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NEAL ASHER



DARK INTELLIGENCE

TRANSFORMATION BOOK ONE

DARK INTELLIGENCE

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DARK
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TRANSFORMATION, BOOK ONE

NEAL ASHER

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They say time heals.
No, it just wears away pain.
It grinds everything to dust.

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THORVALD SPEAR

I woke in crisp white cotton sheets to the sound of skylarks, with the sun beaming through a window somewhere nearby. I gazed up at a lighting panel inset in the pale blue ceiling and smelled comforting lavender with a slight acrid undertone of antiseptic. I could also detect the distant promise of coffee. I felt really good and, after a deep, relaxing breath, sat up to look around. The arched window at one end of the room gave a view of mown lawns scattered with perfect springtime trees. Gentle puffy clouds neatly decorated the sky, with just the stark lines of a single-cargo grav-barge crossing it for contrast. Within the room stood a chair, and side table with a mirror above it. The smart touch panel in a bottom corner indicated that it also served as a screen. Next to the bed my clothes lay neatly folded on another wooden chair: including my favourite jeans, ersatz rock-climbing boots and an enviro-shirt.

I whipped the sheet back and got out of bed. Nothing ached, nothing hurt and I felt fit. It then occurred to me to wonder, vaguely, why I might have expected otherwise. I headed over to an open side door into the en-suite, glanced at the toilet but felt no need to use it, then went over to the sink and peered at myself in the cabinet mirror above. No stubble, but then I'd had permanent depilation years ago. I opened the cabinet and took out a small brushbot, inserted it into my mouth and waited while it traversed round my teeth, cleaning them perfectly. Took it out and dropped it into its sanitizer, then went back into my room to dress.

Vera, as her name-tag declared, arrived just as I was closing the stickseam on my shirt.

"Oh, you're awake," she said, placing a tray on the side table. I walked over, the pungent smells of coffee and toast eliciting something close to euphoria. I picked up the coffee and sipped, finding it as good as it smelled, and studied Vera. She was beautiful, her complexion flawless and the balance of her features perfect. She wore a nurse's uniform of white and navy blue, a silver crab pendant at her throat, and sensible shoes.

Crab.

My mind keyed onto that and I rose to a slightly higher level of consciousness, where I found it wasn't quite so comfortable.

"He'll be waiting for you on the veranda when you're ready," she said, then turned to go.

"Wait," I said.

She turned back and gazed at me expectantly, but I couldn't find the words to express my unease.

"It's nothing," I finished.

She departed.

The toast with its butter and marmalade was, like the coffee, the best I've ever had. I finished it with relish, then headed for the door. I turned left into a carpeted corridor, then right into a clean and decorously appointed sitting room—seemingly translated from centuries in the past. A glass sculpture on a nearby bookcase caught my eye; something insectile squatted there, with hints of light in its depths. It made me as uneasy as that crab pendant and my awareness rose to yet another level. I pushed open paned glass doors and stepped onto a wooden veranda, replaying the moments I had experienced from waking, wondering at their perfection. Then, as I saw the figure sitting at an ornate iron table on the veranda, the confines of my mind began to expand.

Sylac ...

~~Of course everything was perfect; too perfect.~~ I had no doubt I was Thorvald Spear and that if concentrated I could remember much of my past. But it bothered me that my recent past wasn't clear and that I felt no inclination to remember it. I walked over to Dr Sylac, pulled out one of the heavy chairs and sat down, and studied him for a second. He was dressed in an old-time safari suit, a thin-shaven-headed man with an acerbic twist to his mouth and black eyes. This was completely wrong because at that moment I had a clear recollection of how he'd looked last time I saw him. The extra cybernetic arm with its surgical tool-head no longer protruded from below his right, human, arm. His skull was now unblemished—not laced with scars and the nubs of data interfaces, all ready to plug into a half-helmet augmentation.

“Interesting scenario,” I said, waving a hand at our surroundings.

“I wondered how quickly you would notice,” he replied. “You were always the brightest of my associates.”

“All too perfect,” I added, “until now.”

“Standard resurrection package,” he said dismissively. “They create a virtuality to ease one back into existence with the minimum of trauma.” “So why are *you* here, then?” I asked.

“They took me out of storage. A reduction in my sentence was promised if I worked on you.” He shrugged. “It seemed like a good deal—I get to return to corporeal form and I've been moved up the Soulbank queue.”

“Soulbank queue?”

“Oh yes, after your time.” Sylac paused for a second then continued, “It's where the dead are stored, either awaiting their chance of resurrection in a new body or leapfrogging through the ages. Some criminals are kept here too ...”

So Sylac's dodgy games with human augmentation had finally caught up with him. It quite surprised me that the AIs had bothered to store his mind. Some of the things he had done should have resulted in a permanent death sentence.

“But it's noticeable,” he continued, “how you haven't asked how and why you're here.”

I stared at him, first realizing that he was part of the process of easing me back into existence, then understanding that his words were a key made to unlock my memories. The war, I remembered. After many years of working in adaptogenics, nanotech and multiple biological disciplines, I'd formed a partnership with Sylac. This was during the first years of the prador/human war—when humans and our AI overlords discovered we weren't alone in the universe. And our nearest neighbours were vicious alien killers.

Upon realizing that Sylac was leading me into experimental and illegal territory, I'd said my goodbyes and joined up. My extensive knowledge and skillset were highly regarded by the AIs, the artificial intelligences running the war. In fact, I'd been very highly *regarded* by them before the war as they'd wanted to know how my brain worked. Intelligence was something that could be measured and, in some forms, perfectly copied into artificial minds ... up to a point. But for some, IQ ceased to be measurable and genius blurred into madness. They called me a genius, but I didn't like that. I always felt that what they'd seen in me was just another immeasurable facet of human mentality-will power.

After both real-time and uploaded combat training, I went into bioweapons and bio-espionage. The AIs tried to keep me away from the front, but I went there anyway. I remembered the desperate fighting, my first encounter with the prador, first attempts at interrogating the creatures and the increasing sophistication of our techniques thereafter. Then things became vague again.

“Are we still losing?” I asked.

“The war ended over a century ago,” he replied.

So, a moment of deliberate shock to shake things free in my mind. Even though I recognized it such, I still felt panic and confusion.

“It ended about twenty years after you died,” he added.

I closed my eyes and tried to recall more, but the detail remained hazy and I just couldn't nail anything down. This was frustrating because clarity of thought had never been a problem for me before. I tried to figure it out, wondering if whatever had been done to enable me to handle revived shock was also interfering with my thinking.

“My implant,” I finally realized, opening my eyes. I'd died, and someone with my background couldn't fail to understand what that meant. Sylac had implanted a certain piece of hardware in my skull, and the “me” who was drawing these conclusions was a recording of my original self.

“They call them memplants or memcrystals now,” he said conversationally. “Yours was the first of many I developed. I sometimes think they're why I'm still alive. The AIs must have weighed my research on the scales of life and death, and my augmentations resulted in more lives saved than lost. Or maybe it's that sticky area concerning the definitions of murder and manslaughter, especially when the supposed victim is a willing participant. The AIs would have us believe that if you kill a sentient being, a true death sentence—the utter erasure of you from existence—is automatic. I know otherwise because there are many like me in storage. And there are many kept there who have committed murder.” He gazed musingly at the parkland beyond the veranda. “Of course it's much easier to sentence someone to true death when they're not useful ...”

We won?” I asked, still trying to get my thoughts in order.

“Debatable,” he replied. “We were winning, but the prador king was usurped. The new king, apparently not so xenocidal, decided that fighting us was no longer a good idea. They retreated but we didn't have the resources to go after them and finish the job.”

“My memplant,” I asked, “where was it found?”

He glanced at me. “Someone who knew my work recognized it. It was set in a brooch in a jeweller's window, which was an interesting outcome.” He paused, studying me, then reached out to tap my skull. “It'll be back in place when they truly resurrect you, as there are difficulties involved copying that technology across to something more modern.”

Truly resurrect ...

I filed that away for later and made another attempt to think clearly. The memplant Sylac had fitted inside my skull was a ruby. It was a decent size too, being as long as two joints of my little finger. So its being used for jewellery seemed surreal but made sense, although this particular ruby was rather more than it seemed. The quantum computing lattice interlaced throughout its crystal structure gave it that bit extra that allowed me to live.

“They couldn't trace its source beyond the shop in which it was found, though there was speculation that it was picked up by salvagers out in the Graveyard—”

“Graveyard?” I interrupted, feeling like an idiot.

“A no-man's-land between our Polity and the Prador Kingdom.”

“Ah.”

“The Polity, that human and AI dominion spanning thousands of star systems, had been shocked out of its complacency upon first encountering the prador. The alien monsters that resembled giant fiddler crabs had been unremittingly hostile and genocidal.

“Your memplant had been damaged before it was recognized for what it was, and the forensic AI that first studied it only made basic repairs. Otherwise, it could have lost the data it contained.” He lifted his hand from the table and stabbed that bony finger at me again. “That data being you.”

“So they got some expert advice,” I suggested.

“Absolutely.” He nodded. “It also seems that they *felt*,” he sneered at the word, “that you were

owed a life for your service during the war.”

“So what now?” I asked.

“A body awaits you, tank-grown from a sample of your own DNA, stored by wartime Polity medical.”

“Then it’s time for me to start my life again.”

“I envy you, but I don’t envy you trying to incorporate your memories. You don’t have full access at the moment.”

“What do you mean?”

“I can tell they’re not clear—as I said, the memplant was damaged, almost certainly by the intrusion of search fibres from a prador spider thrall. Not even the AIs can work out how you died. But they, and I, uncovered enough to know that it’s all very ugly.” He turned to gaze at me again. “You can, if you wish, decide to edit those memories out.”

My immediate reaction was distaste. They’d started using memory editing during the war and even though it turned battle-stressed and highly traumatized people back into useful soldiers, I hadn’t liked it. It was a cop-out, renegeing on responsibility, going through life with blinkers on.

“I want all my memories,” I said, which was enough to trigger what had been hidden until now.

A chaotic montage of horror returned, delivered through a tsunami of fire.

THE WAR: PANARCHIA

The reality of the war was scribing itself across the sky of Panarchia in brighter text every night. In the beginning it had competition from the accretion disc of Layden’s Sink, a bright oval lighting up half the sky. Perhaps a century hence this black hole would suck down this whole planetary system. Yet now, even that formed a dull backdrop against which Polity and prador forces tore each other apart.

“Close your visor, soldier,” said Captain Gideon.

I touched a control on my combat suit’s helmet, and its visor slid silently closed. I needed the light amplification now, anyway. And, during the night here, given the hostile local wildlife, you maintained suit integrity or you stayed in your tent. General Berners said the octupals, or the “fucking molluscs” as he described them, were an alien import. Yet it struck me that they had burgeoned very nicely thank you, in an environment supposedly not their own. As Gideon settled beside me, I scanned the emplacements around us, uncomfortable with our exposed position, then dropped my gaze to the sheet of solidified lava beneath our feet. This was dotted with small pools where large gas bubbles had burst and looked like a slice of cherry chocolate cake in the twilight. Already some octupals were crawling from those pools, ready to set off on their nightly hunt for prey and for mates—though sometimes they made little distinction between the two. And already I’d heard swearing from some of Gideon’s troops who, like me, had forgotten to close their visors.

“You ever seen a real octopus?” asked Gideon.

“Yes,” I replied, returning my attention to the body of the captured prador first-child—one of the vicious children of our enemy. It was sprawled before me beside the foxhole it had made in the rock here. Its legs, manipulator arms and claws were stacked in a pile a few paces away, behind our battle autogun. I now had its carapace open, hinged aside on gristle like the lid of a waste bin. I continued sorting through the offal inside, pulling aside various glutinous items to finally expose its main ganglion, or brain. This sat inside a ring-shaped chalky case. Picking up my surgical hammer, I hit hard, cracking open the case. The first-child hissed and bubbled and I felt the stubs where we had cut

off its mandibles knocking pathetically against my leg. Still, even knowing what a creature like the would do to me were it mobile, I hated what I was doing.

“Where?” asked Gideon.

“Where what?”

“Where did you see an octopus?”

“In an aquarium on Earth.”

“Never been there,” he said dismissively. “Never wanted to go there.”

I guessed he was trying to distract himself and, with anyone else, I would have assumed he didn't want to think too much about what I was doing. However, he and the rest of his men had been fighting the prador for a long time and had ceased to have any squeamishness about bioespionage. When the enemy's inclination was to both kill and eat you, you tended to toss away any human rules of engagement. I wished I could.

Finally having broken away enough of the ganglion casing, I selected an interrogation implant from my steadily dwindling supply—a chunk of hardware that looked like a steel door wedge—and stabbed it into the required spot. The prador jerked under me, hissed and bubbled some more and squirted green blood from its leg sockets.

I turned away, feeling small impacts on my suit, and noted a nearby octupal shooting poisonous darts at me. It had decided it wanted to either eat or fuck me. Light stabbed through the twilight and the octupal exploded like a microwaved egg. One of our mosquito guns moved on, its camousk rippling.

“they'don't look much different,” I said.

“What?”

I gestured to the steaming octupal remains nearby. “These look just like terran octopuses, though the ones on Earth live in water and some varieties grow larger.”

“Do they shoot poisonous darts?” Gideon asked.

I shook my head. “they'don't have tri-helical DNA and three eyes either.”

Gideon snorted then turned back to look at the prador. “How long before you can get some answers?”

“A few minutes, but I'm not hopeful.”

Gideon looked back the way we had come, towards the mountains, which were now silhouetted against the furthest rim of Layden's Sink. The eight thousand or so remaining men of Berners' division were encamped there and fortifying. If the prador already on this world moved against us there was no doubt that we would be screwed, and fast. But the hundred thousand or more pradors surrounding us had just spread out and dug in and were simply waiting. Berners reckoned they were awaiting the result of the space battle raging above. This sometimes turned the night to day, or shook the ground when some leviathan piece of wreckage came down. It was also close enough that passing Polity attack ships could help us out, sending down ceramic shrapnel daisycutters to shred the dispersed prador forces. Berners further pronounced that whichever side ended up controlling near space, owned this world and could quickly dispose of the opposing forces on the ground from orbit. But I didn't agree.

The prador had already been bombed by Polity ships, yet Berners' division, whose location the prador certainly knew, had not been touched in retaliation. I suspected a complicated game of strategy. Maybe the prador were keeping us alive in the hope that the Polity would make a rash rescue attempt putting the AIs at a tactical disadvantage. It was, I felt, a strange strategy to use when you were fighting Polity battle AIs, but seemed to be the only explanation that fitted. I was now hoping for confirmation from this first-child, or at least some explanation.

“It's not right,” said Gideon.

I turned to him, thinking he was having similar thoughts. Instead, he was staring up at the accretion disc.

“What’s not right?”

“Y’know,” he continued, “in another life I was an astrophysicist.”

“What?” Now I was getting confused.

He pointed up at the accretion disc. “It’s been described as a Kerr black hole because of the massive spin and other readings that indicate a Kerr ring, but there are irregularities.” He lowered his hand and looked at me. “Its electrical charge is just too massive—thought impossible in something naturally formed.”

“But evidently not impossible.”

An icon blinked up in my visor as the interrogation implant made its connections: a small cartoon crab with a speech bubble issuing from its mandibles. We had more pressing matters in hand than our theoretical physics. It was my contention that to appreciate the wonder of the universe, one must first remain alive.

“We’re in,” I said. Then, “What’s your name?”

“Floost,” the prador replied.

Of course the creature was not replying to me directly. I’d flooded its brain with a network of nanoscopic tendrils, and these were similar in design to the connection routine of a standard human cerebral augmentation. That device had broken the barriers between the fleshy human brain and computing, but this one had a coercive element that standard augs lacked. And the data-feed route back through a translation program. The upshot was that Floost couldn’t refuse to answer. However, the prador could give perfectly true but misleading replies.

“Why have you not attacked the human forces on this world?” I asked.

“Because Father ordered us not to.”

“Why did your father order you not to attack us?”

“Because you would be destroyed.”

“Why does your father not want us to be destroyed?”

“Because he was ordered not to destroy you.”

I realized then that this first-child had been coached in how to respond should it be captured and interrogated in this manner. This was going to get a bit laborious.

“Why was he ordered not to destroy us?”

“Because of the tactical advantages.”

“We’ve got movement,” said Gideon, gazing out towards our emplacements.

I glanced over and saw the big autogun swinging its barrel across, then beginning to heave its weight off the ground on lizard-like metal legs.

“Twenty-four targets closing,” someone stated over com. “One first-child and the rest seconds—two of them implant tanks.”

Implant tanks, great. As if the prador children weren’t sufficiently bad in their natural form, their fathers transplanted their brains into heavily armed and armoured war machines.

“Fuckit,” said Gideon. “Get your data, Thorvald.”

“Why would not destroying us be a tactical advantage?” I asked.

“Accruing assets is advantageous.”

“How are we assets?” I managed to ask just before Gatling cannons started thundering. Our force fields took the strain, their powerful hard-fields appearing in the darkness, gleaming periodically like torch beams falling on glass. Tank shells next ignited the night, followed by a particle cannon beam of royal blue. A shock wave picked me up and deposited me on my back and, as I fell, I glimpsed the burning wreckage of a hardfield generator and projector tumbling past, leaving a trail of glowing

molten metal on the stone.

“Covered retreat to the canyon,” said Gideon calmly. “Tic mines all the way.”

I only just heard the prador’s reply over this, and it simply didn’t make any sense, then. “You will serve us,” it had said.

“We’ve gotta go,” said Gideon, tossing a tic mine into the opened-up first-child even as I struggled to my feet.

I grabbed up my equipment and threw it into my backpack. I didn’t bother with the interrogative implant because the things were single use. The rockscape was now constantly lit by pulse-rifle fire, the glaring stabs of beam weapons and the dance of glowing hard force-fields. Our mosquito guns were spitting fire, while our big gun was steadily backing away. Our remaining hardfield generators were now up off the ground and retreating on grav, their cooling fins already cherry red. About a mile beyond their defensive perimeter the prador were advancing behind their own layered hardfields. I could make out a big first-child firing a Gatling cannon. This was attached to one claw and it had a particle cannon attached to the other. Second-children half its size were firing the prador equivalent of our pulse-guns, or staggered along under the load of hard-field generators. The two implant tanks rolled along on treads with side turrets firing shrapnel rounds, while their top turrets coloured the night green with high-intensity lasers.

I watched the troops pulling back behind, firing occasionally and dropping tic mines in selected pools. These last devices behaved just like the insects they were named for. Upon detecting nearby enemy movement, they leapt from concealment and attached themselves. They then detonated their copper-head planar load, to punch through armour. As I retreated after Gideon, I saw one of our troops just fragment into a cloud—seemingly composed of nothing but scraps of camo-cloth.

“Move it!” Gideon bellowed. “We can’t hold this!”

The troops broke into a run and within minutes we reached the edge of the canyon and began scrambling down to the riverbed. As we reached it, all our autoguns and shield generators entrenched themselves above to cover our retreat.

“Full assist,” Gideon ordered.

I hit the control on my wrist panel and felt my movements become easier, smoother. Soon I was running android-fast with the others, back towards the mountains. Behind us the battle continued. I heard a massive detonation and, glancing back, saw that our big autogun was gone.

“Damp down assist,” said Gideon, sounding puzzled. “They’re not following.”

That, I felt, must have something to do with us being “assets” or “resources” but it still made no sense to me. As I cut down on suit assist, splashing through the shallow pools that were all that remained of the river’s flow, I realized that the sky was lighter. Now that Layden’s Sink was out of sight behind the mountains, I could see that the night was nearly over.

“Hey, looks like we’ve got visitors!” someone commented.

We all paused and gazed up above the peaks. High above Berners’ division, a Polity destroyer hung in the pale sky. I felt something relaxing inside me. Every other visit by a Polity vessel had been a quick in-and-out job, sowing destruction amidst the enemy behind us. Maybe now the fleet was making a concerted effort to get us out.

“Why a destroyer and not a transport?” asked Gideon.

“Maybe just cover until they can get something bigger down,” I suggested. “If they’re moving something in to get us out, they know the prador down here will react.”

Then a particle beam stabbed down from the destroyer, blue coherent lightning reaching down here and there in the mountains, giant flashbulbs going off where it touched. The symphony of destruction reached us shortly afterwards, complemented by the shuddering of the ground.

“What the fuck?” I wasn’t sure whether it was me or someone else who said that. But even as the

beam winked out, I knew that our division's outlying guard posts had just been annihilated.

Did I actually see what happened next or did imagination fill in the details for me? Black objects hurtled down from the destroyer—one of them visible only half a mile or so ahead. Then the shells peeled away, igniting a fusion drive to hurl itself back upwards. Bright light flashed, and my vision went protectively opaque for a few seconds. As vision returned I saw, in nightmare slow motion, mountains heaving and crumbling, their broken stone turning to black silhouettes that dissolved in a torrent of fire.

"They've killed us," said Gideon.

The fire rolled down and swept us away.

THE WAR: A BELATED PRELUDE

The miners of Talus push a runcible transfer gate, enmeshed in hardfields, into the giant planet's core. Here, they prompt thousands of tons of nickel-iron to squirt through underspace, via the gate, to a distant location. Meanwhile, a hundred light years away, the autodozers on planetoid HD43 shove mounds of ore into mobile furnaces. These metals are rare on some worlds, but here on Talus they are easily field-filtered, refined and transmitted. HD43's orbit is perturbed by a strip-mined loss of mass which runs a mile deep all around the planetoid as it is gradually peeled like an onion. Silica sand billows into a runcible gate on the planet Fracan, where a desert is being vacuumed away to bedrock. Old Jupiter swirls with new storms as its resources too are stripped, but by gas miners feeding like whales. In the Asteroid Belt combined crusher and smelting plants select asteroids, as if choosing the best candidates from a vast chocolate box. Materials gate through nowhere from numerous locations, becoming non-existent, and arrive. And these invisible transit routes converge at a point on the edge of chaos: factory station Room 101.

Resembling a giant harmonica, discarded by a leviathan eater of worlds, Room 101 sits on the edge of a binary star system. The station is eighty miles long, thirty miles wide and fifteen deep. The square holes running along either side of it are exits from enormous final-fitting bays. One of these is spewing attack ships like a glittering shoal of herring, which eddy up into a holding formation. Drive then ignite upon orders received, and they shoot away. At a slower pace, another exit is birthing the huge lozenge of an interface dreadnought. Another seems to be producing smoke, which only under magnification reveals itself to be swarms of insectile war drones. Some of these head over piggyback on the attack ships, while others gather on the hull of the dreadnought. Still others, those of a more vicious format, head off on lone missions of destruction.

Inside the station, the sarcophagus-shaped framework of a nascent destroyer shifts a hundred feet down a construction tunnel eight miles long. Into the space it occupied, white-hot ceramal steel girders now stab like converging energy beams. Then these are twisted and deformed over hard-fields which glitter like naphtha crystals. The skeleton of another destroyer takes shape and is moved over after its fellow, cooling to red in sections as directed gas flows temper it. From the tunnel walls, structures like telescopic skyscrapers extend and engage in hexagonal gaps in the ship's structure. A third such device moves up the massive lump of a three-throat fusion engine, hinges it up into place, then extends constructor tentacles like steel tubeworms. These commence welding, bolting and riveting at frenetic speed.

Fuel pipes and tanks, skeins of superconductor, optics and all the apparatus of the ship's systems come next—some of it preprepared to unpack itself. The constructor tentacles are now ready to proceed inside, rapidly filling out the destroyer's guts. A main railgun slides up like an arriving train.

as the tentacles withdraw. The skinless vessel is turned and the railgun inserted like a skewer piercing the mouth of a fish. The conglomerate chunks of solid-state lasers are riveted in all around. The loading carousel of the railgun clicks round, as its mechanism is tested, then racking is woven behind it. This is filled with both inert missiles and CTDs—contra-terrene devices—because nothing says “gigadeath” quite so effectively as those flasks of anti-matter. A particle cannon arrives like a gatecrasher and is inserted just before the destroyer is shifted on, two more rising skyscrapers coming up to pin the next bug in this procession.

Next, another lump of hardware arrives: two torpedo-like cylinders linked by optics. These are trailing s-con cables and sprouting brackets and heat vanes like fins, a distortion around them causing weird lensing effects as they’re inserted into the ship. Constructor tentacles bolt them into place and now small maintenance robots unpack themselves, moving in to connect other hardware.

A fusion reactor fires, powering up computers, which in turn run diagnostics that feed back to the constructors. A solid-state laser is removed and sent tumbling away—to be snatched up by scavenger bots crawling across the walls like car-sized brass cockroaches. Then another is inserted. Next come the tubes of dropshafts and large blocky objects, whose only identifiers are the airlocks and shaft connections on their outsides. They are inserted and connected throughout the ship, like a bubbled metal lymphatic system. And it’s time for furnishings, suites, supplies and the other paraphernalia of human existence to be installed inside. Diamond-shaped scales of composite armour begin to arrive as impact foam expands to fill the remaining inner cavities.

Constructors lay down the heat-patterned ceramal, which they weld and polish to a gleaming mirror finish. Space doors are installed over an empty shuttle bay. Inside a last remaining cavity, two objects like old petrol engine valves part slightly in readiness. The all-important crystal arrives as the final hull plates are being welded in place. It sits inside a shock-absorbing package a yard square, but this prize already hides faults due to hurried manufacture. The crystal is a gleaming chunk two feet long, a foot wide and half that deep—laminated diamond and nano-tubes form its quantum-entangled processing interfaces. Even its microscopic structures possess a complexity which is beyond that of the rest of the ship. A constructor arm like a tumorous snake strips it of its packaging, revealing its gleam through an enclosing grey support frame like a dragon’s claw, and inserts it. Lastly, as the valve ends close down to clamp it in place, the last hull plates are welded shut and polished.

And the fractured mind of a destroyer wakes.

You are the war-mind Clovis, trapped in a mile-wide scale of wreckage falling into the chromosphere of a green sun. In the remaining sealed corridors around you, the humans are charred bones and oily smoke. Your Golem androids have seized up and your escape tube is blocked by the wreckage of a prador second-child kamikaze. When the salvage crab-robot snatches you from the fire you are indifferent, because you accepted the inevitability of oblivion long ago ...

You are the assassin drone named Sharp’s Committee, Sharpy for short. Your limbs are all edged weapons honed at the atomic level, your wing cases giant scalpel blades and your sting can punch even through laminar armour to inject any of the large collection of agonizing poisons you have created. You have sliced away the limbs of a prador first-child—one of the adolescents of that vicious race—and it screams and bubbles as nano-machines eat its mind and upload a symphony of data to you. You love your job of creating terror, because it satisfies your utter hatred of your victims ...

You are dreadnought AI Vishnu 12, so numbered because that is a name chosen by many of your kind. In the five-mile-long lozenge that is your body, you contain weapons capable of destroying the world below. But you are mathematically precise in their use because of the higher purpose you serve: the knowledge of those aims and your adherence to duty. But the world is now fully occupied by the

prador enemy and the fate of the humans trapped below is foregone. Your railguns punch antimatter warheads down into the planet's core, while you set out to accomplish your next task. So you travel ahead of a growing cloud of white-hot gas, laced with a cooler web of magma ...

You are not fully tested and may not even be viable. You are version 707: composed from the parts of wartime survivors. The crystal you reside in has its fault, the quantum processes of your mind cannot, by their nature, be predicted, and time is short. You are newborn from the furnace and about to enter Hell. And in time you will, for reasons others will find obscure, name yourself Penny Royal ...

SPEAR

The second time I woke was in an amniotic tank, breathing through a tube and with the unmistakable feel of things attached to and penetrating my skull. I opened my eyes to a blur as I felt a metal grid slide up beneath me, hoisting me up and out of the liquid under harsh bright lights. It swung me to one side of the tank, then lowered me down again. Cold metal clamps took hold of my head, but this evoked a recently returned memory which I hadn't yet examined closely, so I struggled.

"Remain still," said a calm and slightly prissy voice.

I obeyed but felt the skin crawling on my back, as those cold fingers removed what had to be the modern version of upload optics and neuro-chemical conversion nodes stuck into my skull. My vision cleared in time to see the metal hand of a Golem android retract out of sight. The clamps opened and I immediately sat up, then just as immediately felt sick and dizzy.

"Take it slowly," said the Golem, turning back to me.

During the war the Golem had been the standard android manufactured in the Polity, and perhaps still was now. Its ceramal motorized chassis, or skeleton, was usually concealed under syntheflesh and syntheskin—and it ran an AI mind in crystal. This one also looked like Vera from the virtuality where I'd experienced my first waking from ... death. She was clad in a monofilament overall and, while I watched, she pulled a syntheskin glove back over her metal hand. She sealed it around her wrist, joining it invisibly to the skin of her arm, then pressed it home in various places, doubtless to reconnect its nerve network. I noted humanizing imperfections I had not seen in the virtuality: a slight asymmetry, an ersatz scar and messy tied-back hair that looked as if it needed a wash. The Golem of my time had always looked utterly perfect and had never quite blended in.

I rolled off the metal grid and stood up, aching from head to foot and feeling very weak. We were in a room that I later learned was the delivery end of mechanized resurrection. I looked around, with a strong feeling of *déjà vu* arising as I watched the grid rise up again on its telescopic poles.

"Where am I?" I asked.

"Chamber R12 in the Krong Tower, London, Earth."

The name "Krong" nibbled at memory but almost in panic I decided not to pursue it. However, despite the familiarity of this chamber, I just knew I had never been here before, or in any place remotely like it.

"What now?" I asked.

She stabbed a thumb towards a door at the other end of the room. "You can clean up through there where clothes are provided, along with a wristcom linked to an Earth Central submind. It will tell you everything you need to know. Thereafter ... She shrugged. "What you do next is entirely up to you since you're a free citizen of the Polity."

"Really?" I wondered if the AIs had finally understood the workings of a mind like mine, in the past century, and I was to be left alone. It then occurred to me that even if they hadn't, they'd probably made a copy to examine at their leisure.

"Really," Vera affirmed.

"Thank you," I said, but she was already turning towards another tank. It was sliding into place with another of the resurrected moving sluggishly inside.

I trudged out of the room, trying to accept all I'd been told, but deliberately avoiding my most recently returned memories. They felt wrong, disjointed, like the recollection of some nightmarish pub crawl and exhibited a similar cringe factor. I didn't want to touch them yet because they hurt. Instead, I concentrated on the simply amazing facts of the now. The memplant Sylac had developed had allowed me to circumvent death. I was now in a clone body, whereas, for over a century, I had resided in a chunk of ruby netted with quantum computing. Maybe my corpse had rotted away completely somewhere, or my memplant had been separated from it by whatever incident had killed me—perhaps I'd been shot in the head. Perhaps the implant had been deliberately removed at the point of death. I just didn't know. Then it had found its way to someone who decided to turn it into jewellery, and I was thankful that person had not decided to cut the jewel. Finally, recently, it had been found and returned to Earth.

Over a century ...

How much had changed? I wondered, as I surveyed the room Vera had indicated. Set in one wall were eight tall cupboards, each with a stick-on LCD label showing a name. I stared at it, the familiarity impinging again. But I felt out of kilter because my name on one cabinet, which was completely right, felt absolutely wrong. As I opened it, I tried to dismiss the feeling that I was interfering with someone else's property. These odd reactions had to be some sort of hangover from the drastic process I had just undergone. Glancing along the cabinets on either side, I also surmised this was just part of the batch being resurrected today, though perhaps the only one from such a distant time.

Inside hung clothing much like the kind I had worn so long ago. I suspected this had been made specifically for me, for I doubted fashions would be the same now. I turned away from this to wander through a door in the other wall, finding the washing facilities while briefly wondering how I had been sure they were there. I took a shower and scrubbed myself until the tank's clamminess had left my skin, returned to dress, and took up the wristcom.

"Thorvald Spear," it said as I strapped it on.

"I haven't noticed any vast changes in technology," I said, to test the intelligence of the submind speaking through it.

"The development curve flatlined before the war," it replied indifferently, "rose during the war—mainly for weapons, medical and spaceship tech—and settled to a steady but slow climb afterwards."

"One would suppose someone is keeping things slow," I suggested.

"One would suppose that necessary to allow slow organic creatures to keep up."

I decided I liked this particular submind. "What's your name?"

"You can call me Bob."

"So where now, Bob?"

"Outside, to where an aircab is waiting for you. It'll take you to a hotel where I have booked you a room. I'll stay with you while you adjust, but thereafter it's up to you. Left out of the door, through the door at the end then right to the dropshaft. Next go down, then out through the lobby."

"How do I pay?" I asked.

"Earth Central's paying, but you've no worries about funds."

"How so?"

"You receive backpay up to the moment of your resurrection—that's been standard for all soldiers whose memplants were discovered late. In your case it means you're filthy rich."

The dropshaft was my first encounter with change. For, though they were introduced aboard spaceships during the war, Earth buildings had still used stairs and elevators. I hesitated at the yawning gap then, following Bob's instructions, pressed the touch screen to select lobby and stepped in. I doubted they had resurrected me only to watch me plummet to a mangled death. The iris

gravity field took hold of me and I descended gently, stepping out into an area decorated with large planetary scenes. ~~The street outside was wide, with miles-tall buildings all around me, the sky narrow blue river directly above.~~ The driver was my next encounter with the future. There had been nothing but autocabs here last time, so was a need for drivers a step back? He wore a skin-tight blue bodysuit, his skin scaly and his eyes those of a snake. He grinned at me, exposing a viper's fangs. "Where to?"

"The Auton," Bob replied.

The aircab was decidedly retro—looked like a groundcar from centuries before I was born and even had wheels. As he took us into the air, whisking me through canyons of buildings, the driver tried some conversational gambits that left me confused. I had no idea what a "hooper match" or "gabbleduck" might be, let alone "Jain tech" or "haiman" and yet felt further confusion at a sense of familiarity with such terms. I wondered when this feeling would go, for I had felt this *déjà vu* a few times now. However, I certainly understood what a Dyson Sphere was and knew, despite Bob's talk of flatlines, that I was probably due for some shocks. The driver subsided in obvious frustration. I later learned that people drove cabs for social interaction and interest, rather than financial gain. I probably wasn't his best fare that day.

London had changed: I recognized some buildings, but they were dwarfed by new structures that must have been close to two miles high. I spotted Elizabeth Tower and Westminster in a semicircle of parkland by the river. But there was no sign of the shimmershields, the "soft" force-fields that had protected these buildings from the depredations of tourism in my time. I subsequently learned that every part of them had been nano-coated with chain glass, so tourists had been allowed back. Finally the cab brought me down onto a high airpark platform extending, amidst many of the same, on a stage from the side of a building resembling a mile-high scalpel blade. From there a dropshaft conveyed me into the plush interior of a lounge-bar.

A wide panoramic window ran along one side, facing a long bar, behind which stood a silver-skinned humanoid who might have been Golem or human. Mockwood lattices separated seating areas around the walls, while in the middle rested comfortable sofas and low tables. The place was crowded with both human forms and figures that weren't so familiar.

"Your room is 1034," said Bob. "If you have any enquiries, just ask, or you can use the console there. It will take me three seconds to respond from now on because I'm off to deal with some other matters."

"What other matters?" I asked, suspecting that Bob had already guessed my intention to make use of the bar.

"Personal," the submind replied briefly.

"Okay—you said *everything* is paid for?"

"Yes, until you find your feet. We done for now?"

"We're done."

I walked over to the bar and as I passed one of the low sofas a black-haired woman stood up, glanced at her curiously, noting her pointy ears, sharp teeth and feline shape to her face. She was wearing very little: a skin-hugging lizardskin top that might as well have been sprayed on and khaki knee-length shorts of a loose meta-material. This shifted transparent diamond-shaped areas over its surface and the ensemble was coupled with slightly antediluvian red high-heeled shoes. I later learned her kind were called catadapts and as such, she had only altered herself so far—she hadn't, for example, opted for body hair. Everything she had done to herself emphasized her sexuality. I found her appearance grabbing at my gut and my groin and just wasn't ready for the intensity of the effect. She glanced at me and smiled knowingly. I nodded an acknowledgement and continued to the bar, blushing like a teenager. That the feeling of *déjà vu* was kicking in strongly didn't ameliorate my

embarrassment.

"I'll have a large brandy," I said to the silver-skinned humanoid, expecting him to ask me what kind. Instead he turned back to the long rack, selecting a bottle of Hennessy and poured me a healthy measure into a cognac balloon. He held it in his hand for a moment then placed it on the bar, the glass warmed. Noting his lack of obvious augmentation, I guessed that he must be a Golem. And presumably one who had downloaded data on me. Second thoughts then occurred, because it had been a hundred years and I just didn't know enough.

"Thanks." I breathed in the fumes then sipped—the taste and sensation more intense than I remembered. I took another sip, contemplating the effect of the catadapt woman, then wondered about the body I now occupied. Like many soldiers during the war, I'd made many alterations to how I functioned. I'd numbed my ability to feel pain, sped up my reaction times and strength and altered my tolerance to certain performance-enhancing compounds, though I'd drawn the line at physical augmentation, or boosting. Also, because it wasn't that helpful during combat or bio-espionage operations, I'd tuned down my libido. Did this body have a suite of nano-machines or whatever other methods of adjustment they used now? Almost certainly, but they must be back at their base setting. I heaved myself up onto a stool.

"I have a question," I asked my bracelet. After a short delay Bob was back: "What?"

"Does this body contain a nanosuite?"

"Yes, though somewhat more advanced than you were used to."

"Where can I get it returned?"

"Things have changed in that respect—Duckam has something for you."

A moment later the silver barman was back in front of me.

"Duckam?"

He dipped his head in acknowledgement and placed a transparent bracelet on the bar before me. The thing was paper thin and about an inch wide. I picked it up and studied it closely.

"What is this?"

"A nascuff," Duckam replied, then shot away again to serve someone at the other end of the bar.

Miniature controls were visible all the way around it, and when I hovered a finger over one it expanded to displace the others. Testing each control in turn, I found all the functional adjustments of the nanosuite I had known, along with a few others that left me puzzled. I put it on my right wrist whereupon it closed up, seemingly bonding to my skin, and turned red. I quickly found the controls with sliding scales governing all aspects of the human sex drive, and stared at them.

"Now that would be a shame," purred a voice at my shoulder.

I turned to watch her as she slid onto a stool beside me. Duckam was there opposite her in an instant, placing some green concoction in a tall glass before her. She sipped, licked her lips, rattled her little jewelled claws on the bar. Déjà vu returned hard, reflecting encounters like this seemingly to infinity. I shook my head to try and dispel it, focusing on her.

"You're just out of Krong Tower?" she queried.

"I am," I replied, "and finding my responses a little unnerving with my nanosuite at its base setting."

"Best place for it to be," she replied, holding up a wrist enclosed with another nascuff. Its color was red too.

Glancing at other patrons of the bar I asked, "What does blue mean?"

"It means boring." She downed her drink. "I take it you have a room here?"

"Shouldn't we at least have a short period of 'getting to know you'?" It annoyed me that my voice was unsteady and that it seemed incendiaries were going off in my body. My instinct was to forgo utter self-control because deep inside I felt an urgency I could not define and knew there was

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