, and reached with long, sinuous arms towards the tiny form of the Cardinal Malvern, cooing enticingly.

The Lady Histryiagh was thus, rightly, astonished when - only a matter of seconds after sending her message, as Malvern resumed his delightful ministrations, causing the Lady to sigh delightedly - a familiar icon flared into her phenomenology. The Lady Histryiagh sat up again quickly in the light gravity, her face registering shock and enabled the icon with a steady glance. She watched it expand to a window and a familiar face.

‘Hello mother.’ The Lady Pateliises Jawarlahal Histryiagh appeared flushed and excited.

The Lady Histryiagh Senior rested her hand lightly on Malvern’s rising head and glanced down before re-focusing her eyes internally on the virtual face of her daughter, the Lady Histryiagh Junior. ‘Pateliises, my *dear* , where are you?’

There was a delay - though not as long as by rights there should be, maybe eight seconds - before she heard her daughter’s reply. ‘I’m on Mars, Mother.’

‘But you can’t be! I’m talking to you almost *real time!* ’

Frustratingly long pause.

‘That’s what I wanted to tell you.’ The Lady Histryiagh Junior frowned before continuing. I think we’ve *moved* .’



...Mars appeared quietly amidst the Koyculture.

Nanashub put one hand in the middle of Mikhail.

Literally.

The neomorph's monstrous hand was 50 centimetres wide and covered the spot where Mikhail's legs joined his torso. When he spoke, Nanashub's voice rumbled up out of his chest with the sound of rocks creaking. 'I leave without you.' The thin slit of his mouth hardly seemed to move to accommodate the sound.

Jurgen quailed, setting his nasal decoration trembling, the fibrous sacs shaking and bobbing either side of his nostrils.

Mikhail looked down at the enormous hand pressing ominously against him and spoke nervously. 'Hey, Shub. Anything wrong?'

The three of them were at the end of a Hub docking spine, just inside one of the large cylindrical locks blistering the ugly, lumpen surface of the ugly, lumpen vessel, the *Ugly Bastard*. At the other end of the docking spine were two silent, hooped-black parts of Hub courtesy, together with the thin choi weapons that had ushered him here. On a command from the neomorph's resource, the outer lock doors closed shut, blocking the view of the Hub remotes.

Nanashub gave vent to a barking gurgling noise, and pushed with his hand. There was an awful crunching, popping noise and Mikhail was propelled backwards, his ribs shattered and the breath explosively removed from his lungs. He took Jurgen with him and the two of them ended up in a tangle of limbs against the outer lock door.

Jurgen cursed and whined, hearing Mikhail gulping and groaning for air, in obvious agony with his hands clutched to his midriff.

Jurgen looked up.

Above, Nanashub was coming toward them. From a cutaneous sheath in his thick forearm, a 40 centimetre-long blade slipped silently into the neomorph's hand. He stopped and raised the metal shard in front of his eyes, seeming to find pleasure in its sharp, clean lines. Mikhail began screaming and tried to deflect the unnaturally muscled arm that approached him, but his terrified, incoherent cry was abruptly cut off in a wet gurgle as he was caught and lifted and then repeatedly dropped onto the rigid blade, which sliced him in half, by increments, up to his throat.

Jurgen became senseless with terror as a crimson rain descended upon him. He struggled to rise, desperate to get away from the inhuman neomorph, the floor slick with appalling quantities of blood.

Nanashub allowed the largely bisected Mikhail to fall from his grasp, his arm and most of his torso coated in a viscous, metallic-bitter sheen, his face splattered with dark, red liquid. He watched as the blade retracted slowly into his trunk-like arm, the spent blood collecting at the entrance to the cutaneous sheath in a rolling cylinder. He gave vent to the same barking, gurgling sound. Keying his resource, he opened the inner lock door and stepped inside, leaving behind him Mikhail's corpse and the gibbering,

terrified, blood-soaked form of Jurgen.

*And that's just for starters.*

Nanashub enjoyed his own personal, grotesque analogue of pleasure. *We have not concluded our business, this Novagaian Hub and I.*



Salisbury was gardening.

She grew *Ocimum basilicum*, *Monarda didyma*, *Coriandrum sativum* and *Cymbopogon citratus*, each with their own characteristic needs and requirements. She cultivated *Artemisia dracunculus*, *Portulaca oleracea* and *Foeniculum vulgare*, each with their own unique and valued culinary or palliative use. She sat now with her hands submerged in the rich black soil of her garden, in distant consensorias with a cadre of tiny choo machines - none more than 10 centimetres in length - that were tending her herb patch. The tiny machines skittered about clearing the dark loam of organic debris, locating and uprooting unwanted vegetable invaders and checking each plant for damage or parasites or other signs of disease. Salisbury loved gardening almost as much as she loved running, but today her thoughts were not occupied with the minutia of horticulture.

She breathed deeply, trying to tease out the assorted vegetable perfumes of the garden, her thoughts aswirl with fantastical happenings.

*Moving worlds.*

The news, when it had arrived from Hub some hours ago, had left her trembling but, curiously, calmly unsurprised.

*First Oaxaca, then Ascii and Verest, now Lattice too, and now ...*

She could not conceive the scale of the metacetacean intervention.

*Mars.*

Six light seconds along the orbit around Sol of the conjoined Koyculture and the larger mass of Water to which it was in leash, the small, previously cold red planet now basked in the warmth of a newly larger sun. If she contemplated the staggering event too closely, Salisbury felt something akin to panic threaten to overwhelm her.

*How was such a thing possible?*

What imaginable scale of physical values could she possibly deploy in order to cope with the

instantaneous movement of an entire *planet* - a mass of some  $5.9 \times 10^{20}$  tonnes - a distance of over 75 million kilometres?

*How was such a thing possible?*

She lay back on the warm soil, drew her feet up and allowed her knees to fall out, her vision going red behind her closed eyelids.

*How had Water accomplished such a thing?*

A silver ellipsoid appeared in the upper right corner of her visual field. The auditory chimed. 'Hub reports 40 percent of Lattice structure now unravelled.'

She had asked Hub to keep her informed of what was happening and issued the command curtly. 'Graphics.'

The ellipsoidal Hub icon birthed a window displaying an image of what used to be Lattice. Alphanumerics informed her the remote relaying the images was 1,000 kilometres from what used to be the core of Lattice. Only 24 hours ago, magnetic couplings had failed throughout the vast, airy structure, and were continuing to fail, selectively, in orchestrated waves. The fragile, metallocrystalline arrangement of the thousands of individual oneils was breaking apart and - so far - no attempt at intervention had been able to effect a reversal of this ongoing, spontaneous disassembly. Salisbury shook her head: the enormous, articulated cube of structures and spaces was uncoiling like a peeling fruit, ablating in one long, continuous slice. This *becoming linear* of Lattice could be nothing other than intervention by Water, she knew, though next to the movement of Mars over interplanetary distances, it seemed almost a trifle. And as to *why* it was happening...?

Salisbury keyed at the window, relaying commands from her resource via the Hub to the choi remote: the image on the resource window blanked then re-assembled from closer in. She gazed at the sight. Rising up from its articulated former self was a long, jointed, curvilinear line. It reminded Salisbury of time-lapse images of plant movement, evidencing the same wobbling, circling climb. She keyed at an auxiliary window, requesting dimensions, and pursed her lips when she saw the figure: 8,500 kilometres.

*Much longer and it will encircle Water.*

Salisbury disabled the Hub connection, watched as the black space iconised and flicked away and cleared her phenomenological world of virtual objects. Her thoughts turned to the Novagaian delegation presently on the home of the metacetacean. She had communicated all recent events to them and they could now add the arrival of Mars - *though how was it possible?* - and the uncoiling of Lattice, to the list of questions for the builders of the Koyculture.

*Should they choose to respond.*

She shook her head, trying to grapple with the scale and the pace of change going on around her. It seemed to her that, increasingly, events were passing beyond even her prodigious ability to perceive and comprehend them. She could remember no comparable situation, not even during the period she had lived on the drowning Earth, certainly not since her arrival on Novagaia. Her teleological perception of the Cascade seemed - she tried to isolate the sensation, to find some analogue - *fogged*. She could conjure no more accurate description, and needed no more potent reason for the fear and the exhilaration she felt coursing through her.

*The moving of worlds.*

She accessed her resource and downgated the nchoi Bridge with her metacortex. Her awareness unfolded into knowledge of the informational underweave of physicality and she began searching for answers, her own questioning mind driving interpretations of the Cascade experience. She was still trying three hours later, when Ksobi put his hand on her shoulder, presenting her with a glass of warm, spiced vegetable juice and a blanket: the Terminator had come and gone and Salisbury found she was shivering cold, the soft ground under her wet with precipitate moisture.



The *Ugly Bastard* floated in vacuum 20,000 metres above the spiky, ellipsoidal Hub complex. Within the rotating central section of the lumpen vessel, sitting in the specially reinforced seat that was his usual command chair, Nanashub keyed at a resource window and the military nchoi machine housed within the neomorph's squashed skull began tapping his optic nerve, providing him with synthetic perception: his apparent visual world fizzed with a virtual snowstorm before reassembling, black and dusted with stars.

For Nanashub, the sensation was as if *he* were the *Ugly Bastard* - a comparison many would not deny - because if he turned his head, then the machine senses of the vessel would orient in the same direction also. He performed just such an action now, and his synthetic perception altered to accommodate him, revealing below, a thin, dark hoop, its inside surface green and white.

*Novagaia.*

Nanashub smiled.

By both his left and right hands, sitting apparently flat and motionless against the vacuum blackness, were two control windows. Nanashub moved his right hand, and inserted it into one of them, deforming and stretching the intangible pane like a physical form. He watched as the window formed a black mitten about his monstrous digit: the virtual resource glove enabled direct access to the *Ugly Bastard's* reaction drive systems.

Nanashub smiled again, his thoughts thick and red and running *snickingagonypleading* .

He repeated the insertion action with his left hand and watched as his other huge hand was similarly, virtually engulfed. He moved his thumb and saw red warning icons appear like blister across the back of the synthetic digit. The voice of his resource, dull and stupid, came online after a harsh chime:

‘Weapons are at your disposal, master.’

*You would imprison me, would you?*

Nanashub fixed his eyes on the distant, looped structure below him, behind it, the huge, darker mass of

Water. He moved his hand inside the weapons glove. A grid-work snicked into apparent solidity and rapidly expanded, magnifying the green, park-like top of the ellipsoidal Hub complex beneath its diamond bubble.

*You would seek to thwart me, would you?*

Nanashub moved his index finger and a line of icons appeared in front of the resource glove. Each was a gently rotating blade, virtually glinting as they spun.

*You would humiliate me, would you?*

Nanashub stabbed viciously at one of the tumbling knife icons.

Towards the stern of the *Ugly Bastard*, a pellet of plastic - only massing some 500 grams - exited the four metre long barrel of an induction Gun after being accelerated to a velocity of some 5,000 meters per second.

The huge speed of the projectile meant that it would impact its target only 4.4 seconds after firing. Yet only 3.98 seconds into its flight, the pellet-projectile was caught and stopped by a powerful Digit, the immense energy of the collision dissipating in a bright flash of high energy EM.

As has been noted before, Nanashub was not evil as such but rather simply inhuman, the ugliness of his grotesque musculature surpassed only by the frightening horrors of his psyche. But the neomorph *was* a little stupid, which is why he refused to listen as the Hub came online from an auditory tap, quashing all attempts by Nanashub's resource to disallow the communication.

'You have taken offensive action. Desist immediately. This is the first of only two, repeat two, warnings.'

Nanashub snorted through his flat, 15 centimetre wide nostrils. Tweaking his fingers inside the weapons glove, the neomorph invoked another array of icons, dismissing the previous line of gently rotating virtual blades. In their place appeared four viciously tumbling axes, the handles of each studded with long thorns and spines. He cackled and swatted his hand across all four of them. In quick succession, the induction Gun at the stern of the *Ugly Bastard* accelerated four heavy projectiles of depleted uranium towards the Hub target, each massing some 10 kilograms.

This time, each was caught and stopped after no more than three seconds of their flight and instantly reduced to ballooning rosettes of high temperature plasma. Once again, Hub came online.

'You have taken offensive action. Desist immediately. This is the last, repeat last, of only two warnings.'

Nanashub roared in frustration. He twisted his head and selected another target, this time, Novagaia itself. He did not care where. The line of axes appeared once more and Nanashub swiped his hand across all four of them. But the same thing happened again. Each was stopped and contained and the enormous kinetic energy of each was dissipated in a quadruple of bright, blooming plasma flowers.

Retaliating swiftly and decisively - as it had indicated, omitting a further, verbal warning - Hub reached out and sliced a powerful Digit through the fragile metal and ceramic thorax of the *Ugly Bastard*, cleanly amputating the offensive induction weapon and the reaction drive engines from the rest of the vessel. Just in case Nanashub had remote EM communications with the still intact induction Gun, the Hub closed its intangible Digit and reduced the drive section of the *Ugly Bastard* to a dense ball of crushed plastic and metal. A brief, fierce explosion was momentarily contained and then allowed to dissipate as the fusion

bottle of the drive systems ruptured.

Within the surviving section of the *Ugly Bastard*, the inhuman neomorph Nanashub raged and roared at the insouciant ease with which his vessel had been rendered so offensively impotent, and vented his frustration the only way he knew how: by killing people, and destroying things.

Fist was unlucky - messily decapitated by one monstrous swipe from Nanashub's watermelon-sized fist before he had time to find sanctuary - but Jurgen had planned ahead, and had already climbed into an EVA suit, and was standing inside an airlock, with his hand on the release mechanism, when Nanashub came looking for him.

Bloated and psychotic as he was with engineered combat hormones, Nanashub was blind to the potential danger as his diamond-sheathed knuckles punched their way through the outer lock door - and Jurgen's terrified actions had their entirely predictable results.

Blown out of the lock of the *Ugly Bastard* in a flurry of vacuum frozen neomorph spit, tumbling helplessly in vacuum without reaction mass - he had not checked the EVA suit before donning it - Jurgen seemed destined to become a piece of stellar detritus. But he didn't. Instead, he was rescued by a Hub remote accompanied by the smiling face of the Limited Awareness Personality Construct Brian, some two hours later.

Nanashub wasn't.



The woven path began a slow curve to the right, revealing a tall, narrow arch of sky ahead, before it switched back to the left, bringing Salisbury out onto an open stretch of cliff. On her left was a wall of forest and on her right, a 100 metre high fall off to the forest floor below. Black and spiky and away over in the centre of Chapel Halls was the improbable machine-cactus, the Tree of Trees.

She accelerated as she broke from the forest cathedral for the clear sprint, reaching 12 metres per second. Then 13. Then 14.

She spotted the obstruction from a distance of 200 metres.

*Odd. What's that?*

She slowed down, staring at the stationary form on the path ahead. From a distance of 100 metres, and with her head jiggling up and down as she ran, it was hard to make out any detail. Whatever it was, the shadow of overhanging vegetation made it black and indistinct. At 50 metres, it was possible to see a little more - *some kind of construct?* - and then at 20 metres, suddenly, she could see *much* more. It was a choo machine, slender and feline, as tall as her when it was sitting down as she was standing up. A sexapod, with two frontal extensions tapering to bulbous, triangular tips. But it was not the morphology of

the choo construct that caused Salisbury to slew to a stop, her arms waving, her strong, compact quadriceps ballooning as she decelerated. It was the coloration.

Curiously luminous grey shot through with blue and white hoops.

A mutation.

She halted five metres away, and she and the machine simply regarded each other for some moments. The triangular tips of the machine's two frontal extensions constantly drifted in and away from each other, as if triangulating on her. And three times whilst Salisbury stood and watched, each turned toward the other and remained rigid for a second or so, as if the machine-mutation was looking into its own eyes.

*Almost certainly anthropomorphic over-interpretation on my part*, thought Salisbury. Transducers for perception and communication were often not where one might think they should be on choo constructs.

Breathing deeply, Salisbury pulled a quantity of a sweetened nutrient solution from a small nipple near her mouth. She had no fear of *direct* assault from the machine: the morality of the ecopoesis was so deeply part of all choo machines that, mutation or no, it would quickly become de-animate were it ever to attempt it. Assault by *omission* of action, such as Rineanna's recent experience of non-avoidance behaviour in the Mammoth mutation, was something different, but this machine hardly looked like it was going to run her over, however. She walked slowly toward the machine and stopped in front of it, her face placid and curious, and looked up.

The mutation began re-configuring.

Aberrant though its coloration was, the mutation was still constructed of innervated carbonsponging. The machine reared up on two appendages, towering over Salisbury at almost three times her height. For a single, terrible moment, recalling the Mammoth mutation - *omission of action!* - she thought the machine might fall and flatten her, but of course it didn't. Instead, it began shrinking. Both frontal extensions, with their curious, triangular tips, in addition to two, dangling appendages intruded into the machine's central section. Then the machine bulged outwards in new directions. After less than a minute, she realized to what morphology the construct was re-configuring.

*Bipedal.*

Smooth, unmarked, luminous, pearly-grey and *bipedal!*

Stunned and bewildered, she looked up at the complex geometry of the un-featured head and dropped her eyes when she saw the two long arms extend toward her. She looked at the finely-detailed hands, noting the deep, luminous-grey fingers hooped with tiny bands of clear blue. They were reaching out for her, imploring and offering. The significance of the action suddenly hit her.

*The machine wants me to access it!*

Quickly, she placed her own small hands into the palms of the pearly-grey choo mutation, feeling the moist access gates open in the machine's pseudo-digits. She waited for the fuzzy, emotional warmth of sensorias and the placid lick of the Host mind.

But this did not occur.



The machine was not the product of deleterious *mutation* but efficacious *evolution* . The machine-mutation was a novel and evolved form, a means of expression, a designed and engineered conduit. Not for a resident Host, not for *itself* , but for an entirely different order of sentience. An ephemeral, emergent sentience, arisen from the trillions of interactions between all the billions of interconnected, component parts of the Novagaian ecopoiesis itself.

Nogai.

Human and Cardinal and choo and flora and fauna. All contributed in their own way to the diffuse mind of Nogai, their very existence going to sustain something greater than the sum of their myriad interactions.

Nogai.

Emergent from the workings of an engineered machine-ecology, the genius saint Child of Water. Through the machine mutation, through a consensorias like none Salisbury had ever experienced, this ephemeral entity spoke to her, the First Novagaian, the first person to walk the virgin surface of the young orbital 400 and more years ago. She gasped and sobbed and laughed and cried as tears of wonder and joy turned her world wet and wavering.

# I am [NogaiImage] Who are you?

## Chapter Sixty

Flocanalog could smell the water before it became visible, a clean, mineral perfume of iodine and salt brought to him on a welcome, cooling breeze. He lengthened his stride, drawing away from the Novagaian delegation, peering ahead to see if the next curve was the one that would finally reveal the beginnings of the planet-girdling ocean. The woven path curved left and right, left and right, then straightened and ended at a tall arch of bright sky. He felt his heart accelerate and broke into a jog, finding even this small exertion taxing for him. He slowed again, his nose flooding with briny perfumes and heard for the first time the crash of waves. The path ended at an artificial headland where a sliver of rock protruded out into the water, the ground hidden by an unnatural covering of the same, white ceramic he had found inside *Kanchenjunga*.

He walked forward slowly, the hot sun beating down strongly on his wispy scalp. Twisting his head to the left, raising a hand as a shade, he took in 180 degrees of uninterrupted arc. At his back was a wall of green, punctured by a vegetable cathedral extending back into the dense forest. But ahead of him, extending to the odd, curved horizon in every direction, foam-flecked aquamarine and blue, turquoise and green, was the surface of Water.

In front of him, he could see the fall-off at the end of the spine of rock. He walked towards it, seeing before he reached the edge that wide, finely-ridged ceramic steps led down to a circular plinth below. Surrounding this plinth was a hemispheric collar of stone extending outwards from the raised plinth and flooded with mere centimetres of water. Five pseudo-Shells with roofs pulled back to reveal darker insides, waited motionless in the lapping water.

*One for each of us.*

Flocanalog doubted if Nyahua, with his occasional, hydrodynamic musculature, would bother.

He turned as he heard footsteps behind him. The four Cardinals stopped by his side, none feeling the need for words. He breathed deeply, pulling great volumes of salt air into his lungs and allowed his eyes to wander out over the vast watery expanse all around him, seeing changes of colour, temperature and depth, capped with transient, white-tipped, foam-flecked waves. From his right, he heard Chaiyaphum's distinctive, modulated hooting.

'The home of the metacetacean, my friends.'

He felt Nyahua place a hand on his leg and looked down. The Cardinal smiled up at him, his thick bowl of hair glinting in the fierce light. He indicated the ocean.

'Your answers, friend Floc-sah, yes?'

*Extraordinary.*

*I am...?*

Later, the mock-cetacean form of the Cardinal Nyahua surged ahead of the collection of lolling pseudo-Shells and powered away into the turquoise depths of water. Deep in nchoo consensorias with the Host mind of the pseudo-Shell, with his actual eyes closed, Flocanalog saw the departure of the hydrodynamic Cardinal through borrowed eyes and watched until Nyahua became lost to the distance.

*Fly, my friend. Perhaps I will soon join you.*



Using his powerful mind to generate his enclosing inertial bubble, the First Metacetacean hung in vacuum and peered down at the red-oxidised, newly warmer surface of Mars that turned slowly 40,000 kilometres beneath him. Experiencing great joy, the First Metacetacean vocalised a metacetacean *koan* complimenting that delivered to the cruel, knife-wielding, stick things of old Earth 900 years before.

# Powwaqatsi!

*Transformed life.*

The First Metacetacean floated serenely in the novel Martian presence, reflecting upon all that Water had achieved and pondering the great chain of events that had led to this moment, to *this* embodied sentience, to *him*, hanging in vacuum above a displaced, mythical bringer of war. The chain began with

his birth, but the First Metacetacean had no memory of his birth. The First Metacetacean had grown from an egg inside *ummm* and *ummm* and then been born into water and blood and then died, asleep in the dreamtime of a pre-sentient race, unknowing and trapped inside a hydrodynamic, cetacean body. He had no memory of the oxygen deprivation that damaged the neural machinery of his young cetacean brain, and no memory of the time that passed while that cetacean neural machinery was mapped and studied and repaired and rebuilt by billions of tiny machines. So the First Metacetacean had no memory that he had grown inside a second, virtual womb with simulated *ummm* and *ummm* and then been born again...

But along human lines, for how else?

*What other kind of sentience was there?*

Intelligent, conscious and self-aware, this *meta* cetacean entity chose his own name.

*Floccinaucinihilipilification.*

A state of nothing.

Floccinaucinihilipilification was the first of his eventual kind, born from a tank of oxygenated polyfluorocarbon emulsion, an alien, human kind of consciousness forced upon him.

From such a childhood...

Now, Water would open the Way for all and enable *powwaqatsi* for all that which was *koyaanisqatsi* .

The First Metacetacean pulled himself from the mnemonic reconstruction and perceived others of his kind appear around him, using their own minds to rearrange physicality such that they became *here* . The First Metacetacean greeted them with an exultant hail.

# Powwaqatsi!

The communicative act attracted the attention of another, more esoteric sentience. Swirling above the planetary pole, coherent light and dark and with impossible volumes smeared across its intangible hypersurfaces, was the Child of Water that had once been Oaxaca.

The mover of worlds.



Floccanalog looked about him, seeing vicariously through the senses of the pseudo-Shell. Away over to his right were three other machines, their motile surfaces trembling, holding at station-keeping: Niandankoro, Chaiyaphum and Hechi. Earlier, Chaiyaphum had explained to Floccanalog how the

delegation would proceed.

‘We will deploy certain protocols.’

Now, dawdling and inactive seven hours after Nyahua’s departure, Flocanalog reflected upon the fact that *deploying protocols* seemed to mean doing precisely nothing more than waiting.

*Interminable* waiting.

Pulling himself out of the consensorias - there was really nothing to see - he opened his eyes to the dim interior of the pseudo-Shell. Cognitively luminous and untranslatable, the metacetacean language item hung from Inhoplae in his mind, a skeletal shape devoid of semantic substance.

*I am...?*

What?

The inert syntactic form gave him no clue, but still he felt his throat thrum with pointless attempts at verbal articulation. What did it mean for him to be here? He pondered the chain of events that had led to this moment, to *this* embodied sentence, to *him*, hanging in 50 metres of brine on the home of those who had built the Koyculture. The sequence of occurrences had begun with the extraction of a pale, weak biped from deep Shell symbiosis on Marineris.

*Stapjeekha, forgive me.*

He remembered the smell of damp soil and a gazebo chopped in half and buried in a wall of earth on Terra and the voice of a new friend and his own exclamation.

‘My grandmother. You look like my grandmother!’

He could remember himself saying the words and could remember Maureen’s reply but of the person he had been referring to...? He shook his head.

*Nothing.*

‘Not a concept I have used for a long time.’

*Grandmother?*

Memories of another life.

He had no knowledge now for what or who he had been before the Shell, when he had lived on Memecast as a boy and then as a young man, 20 and more years ago before he had dived into the waters of Marineris to live the Shell life. The memories that had flooded him initially, on Terra and later on Novagaia, were now dim and coloured with no history or sense of self-involvement.

Yet another *him*, an unknown person.

Why had he left the Shell? Why had he gone to Novagaia? The Old One had told him to.

*Hadn’t it?*

Now, he was not certain. He could remember himself telling Manchester the sequence of events and could even remember the form of his words.

‘All of them. I want *all* of my questions answered. Who I am, who I was, what I am, everything.’

Flocanalog snorted at the naiveté.

But he had an image of Manchester’s face before him and was able to recall a wealth of detail about it, both visual and verbal and could recall his strange assertion.

‘The Old One told me I have been someone else.’

He was able to recall his own description of the encounter and could hear himself uttering the words, telling the small Cardinal of the birth of a cetacean calf that was all *ummm* and *ummm* and a regular, comforting pulse and then a terrible, squeezing, wrenching separation and the sight of the great serrated blade. But of the incident itself and the meeting of his Shell with the ghostly, philosopher-cetacean on Marineris...

*Nothing.*

The encounter had seemingly happened to another *him* and now he remembered it only second hand. Assuming that it ever actually happened. Increasingly, he was having difficulty believing that it had. Another him had experienced that extraordinary meeting - *if it was real?* - not this him and he no longer knew that older self.

*Extraordinary.*

*I am...?*

Flocanalog drew a deep breath and closed his eyes. Rising unbidden came the face of the young historian, Tennys. Flocanalog remembered their first meeting in the Tree of Trees and recalled the youth’s distant, awkward politeness.

‘Curious. You have too much memory, I have too little.’

He remembered the words and the image of the young man’s face in the resource window.

*I was wrong, I do have too much memory.*

No, that was not it, not quite.

*Too many memories more like.*

Too many lives and not enough space or time to recall them all in.

Flocanalog thought of Malvern, the infuriating, eccentric Cardinal Malvern and remembered the hot, dry Mammoth plateau and a bouncing wave of black Mammoths and the smell of burning cinnamon and sage. ‘Floc, old boy, you got the hang of an optics tool yet?’

His thoughts drifted to the feel of Manchester’s hands on his shoulders around a long table and the tickle

of nchoo infection and the beautiful Carys and the softness of Aileeni making love in consensorias beneath the waters of Ushogbo.

*Aileeni, forgive me.*

He considered that he no longer knew even that person, the one that had shared Aileeni's bed. Sonepur seemed a lifetime away and the simple pleasures of touch and smell beyond his ability to understand them.

*Inhoplae.*

Everything had started at Inhoplae. From the innards of a pseudo-Shell at a table with the smell of infused leaves and salt and the rustle of paper and hair. He felt *less* than weeks old as if he were caught in a continuous cycle of rebirth, as if he were being re-born minute by minute, his virgin awareness awakening second by second to confusion and pain.

*Extraordinary.*

*I am...?*

Flocanalog closed his eyes, remembering the consensorial images from Inhoplae again, rising behind him amidst swirling columns of ebullient brine and piercing him with coruscating light emerging from the curious apertures of the...

*Metacetacean.*

First on Marineris, the *Old One*, huge and fluked, blunt-nosed and *cetacean* then in Inhoplae, a *meta-cetacean*, an incomprehensible, alien being.

*How was it so? Why was it so?*

He asked himself the same questions. Always, comprehension continuously elusive, he received the same silent, non-answers.

*Extraordinary.*

*I am...?*

The metacetacean glosseme hung in his mind's eye as if taunting him, like the promise of enlightenment, achingly close but simultaneously utterly distant. With Maureen's help and aided by Nyahua's insight, the mnemonic reconstruction had enabled Flocanalog to appreciate the shape or *syntax* of the alien meaning quantum and, deep in nchoo consensorias with a chirruping pseudo-Shell, was able to vocalise an approximation of it. But still he had no way to know if the communicative act was meaningful. Amputated as he was, ripped from symbiosis and neurally re-configured bipedal, he - *this person*, thinking and existing in *this* moment - no longer understood the fluid *soundworldbuilding* that was Shell language. An older, Marineris self, a blended, bonded symbiont might come to understand metacetacean language, but he was no longer that older self.

*I am...*

*What?*

Born novel and raw from a tank of oxygenated polyfluorocarbon emulsion, Flocanalog did not know.

An icon winked.

He watched a black virtual window expand from it and saw the calm face of Niandankoro. The auditory tap chimed. 'Friend Flocanalog. Nyahua is returning.'

Flocanalog felt his heart begin to beat a little faster. 'Thank you Niandankoro.' He reached with his hands for the pseudo-Shell's moist access gates, closed his eyes and sank into empathic consensorias with the choo Host, perceiving with borrowed senses. Ahead, still some kilometres distant but approaching very rapidly, was the dipping, speeding form of Nyahua. Behind - terrifying, astonishing, delightful - were two other forms, bigger than the Cardinal and more alien

*Metacetaceans!*

Flocanalog felt the pseudo-Shell extrude motile surfaces in response to his unconscious prompting, the magnetohydrodynamic machine eager to be in motion, but he held his position. Nyahua sped towards the waiting delegation of pseudo-Shells, burbling sonar. He seemed crazy: he flashed past to the left of Flocanalog's pseudo-Shell, whistling, clicking and squeaking. He pulled an impossibly fast turn and bathed Flocanalog and the other three Cardinals with an incoherent wash of sonar.

An icon winked.

The sharp, perceptual icon spoilt the fuzzy nchoo consensorias, so Flocanalog opened his eyes inside the pseudo-Shell, his fingers dropping away from the machine's access gates. He swatted at the icon and watched a large black pane expand from it, showing the simulated faces of all four Cardinals: the delegation, upon Chaiyaphum's instructions, was maintaining active slave links with each other's resource. Nyahua's simulated face appeared radiant with joy. The auditory tap chimed and Nyahua's voice sounded synthetically in four different ears.

*'Alive! She is alive!'*

Chaiyaphum's virtual image moved its lips. 'Nyahua! Please!'

'My friends, my friends!' The virtual Nyahua smiled, actually showing teeth, as the hydrodynamic Nyahua twisted and tumbled. '*Best of Us is alive!*' Flocanalog heard gasps and exclamations and saw three virtual faces register various varieties of shock and thought. 'My friends, my friends...' The hydrodynamic Cardinal flipped around and hung stationary in front of the four larger pseudo-Shells. 'She approaches!'

Flocanalog used his hands to re-enter machine consensorias and passed a request onto the pseudo-Shell. He wanted to use his own eyes. A portion of the pseudo-Shell directly in front of him became translucent, flooding the dim interior of the machine with a pale aquamarine light, allowing him to see, approaching, two extraordinary forms.

The first was a giant, briny equus, its dimensions impossible to judge, streaming with light. The second was a fragile, glowing form, like a hydrodynamic dragonfly, its bulbous head glinting and flashing metallic greens and blues and trailing twisting, pulsing tendrils.

The briny equus stopped and crimson and heliotrope swirled over its long, dipping snout.

Nothing happened.

In awe, trembling with astonishment, Flocanalog could hardly believe what he was seeing.

Nothing happened.

An icon winked and birthed a black window.

A face appeared. Ebony and chiselled, hair tightcurled, the mouth, when it synthetically opened, a pinkivory surprise. Words sounded over the auditory tap with a curious, ancient inflection.

‘I am Ushogbo.’

Noise erupted from the four Cardinals but Flocanalog did not hear. He was not listening. He was looking instead, out into the water behind the two metacetaceans, to where an inverted cathedral of light had appeared silently in the clear brine. He howled inside the confines of the Shell, his mind ablaze.

*There it was! Inhoplae. Metacetacean!*

He fumbled for access to the pseudo-Shell, trembling with exultation and closed his eyes. He sank into machine consensorias and directed the mysterious metacetacean language form to spill from the transducer surfaces of the aquatic, chirruping machine in repeated, clumsy, undoubtedly polysemous articulation.

# I am... [Image]?

# I am... [Image]?

# I am... [Image]?



Hanging serenely above the red-oxidised surface of Mars, the First Metacetacean reached into the informational underpinnings of physicality, and existentially re-wrote himself 78 million kilometres elsewhere and boomed into the pocket of solar moisture as he became *there*. Now, stretching into vacuum shadows below him, appearing fragile and incongruous against the mighty backdrop of Water, was a metal kebab, with 50 enclosed micro-orbitals speared with a central shaft 1,000 kilometres long.

Malignancy.

The First Metacetacean modelled experientially sadness.



*Austerity.*

Only here was the Way closed. Only on Austerity had beautiful, emergent life not accreted from the complex interactions of simpler component parts. Only here was dysfunction and malignancy and pain. Only here had *koyaanisqatsi* not transcended itself and become *powwaqatsi* .

From many kilometres away, the Mother of Water caused the vibration of water inside the inertial bubble and her communicative act sounded in the pocket of solar moisture.

# Cometous Urwombofmine [Imagelocation]

The First Metacetacean tumbled slowly, lost to regret and boomed a slow reply.

# Iwillcome

The First Metacetacean instantly became *there* below the watery roof of his world. The Mother of Water and Shochil hung before specks of *koyaanisqatsi* , the latter closeted in motile shells. One of these shells burst out with an attempt at vocalisation, clumsily deploying a metacetacean language form, constructing polysemous, imprecise *souldworldpictures* in which...

# *I am... I?*

# *I am... me?*

# *I am... you?*

## Chapter Sixty One

The pseudo-Shell deposited Melie on the beach three and half hours after the Terminator had passed linearly over Novypolos heralding the noisy beginnings of Carnival. The cooling air above her was punctuated with sharp cracks and retorts and the night sky birthed bright rosettes and streamers of colour. She waited impatiently as the pseudo-Shell laboured out of the surf and climbed nimbly up out of the curling roof of the machine when it came to rest. She headed straight up the beach at a jog, soon finding the right path - the one that Debroeket had taken - without difficulty. When she reached the point where the Tree root dived back into the ground, at the entrance to the small orchard, Melie was 50 minutes late for her meeting with Herne.

‘Shit.’

Gulping for air, Melie looked about her in the darkness, searching for... there. She angled herself towards the tree and circled it completely: he was not there.

‘Shit.’

Melie contemplated the wisdom of coming here. She had had to leave her sister and all the others and for what?

*To meet some mal? Not like me.*

This had, indeed, been bothering her: she didn't really know *anything* about this mal Herne. She had seen him once, briefly, at Sonepur and once more here, only a matter of hours ago. Yet here she was, leaving her sister and her friends behind, because - she tried to probe what she felt - because she felt, for no obvious reason, irrationally but with total conviction, that she knew everything about him. Everything important, that is: everything she needed to know.

*Do I?*

Melie posed the question to herself deliberately, for a number of reasons. Although she tried to make it a rule never to do so on a first meeting - like the best laws, not an absolute one - Melie realised that she fully intended to have *sex* with this mal for one thing.

*Do I?*

The answer was right there in the excited tightness of her belly.

*Oh yes.*

She gave a little shiver, part fright, part delight. She knew sexual attraction when it happened and it was happening right now, but that was not all that was going on here. Melie gave a little hoot, recognising that she knew about Herne in the same way that she knew about Novagaia, as a Cardinal, right at the core of her.

'Fucking *A*.'

She looked about her in the darkness. At the far end of the orchard were the orange-dance of flames and the sound of voices.

*He's over there.*

She ambled through the irregularly spaced trees, running her hand over each smooth trunk as she went. But with her gaze fixed ahead she did not see the person peaceably squatting and evacuating their bladder in front of her. The collision deprived Melie of her legs and toppled her headfirst into the ground. She rolled over and sat up. 'Oh, hey, I'm really sorry fem, you alright?'

She was answered with a huff and then a giggle. 'Woof. A girl's just taking a pee and *what* happens?'

'Shit, I'm sorry, it was my fault, I didn't see you. You OK?'

'Yeah, I'm OK. I was finished anyway. You OK?'

'Yeah, I'm fine.' Melie got to her feet and helped the other person up too. 'Hi. I'm Melie.'

The figure bent to pull up her leggings, dancing from foot to foot to accomplish the action. 'Oh Melie, yeah right. I'm Himochee.' She straightened up and her face broke into a smile, her large teeth very white in her dark face. 'Herne's told me about you.' She gestured with an arm. 'He's over there by the fire.'

Poor mal thought you blew him out. I'm his sister.'

Melie cocked her head. 'No shit? Hey, nice to meet you fem. Two sisters in one day!'

Himochee frowned. 'Two?'

Melie brushed hair away from her forehead. 'Long story. I'll tell you later. Himochee, hey, I know this mal who met a fem called Himochee in Sonepur. Do you know him? Austerity type, but he can't help that.'

Himochee's eyes went a little wide. 'Sort of thin and dark-haired?' she asked. 'Dennis or something?'

Melie guffawed. 'Dennis! Yeah, that's him. Oh wow, and you *know* him? This is just too freaky.'



Manchester sat on the wall of the terrace with her legs stretched out before her, rubbing at some matted Weed fibres with the ball of her thumb, carefully reducing them to dusty flakes. She filled the bowl of her pipe, applied a flame and drew the Euphoric reverently into her lungs, reducing the dusty pile to grey ash. She tapped out the minuscule residue and watched it flit away into the night, falling towards the waters below. She looked to her left, her eyes flicking from group to group, saccade, pause, saccade, tuning in and out of the conversations above the soft, reedy music.

'Really?' Brock asked.

'What, completely?' asked Carys.

'Absolutely.' Tennys bit into the rolled pancake, the oily dressing coating the enclosed leaves escaping the corner of his mouth. 'Umdisreelood.' He chewed and frowned. 'I just suddenly realised that... and this is after finding the name of Ushogbo's mother too mind, that...' He shrugged and looked Brock and Carys in the eye. 'I mean, it's just not *important* really is it?'

'Never bothered you before.' Brock noted good naturedly.

'I know, I know.' He waved a hand. 'Things have changed, though.'

'This is all very sudden, Tennys.' Carys said. 'Has something happened?'

*Had something happened? What a question!*

He smiled and looked Carys in the eye. 'Everything.' He gesticulated with the pancake. '*Everything's* happened, Carys.'

He saw Carys break into a smile and turn to direct a comment at her husband. ‘You can see it on his face, can’t you Brock?’

Brock gave a chuckle. ‘Brimming with it, I’d say.’ He reached forward and shook Tennys by the shoulder. ‘I’m pleased for you, Tennys.’

‘Me too.’ Carys got up and gave Tennys a big hug.

*Saccade.*

Deoli indicated with one coffee hand towards the wall. ‘Ah, now this one Debroeket, my dear...’ He indicated each intricately etched figure in turn with a lazy finger. ‘Here we see the Lord Krishna instructing the imperishable science of *bhakti-yoga* to the sungod Vivasvan. While here...’ The Cardinal’s finger drifted lower. ‘We see Manu, the father of humankind, being instructed by Vivasvan, who in turn instructed Ikshvaku.’

‘Amazing.’ Deb peered at the figures closely then pulled away. ‘And you did all these yourself?’ She looked around the terrace at the other two similarly decorated walls.

‘I did. Though, as you can see...’ Deoli turned and indicated a barren patch of wall above the arching entrance to the terrace. ‘I have not finished.’

‘What’s going there?’

‘A serene *brahmama*, and an inscription.’ Deoli gave a little cough, put the palm of one hand flat against his spotless cream tunic and recited:

"Taking as a bow the great weapon of the Upanishad,

One should put upon it an arrow sharpened by meditation.

Stretching it with a thought directed at the essence of That,

Penetrate that Imperishable as the mark, my friend!"

Debroeket gazed down at the Cardinal with awe. ‘Wow.’

*Saccade.*

‘...awful, just *awful*. Never encountered armpits like it.’ Aileeni took a large slurp from her mug, leaving a creamy-white moustache of foam on her upper lips. ‘And the *Snow Crash* wasn’t large, you know what I mean?’

Ro laughed. ‘Didn’t you tell her?’

Aileeni snorted. ‘Well, I tried, but what can you say? "Junie, love, you stink?" She’d have cracked my head open.’ Aileeni blew out her cheeks. ‘Big girl, Junie you know. Neomorph. I saw her once, it was on Lattice, near the core, and she took on *three* mals by herself...’

‘No!’

‘On my life, *three* of them...’

*Saccade.*

Kirsty-Ann was close to tears.

Again.

‘Oh Melie, it’s so *good* to see you! I was *so* worried about you, you know. The way that mal tried to...’ Kirsty-Ann could not even say the word. ‘You know.’

‘Yeah. Well, I’m just sorry you had to see it all. And cos I didn’t hear anything from Bea, I just figured she had seen you off safe and sound, you know?’

‘I know, Melie. She did really. It was my fault slipping away from her like that. You know me, never think things through properly!’ Kirsty-Ann smiled at her sister lovingly. ‘Though *now* I’m glad I didn’t go back to Sesquoia straight away, because I wouldn’t have met Gervane otherwise.’

‘Yeah.’ Melie glanced across at Gervane. The good Professor Harmins-Keirhardy had done a good job on him. Although Melie had instinctually felt that she knew him when she first saw his reconstructed face, she was unable until told to couple a name to the vague memory. Both his hair and his eyes were now a different colour. His face had lengthened it seemed and changed shape and his lips seemed thinner which Melie thought was a shame remembering the feel of his mouth on... She caught herself.

*This is weird.*

Pause.

‘This is a bit odd, really, don’t you think?’ She asked her sister. ‘You and me, I mean, and...’ She gestured with her head.

Kirsty-Ann blinked and shook her head a little. ‘What?’

Melie nodded her head. ‘Gervane. I mean, he doesn’t look like the same person now, does he? But like when he was ball...’ She coughed. ‘...Bor, buh, ba, back, back on Godsfollicle...’

*This is definitely weird.*

She decided to finish this sentence as quickly as possible. ‘He was dark.’ She grinned weakly.

Kirsty-Ann assumed a smile with a hint of superiority to it. ‘I love *Gervane* Melie, not his *face* .’

Melie huffed and coughed. ‘Oh yeah. *Course* .’

Pause.

‘And have you met anyone then Melie?’

‘No, though I...’

*Herne!*

Melie suddenly remembered that she had arranged to meet him.

‘Melie, what’s wrong?’

Melie looked her sister in the eye. ‘Cuty, listen, I arranged to *meet* someone. Only like, about now, so...’

‘Oh, really? Who? Someone nice?’

Melie chewed her lips. ‘I think so.’ She grinned. ‘Only just met! Look Cuty, do you mind if I go and meet him? I won’t be long. I’ll just arrange another time for a meeting and then come straight...’

‘Of *course* I don’t mind Melie.’

‘You don’t?’

‘No, of course not. In fact, why don’t you bring him back here?’

Melie shook her head. ‘Nah. Don’t think so.’

‘Oh, but you must, Melie.’ Manchester hopped off the low wall and put her arm around Kirsty-Ann’s shoulder. ‘Me and Kirsty-Ann want to meet this person, don’t we Kirsty?’ She beamed and Kirsty-Ann giggled her agreement. ‘Now, go on. There’s transport down by the jetty.’

Melie appeared to waver but then grinned and rose from her seat. ‘I *love* you two, you know that?’ Melie put her arms around both Kirsty-Ann and Manchester together then skipped to the break in the terrace wall and the steps leading down to the jetty and disappeared.

‘So, Kirsty-Ann.’ Manchester reached for her pouch. ‘Tell me about yourself.’



Herne saw Melie emerge from the orchard darkness accompanied by his sister and felt his stomach tighten. He lost all sense of his surroundings as her face across the tops of the licking flames became the world for him. All sound seemed to cease and all distractions lost saliency. She seemed to expand in his eyes, her presence filling his mind like a light. He rose from the ground and went over to the two women and stopped and said:

‘Hi.’

He searched her long face, starting at the top, seeing the individual, fine strands of her hair and the high, smooth forehead. Her eyes were wide, green-speckled grey above a small nose and wide lips opening

and deforming moistly, saying:

‘Hi.’

He saw her mouth widen in a smile and saw her eyes darting about his face: always to his eyes, always returning and seeing effortlessly it seemed to the love and the lust within him. He stepped closer and said:

‘I thought maybe you’d changed your mind.’

‘Not a chance.’

He felt the same drawing-closer desire as before and reached for her slowly with his hands, aware of her response. His eyes locked with hers. He gently cupped her elbows, feeling her palms settle on his forearms. He saw her eyelids descend at the contact and felt her tremble and said:

‘I’m glad.’

He saw her open her eyes and raise her hand, reaching for his face, brushing at the hair by his ear and heard:

‘Herne...’ Her knee nuzzled the gap between his legs. ‘Umm, listen...’ Her fingertips stroked the bare skin of his forearms. ‘I have to go again. My sister...’ He pulled her closer to him, allowing her to discern the rising lump in his trousers and saw her eyes close, then open wider and wilder. ‘But do you want...’ The emphasis changed. ‘I want you to come back with me.’

Herne felt an inexpressible feeling flowing through him, like the best Lilaan Euphorics, except better and more real. He gripped her arms tighter and nodded his head and said:

‘Try and keep me away.’

He found it hard to drag himself from her, reluctant to even turn his back because then he wouldn’t be able to see her.

Himochee, still standing next to the two taller figures, made a squelching noise and blew out her cheeks, simultaneously spreading her arms. ‘Wow. I’m small, green and good in sweetpies, what am I?’ She popped the end of one finger into her mouth and touched it to Melie’s arm, drawing it away quickly with a vocal sizzle, affecting a burnt digit. ‘Hot!’

The joke seemed to break a tension. Melie laughed. ‘Yep! Sex Goddess me.’ She looked at Herne challengingly then put her arm about Himochee’s shoulders. ‘Just like any fem.’ Melie looked at Himochee out of the corner of her eye. ‘Sright, isn’t it Himee?’

Himochee beamed. ‘I think I like you, Melie.’ The two women turned and gave each other a hug. Himochee spoke as she pulled away. ‘Seriously, though, Melie. Are you sure you want me to come along with you? You and him need some *privacy*, I think.’

Melie laughed. ‘No worries, we’ll get privacy. Besides...’ Melie laid her hand on Himochee’s arm. ‘I think Tenny really wants to see you again. He’s told me lots about you.’

‘Really?’ Himochee did not gush with enthusiasm.

Melie looked at Himochee carefully. ‘Sup fem? You don’t want to see him?’

Himochee thought back to the Carnival at Sonepur and the lifting elevation of Euphorics in a cushioned tent, tender attentions and the cushioning of pillows in the dark. ‘No, no, it’s not that. I just don’t know if *he’ll* want to see *me*.’ Himochee paused minutely to think. ‘No, in fact you’re right, I don’t know whether *I* want to see *him* either. I think he might be angry and I really haven’t got the patience for that.’

Melie paused to consider. ‘Well, tell you what. Why don’t you come along anyway, cos then you can meet Manchester, that’s the Cardinal I told you about and she’s well nice. And you can meet my sister Kirsty-Ann and Deb and Ro too cos they’re well nice fems, and then *that* way, if Tennys decides to be a jerk, well then you can just leave, or stay or whatever, but I’ll tell him not to hassle you, yeah? He sort of does what I tell him, really. And you can stay with Deoli, he won’t mind.’ Melie beamed. ‘All sorted, yeah?’



Gervane looked around the table, seeing warm, friendly faces everywhere he looked. The terrace seemed to teem with people. He counted them in his head. At the far end of the table was the thin, dark-haired historian from Memecast and the small, plump Novagaian. Gervane screwed up his eyes as he tried to remember their names - *Tennys* and *Himochee*. Next to them were two other women.

*Beautiful women.*

Gervane had not forgotten the names of Carys and Debroeket. He allowed his gaze to come further down the table to the two Cardinals, Manchester and Deoli and then immediately to his left at the head of the table, Brock. To his right was his Kirsty-Ann. He smiled fondly as he watched her, noting the movement of her dark hair. He had no sense of *choosing the wrong sister* because - he felt his chest grow warm with it - he loved Kirsty-Ann and had done so ever since the first time he met her. Now, Melie seemed only a paler, more haughty replica of a purer essence. He flicked his eyes along the line: next to Melie was her tall, dark Novagaian friend - Gervane struggled to remember, but the name escaped him, the only one - and last, the two women Aileeni and Ro engaged in a Herculean drinking contest. *Herne* : the name popped into his head from nowhere, completing his inventory. 13 people.

*A strange group.*

Gervane heard Melie’s voice then Kirsty-Ann’s. He saw the Cardinal Manchester on the other side of the table lean forward, cupping her ear. Melie rose from the table and came round the back of him to whisper in the Cardinal’s ear.

Kirsty-Ann turned to him with a little squeal. ‘Melie is going to show us a trick.’

‘Oh yes?’ He smiled at her, loving her. He reached up and brushed a lock of hair gently away from her face. ‘You OK?’



‘Yes, thank you Gervane.’ Kirsty-Ann hunched her shoulders, leaned forward and whispered in his ear. ‘I love you.’ She gave him a little squeeze to accompany the words.

‘Nuff of that!’ Melie came back round the table and patting them both on the head. ‘Trick time!’ She returned to her position, Herne allowing her to sit on his lap, his hands on her hips. ‘Yo, people!’ She waved her arms. ‘Yo, quiet, quiet! You are to be entertained!’ She was met with a fond wave of derision and Ro threw the remnants of a yeasted bread roll at her. ‘No look, right, this is really good... Ro, shut your face! Look, quiet! Right, now...’

‘Get on with it!’ heckled Ro.

‘Shut up Ro,’ said Deb.

Melie gathered her hands together with her fingers forming a point under her chin. ‘First, the niwe...’ Manchester picked up a glass with exaggerated movements, pointing and indicating with the other hand.

‘The very *finest* ...’ Manchester showed it to all around the table. ‘I think I should stand for this, actually.’ She climbed onto her stool to much derisory cheering from Ro and Aileeni.

‘Don’t think much of the assistant, do you?’

‘Bit crap, I’d say.’

‘Look at the state of those legs.’

‘Shut up Ro,’ said Deb.

‘Quiet please, quiet please.’ Melie put a finger to her temple. ‘Now, with the power of my mind...’

Aileeni guffawed. ‘Your what?’

‘Shut up Aileeni,’ said Manchester.

Aileeni chuckled. ‘You can’t talk to me like that, being’s how you’re only the *assistant* ...’

‘Leeni please, look I have to *concentrate!*’

‘Sorry.’

‘OK. Now, I invoke the magic...’ Melie smiled at Himochee who was sitting with a big smile on Tennys’ lap. At her back, Melie felt Herne move and peer over her shoulder. ‘And Manchester pours the wine...’ Melie closed her eyes and pretended to hum in a meditative fashion, her elbows stuck out from the side of her body. Manchester extended her arm and began to twist the glass. The golden *niwe* rose slowly to the brim, then breached it and fell in a thin stream toward the table... where it was unexpectedly caught, frothing and churning in an invisible glass, the outlines of which were clear from the behaviour of the liquid but which could not otherwise be seen.

The table variously gasped, groaned, clapped and laughed as Manchester emptied the glass, leaving an intangibly fluted volume of *niwe*, floating unsupported five centimetres from the table.

Gervane, like all the others, had his eyes on the glass.

Nevertheless, when the figure appeared in the doorway, he saw its movement. He could not see who it was, but his recent past had made him unnaturally suspicious. He peered down the length of the table to the shrouded terrace entrance. Light fell on black cloth and pale features that looked bruised and he felt blood drain from him.

*No, it couldn't be. Not here!*

Gervane flicked his eyes - though the saccade seemed damped by thick oil and his gaze moved too slowly - and saw Manchester also looking at the entrance. There was a peculiar wobbling near her face and the suggestion of something there, like a long pencil. He took a deep breath, and was about to modulate the venting, vocalising meaningfully, when a ferocious wall of air knocked him backwards out of his chair, denying him the chance.



‘Well I just stopped, thinking "Ohmygod, who is that?". The Terminator was still a way off, so it was still dark and I couldn't see very much but suddenly there they were, just sitting in the night...' Tennys leaned closer and dropped his voice. ‘*Stark naked.*’

Himochee affected surprise. ‘What did you do?’

Tennys shrugged and grinned. ‘Nothing. Well, I just stood there, panting and heaving and gulping air and watching as this ghostly, shadowy figure rose up from the sand!’ Tennys wiggled his fingers, sculpting air to accompany his words. Himochee's eyes grew bright in her round, chocolate dark face. ‘And then she said, "Last one in cooks breakfast!" and went racing off for the water...' Tennys laughed and shook his head. ‘And what else was I going...’

Himochee tapped Tennys on the knee. ‘Excuse me. *She* ran off?’

‘Yeah, she. Deb...' He yanked a thumb over his shoulder, indicating the slender Novagaian. ‘Deb just took off for the water, and... Himochee?’

Himochee peered down the table to where Debroeket was engaged in conversation with the tall, dark-haired woman called... *Haris or something?* Himochee was terrible with names.

‘*Her?*’ Himochee flicked her eyes up and down the long legs. ‘She's ugly isn't she?’

He took a moment to answer. An older version of himself would have become flustered, thinking that Himochee was *angry* with him for being in the company of another woman or for even *mentioning* Debroeket at all and that she *disapproved* of his actions in some way. A newer, easier Tennys knew this for a nonsense. ‘Yep.’ He smiled. ‘Though, because it was dark, I couldn't really *see* her properly, you

know?’

Himochee looked at him knowingly and slapped his arm. ‘Liar.’

He grinned and pulled his stool closer, putting his hands on her hips. ‘Besides, I like...’

‘You like curves. Yes, I know.’

‘No...’ He kissed her neck. ‘I *love* curves and *especially* I love *this* one...’ He ran his hand over Himochee’s bottom. ‘And *this* one and *this* one too...’ His hand found its way between her legs.

‘Umm.’ She pushed him away and spoke softly, looking him in the eye, the ocular contact sending sharp, urgent pangs racing through his body. ‘Tennys, not *here*.’ Her hand drifted surreptitiously towards his crotch and stroked the tented structure in his lap, tracing the outline. ‘Umm!’ She brushed with a hand at his legs, indicating he move to accommodate her, and settled herself onto his lap. He felt her squashy thigh press against the hot bulge in his crotch and looked lovingly up at her. His eyes were drawn to hers. They were smoky ebony, the whites enriched with pale toffee.

‘You’ve changed, you know Tennys,’ she said, drawing herself back from him and inspecting his face. ‘I don’t know what it is, but you’ve *definitely* changed.’

Tennys blinked and smiled. ‘For better or worse?’

Himochee smiled too. ‘Oh, better, absolutely. You know...’ She wriggled on his lap, causing him to groan and tighten his grip about her generous hips. ‘I wasn’t going to come originally. With Melie and Herne, that is. I thought...’ She paused. ‘Well, I thought you’d be a jerk to be honest. I thought you were the type for that, you know, intense and really *needy*. That’s why I blew you out at Sonepur, but... you’ve changed.’ She smiled. ‘You’re treating me like a queen.’

Tennys felt his smile fade, recognising the description of himself. ‘Yeah. You’re right. When I was in Sonepur I think I *did* need you. I was... I didn’t realise it but I came to Novagaia looking for something and you helped me find it. I thought it was history, I thought I was looking for names and connections and explanations, but I wasn’t. I was looking for who I was, not who other people were...’ He shook his head and pulled himself away from such abstract analysis, stroking his hand over Himochee’s back. ‘Sorry, you don’t want to hear all that stuff.’

Himochee smiled gently at him. ‘No. I don’t.’ She pressed herself against him, twinning her arms around his neck. ‘Not yet anyway. Later perhaps.’

‘Yo, people! Yo, quiet, quiet! You are to be entertained! No look right, this is really good... Ro, shut you face! Look, quiet! Right, now... First the niwe...’

‘What’s going on, you reckon?’ he asked.

Himochee just shrugged.

Tennys returned his attention to the table. Manchester was climbing onto her stool. She glanced at him as she rose, smiled and gave a little shrug. He grinned at her and flicked his eyes across the table and saw Melie looking across and smiling - at Himochee, he realised, not him. He looked on as the tall Sesquioian assumed a meditative posture and heard her mock solemn words. He saw the Cardinal raise and tip the glass and shouted along with everyone else when the descending stream was caught and contained by an

invisible glass. He turned his head to look at Himochee when there was a bright flash and an immense force slammed into him, picked him up and hurled him backwards away from the table.



Amidst the laughter and the conversation, with the slender Debroeket to her left and Deoli in animated discussion with Brock to her right, Manchester sat smiling in a pocket of quiet. Above her, through the gaps in the canopy she could see silent rosettes of red and green and silver. The Carnival was beginning.

*Almost time for a stroll, I think.*

Manchester looked around the table happily, feeling herself washed with the droning buzz of conversation, tuning into the reedy, drum-accompanied warbling of the music and tuning out, her eyes flicking about from person to person, and face to face, seeing all around, laughing eyes and the pink and white cavities of open, mobile mouths. She picked out a voice to her left.

‘...Oh yes, sometimes three or even four.’ Carys laughed and rested her hand on Debroeket’s arm. ‘Brock tries to be critical, but the poor thing doesn’t know how to be nasty and critics - honest critics anyway - have to be at least a *little* horrible some time. So I think I overcompensate for that and think everything I do could be better!’

‘So... but then what happens after you’ve done the...’

‘The maquette?’

‘Yes, the maquette.’ Debroeket grinned. ‘How do you turn that into the finished piece?’

Carys smiled and clapped her hands. ‘I start chopping!’ She mimed the actions of a hammer with a fist. ‘I have a piece of *Yohunga* so I’m really going to have my work cut out for me.’

‘Wow. How long?’

Carys shrugged. ‘Months? Half a year. Maybe more, I don’t really know.’

Debroeket shook her head wonderingly. ‘Wow, that’s really amazing.’

*Saccade.*

‘...Lila, my friend, isn’t it? I was there recently. *Ring-tail*, *safaka*, *indri* ...’ Deoli counted off the species on the fingers on one hand. ‘And 20 others, and that was just the prosimian.’ Deoli waved a hand. ‘Say, 15 other simian species...’

‘Uakari?’ Brock asked.

‘Yes, yes Uakari my friend.’ Deoli blew out his cheeks, attempting to redden them and released his pent up breath with a laugh as Brock slapped his shoulder, recognising the joke.

‘The red mask, isn’t it?’

Deoli nodded his head and blinked quickly, his finger circling his face.

*Saccade.*

‘...Why? I mean...’ Ro seemed lost for words and indicated amorphously with her bottle. ‘Why?’

‘Well, you young Novagaiaans don’t know what the real Koy is really like do you?’ Aileeni replied. ‘Have you ever been to Gods?’

‘No, but...’

Aileeni drew a sharp intake of breath and shook her head. ‘There you are then, it can get nasty, see? *That’s* why I have all the Fat. It’s microfactory food. Plus, you know, I’m not small anyway and I kind of like it.’

Ro scrunched up her nose. ‘What, being fat?’

‘Yeah.’ Aileeni took a swig from her mug, licked her lips and grinned. ‘Kind of sexy, with the right mal.’

Ro guffawed. ‘*Sexy?*’

‘Course, when I’m that big, he’s got to be, you know...’ Aileeni nodded and dropped her voice and Manchester had to lip-read. ‘*Well endowed.*’ Aileeni leaned closer to the smaller Novagaian. ‘*Otherwise, I don’t feel shit you know?*’

‘...ester? Hey, Manchester!’

Manchester blinked. Melie was beckoning her. ‘What?’ She cupped her ear and leant forward. Melie tried to whisper across the expanse of table but her voice did not carry. Manchester saw her mouth an instruction - *stay there* - and watched as the nova-Cardinal came around the table and whispered in her ear. ‘Manchester, I want to try something, can you just tip a glass of water or something over the table for me?’

Manchester smirked. ‘Why?’

‘Oh Manchester, don’t argue, just do it, OK?’ Melie rose and skipped back round the table, batting Gervane and Kirsty-Ann on their respective heads as she passed.

‘Yo, people! Yo, quiet, quiet! You are to be entertained! No look right, this is really good... Ro, shut your face! Look, quiet! Right, now... First the niwe...’

Manchester realised that this was her cue. She selected a glass of *niwe*. ‘The very finest...’ She lifted the glass so that everyone could see. ‘I think I should stand for this, actually.’ She smiled as Aileeni led the good-natured heckling, turning and catching Tennys’ eye, shrugging and grinning at him before turning away.

‘...your what?’

‘Shut up, Aileeni,’ she said.

Manchester saw Melie glance around and smile and heard her say: ‘And Manchester pours the wine...’

*What am I doing? It’ll only make a mess.*

Manchester allowed the clear golden *niwe* to approach the lip of the glass and watched the stream fall and then gave a hoot of surprise as it was intangibly contained. She continued to pour, emptying the glass, peering at the curious, not-there outline of the invisible vessel as she did so.

A Third icon flared into existence in her phenomenology.

She turned her head toward the shadowed entrance to the terrace and saw pale, lumpen skin and the suggestion of fabric. There was something closer too, an unnatural wobbling of the air just ahead of her.

The Hub choi weapon.

The weapon - its Digits cupped to form the invisible glass holding the *niwe* - was the last thing the Cardinal Manchester saw before a monstrous hand gathered her up and flung her bodily from her stool, her body breaking multiply upon impact with the hard stone wall of the terrace behind her.



The autonomous, encapsulated Halflife had finally acquired its target - although, because it wasn’t executing, the simulated belief system which believed itself to be Dwoschultsizes Gromburg was not cognisant of this fact - and peered from the shadows into the candle-lit terrace with a variety of augmented EM senses. Processes monitoring an intrinsic milliradar tool sounded the warning.

*Hostile detected.*

The parasite resource engaged the tracking systems of its offensive systems, loaded the hottest ammunition that its munitions microfactory could manufacture and locked on to the EM-shaded Hub remote. It activated the cranial weapon, accelerating tiny, explosive pellets along the five centimetre-long barrel of each miniature induction Gun, spitting hot violence at 500 metres per second. The Hub remote, with its Digits otherwise utilised and thereby defenceless, was instantly punctured and disintegrated in a hot ball of high temperature gas.

The detonation plunged the balcony into a painful, terrifying darkness, filled with crying and moaning and the tinkling of shattered glass and ceramic, with several voices shouting and wailing hysterically. The Halflife stepped into the balcony proper and moved to its left: at its feet were two females, the smaller

crying loudly and the larger grunting and struggling to rise. Gromburg raised one large pedal extremity and planted it in the middle of the smaller female's face. Then he reached forward with one hand, grabbed the shirt-front of the larger female and shattered her nose with its fist, cracking her head on the stone wall.

Ahead, a figure was bent over the prone form of an engineered arboreal. The first figure, a male, turned, its face blackened and leaking from numerous ruptures. He snarled and shouted, rising its arm in an obviously threatening gesture. The Halflife activated its cranial weapons and the male's right shoulder disappeared in a wet spray of sizzling tissue and boiling liquid. The parasite resource engaged the belief system that considered itself to be Gromburg and stepped over the screaming leaking form. Lead words emerging from the mouth of the biological shell.

'Millstar. Let me take you away from this depravity.'

The Gromburg belief system was quickly shunted into an experiential loop as the nchoi parasite detected movement behind it. It swung around and activated its weapons: a female was climbing to her feet, her face wet with a sheen of blood, waving her fist and wailing. Next to her, a thin, dark-haired male threw his arms over the female, pulling her around and down and protecting her from the snicking, hissing burst from the cranial weapons of the Halflife. A 20 centimetre wide swathe of his spinal column suddenly flooded crimson and he screamed. The Gromburg belief system re-engaged under instructions from the executive nchoi, and the biological shell spoke again.

'Millstar. I will not harm you. You must allow me to take you to safety.'

Ahead, a female was crying and weeping and dragging herself over to a partially rising figure. The Gromburg thing approached. The kneeling figure screeched and put up a trembling hand. 'What do you want? *What do you want? WHAT DO YOU WANT?!!*' The Halflife put a reinforced fist into the middle of the noise and it abruptly stopped, leaving the Gromburg thing to see, at last, the face of Millstar. The simulated belief system that believed itself to be Gromburg was not, of course, concerned by the change in appearance: it was able to recognise Millstar from the distinctive olfactory signature of the perspiration leaking from pores in the cutaneous outer covering.

The Gromburg thing bent down and went to lift Millstar up, but was greeted by a sharp kick and a barrage of screeched, gasped imprecations.

*'I don't want to go with you! Leave! Leave now!'*

The nchoi parasite shunted the Gromburg belief system into a holding loop. The biological shell shot out an arm and grabbed its target by the throat and squeezed, until the struggles ceased and, deprived of oxygen, the figure slumped unconscious. The biological shell slung the body over its shoulder, turned and headed for the terrace entrance.

'No!'

The resource parasite re-engaged the Gromburg belief system as the biological shell stopped and turned, to see the female, engineered arboreal rising from the floor. She was holding her side and grimacing, her face leaking crimson from a number of shards that had penetrated the soft, watery tissue.

'No, why are you doing this?'

'Millstar must be Austere.'

The engineered arboreal attempted to laugh, but it turned into a painful, wracked sob. ‘You what? You fuckin...’ She was unable to complete the communicative act, breath denied her, pain claiming her. She bent over at the waist and sank to her knees.

The Gromburg thing spoke. ‘You have violated Millstar.’ Melie hardly heard and hardly understood. ‘You must be punished.’

Melie did not see the polyp weapons emerge from the Halflife’s coral forehead. She was unaware of ammunition being inserted and ignorant of her fortuitous escape as a monitoring milliradar tool suddenly alerted the nchoi parasite to the presence of hostiles. The Halflife spun round to face the threat, its augmented senses probing the air out above the waters to the right. Gervane was put down and the parasite resource activated its weapons systems, targeting and locking onto multiple signals: choosing one, the polyp weapons spew a stream of incendiary pellets at the approaching Hub remotes.

The pellets exploded but were bounded and contained behind a sphere of thick, interlocked Digits.

The Halflife realised its weapons were ineffectual too late and put up a free hand as it perceived a projectile coming towards it: a futile gesture. A shard of Hub weaponry passed straight through the thin watery tissues of the raised digit and penetrated the crystalline-boron sheathed skull of the Halflife, passing from front to back and exiting with a damp spray of traumatised tissue and bone.

The nchoi parasite initiated the mobilisation of medical nchoi, trying to staunch the flow of liquid pouring from its ruptured cranial refuge. It engaged the endoskeletal support intrinsic to the Halflife and instructed the leaking, punctured biological shell to turn, flight being the only option available.

Deposited there by the sleek Hub weapon, a small grenade went incendiary within the skull of the biological shell, coagulating proteins and voiding large quantities of usurped neural tissue.

The lumpen figure of the Halflife slumped suddenly to the floor. Low grade nchoi dispersed in pockets throughout the biological shell tried to mobilise, but, deprived of the overseeing nchoi parasite, failed. The biological shell twitched and jumped then was still, the ruptured neck spilling a dark, metallic pool.

Melie looked around. There were bodies everywhere, some stirring, some not. Her eyes fell to Tennys, and to his... She threw up, the convulsion sending sharp, white-hot pain slamming through her. She sank to the floor and had the presence of mind to put out her hand in front of her before slumping unconscious on the warm, slippery-crimson floor.

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## Epilogue

Seven days after climbing the *Hair of God* back up out of the gravity well of Water, Flocanalog stepped slowly onto the balcony of the Transition facility, remembering the first time he had done so, uncertain, weak and confused from his initial Shell extraction, the remembered incident a matter of several short weeks ago and a whole life-time distant. He looked down towards the turquoise beginnings of Marineris, upcurling away from him to Spinward along the orbital.

*Ocean. Home. Stapjeekha.*

And something else, too. He turned his head, looking for the little island and the arching bridge, like the articulated limb of an insect, linking it... *there* .

‘Hello, my friend. Are you in, I wonder?’

Floccanalog said the words aloud, not using his resource. But Maureen still heard and made a virtual Appearance, neat and silver-haired, with warm, intelligent eyes.

‘Hello, Flocc. Did you find your answers?’

He was silent for a long moment then nodded. ‘Yes.’

Maureen appeared to sigh. ‘I am happy for you. My friend.’

He smiled at the use of the word - *friend* - and remembered asking Maureen once before if she could experience happiness. ‘You are *genuinely* happy to see me, Maureen?’ He gazed at the Appearance fondly and repeated his earlier question. ‘*Can* you be happy?’

The Appearance gathered its virtual hands neatly together and fixed him with grey, twinkling eyes. ‘Yes, Flocc. I know now I *can* be happy. And for this knowledge, I have, in large part, you to thank.’

The assertion came out of nowhere. ‘Me? What did I do?’

The Appearance appeared to smile. ‘More than you can know.’

Floccanalog shook his head. ‘Maureen, no. If it wasn’t for you, I...’ Momentarily, he did not know how to complete the sentiment. ‘I couldn’t have done what I *have* done and couldn’t have learned what I *did* need to learn, and...’ Floccanalog realised that what he wanted to express was something of gratitude and something of love. ‘And *I* want to thank *you* for that. From the essence of me...’ He opened his clenched fists in a digital blossom, pushing his arms out toward the virtual Appearance. ‘...to the heart of you.’ The virtual Appearance blinked and appeared to adjust the placement of its archaic lenses. ‘I wish I could touch you, you know,’ he added. ‘I want to hug you to me for all that you have done and not let you go.’

The Appearance raised its face at that and Floccanalog saw virtual tears gathering in the grey, intelligent eyes. ‘They are of joy.’ Maureen indicated and darted an uncertain smile. ‘Visually simulated, naturally. They seemed the most eloquent emotional response. Because of you, friend Floccanalog, I *can* believe in joy.’

The day before re-incorporation with his dormant Shell symbiont, sitting in the terraced gardens of the Transition facility, Floccanalog received a visitor: curiously sloped, smiling and serene below a thick bowl of black hair.

‘Greetings, friend Flocc-sah.’

‘Nya-sah. Welcome.’

The Cardinal seated himself on the bench next to the taller Marineris man and stared out at the view. A companionable silence stretched into its tenth minute before Floccanalog broke it, his thoughts returning to his encounter on Water with the three metacetaceans.

‘What’s going to happen Nya-sah?’

Floccanalog heard Nyahua inhale and then exhale, the single cycle taking 30 seconds to complete. ‘That is a question, Flocc-sah.’

Pause.

Flocanalog thought the Cardinal wanted confirmation. ‘Yes. It is.’

Nyahua inhaled and exhaled again with the same periodicity, shrugged, turned and smiled without teeth. ‘*Powwaqatsi*, Floc-sah.’

Pause.

‘Is that good?’

Pause.

‘Believe *yes* , Floc-sah.’

Five days after re-incorporation with his Shell symbiont had been initiated, Flocanalog hung immersed in 60 centimetres of oxygenated, nchoi infested polyfluorocarbon emulsion. Today, his pale, whiskery body would be physically reincorporated with the magnetohydrodynamic Shell. Like his initial extraction in reverse, his body would be multiply penetrated by invasive tendrils of innervated carbonsponging and flooded with nchoo. These tiny machines would establish the preliminary interfaces in the spine and brain stem necessary for Flocanalog to be neurally re-wired as a marine entity, enabling him to function as a wholly aquatic life form, computationally and *experientially* conjoined with the choo Host of the Shell. Maureen would oversee this delicate reintegration carefully, directing the dismantling of old, bipedal meme complexes and prompting the judicious re-configuring of neural networks in structures as diverse as the cerebral cortex, the limbic system, and the visual and interpretative cortices. Her actions would serve to re-install the virtual machinery that would enable Flocanalog to live the Shell life again and use the flowing *soundworldbuilding* that was Shell linguaception.

A presence was with him throughout. A vast, ancient sentience, bonded to him and part of him in a way that he, as yet, could only dimly conceive. A sentience that had already communicated with him on Marineris and on Novagaia before the third occasion on Water. He did not understand it all, even now. But he would. When Maureen and her medical nchoi had re-configured the billions of neural connections necessary to enable them, new, more *cetacean* virtual machines would once more begin looping and processing in the wetware housed inside his skull. Novel understanding would arise from this neural machinery, knowledge built upon hydrodynamic, cetacean meme complexes, re-defining what and who Flocanalog considered himself to be. As the principles of human language and consciousness fell away, so more fluid tenets would arise to replace them, giving him the foundations of the grander cognition that was linguaception. Then like the spread of sea grass, barren human sand would become verdant Shell pasture and he would discern meaning in the esoteric glossology of the metacetacean language form from Inhoplae and he would say:

# *I am... [Image?]*

As he lay in the tank of oxygenated emulsion, waiting for Maureen to re-birth him back to the fluid joys of the Shell life, he *knew* that the answer was within him. Only then, re-bonded with the choo Host, would the bare syntactic skeleton that had haunted him since Inhoplae grow meaningful flesh. Then, its significance would become part of him. Conjoined with the Shell, freeswimming the continuous ocean that was Marineris, effortlessly magnetohydrodynamic, he would sing and build the world in which *he was... ?* No. He could not conceive an appropriate [Image] yet. He was still too bound up with the limitations of a human, choochoi understanding to grasp the complex Shell glosseme that would articulate what he was.

*Not yet, but soon.*

Eight days after re-incorporation with his Shell had begun, within a holding tank open to the continuous oceans of the Marineris orbital, he flexed his limbs - arms and legs rapidly becoming otiose labels for redundant sense-memories - feeling the immanent power of motile surfaces. One was with him, occasionally hydrodynamic and mockcetacean.

Nyahua.

Already lost to bipedalism, no longer only or strictly human, Floccanalog drifted from the holding tank and paused, before surging powerfully away into the turquoise depths of Marineris, his magnetohydrodynamic limbs hurling water away behind him and leaving a mockcetacean form rocking in his wake, the water suddenly alive with excited clicks and joyous, modulated whistles.

*# I am [Image]!*



Herne lost his entire left arm and shoulder.

Tennys lost a 20 centimetre wide swath of his spinal column, the articulated vertebrae revealed and lacerated.

Injured by the incendiary pellets fired from the cranial weapons of the hostile Halflife that had attacked them at Novypolos, Tennys and Herne lay side by side in the spacious medical facility at the base of the Tree of Trees, floating in tanks of pale-blue medical emulsion. Nchoi were orchestrating an extensive gene therapy, re-writing viral DNA sequences and co-opting the bodies help in its own repair, and then acting to quicken the resultant, natural healing and provisioning the rapid re-growth of new tissues.

The swift arrival of the choi remotes from Hub saved those on the Cardinal Deoli's terrace from death by a matter of seconds. Herne would have died from loss of blood very quickly had it not been for the intervention of the specialised Hub constructs and Tennys, not long after him. Of the 13 people on the terrace that night, 12 had needed medical attention from the force of the explosion of the Hub weapon.

One had not.

Others had suffered additional traumas. Roeena, Aileeni, and Kirsty-Ann had all been injured in a similar fashion, their noses smashed and bones in their face fractured, whilst Gervane had suffered multiple, hairline fractures in his neck. Deoli, Brock, Debroeket, Melie and Carys all required the removal of multiple shards and splinters from their faces, arms and upper body and none recovered their hearing properly without nchoi reconstruction of aural tissues. Himochee received the lightest injuries of them all, treated for concussion and a broken bone in her wrist, sustained when she put out a hand as Tennys fell on top of her.

All 12 would live.

One had not.



The Cardinal infant asked if she could go only six months after being birthed from the womb of her tall mother. Initially her request was refused until she gave her reasons for wanting to go. Then, seven of them made the journey, to a place slightly Spinward of Undine and 1,300 kilometres from Chapel Halls, to a mist-shrouded tributary valley off one of the major Afine canyons. To a large clearing at the end of a wide, sloping, Tree-root path. To the place where, 300 years ago, Mirandar Jatspaar had coaxed the living plant sculpture of the *Three Women* from the substance of Novagaia.

To the place where there now stood *Four Women* .

One was standing with her legs apart, bent over at her waist, her hands in her vegetable hair. The second was squatting with her head and hair thrown back, her hands at her cellulose clitoris, while the third sat watching, leant back on stiff arms, her smooth, woven head poised atop her graceful neck.

The novel fourth woman was half sitting, half leaning atop a section of fallen tree, growing stiff arms out behind her, with her smooth, unfeatured head thrown back and her legs raised, bent at the knees. She was smaller than her three woven-vegetable sisters, but still on the same large scale, so that the top of her head reached three metres above the clearing floor. She was composed of smooth, thin branches, a living, sculpted plant, growing up out of the ground at her feet, the base of her spine and the palms of her hands on the spongy log.

The plant sculpture recreated a moment in a forest for a completely different kind of life. A Cardinal life, begun on the Novagaian orbital 65 AK., a friend and companion to 12 others who survived her in an attack by an autonomous, encapsulated Halflife from Austerity, 18 months ago, on a terrace overlooking the clear, dark waters of Wickremasinghe.

Manchester.

Melie stared at the living sculpture with tears of both joy and sadness welling in her eyes.

*Who had accomplished this?*

‘A gift of remembranth from Nogai,’ said her daughter.

Feeling herself tremble inside at the remembered sense of awful, crushing loss, Melie looked down at the tiny, diminutive form of the miraculous life that had grown within her. Like her father Herne, she was distinctly Novagaian, long-limbed and dark-skinned. She had chosen her own name by dint of her birthplace, by the shores of the tea-stained, briny Novagaian sea.

Ushogbo.

‘From Nogai, huh?’

‘Yeth mama, from Nogai. Nogai love Manthether.’ Ushogbo chirruped and turned an alert, smiling face up at her mother. ‘Can you pick me up please?’ Melie bent and lifted the tiny body, placing her daughter on her hip. ‘We should say hello.’ The infant Ushogbo looked at the sculpture of the dead Cardinal. ‘And give her a name too.’

‘What about, “The Little Angel”?’ Tennys suggested.

‘Thath a *nithe* name!’

Malvern murmured his dissent. ‘No. She is *The Flower of Us*.’ He pursed his lips and stared at the plant-woven form of the dead Cardinal. If he recognised the sculpture’s posture - evoking the whisper of *Salix alba* and the musk of moist *gynoecium* in a forest clearing - he did not reveal it. ‘The Flower of Us,’ he repeated, more quietly.

Carys was weeping quietly.

‘Thath a *nithe* name too!’ Ushogbo looked into her mother’s grey, green-flecked eyes. Then she cocked her head to one side and put a small finger to her mouth, as if listening to distant voices. Her infant smile faded. ‘Oh. Mama, I think it started.’

Malvern glanced up and nodded.

Melie had seen the warning Third icon too and felt the same, odd ripple in the Cascade. ‘Everyone. Come here. Hold hands.’ The Terminator ran over them two minutes later, banishing day in a rippling line 300 kilometres wide and plunging the little clearing into darkness.

Overhead were familiar stars, the backbone of night.

‘Powwaqathee!!’

Tennys put his head back and looked up into the night sky. As he watched, the stars disappeared and the darkness was obliterated by the light of a sun that was not Sol.



The Mother of Water drifted gently in the warm, clear brine below the roof of her adopted home, remembering other times before the Koyculture was built and before the *Hair of God* fell out of the sky. Before Water came to be. Before the Great Dying began and before even the time when the first

metacetacean had been announced to the world of *koyaanisqatsi* . Back even further, to the times when the metacetacean race still slumbered in the pre-sentient, cetacean dreamtime, when Water was still dry Earth and the Mother of Water had walked the surface of Earth and breathed atmospheric oxygen as a bipedal human being and called herself Elizabeth.

But the metacetacean Mother of Water was not *that person* anymore. Were it not for the protected meme-cache she retained for the events of that period, the Mother of Water might doubt that she had *ever* been *that person* . Were it not for these stored memories of another life, she might forget entirely the traumatised whale calf that she saved from almost certain death and yanked into language-using sentience over 900 years ago.

The metacetacean Mother of Water perceived communication. Taking a moment to gather herself, she responded, tweaking at the informational Cascade and appearing *there*, 60,000 kilometres distant, 100 metres below the continuous ocean of Marineris.

# [Olympian contentment] Urwombmother

# Greetings Littleone

Two others were with the First Metacetacean, conjoined choo and human, their magnetohydrodynamic wings fluttering. These newly found friends greeted the Mother of water in unison.

# Greatjoy!

The First Metacetacean vocalised.

# Powaqqatsiiimmanent *delight!*

The First Metacetacean wrapped an inertial bubble around his three companions and became *there* , hanging in vacuum, taking an allotted place in a vast Jovian ring of citizenry encircling the aquamarine bulk of Water.

Their arrival signalled the beginning.

Using no atmospheric soup for transmission of their esoteric voices, the metacetacean citizenry began to sing, weaving *soundworldpictures* in the informational Cascade and thereby manipulating physicality. Then others joined the Jovian ring and the Olympian choir: the Children of Water, the emergent consciousness of Memecast and Novagaia, Lattice and Ascii, Verest, and Oaxaca. The Children added to the esoteric chant, one by one, enriching the harmony with their higher order voices.

Joining last, the Oaxacan entity galvanised the whole. The metacetacean song reached an unearthly climax, Water and the encircling Koyculture and the dangling *Hair of God* and the newly warm Mars - all conjoined as a single system - became *elsewhere* and then hung, bathed for the first time in the novel EM of a new star.

The Way had opened and the informational Cascade was re-written.

From the heights and the distances, the glorious, exultant susurrations issued forth.

# Greatjoygreatjoygreatjoy!!



## Glossary of Terms

All terms **inbold** are themselves referenced in this Glossary.

Appearance	A visual image (usually anthropomorphic) resulting from <b>aresource</b> tapping a person's optic nerve.
Bus	A transport vehicle used within the confines of the <b>Novagaian orbital</b> . An example of a sentient <b>choo machine</b> .
Cardinals	A race of 400 extraordinary beings who served as "spiritual guides" for the human species during the <b>Great Dying</b> . <b>Cardinals</b> were designed and created by the <b>metacetaceans</b> , engineered for altruistic perversion and exceptional longevity, the latter attribute resulting in their characteristically small stature. <b>Cardinals</b> are capable of <b>teleological perception</b> , which is the ability to "see" into the <b>Cascade</b> and to "understand" it - albeit in a limited fashion.
Cascade	An existential precursor to the non-local quantum correlations that are the basis of everyday physicality. The <b>Cascade</b> is a hypothetical Bell-like continuum or "informational universe" underlying causation.
Consensorias	Not virtual reality, but Empathic Reality. <b>Consensorias</b> is a non-visual, non-linguistic information-processing space, where humans can interface with <b>choo machines</b> . The term is commonly used in the sense of a person "sharing" or "being in" <b>consensorias</b> , vicariously experiencing the "perceptions", "emotions" and the "mind" of a particular machine.
Choo	A generic term referring to all distinctively "neural" styles of computation.
Choo machines	The class of all organic constructs manufactured by the <b>Trees</b> of <b>Novagaia</b> , all of which are based upon <b>choo</b> -style information-processing.
Choi	A generic term referring to all distinctively "symbolic" styles of computation.
Choi machines	The class of all non-organic constructs which operate using <b>choi</b> -style information-processing.

Ecopoesis	The "morality of the ecopoesis" refers to the "rules" by which <b>Novagaia</b> operates.
Encapsulated Halflife	A term for a biological automaton whose neural tissues have been usurped by a hostile, parasitical <b>resource</b> . An "organic" robot.
Fat	Raw material for <b>microfactories</b> .
Godsfollicle	The geo-synchronous orbital sheath for the <b>Hair of God</b> .
Great Dying	The name for the cataclysmic half millennia of history (see <a href="#">Calendar Note</a> below) during which the <b>metacetaceans</b> enacted their cull of the human species, imposing a world-wide sterility upon them. The <b>Great Dying</b> also refers to the drowning of the Earth by the <b>metacetaceans</b> , and the changing of the planet into <b>Water</b> .
Hair of God	The 70,000 kilometre-long cable dangling from <b>Godsfollicle</b> down the gravity well to the surface of <b>Water</b> . Constructed by the <b>metacetaceans</b> during the <b>Great Dying</b> .
Halflife	<b>Anychoi</b> -simulated "personality construct".
Histories	A collective name for the sum total of human historical knowledge <b>BK.</b> , comprising all the art, science, literature, philosophy, culture and society of the vanished human civilisation. A notoriously unreliable and contradictory source of information.
Host	A general term used to refer to the sense of "embodied sentience" experienced by people in <b>consensorias</b> with <b>achoo machine</b> (e.g. a <b>Bus</b> ).
Hub	The large physical structure at the centre of <b>Novagaia</b> , as well as the name for the Free <b>Awareness</b> - the powerful <b>choi machine</b> - resident there. The <b>Hub</b> is also the repository for the <b>Histories</b> .
Koyaanisqatsi	The <b>metacetacean</b> name for the human species, with pejorative connotations of stupidity, aggression and irrationality.
Koy	The name for humanity's new home in orbit around <b>Water</b> , as well as the name by which human society now collectively refers to itself. Architecturally, <b>Koy</b> comprises 13 vast habitat-structures, constructed (seemingly magically) during the latter centuries of the <b>Great Dying</b> by the <b>metacetaceans</b> .
Lifeswork	<b>Anychoi</b> -simulated, virtual scene, though referring particularly to renditions of scenes/places/events from the <b>Histories</b> .

Mammoth	A class of very large, tri-pedal <b>choo machine</b> .
Metacetaceans	The magical, mysterious descendants of the first marine cetaceans raised (by humans) to language-using sentience 900 years before. The builders of the <b>Koyculture</b> , the <b>metacetaceans</b> were also responsible agents for the drowning of the planet that took place during the <b>Great Dying</b> . Humanity in the <b>Koyculture</b> have no commerce with the <b>metacetaceans</b> at all, and know next to nothing about them.
Metacortex	The extra, specialised neural tissue in the <b>Cardinal</b> brain - designed by the <b>metacetaceans</b> - which enables their <b>teleological perception</b> of the <b>Cascade</b> .
Microfactories	Molecular-sized "manufacturies" of <b>nchoo</b> and <b>nchoi</b> which are used throughout <b>Koy</b> to create all physical objects, one atom at a time.
<b>Nchoo</b> (enchoo)	Nano-scale versions of <b>choo machines</b> , which operate - like their macro relations - using "neural-style" information-processing.
<b>Nchoi</b> (enchoi)	Nano-scale versions of <b>choi machines</b> , which operate - like their macro relations - using "symbolic-style" information-processing.
Novagaia	One of the 13 structures making up <b>Koy</b> , and where most of the action in the novel occurs. Home to the <b>Cardinals</b> and other humans, <b>Novagaia</b> is a spinning hoop 4,000 kilometres in circumference, 1,300 kilometres in diameter and 300 kilometres wide.
Raptor	A very swift, bipedal <b>choo machine</b> .
Resource	A term for the personal computing machinery that everyone in <b>Koy</b> possesses, comprising <b>nchoi</b> constructs interfaced directly with their neural tissues, providing communications, library and <b>Histories</b> access, as well as a host of other functions.
Shell	An aquatic form of <b>choo machine</b> which uses magnetohydrodynamic propulsion.
Teleological perception	The <b>Cardinal</b> ability - granted them by the existence of their <b>metacortex</b> - to "see" and "understand" the <b>Cascade</b> . <b>Teleological perception</b> is part prescience, part holistic understanding, part synchronistic insight.
Third	The Cardinal name for that part of their mind supported by the activity of the <b>metacortex</b> . Roughly speaking, the cerebellum is <b>choo</b>

	-supporting neural tissue, the cerebral cortex is <b>choi</b> -supporting, and the <b>metacortex</b> is <b>Third</b> supporting.
Trees	A form of static <b>choo machine</b> , the Novagaian <b>Tree</b> population constitute the "manufacturing base" of <b>Novagaia</b> . All <b>Trees</b> are infested with <b>microfactories</b> housing large <b>choo</b> populations, and can be accessed via <b>consensorias</b> .
Water	What the Earth is now called after being drowned by the <b>metacetaceans</b> . Also the collective term by which the <b>metacetaceans</b> refer to their own race.
Water Engine	An invented human term for any <b>metacetacean</b> "machine". In actual fact a misnomer, as the term properly refers to the <b>metacetaceans</b> own advanced <b>metacortex</b> . Unlike the <b>Cardinals</b> , the <b>metacetacean</b> are able to not only "see" the <b>Cascade</b> using their <b>metacortex</b> , but to "effect" it also. This ability - to "mentally" manipulate physicality - is how the <b>metacetaceans</b> escaped from their original, genomic handlessness.
Way	A mysterious <b>metacetacean</b> project, which will dwarf all their previous accomplishments, the details of which are unknown to either Cardinals or Humans in <b>Koy</b> .

### Calendar Note

The story events of the novel *Water* take place in **495 AK.** , approximately 1,000 years from now. Dating events in the "past" of this future-history make use of the following calendar abbreviations.

- **BK.**: **B**efore **K**oy. This refers to any date *before* the exodus of humanity from the drowning Earth, up the Hair of God, to the newly completed Koyculture.
- **AK.**: **A**fter **K**oy. This refers to any date *after* the exodus of humanity from the drowning Earth and *after* the construction of the Koyculture by the metacetaceans.

### Conversions

- 500**BK.** = 2000**AD.**
- 0**BK./AK.** = 2500**AD.**
- 495**AK.** = 2995**AD.**

## Population Note

In 495 AK. - when the story events of *Water* take place - the total population of Koy stands at only five million individuals. This figure is so small because, towards the end of the Great Dying in 100 AK., the human species was actually on the verge of extinction.

Over the course of the Great Dying - the four and a half centuries 350 BK. to 100 AK. - the metacetacean cull reduced the number of human beings alive from a peak of 20 billion in 350 BK. to a desperate nadir of just 500,000 in 100 AK. Only in the centuries since has the population slowly recovered, to stand at its current modest total.

## WATER

A Science-Fantasy Novel

## Prologue

Manchester sat placidly on what appeared to be a large mat of dark moss, drinking strawberry tea in a Hub-generated Lifeswork. She was surrounded by a circle of bulbous Trees, distinctively cream and shot through with reds and golds and browns, sprouting up from the spongy main body of the choo machine living below. Dense green foliage created a fragrant, sappy haven all around her, quiet and very still, luxuriant with the smell of wild garlic. The Cardinal was meditating upon her inner breath, testing some new mnemonic triggers, when a rustle in the far side of the clearing caught her attention.

Two pin-pricks of light.

As she watched, the points moved. A small, dark object leapt from behind the spongy trunk of a Tree, and raced towards her. It came very quickly, and before she could even move it had leapt, landing on her shoulder and instantly burying itself in the hair at the nape of her neck, wriggling around to suckle at the lobe of her right ear. She smelt liquorice and pine, and felt a quick lick of moisture. She reached up and stroked the tiny machine, no bigger than a robin, its little body quivering.

*What now?*

The tiny choo machine was a messenger. The Cardinal's nchoi resource, nestled at the base of her interpretative cortex, quickly decoded the message coded in the machine's pseudo-saliva. An icon snicked open in the Cardinal's visual world and spun on an axis, pulsing gently: a standard request by the nchoi resource for access to the virtual Lifeswork, spoiling Manchester's mood.

She decided to ignore the message.

The icon vanished for all of ten seconds and then re-appeared: it even made a little sound, a pitiful mewling for attention over her auditory tap.

*Shit.*

Manchester sighed and instructed her resource to relay the recorded message. The molecular-sized nchoi machine enmeshed in her cortical tissue interfaced a portion of her optic nerve and the icon expanded into a momentarily black, virtual window, hanging to the left of her right hand. A face appeared. Fine, sandy hair and huge ears, large, droopy eyes the colour of wet slate above a large, ugly beak of a nose.

*Lodz. I might have guessed.*

'Manchester, how you have the nerve to call yourself a Cardinal I don't know. Where is the consideration? Where is the altruism? I really don't know what...'

*Get to the point Lodz.*

Manchester sneezed, startling the little messenger perched by her ear. The tiny machine wriggled and quivered and she reached up to calm it. Returning her attention to the window, Manchester scowled at the image of Lodz's face, and listened.

'...thing else altogether.' The simulated visage of the Cardinal Lodz narrowed its eyes and pursed its fat, pale lips. 'Manchester, you and I were supposed to have been meeting today. I really do think that this

reclusive business of yours is getting out of hand. Oh, what am I talking about? Becoming out of hand? It already is out of hand. And rude to boot.' Lodz's voice was dry and a little scratchy, a natural companion to his usual hostile pomposity.

Manchester stuck out her tongue and wagged it at him.

'But I will forgive you your disgraceful behaviour on this occasion. Myself, Chaiyaphum and Salisbury have a little job for you. We want you to accompany some Trippers. I know that you don't like playing the mystic, but you haven't actually accompanied a Trip now for...' Lodz paused, as if savouring the statistic. 'Some 57 years now Manchester.'

*Well, I've been busy.*

'According to Salisbury, one of the Trippers, a young female named Melie Inherdinia, has a Cascade signature that you might be interested in.' Manchester's interest piqued at this: the teleologic-symbolic, Third augmented consciousness of the Cardinal Salisbury was practically legendary in the Koyculture.

*Interesting? How?*

'There are two other Trippers. One is a male, a historian named Tennys Smolensky. He wants to know about the varieties of religious experience, and has expressed an interest in meeting you personally, though I can't imagine why.' Manchester bristled, making the sensitive little choo machine on her shoulder quiver. She reached up to soothe it.

*Lodz, you are such a clod!*

'The third Tripper is a mystery. Calls himself Flocanalog. Originally from Memecast, latterly Marineris. He had to disengage from a 20 year long Shell symbiosis just to be able to walk the green of Novagaia.'

Despite herself, Manchester was intrigued. She had never heard of any inhabitant of Marineris *deliberately* disengaging from a Shell symbiosis. Shells were magnetohydrodynamic choo machines. On Marineris, the human symbiont to which such machines were Host grew together as a result of experience of learning into a single entity. After a number of years, it became almost impossible to differentiate where choo machine ended and human machine began, both psychologically and physically. An enforced separation was a strange thing to initiate. This Flocanalog must have a very good reason for wanting to come to Novagaia.

'So there you are Manchester. Not much to ask, eh? If you have any questions, you know where to ask them.'

The image of Lodz froze for a second, and then the window snicked closed and iconised. Manchester instructed her resource to close the remaining icon and the tranquillity of the Lifeswork was restored. She looked around her, sighing.

*A Trip. Why a Trip of all things? All that pretence! Welcome to the Novagaian ecopoesis.*

Stuff and nonsense.

Talk to a few Trees, play in a few fields, add a subtle on-line reconstruction of some internal resources, and bingo - enlightenment!

Manchester snorted derisively at the thought. It was not that she disliked humans: some of her best friends were human. Nor was it that she resented playing up the Mystic: there was always opportunities for mischief in such situations. It was not even that she particularly resented having to spout all that pseudo-religious drivel about the Cascade that some Trippers wanted to hear, the old theosophy of Ushogbo that had served the Cardinals so well during the Great Dying. No, it was rather more that Manchester simply didn't like being told what to do.

She sighed again, realising that she would not be able to meditate. Lodz's message had irritated her past the point where she would be able to properly empty herself. She accessed her resource instead, and a series of options appeared -**procurement, communications, Lifeswork** - bright little icons hanging virtually in the air before her.

She touched the last intangible graphic and a second window appeared. She keyed a sequence, and the link between her internal resource and the powerful Hub machine maintaining the virtual Lifeswork was broken. The encircling Trees, the carpet of moss and the smell of wild garlic dissipated, leaving Manchester to slowly focus her eyes out on the view through the diamond transparency of the observation blister in which she sat.

The blister was perched at the very top of the Starboard Rim on the Novagaian orbital. Some 40,000 metres below, the immense wall of metal met the floor of Novagaia proper. Manchester looked to her left, leaning out into the centre of the diamond bubble. The Rim curved up and away, and drew her gaze even further out past the orbital confines to the dark, aquamarine bulk of Water hanging in the vacuum. All of a sudden, she shivered. She had not been there when the worst of the Great Dying had taken place, and for that she was glad. Water was no longer the place for either human or Cardinal, belonging now to the esoteric builders of the Koyculture.

Manchester drew a deep breath and brought her attention back to her immediate surroundings. *So, a Trip. Could be worse, I suppose*. Then she remembered what Lodz had told her, of the young woman's interesting Cascade signature, and her interest was re-piqued. *Hmm*.

## WATER



A Science-Fantasy Novel

Stuart A. Jackson