

Crimes and Glory by Paul McAuley

Part One

“Where are they?”

‘They? Who’s this “they“, Niles?’ I say, wondering if he’s finally flipped. ‘There’s nobody out here but us chickens. And we’re where we’ve always been. Right behind you and catching up fast.’

‘It’s a famous question, Emma. Even though I know your training wasn’t all it could have been, I’m surprised and more than a little shocked that you don’t recognise it.’

At the beginning of this long chase, Niles Sarkka maintained an imperial silence, week after week, month after month. He didn’t answer my calls, and after a while I gave up trying to call him. Then, after turnover, after we switched off our motor and flipped end for end and switched it back on and began to decelerate, applying the brakes as we slid down the steepening slope of the warm yellow star’s gravity well, he called me. He wanted to know why we’d left it so late; I told him that a smart fellow like him should be able to work it out for himself.

But he hasn’t, not yet, although he’s been nagging away at it ever since. As our ship has grown closer to his, as both have grown closer to our final destination, the calls have begun to increase in frequency. And like most people living on their own, Niles has developed eccentric habits. He calls without any regard for time of day, so I have to carry the q-phone everywhere, and it’s a big old heavy thing the size of a briefcase, one of the first models. This call, the second in three days, has fetched me out of my weekly bath, and baths are a big deal on the ship. It’s not just a question of scrubbing off a week’s worth of grime; it’s also an escape from the 1.6 g pull. Sinking into buoyant water and resting sore joints and swollen legs and aching backs. Forgetting for a little while how far we’ve come from all that’s known, and the possibility that we might not be able to get back. So, standing dripping wet on an ice-cold floor, grappling with the q-phone and trying to knot a towel around me while the other women slosh and wallow in hot dark water in the big bamboo tub, I’m annoyed and resentful, and having a hard time hiding it.

Saying, ‘As far as I’m concerned, my training was good enough to catch you.’

Fortunately, Niles Sarkka ignores my sarcasm. He’s in one of his pedagogical moods, behaving as if he’s back in front of the TV camera, delivering a solemn lecture to his adoring audience.

“Where are they?” he says. ‘A famous question famously asked by the physicist Enrico Fermi when he and his colleagues were discussing flying saucers and likelihood of faster-than-light travel. “Where are they?” Fermi exclaimed. Given the age and size of the Galaxy, given that it was likely that life had evolved more than once, the Earth should have been visited many times over. If aliens existed, they should already be here. And since they were not, Fermi argued, they did not exist. Many scientists and philosophers challenged his paradox with a variety of ingenious solutions, or tried to explain the absence of aliens with a variety of equally ingenious scenarios. But we are privileged to know the answer. We know that they were there all along. We know that the Jackaroo had been watching us for centuries, and chose to reveal themselves in our hour of greatest need. But their appearance provoked many other questions. Where did they come from? Why were they watching us, and why have they intervened? Why have they survived for so long, when we know that other intelligent species have not? Are they outliers, or something different? Are we like them, or are we like the other so-called Elder Cultures—doomed to a finite span, doomed to die out, or to evolve into something beyond our present comprehension? Or are we doomed by our association with the Jackaroo, who set us free from the cage of Earth, yes, but only to let us move into a slightly larger cage. Where we can be studied or played with until they grow tired of us. And so on, and so on. The Jackaroo provided a kind of answer to Fermi’s question, Emma, but it

generated a host of new mysteries. Soon, we will discover the answers to some of them. Doesn't it excite you? It should. *I* am excited. Excited, and amazed, and more than a little afraid. If you and your farmer friends have even the slightest hint of imagination, you should feel excited and amazed and afraid too. For we are fast approaching the threshold of a new chapter of human history.'

Like every criminal who knows the game is up, Niles Sarkka is trying to justify actions that can't be justified. Trying to climb a ladder of words towards that last little chink of light high above the dungeon of his plight. I let him talk, of course. It's always easier to let the guilty talk. They give so much away it isn't even funny. Niles Sarkka is responsible for the deaths of three people, and stole code that could—yes, this is about our only point of agreement—radically change our understanding of our place in the Universe and our relationship with the Jackaroo. So of course I let him talk, but I'm growing cold, standing there in only a towel, my vertebrae are grinding together, blood is pooling in my tired and swollen legs, and I'm growing more impatient than usual with his discursions and bluster, his condescending lesson on the history of the search for extraterrestrial life. So when at last he says that he doesn't care what people think of him now, that history will judge him and that's all that counts, I can't help myself.

'I'll tell you who will judge you, Niles. A jury of your peers, in Court One of the Justice Centre in Port of Plenty.'

He hangs up. Affronted and offended no doubt, the pompous fool. Anxiety nips at me, I wonder if this time I've gone too far, but it soon passes. I know he will call back. Because he wants to convince me that, despite all the bad things he's done, he will be vindicated by what he expects to discover. Because he has only one q-phone, and I have its twin. Because he has no one else to talk to, out here in the deep and lonely dark between the stars.

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As far as I was concerned, it began with a call from one of our contacts in the Port of Plenty Police Department, telling me that the two code jockeys I was looking for, Everett Hughes and Jason Singleton, had been traced to a motel.

It was a little past eight in the evening. As usual, I'd been writing up notes on the day's work with half an eye on the news channel. I found the remote and switched off the TV and said, 'Are they still there, or are they in custody?'

'It looks like they're dead. The room they rented is burned out, and there are two crispy critters inside. I hate to be the bearer of bad news, but there it is. And info is info, good or bad, right?'

I didn't bother to reassure him that he would get paid in due course. 'Who's the attending?'

'Zacarias. August Zacarias. He's good police, closes more than his fair share of cases. A prince of the city.'

'Where can I find him?'

'He's still at the scene. From what I hear, it's a mess out there.'

The motel was at the outer edge of the city, close to an off-ramp on the orbital freeway and an access road that climbed a slope of thorn scrub to an industrial park. The streetlights along the road were out, the long low sheds of the park squatted in darkness, and the lights were out in the motel office and its string of rooms, too. A transformer on top of a power-line pole fizzed and sparked. I parked behind a clutch of police cruisers and the satellite van of the local TV news team, and badged my way past the patrol officers who were keeping a small crowd on the right side of crime scene tape strung between a

couple of saw horses. The TV reporter and her camerawoman tried to zero in on me, but I ducked away. I was excited and apprehensive: this had brought three months of careful investigative work to a sudden and unwelcome crux, and I had no idea how it would play out.

The warm night air stank of charred wood, smoke, and a sharp tang like freshly-cut metal. The headlamps of a pair of fire trucks patchily lit an L-shaped string of rooms that enclosed two sides of the parking lot; their flashers sent flickers of orange light racing over wet tarmac and the roofs of angle-parked cars and pickup trucks. Firefighters in heavy slickers and yellow helmets were rolling up hoses. A chicken was perched on the cab of a pickup and several more strutted and pecked amongst a couple of picnic tables set on a strip of grass by a derelict swimming pool. The room at the end of the short arm of the L was lit by portable floods, light falling strong and stark on blackened walls, smoke curling from the broken door and the smashed, soot-stained window. Jason Singleton's car, an ancient Volkswagen Faraday, stood in front of this ruin. The windshield was shattered and its hood was scorched and blistered.

The homicide detective who had caught the call, August Zacarias, was a tall man in his fifties, with matt black skin and wooly hair clipped short and brushed with grey at the temples, dressed in a brown suit with a windowpane check and polished brown Oxford loafers, a white shirt, and a buttercup yellow silk tie. A micropore mask hung under his chin and he stripped off soot-stained vinyl gloves as he came towards me, saying that he understood that I wanted to take his case away from him. He had a chunky signet ring on the middle finger of his right hand: the kind, faced with a chunk of opal, worn by male members of the Fortunate Five Hundred.

'As far as I'm concerned, you've walked into *my* case,' I said.

'You're English.'

'Yes. Obviously.'

'Were you in the police before you came here?'

'Ten years in the Met.'

'The London police? Scotland Yard?'

'New Scotland Yard.'

'And then you came here, and joined the geek police.'

'I joined the UN police, Detective Zacarias, and currently I'm working with the Technology Control Unit. Now that we've bonded, perhaps you can tell me what happened here.'

August Zacarias had a friendly smile and possessed the imperturbable calm of someone with absolute confidence in his authority, but from bitter experience I knew exactly what he was thinking: that I was a meddling, boot-faced bureaucrat with a humour bypass and a spreadsheet for a soul who was about to steal a perfectly good double murder from him and cause him all kinds of grief besides. And I couldn't help wondering how he paid for his tailored suit, handmade loafers, and expensive cologne, whether the gold Rolex on his left wrist was real or a street-market fake, whether he was just a working stiff who wanted nothing more than to put down this case and move on to the next, or whether he had an agenda. Aside from the usual rivalry between our two branches of law enforcement, the plain fact of the matter is that the PPPD is riddled with corruption. Most of its patrol officers take kickbacks and bribes; many of its detectives and senior officers are in the pockets of politicians, gangsters, or business people.

‘Myself, I am from Lagos,’ he said. ‘I was in the army there, and now I am a homicide detective here. And that’s what this is. Homicide. Two men died in that room, Inspector Davies. Someone has to answer for that.’

‘Have the bodies been identified?’

‘You want to know if they are the two young men you are looking for. I’m afraid I can’t confirm that yet. They are very badly burned.’

‘This is Jason Singleton’s car,’ I said.

‘It is certainly registered to him. And according to several of the residents it was used by a man answering Mr Singleton’s description. Tall and blond, in his twenties, possibly English. His friend was heavysset, with long black hair, tattoos, and an American accent. Also in his twenties. That sounds like your other missing coder, Everett Hughes, yes? Although they signed the register as Mr Gates and Mr Jobs.’

‘Geek humour.’

‘I wondered if it was supposed to be funny. You posted an APB for both men. May I ask why?’

‘I believe they stole Elder Culture technology from their employer.’

‘That would be Meyer Lansky.’

‘You work fast, Detective Zacarias.’

‘Out of necessity, Inspector. We had two hundred and forty-one straight-up murders in this city last year, not to mention a significant number of suspicious deaths, fatal accidents, and kidnappings. We put down just thirty-three per cent of those murders. The municipal council and the police commissioner want us to improve our success rate, we already have ninety-eight names on the board, and it’s only April. If I don’t close this in a day or two, it will be pushed aside by a fresh case. So, these boys stole something from their employer and hid out here while they looked for a buyer, is that it?’

‘We’re being frank with each other, detective?’

‘I hope so.’

‘Frankly, I want you to stay away from Meyer Lansky. He’s important to us.’

‘I don’t suppose you can tell me why.’

‘I’m afraid not. Has the car been searched yet?’

‘We didn’t find anything in it. We are waiting for a tow truck. The crime scene people will examine it back at the police garage, under sterile conditions. Unless you want to take charge of it.’

‘We don’t have the facilities. But someone will observe and advise your crime scene techs while they work on it. Did you find a computer in the room?’

‘Not yet. Things are pretty much melted together.’

‘Or something like a fat thermos flask?’

‘You are welcome to examine the crime scene, Inspector. I’ll even let you pat down the bodies before

the ME takes them away.'

I ignored his impertinence. 'I want your people to maintain a perimeter until my people arrive. Until they do, nothing should be touched. The bodies will remain where they are. I will need you to turn over all witness statements. And please, don't say a word to the TV people, or anyone else.'

'Those bodies are cooked all the way through, and something fried every electrical device in the immediate vicinity. What they stole, was it some kind of Elder Culture energy weapon?'

'Everett Hughes owns a motorcycle. A 125cc Honda. I don't see it.'

'Then it's probably not here,' August Zacarias said. He was smiling, enjoying our little to and fro. Having fun. 'Perhaps the killer took it. Or perhaps these two young men tried to sell whatever it was they stole, the deal went wrong, and they killed the would-be buyers and fled. Or perhaps we're looking at a case of spontaneous combustion, and in the confusion, one of the residents in the motel stole Mr Hughes's motorcycle.'

'Anything is possible.'

'You do not care to speculate. Or you know more than I.'

'I don't know enough to speculate.'

August Zacarias liked that answer. 'How long have you been watching Meyer Lansky?'

'Long enough.'

'And now the roof has fallen in on you.'

'We rarely choose where to fight our battles, detective. If we are finished here, I have some phone calls to make. And you could help me by maintaining the perimeter until my people arrive.'

'My boss will be pleased that we can hand over the responsibility for these deaths to you. It means that we have two fewer cases to investigate, a microscopic improvement to our statistics. Myself, I do not think that numbers are so very important. I don't care about stolen alien ju-ju either. What is important for me is that the dead are given a voice. That someone speaks for them, makes sure that they are not forgotten, and that whoever is responsible for what happened to them is brought to justice.'

August Zacarias looked straight at me when he said this, and I could see that he meant it. Perhaps he was in someone's pocket, perhaps not, but he took his work seriously.

'I'll do my best by them,' I said. 'If there's anything that I need to know, now is the time to tell me.'

'I can tell you that this is a good place to hide,' August Zacarias said. 'When the city was very young, VIPs stayed here. The freeway wasn't built then, or very little else, for that matter. There were splendid views across fern forests to the bay. Now, half the rooms are rented by the hour, with the kind of traffic that implies. Most of the others were occupied by semi-permanent residents who can't afford anywhere else. An old Chinese woman who keeps chickens and will put curses on people, or remove them, for a small fee. A Ukrainian poet who is drinking himself to death. A small gang of Indonesians who work as day labourers on various construction sites. They trap the giant lizards that live in the brush and roast them over fires in the empty swimming pool. Last year, two of them fought with parangs in the parking lot, one lost most of an arm, and bled to death before his friends could get him to the hospital. I worked the case. The winner of that little set-to went away for two years, manslaughter.'

‘You know the place.’

August Zacarias smiled and made a sweeping gesture. ‘Welcome to my world, Ms Davies.’

‘Luckily, I’m just visiting.’

‘That’s what Everett Hughes and Jason Singleton thought. And look what happened to them.’

I phoned Varneek Sehra and told him to bring his crew to the scene as soon as possible. Then I phoned my boss, Marc Godin, and told him what had happened. Marc wasn’t happy about being called late at night, and he wasn’t happy about the mess the double murder might cause, but he was already ahead of me when it came to discussing what to do next.

‘We can’t contain the story. The local TV news is already onto it. We can’t contain it. If the Koreans aren’t already involved, they soon will be. Pak Young-Min will want to have some hard words with his man Lansky.’

‘Words will be the least of it, sir.’

‘In any case, if he has not already done so, Lansky may try to scrub his records of incriminating evidence. I’ll draw up stop and seizure papers and we’ll visit Judge Provenzano and get them made official. Then you can visit Mr Lansky and ask him to come in and talk to us.’

‘I already have papers drawn up,’ I said, and told him where to find them.

‘Always prepared, Emma.’

‘I must have had a premonition.’

‘Meet me at the office in...how long will it take, out there?’

‘I’m just waiting for Varneek to take over,’ I said.

‘A shame about those two kids,’ Marc said. ‘But perhaps this will give us something to use against Monsieurs Lansky and Pak.’

‘Yes, let’s try to look on bright side,’ I said.

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Let me speak about the dead for a moment. Let me do the right thing by them, as Detective August Zacarias would say.

Like most people who won the emigration lottery and didn’t sell their prize to one of the big corporations or to a redistribution agency, or give it away to a relative who either deserved it or wanted it more than they did, or have it stolen by a jealous neighbour, a spouse or a child or a random stranger (UN statistics showed that more than four per cent of emigration lottery winners were murdered or disappeared), or simply put it away for a day that never came and meanwhile got on with their lives in the ruins of Earth (and it was still possible to live a life more or less ordinary after the economic collapses, wars, radical climate events, and all the other mess and madness: even after the Jackaroo showed up and gave us access to a wormhole network linking some fifteen M class red dwarf stars in exchange for rights to the outer planets of the Solar System, for the most part, for most people, life went on as it always did, the ordinary little human joys and tragedies, people falling in love or out of love, marrying, having children, burying their parents, worrying about being passed over for promotion or losing their job or the lump in

their breast or the blood in the toilet bowl)—like everyone, in other words, who won the emigration lottery and believed that it was their chance to get out from under whatever muddle or plight they were in and start over (more UN statistics: thirty-six per cent of married lottery winners divorced within two months), Jason Singleton and Everett Hughes wanted to change their lives for the better. They wanted more than the same old same old, although that's what most people get. People think that by relocating themselves to another planet, the ultimate in exoticism, they can radically change their lives, but they always forget that they bring their lives with them. Accountants ship out dreaming of adventure and find work as accountants; police become police, or bodyguards to high-end businesspeople or wealthy gangsters; farmers settle down on some patch of land on the coastal plain west of Port of Plenty or on one of the thousands of rocks in the various reefs that orbit various stars in the network, and so on, and so forth. But Everett Hughes and Jason Singleton were both in their early twenties, and as far as they were concerned, anything was possible. They wanted to get rich. They wanted to be famous. Why not? They'd already been touched by stupendous good fortune when they'd won tickets to new and better lives amongst the stars. After that, anything seemed possible.

They met aboard the shuttle that took them out of Earth orbit to the wormhole throat anchored at the L5 point between the Earth and the Moon, and plunged through the wormhole and crossed more than five thousand light years in the blink of an eye, and emerged at the leading Lagrangian point of a Mars-sized moon of a blue-green methane gas giant that orbited an undistinguished M0 red dwarf star, and broke orbit and travelled inward to the planet of First Foot and landfall at the spaceport outside the city of Port of Plenty.

It was a journey I had made twenty-two years ago, after I'd divorced my first husband and two weeks later won a place on the emigration lottery. At the time, it had seemed like a message from fate's hotline: pack up what was left of my life, travel to a new world, start afresh. When I arrived on First Foot, Port of Plenty had been a shanty town amongst alien ruins. I worked for the PPPD for three years, then signed up with the UN Security Agency, working in the spaceport at first, then joining what was then the brand-new Technology Control Unit. A year after that, I met my second husband and we married and it all went wrong very quickly—but that's another story and besides, the man is dead.

And all this time, Port of Plenty was growing around me, extending along the shoreline of Discovery Bay, climbing through the semi-arid hills that circled it, spreading into the outer margins of the Great Central desert. It's a sprawling megapolis now, a nascent Los Angeles or Mexico City. A whole generation has grown up on First Foot, they're having children of their own, and still the shuttles keep coming, loaded with lottery winners and those who can afford to buy the tickets of winners and those who have had their ticket bought for them by corporations, or by the city authority, or by the UN or some other sponsor. Our original settlement, an ugly unplanned patchwork of favelas and shantytowns, has grown into a clean, modern city. Big office blocks in the centre where the corporations and private finance companies work. A marina, and parks, and restaurants, and shopping malls. Suburbia. Oh, we've made ourselves at home, all right. But it isn't our home. It's an alien world with a deep history. And settlers have spread out through the wormhole network, discovering Sargassos of ancient ships and refurbishing them, making homes on moons and reefs previously settled by countless other races of sentient beings, Elder Cultures who died out or moved on, leaving behind ruins and all kinds of artifacts, some of them functional.

That's where the UN Technology Control Unit, a.k.a. the geek police, comes in. Some Elder Culture technology, like the room-temperature superconductors and paired virtual particles that allowed us to develop q-phones, hypercomputers, and much else, is useful. Some of it, like grasers and other particle and beam weapons, is both useful and dangerous. And some of it is simply dangerous. Stuff that could give an individual the power to hold worlds to ransom. Stuff that could change the human race so radically that it would either die out or become something other than human. That's why the UN created a legislative apparatus to clamp down on illegal trading of Elder Culture technology, to make sure that

new technologies developed by legitimate companies can't be licensed until they have passed strict tests, and so on and so forth.

The Technology Control Unit is at the sharp end of this legislation. I believed then, and still believe now, despite everything, that it is important work. At any time, someone could stumble over something that could change the way we lived, how we thought of ourselves, how we *thought*. In the end, that's what the UN is trying to protect. The right to continue to be human. We have been given a great gift by the Jackaroo. A chance to start over after a terrible war and two centuries of uncontrolled industrialisation and population growth almost ruined our home planet. It is up to us to make the best of that, and make sure that we don't destroy ourselves by greedy or foolish appropriation of technologies so advanced they are, as the old saying goes, indistinguishable from magic.

Fortunately, anyone who wants to make any kind of money from a functional and potentially useful scrap of Elder Culture technology has to come to First Foot, and the city of Port of Plenty. Port of Plenty has a research and manufacturing base that can spin product from Elder Culture artifacts, and it also regulates traffic between the fifteen systems and Earth—and Earth is still the biggest and best market, the only place where real fortunes can be made. But there are also people who want to exploit dangerous Elder Culture artifacts and technologies regardless of the consequences. Some are genuine explorers and scientists; some, like Niles Sarkka, belong to the tinfoil hat brigade. Crackpot theorists. Green ink merchants. Monomaniacs. And some, like Meyer Lansky, are crooks, plain and simple.

At first glance, Meyer Lansky's code farm was a genuine business, one of more than a dozen that dealt in the code prospectors pulled from the shells of ships abandoned by the previous tenants of the wormhole network, the Ghajar. They had been some kind of gypsy species that, like all the other Elder Cultures, had died out or vanished, and had left behind almost no trace of their civilisation or culture apart from their ships. Most had been left parked in orbital junkyard Sargassos, some dead hulks, others slumbering in deep hibernation; a few lay wrecked on the various planets and moons and rocks of the fifteen stars. Some archaeologists believed that the crashed ships were casualties of a war between factions of the Ghajar; others that they had beached their ships much as whales and smaller cetaceans beach themselves on Earth, because of disease or panic or confusion or suicidal ennui, had sometimes swum into shallow waters and become stranded by retreating tides. In any case, whether dead or alive or smashed to flinders, all the ships were to some degree or another infested with code. It was quantum stuff, hardware and software embedded in the spin properties of fundamental particles in the molecular matrices of the ships' hulls, raw and fragmented stuff cruffy with errors and necrotic patches that had accumulated during millennia of disuse.

Coders working in code farms like Meyer Lansky's analysed and catalogued this stuff and stitched together viable fragments and spent hours and days trying to get it to run in virtual partitions on the farm's hypercomputer cloud. Code approved by the licensing board was bought by software developers who used it to patch the controls of ships reclaimed from the vast Sargassos, manipulate exotic matter, refine the front ends of quantum technology, and so on and so forth. There were theoretical applications, too—four of the so-called hard mathematical problems had been solved using code reclaimed by the farms.

Meyer Lansky's code farm had been licensed, regulated, and entirely legitimate until he'd run up huge gambling debts and sold control of his business to a shell company owned by a family of Korean gangsters. Now, its legitimate work was a front for black market trade in chunks of viable code too hot and dangerous to ever win a research and development license, and for wholesaling viral fragments to dealers who supplied codeheads with tickets to strange places of the mind, a trade that was growing to be as troublesome as crack cocaine once had been.

Everett Hughes and Jason Singleton had been working in Meyer Lansky's code farm until they'd suddenly quit without warning and dropped clean out of sight. Ten days later, everything blew up at the motel room. We'd been researching the code farm for three months, patiently accumulating dossiers on everyone who worked there, but the grisly double murder blew our clandestine investigation wide open. We shut the farm down before Lansky or the Koreans could destroy evidence of wrongdoing, and brought Singleton's and Hughes's co-workers in for interviews. Towards the end, I knew more about the two young men than I did about some of my friends. Singleton was from my home town, London, England; Hughes was from Anchorage, Alaska; both were young, white, English-speaking males who were serious computer freaks. They'd bonded when they'd met on the shuttle, stuck together after the shuttle touched down and they were set adrift in the raw hypercapitalism of Port of Plenty. Neither had much in the way of stake money, or any kind of plan. They were flying by the seats of their pants, driven by a mix of arrogant optimism and naiveté, confident that because they were young and energetic and talented they were bound to spot some opportunity ripe for exploitation.

At first, they did agency work in the IT department of one of the big multinationals that had set up in Port of Plenty, but the pay was rotten, with no benefits whatsoever apart from vouchers for the subsidised canteen, and it was the kind of boring and frustrating work they'd both been doing back on Earth—Singleton in a university; Hughes for the Russian company that had purchased Alaska from the US government after a failed attempt at secession. In short, it was everything they'd hoped to escape, and after only four weeks, they quit and went to work on Meyer Lansky's code farm.

The pay wasn't much better than the agency work and the benefits were equally exiguous, but as far as Singleton and Hughes were concerned, it was far more romantic than writing object location routines for suits who didn't really know what they wanted. And his fellow coders agreed that Everett Hughes had a talent for the work. A weird ability to instantly assess the viability of any kind of code, the way some people saw colours in words, or music in numbers. Either it looked good or it didn't, he said. Meaning that the code should conform to a kind of symmetry or beauty, although he found it hard to explain what that was, and if he was pressed about it, he would grow surly, hunch his shoulders, and sneer that it wasn't worth trying to explain it, because either you had the righteous gift or you didn't. He had the gift, and he was usually right. Jay Singleton got by through determination and hard work, but Everett Hughes flew.

Apparently, they had been planning to stash away a good percentage of their pay until they had accumulated enough to buy themselves berths on a code-hunting jaunt. They'd have to buy their own equipment, and pay the gangmaster fees for transport plus a thirty per cent kickback on anything they made, but they were confident that they would strike a hot lode that would set them up for life. But it seemed that the two of them had grown bored with working and saving and saving and working, and had taken a short-cut. They'd stolen something from Meyer Lansky, and either Lansky or the Koreans had found them and killed them and taken the stuff back, or they'd tried to sell it to the wrong people. Those were my working hypotheses, but I was worried that the code itself might have had something to do with the two bodies in the burnt-out motel room—we were running a pool in the TCU on when someone would stumble across true AI, and who knew what else someone might find out there? In any case, Hughes and Singleton must have stolen the code in the first place because they'd thought it valuable. And if it was valuable, it must be functional: unknown code with unknown capabilities, out there in the world. Recapturing it was suddenly my main priority, and the first thing I needed to do was to shut down Meyer Lansky's operation and find out what Hughes and Singleton had been working on before they'd gone on the run.

Part Two

Like all the ships we humans use, the reef farmers' ship was a shell retrieved from one of the vast

Sargassos that orbit almost every one of the fifteen stars. Many ships are frozen relics no more functional or repairable than a watch that's spent a thousand years at the bottom of the ocean; others are merely quiescent, systems ticking over in a sleep deeper than any hibernation, but fully functional once awakened; all are ancient, handed down from Elder Culture to Elder Culture, modified and rebuilt and modified again until scarcely a trace of the original remains.

The farmers bolted the usual translation interface to the ship's control systems, but they weren't able to customise the lifesystem for human occupation because the ship possessed fierce self-repairing mechanisms that resisted any alterations (which was why they'd been able to buy it cheaply, because few people want a ship with a mind of its own). The lifesystem supplied food that was both unpalatable and toxic to humans, the light was actinic, and the air was like the air of a high altitude steel refinery: not enough oxygen or water, desert dry and hot, stinking of tholines and sulphur dioxide.

The ships' crew and its single passenger—me—lived in a series of pressure tents bolted to the bulkhead near the pool of nanodust that served as an airlock. The maintenance system treated us as cargo and left us alone as long as we didn't interfere with other areas of the ship. There was a large commons and a series of smaller rooms, including sleeping niches partitioned by fibreboard, like the cells of a wasp's nest, a communal bathroom, and the small red-lit space, crowded with racks of electronic gear, that served as the bridge. The commons was cozy enough, carpeted with overlapping rugs and cushions and beanbags and lit by small lamps and strings of fairy lights, but even so we lived like refugees, the rest of the ship's chambers looming above us like so many chimney shafts, walls pitted with cells of various sizes, lit by the pitiless glare of the lights, scoured by hot, acidic breezes blowing at random.

It was a perfect example of the human experience after First Contact—men and women living like mice in the walls of worlds they barely understand. The ship's fusion motors, for instance, were sealed mysteries. Very simple things that have been working for a hundred times longer than the existence of human agriculture on Earth, fuelled by deuterium and tritium gathered by ancient ramscoop factories that swim through the atmospheres of certain ice giants.

Fuel was the key to the end of the chase.

Ours is a big ship, as ships go, categorised as an A3-Class heavy lifter. Even so, it can't carry enough fuel for a round trip out to Terminus's neighbouring star, so a drone has been sent after us, loaded with a cargo of newly-purchased deuterium and tritium. A major investment by the farmers that I hope the UN will defray, although their council chair, Rajo Hiranand, is sanguine about it. Telling me that her people made a huge gamble when they settled the rocks of Terminus's inner reef, and so far it has paid off far more handsomely than they expected. They have laid claim to several hundred planofomed worldlets where they can grow crops and ranch sky sheep, and also to a plethora of ancient alien artifacts, a greater concentration than anywhere else apart from the fifteen stars' solitary habitable planet, First Foot. They share the wealth from licensing exploitation of artifacts and code unearthed by prospectors, and now they have invested in this, a prospecting expedition of their own.

Rajo and I agree that Niles Sarkka may be crazy, but he is not stupid. That he must have good and convincing reasons for heading out to Terminus's neighbour. It isn't likely that he will find what he expects to find there, of course. But the fact that the navigation code points to a location close to the star must mean that something is there, or was once there, in the long ago when the Ghajar were the tenants of the fifteen stars.

The rational part of me hopes that Niles Sarkka won't find anything useful, let alone prove that his wild idea is right. But I'm also caught up in this crazy chase, and it wouldn't be very satisfying to discover that this was nothing but the wild goose kind. And besides, if there is something important around that star, it would *justify* this chase. It would justify disobeying a direct order. It would, in short, redeem me.

But only, of course, if I can stop Sarkka and bring him to justice.

Now that we are slowly but surely catching up with him, I've told him several times that we are prepared to rescue him as long as he cooperates. Trying to get him used to the idea that he'll reach his goal, yes, but then we'll come alongside his ship and take him off and bring him home. So far, though, he's having none of it. Sometimes he rants at me; sometimes he's cool and reasonable, like a patient teacher correcting the error of a particularly stupid but wilful pupil.

He has no intention of returning, he says. He will spend the rest of his life with the Elder Culture that lurks somewhere around that star. Either they'll take him in, or he'll settle close by and found an institute or research centre.

'And if you're wrong?' I say.

'I am not wrong,' he says.

'If there is nothing there? Just suppose.'

'I do not intend to return.'

And meanwhile, the star grows brighter as both ships fall towards it, fusion motors blazing with a thrust of a shade over 1.6 g, the maximum acceleration of every ship so far refurbished.

It is the brightest star in the sky now. Blue-white as a chip of ice. There's a thin ring of rocks close in, none of them cased in an atmosphere or more massive than they should be, and in any case all of them far too hot to be habitable. And there's a single planet, a gas giant about the size of Saturn, orbiting beyond the star's snowline. A somber world whose atmosphere is darkened by vast belts of carbon dust, as if it's been polluted by some vast industrial process. Possibly it has: over millions of years, the succession of Elder Cultures made all kinds of modifications to all kinds of worlds. It has multiple rings of sooty ice, and a retinue of moons, the larger ones balls of ice wrapped around silicate cores, the smaller ones captured chunks of carbonaceous chondrite in eccentric and mostly retrograde orbits. Somewhere amongst them, Niles Sarkka believes, is proof that his theory is correct, vindication of every bad thing he's ever done. Somewhere out there, he thinks, aliens have been hiding for tens of thousands of years.

#

Although Marc and I did our very best, it wasn't possible to make Meyer Lansky understand that we were prepared to make a deal with him rather than throw him in jail. Or maybe he understood, and didn't care. He was angry that his business had been shut down, and he was scared that his boss, Pak Young-Min, would find out that he'd been rolled by a couple of his own coders and conclude that he wasn't up to the job—the usual retirement plan for the Pak family's gangland employees and associates was a bullet in the back of the head and a short ride down the river to the sea. So he refused my offer of protection when I served papers on him at his house around midnight, and he refused again when he was brought in for questioning. A broad-shouldered man dressed in a white suit, neatly barbered hair dyed the colour of tarnished aluminium, he sat in my office with a grim, shuttered expression and his arms folded across his chest, giving Marc and me the dead eye while his lawyer explained why he couldn't answer any of our questions.

One of the assistant city attorneys was there, too, and Marc and I knew things had taken a turn for the worse when she asked for a break and stepped out of the interrogation room with Lansky's lawyer. Marc took the opportunity to tell Lansky all over again why he would be doing the city and the UN a service by telling us where the stolen code was and what had happened to the two coders, repeating the scenario he'd already painted, with Lansky as the innocent party, first robbed by two of his employees,

and then involuntarily involved in their murder by his boss.

‘A man like you doesn’t do things like that. You had to tell Pak Young-Min about the theft because otherwise it would come down on your head. I understand that. But after that it was out of your hands and things got out of control,’ Marc said. He had taken off his jacket and hung it on the back of his chair at the beginning of the session; now, in white shirt and red braces, he leaned forward and stared straight at Lansky. ‘You are a smart man. You know how much trouble you are in. And you know what Pak Young-Min is capable of. But we’re here to help. We can make your troubles disappear. All you have to do is tell us exactly what happened. What was stolen. What happened to the two foolish kids who stole it. Where it is now.’

Meyer Lansky shook his head, eyes half-closed, lips pressed tight. He looked as if he was trying to teleport himself to some more congenial place by sheer mental effort.

Marc looked up at me, and I told Lansky that the UN would settle him anywhere he chose. That we’d even take him back to Earth, if he cooperated with us. That he would have a chance to start over, and meanwhile the men he feared would be put away for the rest of their lives.

Lansky shook his head. ‘Nothing was stolen. Those two kids, they just left. It happens all the time.’

‘It’s time to tell the truth,’ Marc said. ‘Lying about what Pak Young-Min did won’t save you. He’ll go down anyway, and you’ll go with him. But you can save yourself. All you have to do is tell the truth. It seems hard, I know. But once you start, you will feel so much better. It will be like a great weight lifting from your back.’

Marc was good, and I did my best to back him up, but we couldn’t get through to Lansky. ‘Talk to my lawyer,’ he said, and wouldn’t say anything else.

At last, his lawyer and the assistant CA came back. The assistant shaking her head, the lawyer telling Lansky that he was good to go.

‘Hardshelled son of bitch,’ Marc said, after they had left.

‘He’s scared.’

‘Of course. But not of *us*, unfortunately.’

‘I suppose we’ll have to wait for the forensic results,’ I said. I was tired and empty. It was two in the morning, my investigation had been broken open, and I had nothing to show for it.

‘We will rest and tomorrow begin again,’ Marc said, as he shrugged into his jacket. ‘You are my best investigator, Emma. I trust you to deliver what we need.’

But our first break wasn’t anything to do with me, or with Varneek Sehra’s forensic crew, either. It was all due to one of our technical staff, Prem Gurung.

Prem was a modest young man who attributed his find to luck, but I knew better. His cubicle was as messy as the bedroom of an undisciplined teenager, desk stacked with folders, papers, fabled trinkets, and littered with every kind of electronic junk, walls tiled with photographs, postcards, print-outs, cartoons, and coasters, in defiance of every regulation, but he was a skilled, intelligent, and hard-working investigator. He had been examining the work logs of Everett and Singleton, and the chunks of the mirrored code they had been working on, and had quickly found something of interest in one particular piece, an incomplete variant of the navigation package used to control refurbished ships retrieved from the Sargassos.

‘It isn’t so much what’s there as what isn’t,’ Prem said.

He was eager to show me, and I reluctantly agreed to take a look. Code is usually explored and manipulated via virtual simulations disneyed up by interface ware: dreamscapes that look a little like coral reefs, their exotic beauty haunted by sharks and moray eels and riptides that can fry synapses or burn permanent hallucinations in optic nerves. Coders, exposed to the stuff eight or ten hours a day, commonly suffer all kinds of transient hallucinations and risk permanent neurological damage—psychosis, blindsight, loss of motor control, death. But they are like deep sea divers, working in the chthonic depths, while I was a snorkelling tourist dipping in for a brief peek, gliding over a garden of colourful geometric shapes, complex fractal packages of self-engulfing information that branched like bushes or were packed as tightly as human brains or formed shelves or fans or spires, everything receding into deep shadow in every direction under a flexing silvery sky. Still, I couldn’t shake off the sense of things unseen and fey lurking at the edges, where steep cliffs plunge into the unknown.

Prem guided me to a spot carpeted with intricate spires, and asked me if I saw it.

‘I’m not very technical, Prem.’

‘It’s a patch, copied from another part of the code’ he said, turning the viewpoint through three hundred and sixty degrees. Spires of every size and shape, glowing with purples and greens and golds, flowed around us in a three-dimensional tapestry. ‘It isn’t easy to see at first, which is, of course, the point. But when you do see it, it’s obvious. I have written a little executable. Here...’

A ghostly scape descended from the silvery sky, spires in wirework outline sitting askew the spires that stood around us.

‘It does not seem to match at all, until you perform a simple geometric transformation,’ Prem said.

The wirework outline spun and stretched and merged with every contour of the spires around us, gleaming like frost on their complex and colourful surfaces.

‘I think someone deleted something and wanted to cover it up,’ Prem said. ‘Fortunately for us, he was skilled, but lazy. Instead of designing something from scratch, he copied and distorted another part of the code and stitched it in. It is on the surface a seamless illusion. It even runs several processing cycles, although they are of course all futile. Like code that has gone bad, as much code does.’

The strange shapes and colours of the code reef, hallucinatory bright, crammed with thorny details that repeated at every level of magnification, were aggravating my headache. I hadn’t had much sleep and was running on coffee and fumes. I stripped off my VR and asked Prem if he had any idea what had been deleted; he told me that despite the fractal nature of the code, little or nothing of the excised portion could be reconstructed. He started to witter on about working up a rough contour grid by extrapolation from the boundaries, using edge-crossing-detection, random-walk searches, and vertex-pruning mutators, blah blah blah. Like very tech, he was more interested in playing with a problem than actually solving it. I cut him off and said, ‘Bottom line, you don’t know what it is, and there’s no way of finding out.’

‘I’m afraid so. The deletion is too thorough for reconstruction, and catalogue comparisons have proven to be of no use.’

‘They stole something. We don’t know what it is, but Hughes and Jackson definitely stole something. They mirrored the code and deleted the original, did their best to cover up what they’d done, and made off with the copy.’

‘That’s certainly one scenario,’ Prem said. ‘Although there is a problem. How did they smuggle the stolen code past the farm’s security?’

It was a good point. Because code is stored in specific quantum states of electrons and other fundamental particles, it can’t be copied and stored as easily as the vast binary strings of ordinary software; to prevent decay into quantum noise, mirrored code has to be kept in cold traps, and these are cooled with liquid helium. Archive traps are as big as trucks; the smallest portable trap is somewhat larger than an ordinary domestic thermos flask. And like all coding farms, Meyer Lansky’s business possessed an insanely paranoid level of security. Coders had to step through scanning frames when entering or leaving, in case they tried to smuggle something in a body cavity, and they were subject to continuous scrutiny by CCTV cameras and random searches.

‘Perhaps they bribed a guard, or secreted the cold trap in some other piece of equipment sent out for servicing,’ I said. ‘Or perhaps Lansky himself might have been in on it.’

‘Or perhaps they didn’t smuggle anything out,’ Prem said. ‘Perhaps they hacked into the farm’s records and found out where the code came from, then deleted the code and altered the records. Perhaps they didn’t sell the code, but the location of the original.’

I liked the idea—it would certainly explain why Hughes had left with Sarkka—but there was no way of proving or disproving it unless we caught up with them. Meanwhile, Varneek Sehra’s crew had come up blank on DNA analysis because the two bodies had been thoroughly cooked, but they had identified one body as Jason Singleton’s from its English dental work, and the second wasn’t Everett Hughes, but a male in his forties. He had an old, healed bullet wound in his left shoulder, and examination of his burnt skin under UV light had revealed a blood group tattoo on his right ankle, suggesting that he’d been a soldier at some point. Varneek’s crew had also retrieved a partial thumbprint from a stolen SUV in the motel’s parking lot, and that had yielded a hit on the US military database: Abuelo Baez, who’d served as a sergeant in the Special Forces of the US Army until two years ago. The name did not appear on the emigration records, so he must have arrived on First Foot under an alias, either working for one of the corporations, or on the dark side. Varneek was going to attempt a facial reconstruction and use that to track down the dead man’s emigration file; I hoped that once I knew Abuelo Baez’s alias, I would be able to discover what he had been doing in Port of Plenty, perhaps even link him to Meyer Lansky or to the Pak family. Varneek also told me that there was a small discrepancy between the two bodies. Jason Singleton’s body had smoke particles in its lungs, consistent with someone who had burned to death; Abuelo Baez’s didn’t. Either he’d been killed outright by the blast, or he’d been dead before the room had been set on fire, it wasn’t possible to tell.

All of this was useful, but it was my hunch about the missing motorcycle that yielded the most significant advance in the case. It had been discovered in the parking lot of a mini-mall a kilometre south of the motel, and security camera footage showed that it had arrived some thirty minutes before the fire in the motel had been started. Everett Hughes had been riding it, and loitered near a rank of vending machines for some forty minutes until a white Honda Adagio pulled up.

I showed Marc the footage of Hughes getting into the Adagio, pulled down an enhanced freeze-frame of the moment when the courtesy light in the car came on as Hughes opened the door, briefly illuminating a bearded man wearing a baseball cap pulled low enough to obscure half his face. I explained that the driver had not yet been identified, but that the car had been traced to the Hertz branch at the spaceport where it had been rented using a snide credit card, and it had been retrieved for trace analysis.

‘After Hughes and the driver returned the Adagio to the rental company, they took the shuttle bus to a ship that departed two hours later. A standard J-class cruiser registered in Libertaria. It dropped through Wormhole #2 six hours ago, and I’ve asked our offices in every port it could reach from that part of the

network to look out for it. That's the bad news. The good news is that the Varneek and the PPPD's forensic people retrieved fibres and hair from the seats, and fingerprints from the steering wheel and elsewhere. Hughes's friend is Niles Sarkka.'

Without missing a beat, Marc said, 'I am not sure that I would classify that as good news.'

#

Niles Sarkka was one of the Fortunate Five Hundred, the self-styled elite who'd ridden the first emigration lottery shuttle to First Foot. Before his downfall, he'd been a leading expert on Elder Cultures with a chair at the University of Port of Plenty, and the host of a TV show popular in Port of Plenty and exported to almost every country back on Earth. In each episode, he led his crew of prospectors to a new site in search of strange and valuable Elder Culture artifacts, surviving dangers and hardships, exploring weird landscapes and worldlets, unearthing wonders. Most of it was faked and exaggerated, of course, but Sarkka was a handsome and charismatic man with an infective enthusiasm for his work. Also, to the disgust of his fellow academics and the delight of his TV audience, he recklessly embraced crackpot ideas about the fates of the Elder Cultures and conspiracy theories that suggested that the Jackaroo had influenced human history by dropping meteorites or manipulating the climate or starting the world war that, just before they'd turned up as saviours, had almost destroyed us. He was a leading exponent of the belief that the fifteen stars were not a chance to start afresh, but a trap. A cage in which we would be the participants in some vast and strange experiment, as had the Elder Cultures which had preceded us. And he had worked up a crazy theory of his very own, which he talked up on every episode of his show. All of this made him rich and famous and notorious, but in the end, his hubris was clobbered by nemesis. In the end, he took one risk too many, and other people paid for his mistake with their lives.

My boss had been one of the team that had prosecuted Niles Sarkka after most of his crew had become infected while excavating the remains of ancient machinery in a remote part of the Great Central Desert. Every one of them died of acute anemia and toxic shock as the iron in their blood and the calcium in their bones was used to make millions of copies of a nanotech viroid. Marc saw the bodies, all of them horribly transformed, some still partly alive. His boss, who later shot himself, ordered cauterisation of the site with a low-yield nuclear weapon.

The crew had been working on an unlicensed site with inadequate protective measures; Niles Sarkka was convicted of manslaughter and spent five years in jail. As soon as he was released, he promptly fled First Foot and established himself on Libertaria, using what was left of his fortune to pursue the theory that was now an obsession.

Given that there was a wormhole link with the Solar System and Earth, he said, then it followed that there must have been links with the home worlds of each of the Elder Cultures that had once inhabited the worlds and worldlets of the fifteen stars. Perhaps those wormholes yet remained, collapsed down to diameters smaller than a hydrogen atom, or hidden inside gas giants or in orbits close to stars where they could not be detected by the flux of strange quarks and high-energy particles. It might be possible to find the home world of the Ghajar or one of the other Elder cultures, and find out what had happened to them. Some remnants of the Elder Cultures might still be alive, either on their home worlds, or elsewhere.

To his fans—and despite his conviction and fall from grace he still had many fans—he was a gadfly genius, a rogue intellect who took great risks to prove radical theories that the establishment tried to suppress. To his fellow academics, he was a highly irresponsible egotist who used his notoriety to promote fantasies as risible as the lost continent of Mu or the Venusian origin of flying saucers, heedless of the damage he caused to serious scholarship. As far as the UN was concerned, he was a criminal willing to take every

kind of risk with Elder Culture technology. He was beyond our reach on Libertaria, but he remained on our watch list.

And now he was heading out for parts unknown, and in possession of either code mirrored from a navigation program, or the whereabouts of the code's original. Given the huge risk he'd taken coming back to Port of Plenty, it seemed likely that he must believe it had something to do with his crazy idea about finding the homeworld or a surviving remnant of an Elder Culture. It also seemed likely that he had killed Jason Singleton and the mercenary, Abuelo Baez. Even if the code was harmless, Niles Sarkka still had to answer for those deaths.

The problem was that we had lost track of his ship. It could be anywhere in the wormhole network, heading for any one of the other fourteen stars—it might even be heading back to First Foot's star by a circuitous route. During the early years of exploring the wormhole network, the UN had tried to set up a monitoring system of spy satellites around the wormhole throats, but it had been sabotaged by various factions over the years, and in the end it had proven too expensive to maintain.

'Even if Sarkka and Hughes go to ground on Libertaria, we have no jurisdiction there,' Marc said.

'We can try to negotiate with them,' I said.

'Perhaps. It would help if we knew exactly what Hughes and Singleton stole,' Marc said.

'That's why we need to talk to Meyer Lansky again,' I said.

But Lansky had disappeared, and so had his wife and their two young sons. A police detail had been watching the front of the house; it seemed that Lansky and his family had left through the back, escaping across the golf course. Either of their own free will, or because someone had come for them.

A safe sunk in the floor of a walk-in closet in Lansky's residence had been left open and still contained large amounts of cash and jewellery, and credit cards and phones registered to a variety of names. Traces of blood belonging to Lansky and his family were found on a wall and the carpet in the adjoining master bedroom. I believed that they were dead, their bodies dumped in the sea or in the fern forests beyond the edge of the city, or incorporated into the foundations of a new building or freeway overpass, and their killers had probably taken from the safe copies of the records for the code farm detailing legitimate and black-market transactions.

After a brief conference with Marc and the assistant city attorney, I issued an APB for the Lanskys and made an appointment to visit Meyer Lansky's boss, Pak Young-Min. Marc thought it a waste of time, but I had a bad feeling that the case was going cold. I wanted to stir things up a little. Besides, I had papers to serve regarding search and seizure of the code farm's assets, and because Meyer Lansky had disappeared, it was only logical to hand them to his boss.

Pak Young-Min was the youngest son of Pak Jung-Hun, a former head of the American-Korean Family Boyz gang in Seattle who had 'retired' to Port of Plenty. Like most gangsters who'd grown rich enough to escape the clutches of law enforcement agencies, Pak Jung-Hun had ambitions to legitimise his family. Three of his sons were involved in real estate and construction, an insurance and loan firm, and casinos in First Foot and Mammoth Lakes. But Pak Young-Min was a throwback: an old-school kkangpae with a volatile temper and a taste for baroque violence who had been given control of Meyer Lansky's code farm by his father in an attempt to wean him away from the street life.

I arranged to meet him in the offices of the development company helmed by his eldest brother, Pak Kwang-Ho. This was on the top floor of a brand-new ziggurat—white concrete, glass tinted the pink of freshly-cut copper, broad terraces dripping with greenery—with a stunning view across the city towards

Discovery Bay, the spaceport and the river delta on one side, the power plant and docks on the other, and the great curve of the Maricon and the beaches between. Up there, the city looked as neat and clean as a map, with no sign of the squabbling territories carved out by different nationalities. Up there, it was possible to believe that the future had arrived. You wanted to search the sky for flying cars and dirigibles.

Pak Kwang-Ho met me at the tall double doors of his private office. A slim and intensely polite man dressed in a crisp white shirt and intricately pleated pants, he shook my hand, offered me a choice of ten different teas, and introduced me to two lawyer types who afterwards did their best to fade into the background, and to his brother, Pak Young-Min.

The young gangster was looming over an architectural model of a shopping mall and entertainment complex, a bulky, broad-shouldered bodybuilder stuffed into a sharkskin suit and a yellow silk shirt and snakeskin boots. Tattoos webbed his neck and his hair was shaved at the sides, high above his ears, leaving a glossy black cap on top of his scalp. He didn't look up when Pak Kwang-Ho introduced me, pretending to be more interested in pushing a model car around a plaza, knocking over model pedestrians one by one.

Pak Kwang-Ho assured me that his family were always happy to help the police with their enquiries, but in this case, since his brother had business ties with Meyer Lansky, he had to ask me to confirm that my enquiries were purely informal. I assured him that I wanted nothing more than background information on Meyer Lansky, although I did have a warrant to serve with regard to the code farm.

'You already searched the place,' Pak Young-Min said.

'This time we require it to be placed under seal until further notice,' I said, and held out the folder that contained the twenty-page warrant.

Pak Young-Min took it and scaled it towards the lawyer types, saying that his people would check it out and get back to me.

'You need to sign it,' I said.

'Why don't you ask me what you came here to ask me,' Pak Young-Min said. 'I have a lot of other business.'

I decided to meet him head on and locked gazes with him and said, 'I have other business too. So yes, let's get this done. When did you last see Meyer Lansky?'

'Days and days ago. I heard he ran away after you questioned him about those two geeks who burned to death,' Pak Young-Min said. 'If you catch up with the old rogue, let me know. I have some questions for him myself.'

'You have no idea where he might be,' I said. 'Him and his family.'

'I've been in Mammoth Lakes for the past week,' Pak Young-Min said, and took out a gold cigarette case, ignoring his brother's warning that he couldn't smoke here, lighting a black Sobranie with a match he ignited on his thumbnail.

'One of the bodies in the motel room was that of Jason Singleton. An employee at your code farm.'

'Meyer Lansky's code farm,' Pak Young-Min said.

'You own it.'

‘He runs it. I wouldn’t know who he employs. When can I reopen the place, by the way?’

‘When we’ve finished our investigation, I doubt that there’ll be anything left of your little operation, Mr Pak.’

Pak Young-Min looked at me with insolent amusement. ‘I know about you and your crusade,’ he said. ‘Word is, you lost your husband to bad code, and now you see bad code everywhere. Even when it isn’t there.’

I didn’t rise to his bullshit. If you show any kind of weakness to someone like him you’ll lose authority and never get it back.

‘You are certain that you have never met Jason Singleton.’

‘I’ve never had anything to do with those freaky little geeks.’

‘Have you ever met Everett Hughes?’

‘Is he the other one who burned up in that room?’

‘He’s the one who got away,’ I said. ‘The other body in the motel room was that of Abuelo Baez, a former US soldier who served in the Special Forces.’

‘I’ve never heard of any of these people,’ Pak Young-Min said.

‘Perhaps you know the face,’ I said, and showed him the printout of Abuelo Baez’s reconstructed death mask.

Pak Young-Min breathed out a ruffle of smoke and said, ‘He isn’t one of mine.’

‘You might know him as Able Martinez,’ I said. ‘That’s the alias he used when he came to Port of Plenty. We identified him from a file in the gaming commission’s records. Every employee of every casino has one. I’m surprised you don’t know him, Mr Pak. He worked on the security detail of the casino in Mammoth Lakes owned by your family.’

‘My brother has nothing to do with the running of the casino,’ Pak Kwang-Ho said. ‘And neither do I.’

‘We’re looking into everything Mr Martinez was doing here, and everyone he associated with,’ I said. ‘If you remember anything about him, it would be better if you told me now.’

Pak Young-Min shrugged.

‘You should speak to the manager of the casino,’ Pak Kwang-Ho said.

I told him that I would, and thanked them for their time and turned my back on both of them and walked towards the big double doors of the office.

Pak Young-Min called after me—he was the kind of man who had to have the last word. ‘Come find me in Mammoth Lakes. I’ll show you a good time. Loosen you up a little.’

I paused at the doors, turned. The corny old Columbo trick, but it’s sometimes useful. ‘One other thing. Have you heard of Niles Sarkka?’

The two brothers looked at each other. Pak Young-Min said, ‘Isn’t he the geek who had that TV show?’

‘He and Everett Hughes took off together,’ I said, and left them to think about that.

Part Three

Later, I told my boss that I was certain that Pak Young-Min knew all about Hughes and Singleton. ‘Lansky was not a stupid man. He probably discovered the deletion in the navigation package and the alteration in his records after they dropped out of sight, and decided to come clean about it to his boss. Pak Young-Min sent his muscle man, Abuelo Baez, a.k.a. Able Martinez, after the two coders.’

‘Baez tracked them down to the motel room but he was killed by Niles Sarkka?’ Marc said.

‘I’m not sure what happened there, but I don’t think it matters,’ I said. ‘Sarkka was definitely involved, and I’m certain that the Paks didn’t know about that until I told them. If we’re lucky, they’ll start making enquiries around the spaceport, and incriminate themselves. I can ask them, why are they looking for the killer of Abuelo Baez if Baez had nothing to do with them?’

‘It is a long shot,’ Marc said. ‘I would prefer something tangible.’

‘So would I,’ I said. ‘But even if we can’t tie them to Baez, we’ll get them for Lansky. Pak Young-Min killed him. I’m sure of it. Lansky’s family, too. He knew that we talked to Lansky, and he didn’t trust him to keep his mouth shut. He probably took copies of incriminating records from Lansky’s floor-safe at the same time. If we have a pretext for arresting him, we might be able to get hold of those records. And somewhere in them is the location of the original of the code Hughes and Singleton stole. We need to find it.’

‘Do you really believe that Sarkka and Hughes are chasing after it?’

‘They haven’t turned up at Libertaria, or anywhere else we have representatives or reliable sources.’

‘That leaves about ten thousand habitable but uncolonised planofomed rocks, and any number of rocks and moons,’ Marc said.

‘We need to find it,’ I said. ‘So we know what we are dealing with. So we can destroy it, and make sure that no one else can mirror it.’

‘If Pak Young-Min has any sense, he will have destroyed those records.’

‘Not if he hopes to restart his black-market business.’

Marc looked straight at me and said, ‘I hope you didn’t set the Paks after Sarkka because you believe that Sarkka has escaped justice.’

‘Of course not,’ I said.

But that was exactly why I’d told the Paks about Sarkka, and although Marc probably knew that I was lying, he didn’t call me on it. Perhaps, like me, he wanted Niles Sarkka to answer for the deaths of Jason Singleton and Abuelo Baez, and for all his other crimes. Is that such a bad thing? Of course, I would have preferred to go after him myself, but at the time, I didn’t think it would be possible. So I had decided to stir things up a little.

While I’m being candid, I suppose I should mention my husband here—my second husband. Not because Pak Young-Min’s silly jibe in any way hurt or upset me, but because certain commentators who should know better, amateur psychologists who aren’t ashamed to speculate foolishly and wholly irresponsibly about the motivations of people they’ve never met, have suggested that I set out after Niles Sarkka

because he was dealing in stolen code, and Jules's addiction to code is the key to my personality. My secret wound. The tragedy for which I have to atone for the rest of my life. Well, let me tell you, that's so much pseudo-Freudian bullshit. I don't mean that it wasn't a tragedy. Of course it was. But I got past it and I got on with my life.

Really, it was all such a long time ago, back in the palmy days when everything in this brave new world of ours was fresh and wonderful. Back then, we didn't know that doing code could hurt you. It wasn't even illegal. It was something that clever and sophisticated people did for kicks. A clean and perfectly legal high that made you think better.

Jules said that it was as if everything had turned to mathematics. He could see everything as it really was, he said, the world stripped bare of all illusion. He could see angels in the architecture and hear the glorious mingled chord of the universe's continuous self-invention. He wanted me to try it, but I was working police, we had regular tests for every kind of psychoactive substance. And besides, I was scared. I admit it. I was scared that the alien code would scramble my mind. And it turned out that I was right, because pretty soon it started to go bad for Jules, and all the other clever people, because the synesthesia and pareidolia induced by the code became permanent, burned into their brains.

Jules began to see ugly patterns everywhere. Angels turned to demons. The music became a marching band banging away inside his head and he couldn't get it out. He no longer spent hours lying out in the back yard, staring up at the stars with childlike wonder. The sky was wounded, now. Everything was rotten. Only the code kept him going. He had to take more and more of it, and by now it had become illegal. He could no longer get a clean supply from his friend at the university (and his friend wasn't at the university any more, he was on the street), but he found other sources. He sold just about everything we owned. I threw him out and took him back, suffered the usual cycle of anger and despair, hate and compassion. At last, he stopped coming back. I could have found him, had him arrested, transferred from jail to a clinic, but it wouldn't have done any good. By then, we knew that code caused permanent damage, a downward spiral of diminishing neurological function that ended in dementia and death. And besides, I was tired of rescuing someone who didn't want to be rescued, and anyway, he wasn't the man I'd loved. He wasn't really *anyone* anymore. He was his condition. So after he left that last time, I didn't chase after him, and the next time I saw him, six months later, was on a table in the morgue.

Yes, it hurt. Of course it did. But not as badly as seeing poor Jules twitching with pseudo-Parkinson's and gibbering about demons. It hurt, but it was also a kind of relief, knowing that he wasn't suffering any more. Really it was. And besides, it was a long time ago, long before I joined the Technology Control Unit. It really doesn't have anything to do with anything I'm telling you about here, despite what some people claim. I wasn't avenging my husband or trying to assuage my guilt or anything like that. I was working the case, just like I worked every other case.

But after my confrontation with Pak Young-Min, the case appeared to have reached a dead end. I continued to try to tease out new leads, coordinating the team who were interviewing everyone who worked in the code factory and trying to discover a direct connection between Baez/Martinez and Pak Young-Min. I wrote day reports, filed evidence dockets, and minuted case conferences. I arranged to meet Detective August Zacarias, ostensibly to brief him about the ongoing investigation into the double homicide at the motel, in reality to pump him for information about his fellow member of the Fortunate Five Hundred. That, too, yielded nothing useful. He claimed that he'd only met Niles Sarkka once or twice, and knew little about him.

'You want to know if he's one of the bad guys. All I can tell you is that back in the early days, he argued very passionately and convincingly about the importance of finding out everything we could about our new world. He said that we should take nothing for granted. That we should take charge of our own

destiny by forging a complete understanding of the history and nature of the Jackaroos' gift. It seems to me that in that respect he hasn't changed.'

I suppose I should have known better. I should have known that the so-called elite would stick together. Ten days passed with little to show for my efforts, beyond filling in the biographies of Everett Hughes and Jason Singleton. And then I received an email that opened up a fresh angle.

It was from a man who claimed to be a friend of Meyer Lansky's mistress. He said that she had gone into hiding because she was afraid of the Paks, and that she had something that I would like to see: two sets of books for the code farm. He'd used an anonymous forwarding service to cover his tracks, but Prem Gurung managed to track him down while I negotiated with him, and within the hour he was sitting in our interview room.

He was a small-time hustler by the name of Randy Twigger, a former boyfriend of Lansky's mistress who was still seeing her occasionally. He put up a feeble show of defiance, but quickly collapsed when I called his bluff and told him that he could be arraigned for accessory to the murder and kidnap of the Lanskys. Later that day, with a pair of armed marshals at my back, I was knocking on the door of a motel room in the fishing resort of Marina Vista, four hundred kilometres east of Port of Plenty.

Meyer Lansky's mistress, Natasha Wu, was a tough and level-headed young woman who was ready and willing to be taken into protective custody, and wasn't surprised that Randy Twigger had screwed up by trying to make some money for himself.

'He was supposed to make an arrangement so that I could meet with you. But he always was greedy,' she said, and dismissed him with a flick of her manicured fingers.

She'd heard about the disappearance of Meyer Lansky and his family on the news, and was convinced they were dead. 'Meyer was ultra-paranoid the last time I saw him. There'd been a break-in at the farm, and those two kids were killed, and you threatened him. I was about the only person he could trust. That's why he gave me the books. He was going to contact me when things settled down. Instead, this man I don't know calls me on the phone Meyer gave me, and threatens me.'

Lansky had given her a q-phone, but after the threatening call she had ditched it and started moving from place to place. Randy Twigger had checked her apartment and found that it had been trashed, so she knew that the people who had killed Lansky and his family knew about her. That's why she had reached out to me.

I liked Natasha Wu, even though I disapproved of the choices she had made in her life. She was a survivor with no trace of self-pity and had probably given as good as she got in her relationship with Meyer Lansky. I told her that the UN was willing to give her a new identity and relocate her in exchange for the accounts and records that Lansky had entrusted to her, and she said why not, the man was dead, and it wasn't like she had a choice anyway.

'Besides, I want off this fucking world. I've been here a year, and already I hate it. I want to go back to Earth. To Singapore. It's fucked up there, but I know my way around, and the gangsters aren't as crazy bad as they are here. Poor Meyer. And his kids.' She teared up just a little, and said, 'Will you get the filth that killed them?'

I thought of Detective August Zacarias and said, 'I'm going to do my best.'

#

At the UN building, I sat with Marc Godin and one of the city attorneys while they made a deal with

Natasha Wu, and took her initial deposition. Then I escorted Natasha to one of our safe houses, so I didn't get a chance to talk to Marc about searching the records for the location of the original of the code, or chasing after Sarkka and Hughes.

I stayed at the safe house overnight, and was eating breakfast with Natasha and the two UN special agents detailed to protect her when Marc called.

'There have been developments,' he said. 'Something I think you will like.'

'Has Prem found where the code came from? Or who found it? Are we going after Sarkka?'

'Meet me at the UN Building,' he said, and rang off.

We bought coffee at the roach coach in the parking lot in front of the UN Building, and walked two blocks to the seafront. I told him that Natasha was holding up; he told me that the records were all that we hoped they would be.

'The late Monsieur Lansky was a meticulous man,' Marc said. 'We have details of all his black market transactions, and that is a great prize. As for the code that has caused so much trouble, we know where it came from. A planofomed but uninhabited rock in the outer belt of the system of Terminus. It was located and mirrored by a prospector named Suresh Shrivastav, registered in Libertaria.'

'And what are you going to do about it?'

'That's what we must talk about now. Let's find a seat.'

It was a fine warm spring morning. Far around the great curve of the beach, two bulldozers looking small as toys were levelling sand where a kraken had beached a few days ago. A raft of bladders and pulpy limbs the size of two football fields, it had drawn huge crowds, and dismembering and removing it had been an industrial process. People were strolling along the front or walking their dogs on the wide beach, and a few early-bird surfers were riding the waves.

Marc and I found a bench, and Marc told me that the UN representative in Libertaria had contacted Suresh Shrivastav's agent. The prospector had just departed for the reef of the star 2M 4962, and according to his agent he had nothing to say to the UN.

'It may be an attempt to force us to negotiate, but as long as we find the code, it doesn't matter, Marc said. 'As for that, I have also contacted our representative in the Terminus system. I regret there is no positive news there, either. There are two rings of rocks around Terminus. The people who live there, farmers all of them, live on the inner ring. And their traffic control system is pretty rudimentary. Regrettably, it doesn't extend to the outer belt, and there is no evidence that Sarkka's ship has visited the system.'

'It doesn't mean that he didn't go there.'

'That's true.'

'Or that he might not be there right now.'

'That is also possible.'

'In any case, the original of the code will still be there. If Sarkka or that prospector hasn't already destroyed it.'

‘Now we come to the heart of the matter,’ Marc said. ‘It is not Niles Sarkka, of course, but the code. There have been political developments. The Inspector General has been informed. And it appears that the Jackaroo have become interested.’

I felt a beat of foolish excitement. ‘It’s really that serious?’

‘They think so. They studied the code and said it was very bad stuff. Do you remember Thor V?’

‘That farming family who took off into the big black,’ I said.

They had stumbled onto code that had infected them with a meme. Seized by its ancient imperative, they’d climbed aboard their ships and headed out into interstellar space. They are still falling through space, a light year from their star now, out of fuel and power, everything dead.

Marc said, ‘The Jackaroo claim that Hughes’s code may have a similar effect on anyone who interacts with it, and there is a nasty twist: it is slowburning, so those infected have time to infect others. And those who become infected but are unable to reach a ship will become insane. The Inspector General has authorised a strike team to travel to Terminus. I have argued successfully that our department should remain involved. So, let me ask you formally. Are you willing to volunteer to accompany the strike team?’

‘I’ve already thought about this, boss. There’s nothing I’d like better.’

Marc looked happy and sad. ‘Of course. Now, I want you to go home and change your clothes, pack for a long voyage, and make any necessary personal arrangements. Find me in my office in four hours. That is when we are to meet with the Inspector General.’

#

The Jackaroo are supposed to keep out of human affairs. They don’t, of course. The software used to interface with code is a case in point. An important one, because it had established a precedent. It’s derived from code that migrated from the wreck of a spaceship into a colony of hive rats in the vast necropolis in the western desert. The biologist studying them enlisted a mathematician to help her decode the hive rats’ complex dances, and the mathematician quickly realised that they were exchanging massive amounts of information—that the colony was acting as a parallel processing computer.

All this is well known. What has been suppressed (until now—and I have good reason to break cover, as you’ll see) was the fact that the code had drawn the attention of the Jackaroo. An avatar hitched up with a bunch of hired goons and tried to kill the biologist and destroy the hive-rat colony. The Jackaroo claimed afterwards that it was the action of a rogue element, and we had to pretend to believe them. In any case, the biologist and a local law enforcement officer fought back. The goons were killed and the avatar was destroyed. I became involved a little later. The law enforcement officer had picked up a piece of kit that the avatar had been using. It not only tracked and disrupted q-phone signals, but could eavesdrop on them. We bought the technology from her, and, in exchange, she agreed to keep quiet about the avatar.

After that incident, the UN and the Jackaroo made an informal agreement to cooperate when it came to suppressing potentially dangerous technology. That is what I had walked into, when Marc took up to the Inspector General’s big, wood-panelled office.

The Inspector General, a small but imperious blond woman in her sixties, walked up and shook my hand and told me that from now on I was operating under Section D, but I paid scant attention to her. I was staring at the man-shaped figure that stood off to one side. A showroom dummy woven from a single

giant molecule of metal-doped polymer, dressed in a black suit and white shirt and polished black shoes. A proxy for a creature no human had ever seen, linked by a version of q-phone technology to an operator who could be anywhere in the universe. Moving now, stepping towards me and greeting me in a newsreader's rich baritone.

'We have followed Dr Sarkka's career with great interest,' it said. 'And this is a very interesting turn of events.'

'A potentially serious turn of events,' the Inspector General said. 'Sarkka is a dangerous man, and he may be about to lay his hands on dangerous code.'

'We have examined the damaged code,' the avatar said. 'What was deleted presents a clear danger to you. We are here to help.'

'And we're grateful, of course,' the Inspector General said.

The avatar responded with a lengthy speech—how grateful the Jackaroo were for cooperation under Section D; in particular how grateful they were to me, for being an important part in the delicate process that had healed a potentially difficult rift; how the ongoing cooperation between the Jackaroo and the UN best illustrated the harmonic convergence of two species; how the present small difficulty would be quickly overcome by application of that same cooperation in general, and my talents in particular, and so on and so forth—I won't bore you with all of it. It was the usual mashup of clichés, mixed metaphors, and orotund sentiment, like a mission statement of some multinational company written by committee and run through a computer which had scrupulously removed any trace of originality, human feeling, and passion. The experts are still arguing, and will probably argue forever, about whether the Jackaroos' communications and conversations are classic examples of Chinese Room AI simulations of human thought patterns, or cleverly misleading simulations of Chinese Room AI simulations of human thought patterns. As someone who has been on the receiving end of one of their perorations, I can tell you that the distinction doesn't matter. As far as I was concerned, all that mattered was that it was so relentlessly dull that it was almost impossible to keep track of what was being said. It would have sent anyone not wired to the eyeballs on caffeine and amphetamine to sleep had it not been for one thing: it was delivered by a genuine alien through a machine of unknown powers.

And so, despite the soporific blanket of the avatar's bland and lengthy blandishments, I was gripped by an electric, barely suppressed terror, and I'm certain that Marc and the Inspector General felt it too. For despite their best intentions—or because of them—you can't help but be paranoid about the Jackaroo. They are alien and therefore completely opaque. Neither angels nor devils, but distorting mirrors that reflect our best hopes and worst fears.

In a nutshell, then, the Jackaroo avatar was pleased that we were planning to destroy the original of the code, and offered to help us find Niles Sarkka and prevent him from exploiting it.

'May I ask a question?' I said, when it had finished, or at least run out of words. 'What kind of help are we talking about?'

'We are here to advise, nothing more,' the avatar said. 'After all, we do not want to reveal that we are helping you. It would violate the terms of our agreement. However, we may be able to help you locate Dr Sarkka's ship, should it use a wormhole again.'

The Inspector General chipped in again, said that the Jackaroo usually refrained from direct interference, but because this was an unusual and highly alarming case, they would utilise a little-known property of the wormhole throats to identify any used by Sarkka's ship. They had already confirmed that Sarkka had visited Terminus, and because he had not returned through that system's only wormhole, he must still be

there. Our first priority was to find, identify, and destroy the code. Our second was to track down Hughes and Sarkka, and if it came to it, we would try to purchase the mirror of the code from them.

The Inspector General mentioned a ceiling limit that exceeded the GDPs of several countries back on Earth. ‘We have no intention of paying Sarkka of course. He will be arrested for murder as soon as he tries to collect. Hopefully, he will have become infected before then, and will have aimed his ship at some damned star or other.’

‘It is possible,’ the avatar said. ‘But we cannot count on it because the incubation period is variable.’

I saw a big flaw in the plan at once: Niles Sarkka wasn’t stupid, and would guess that my offer was bogus. And in any case, if the code promised to validate his theory, he wouldn’t part with it for any amount of money. But I didn’t raise any objections: as I’ve already explained, I believed that summary justice was better than letting Niles Sarkka gain power over dangerous code. When the Inspector General asked me if I needed time to think about this, I said that I already had thought about it, and would gladly accept.

It was almost not untrue.

#

‘They have been manipulating us from the very beginning, Emma. Playing with us as a child plays with white mice in a cage. And they have been watching us a very long time. They know things about us that we do not know. They sit in judgement beyond ordinary human plight. But they don’t know everything. Their panoptical survey of our comings and goings on Earth and everywhere else, is not omniscient. That is why we will escape their chains. And that is why we are here, you and I.’

It’s two in the morning. Everyone on the ship asleep except for the maintenance robots pattering about their inscrutable business beyond our encampment, the three men and women of the night watch, and me. I’m trying to make a cup of green tea with one hand while holding the q-phone in the other, listening to for the tenth or twelfth time a variant of Niles Sarkka’s standard lecture on the Jackaroo and their fiendish plans and plots.

I said, ‘They knew about Hughes and Singleton. They knew about the code.’

‘No, Emma. They intercepted q-phone messages between me and a friend in Port of Plenty who was acting as go-between. They did not know what the code was, or where it came from, because poor Everett and Jason did not know what it was, and they wouldn’t tell me where the original was located until we had concluded our dealings face to face and quit First Foot.’

‘Even so, they tracked you to Terminus.’

‘Did they? They lied about the nature of the code. Perhaps they lied about that, too. They don’t know everything, and they lie. If they are gods, they are petty and spiteful gods. I don’t know about you, but even at its lowest, I don’t think that humanity deserves gods as low and base as them. No, we aspire to greater things. Why else would we have come all this way, you and I?’

‘I’m here to bring you to justice, Niles. You know that.’

‘You’re here because of your nature, Emma. You’re here because you want to be here. You see, you aren’t very different from me after all.’

I was brought up short by his assertion, but shrugged it off with a quip about this not being in any way the destination I’d anticipated when I’d left First Foot, and he didn’t make any more of it, went back to his

interminable dissection of conspiracies and secret histories. I mention it here because I think he's wrong. Oh, there's no doubt that we have some things in common, particularly our obsession with seeing things through to the end no matter what the cost, but this is overshadowed by a fundamental difference.

I stand for the right side, and he does not.

#

We left, the strike team and I, in a Q-class scout, a small ship that resembled a cartoon toadstool: a fat cone containing the lifesystem, with the teardrop-shaped 'stalk' of the fusion motor pod depending from its centre. The lifesystem's interior was a roughly oval chamber partitioned by mesh platforms and furnished with bunk beds, a pair of porta-potty toilets, and a shower pod like a dingy plastic egg, picnic tables and an industrial microwave, commercial chest freezers and rows of steel storage lockers. All in all, it was about as glamorous as a low-rent bomb shelter or the accommodation module of an oil platform, except that its shape and the scalloped nooks and crannies of its walls were a perfect hollow cast of the shape of the whale-sized agglomeration that had once filled it—the Ghajar had been colonial creatures that exchanged biological modular parts amongst themselves as easily as we changed clothes, each one a different shape and size from all the rest.

Like all ships, ours was a strictly point-and-click operation: apart from a package of solid-fuel motors for fine manoeuvres strapped around the lifesystem's circumference, most of the ship's systems, especially the fusion motor, were sealed, enigmatic, inaccessible. Our pilot, a slender, athletic New Zealander, Sally McKenzie, typed a command string into the laptop that interfaced with the ship's navigation package, and the ship boosted itself out of orbit and aimed itself at the pair of wormhole throats that orbited the trailing Lagrangian point of the system's methane gas giant.

All wormhole throats look the same, a round black mirror a little over a kilometre across, framed by the ring that housed the braid of strange matter that keeps it open and embedded in a rock sheared flat on one side and shaped and polished to a smooth cone behind, shaped and set in place millions of years ago by the nameless and forgotten Elder Culture that created the network. There were two in First Foot's system, one leading to the Solar System, the other to another red dwarf some twenty thousand light years away, at the outer edge of the Scutum-Centaurus Arm of the Galaxy. That's the one we dropped through.

I sat with Sally McKenzie during the transit, watching on the HD screen as with startling speed Wormhole #2 grew from a glint to a speck to a three-dimensional object, the round black mirror of the throat flying at the screen, filling it. And then, without any sense of transition, we were out on the far side, falling around the nightside of a hot super-Jupiter. The red dwarf sun rose above the vast curve of the planet like a moon set afire, and the ship drove on towards the next wormhole throat, sixty degrees around the orbit it shared with the wormhole we'd just exited.

It had taken more than two days to reach the wormholes in First Foot's system, but took just two hours to swing around the super-Jupiter to catch up with the next one, plunging through it and emerging close to a dim brown dwarf that orbited a red dwarf star little brighter, glimmering like a dot of blood against the great dark shoulder of the Horsehead Nebula. The ship broke orbit and swung out towards a sombre ice giant, and, after three days at maximum acceleration, plunged into the solitary wormhole that orbited it.

And so on, and so on.

Via q-phone, Marc kept me up to date with the code farm investigation. It seemed that Natasha Wu had fitted a video camera into the bedroom of her apartment ('A girl can never be too careful.'), and it had caught the two goons who had broken in and trashed the place while searching for the code farm

archives. Both were in custody inside a day, and both turned out to be linked, via DNA trace evidence, to no less than seven unsolved murders. One of them quickly decided to take up Marc's offer of immunity from prosecution and sang about everything he knew, including the kidnap and murder of Meyer Lansky and his family: more than enough to take down Pak Jung-Hin. Apparently, the dead mercenary Abuelo Baez had been a freelance who'd done several enforcement jobs for Meyer Lansky, specialising in 'debt recovery'. The goon didn't know if Abuelo Baez had been sent after Jason Singleton and Everett Hughes, but Marc believed that it seemed likely. We still weren't sure what had gone down in the motel room, but it looked as if Lansky's man had caught up with the two coders, Everett Hughes had escaped, and Niles Sarkka had been involved in some kind of confrontation that had left both Jason Singleton and Abuelo Baez dead.

The young captain and the six soldiers of the strike team passed the time stripping and reassembling their weapons, swapping war stories, immersed in virtual simulations of various actions, watching videos, and sleeping—they slept a lot, like big predators with full bellies whiling away the time until the next meal. My presence seemed to make them uncomfortable, no doubt because I wielded authority outside their chain of command, but I found the pilot, Sally McKenzie, a congenial companion. She'd been a colonel in the New Zealand Air Force during the war, had won a ticket on the emigration lottery three years ago, shortly after she'd been retired from active service. Now she was a spaceship pilot, eager to see everything the fifteen stars had to offer. She told me stories about dogfights over the Weddell Sea and the Antarctic Peninsula; I told her sanitised versions of various investigations I'd been involved in.

And so we moved from wormhole throat to wormhole throat, a chain that passed through six star systems, until we reached our destination, the star 2CR 5938, otherwise known as Terminus. So-called because there was only one wormhole throat orbiting it, only one way in, and one way back out. The end of the line.

It was a dim red dwarf freckled with big sunspots. The bright filamentous arc of a flare bridged one edge of its disc from equator to pole. It was partnered with a G0 star that shone a little over a tenth of a light year away, only a little less bright than the dozens of hot young stars that were beginning to burn through a tattered veil of luminous gas that slanted across half the sky.

The red dwarf was circled by two concentric rings or reefs of asteroids: rubble left from ancient collisions of protoplanets, prevented from accreting into larger bodies by the gravitational interference of the hot and dense superJupiter that orbited between them. Our ship fell towards the outermost reef, at the edge of Terminus's habitable zone.

The UN representative had already reached an agreement with the reef farmers' council, which had sensibly agreed to keep away from the rock for fear of infection with the meme that the Jackaroo had warned us about. The rock itself was an undistinguished worldlet amongst ten thousand such. Unequally bilobed like a peanut, an agglomeration of basaltic rocks heated and partly melted by successive shock fronts that had driven the orbital migration of the superJupiter, afterwards lightly cratered by impacts with debris left over from the formation of thousands of others like it and mantled in a layer of dust and pebbly chondrules. It had orbited Terminus for more than seven billion years, undisturbed by history until some nameless Elder Culture had planofomed it, injecting into its centre of mass a spoonful of collapsium, exotic dark matter denser than neutronium that gave it a pull averaging a little less than the Moon's gravity, wrapping it in a bubble of quasiliving polymer that kept in a scanty atmosphere of oxygen, nitrogen, and argon, landscaping it, seeding it with life.

A hundred or more tenants had come and gone since then. Some leaving no trace of their occupation apart from subtle changes in the isotopic composition of its atmosphere and biosphere; others adding species of plants and microbes to the patchwork ecology; the most recent leaving ruins. Ghosts had

riddled it with pits and shafts. Boxbuilders had left chains of crumbling cells stretched here and there on top of ridges and around the edges of eroded craters. Spiders had parked a small asteroid in stationary orbit above its nipped waist and spun a cable, woven from diamond and fullerene and noded here and there with basket-weave habitats, down to its surface. And a few thousand years ago, a spaceship of the Ghajar had crashed at the pole.

Despite its deep history, the little rock was a bleak and marginal environment, cold as Arctic tundra before global warming, sheeted with ice and snow, black bacterial crusts and cushion algae growing in sheltered niches in the equatorial rift, cotton trees floating in the air like clouds spun from pale wire. Unnamed and unexplored by humans, untouched until some prospector had stumbled onto code still active in the wreckage of the crashed ship.

As the ship made its final approach, the strike team launched a drone rocket that sped ahead of us and dumped three baseball-sized spy satellites in orbit around the rock. They soon located the ancient crash site, an oval impact crater under the snow cap at the pole of the larger of the rock's two lobes with traces of metal spattered around it that showed as a spray of bright dots in the sideways radar scans. And their high-definition cameras also picked up a tiny source of heat and an ordinary blue camping tent at the rock's equator, close to the base of the spider cable.

The young captain who commanded the strike team, Jude Foster, told Sally McKenzie to establish an equatorial orbit and ordered his soldiers to get ready to make a crash entry. Apparently, using the elevators of the Spider cable was out of the question: they were too slow, and anyone on the surface would have plenty of time to prepare an ambush.

'This is an eccentric scholar and a coder barely out of his teens,' I said. 'Hardly a major threat to your people.'

'Surely you have not forgotten that your "eccentric scholar" is wanted for homicide, Inspector,' Captain Foster said with wintry condescension. 'And in any case, a whole crew of malcontents might be concealed down there. It is my duty to take appropriate precautions.'

Like me, Captain Foster was a Brit: pale, blond, and laconic, also startlingly young, and eager to prove himself on his first real action. We had a brief discussion about whether or not I should accompany the strike team on their crash entry or wait aboard the ship until they had secured a perimeter around the base of the cable. I prevailed. I freely confess that I was scared silly, but I was determined to do my duty.

Sally McKenzie helped me dress in a pressure suit and one of the soldiers helped me spacewalk across the flank of the lifesystem to the cargo pod where the scooters were stored. I rode pillion behind Captain Foster; the soldiers rode three scooters flanking us. They were crude hybrids, the scooters—quad bike frames perched on the skinny tank of a LOX booster, with two pairs of big fans set fore and aft to give them lift in atmosphere—but they were fast and manoeuvrable. The rock swelled ahead and we burst through its sky membrane simultaneously, riding through a sudden buffeting wind, sliding down fingers of red sunlight that slanted at a shallow angle across kilometres of air. Cotton trees caught in the raw sunlight exploded like popcorn kernels, spewing tangles of tough threads, creating mats hundreds of metres across that sailed past us and smacked against the holes we'd punched in the skin of the sky. Within seconds, the holes had been sealed and the whirlpools of water vapour that had condensed out of the thinning air around them were beginning to disperse behind us as our scooters swooped down in wedge formation. The surface of the tiny world flew at us, white ice patched with bare black rock curving away on all sides, the spider cable's dark tower rising towards the bronze sky.

One of the soldiers whooped over the common channel. I felt like whooping, too. I was dizzy with fright

and exhilaration.

Details exploded out of the landscape as we headed in towards the rift valley that girdled the equator. We skimmed across a lip of bare rock strung with Boxbuilder ruins, hollow cells mostly roofless, and dropped past sheer cliffs towards the black blister where the cable socketed into the floor of the wide valley. The valley's floor was mostly flat, cut by low wrinkle ridges and short crevasses jagged as lightning bolts, some of the crevasses flooded with frozen lakes. Scrub and low patches of thorn trees grew everywhere between the lakes, a waist-high krummholz forest. I glimpsed a flash of blue at the tip of a long thin lake and then the landscape tilted and my insides were scooped hollow with vertigo as the captain swung the scooter around and brought it down with a jarring bounce.

A man stood beside an ordinary blue nylon camping tent pitched at the lake shore. He was dressed in boots and blue jeans and a black puffa jacket, raising his hands as the soldiers advanced towards him from two sides. I fell to my knees when I climbed off the scooter, dizzy, grinning like a fool, and pushed up and followed as best I could, unbalanced by the low gravity and the encumbrance of my pressure suit. The ground was carpeted with stuff a little like moss, a thick lace of bladder-filled filaments the colour of old blood that crunched and popped under my boots. Beyond the lake and a steep ridge, the cable cut the sky in half.

Captain Foster, bulky as a fairytale knight in his white pressure suit, pistol clamped in his gauntlet, marched up to the man and told him to kneel and clamp his hands on top of his head. The man—it was Everett Hughes, black hair falling over a face as pale as paper—obeyed, a little clumsily, saying, 'There's no need for this. I'll tell you everything.'

I said, 'Where is Niles Sarkka?'

Captain Foster said, 'Are you alone?'

'Niles is long gone,' Everett Hughes said. 'He's on his way to history.'

Part Four

I insisted on carrying out an immediate field interrogation, recorded by an autonomous drone and witnessed by Captain Foster. I wanted to find out what had happened on the rock, I wanted to find out where Niles Sarkka had gone and with what intent, and I wanted it to stand up in court—I was still thinking like that, then.

Despite his getup as the ultimate badass coder—the unruly mane of black hair, silver rings sewn around the rim of his right ear and a skull ring on a chain around his neck, tattoos on his neck and fingers, the leather vest and white ruffled shirt under his black puffa jacket, the tight blue jeans and the cowboy boots—Hughes was young and naive. He told us that we'd find a q-phone in the tent, that Sarkka possessed its entangled twin.

'If you want to know what happened, and why it happened, you should call him. He can explain everything much better than I can.'

His calmness wasn't anything to do with bravery; it was compounded of youthful arrogance and sheer ignorance. He really didn't understand how much trouble he was in. He refused to acknowledge that he had been used, abused, and dumped by Niles Sarkka, believed to the end that he and Sarkka had done the right thing, and was proud to have helped him.

What I'm trying to say is that although he appeared to be cooperative, everything he told us was coloured by his loyalty to Sarkka. I don't offer this as an excuse for what happened, but that's why I

allowed it to happen. Because I thought that Hughes was only telling some of the truth, some of the time, and because he refused to give up crucial information. Sarkka poisoned that young man's mind. He's as much to blame for what happened as anyone else.

In any case, Captain Foster and I agreed that we would defer the pleasure of a conversation with Niles Sarkka until we had learned everything we could from Everett Hughes. And to begin with, the interrogation went smoothly enough. We did it in the tent, Hughes perched on a camping stool, Captain Foster and I looming over him in our pressure suits, the drone hovering at my left shoulder. Hughes readily admitted that he and Jason Singleton had, as I'd suspected, erased the code without trying to mirror it; instead, they'd hacked into the database of the code farm, discovered where the code had come from, and then erased both code and records. When I told him that it was too bad for him that I had found that Meyer Lansky had kept duplicate records in his home, he shrugged and said he'd factored the possibility into his plans.

'I figured Lansky wouldn't tell you about them because it would have meant admitting to all his black market deals. And I reckoned that even if you did manage to get your hands on them, it would take some time, because you couldn't just go in and search his place, you'd have to get all the papers in order and so on. Time enough for Niles and me to get out here and do what we needed to do.'

He said that he'd deleted the code because Lansky insisted that every chunk should be checked by three different people, and he knew that the next guy in the line would have spotted it. And then, because they were worried that their tampering would be discovered, he and Jason Singleton had gone into hiding before reaching out to Niles Sarkka.

'As soon as I laid eyes on that code, I knew that Niles Sarkka was the man to go to. It took a while to contact him, though. And then he had to have us checked out, in case we were part of some kind of law enforcement trap. While all this was going on, a guy employed by Lansky tracked down where Jay and me were hiding out. I don't know how, exactly, but Jay had a girlfriend—you didn't know? I guess there's a lot you didn't know. Anyhow, I reckon Jay called her one last time, right around when we were getting ready to leave, and the call was intercepted. Either the guy had bugged her line, or he'd gotten hold of her and was waiting for Jay to show. I hope not, I liked her. In any case, the guy turned up at the room while I was meeting up with Niles. Jay managed to lock himself in the bathroom and phone me, and Niles said he'd deal with it. Said that because of what I knew, I wasn't to put my life in danger. He had a gun—he'd taken a risk coming back to Port of Plenty, he had enemies there. So he took off, and we met an hour later, and he told me Jay was dead. That was bad enough. But he also told me that a Jackaroo avatar had been there. The guy working for Lansky was lying dead, so it must have followed him and killed him, and it was bent over Jay. Doing something to him. Niles shot it, and it exploded and the room caught fire, and Niles couldn't get to Jay. He said that Jay was already dead, there was nothing he could do.'

'Bullshit,' I said. 'Sarkka spun you a story, Everett. I'll tell you how I know. Your friend had particles of soot in his lungs. That means that he was still alive when he burned to death. Sarkka was lying to you. There was no avatar. He killed your friend and Lansky's man because it was the easy thing to do. Because he didn't want to risk his life saving your friend.'

'Niles told me there was an avatar, and I believe him,' Hughes said, looking straight at me. 'And not only because he wouldn't lie to me about something like that. There was a break-in at the code farm after we contacted Niles. You know how hard it is, to break into the place? Almost impossible. But someone did it—or *something* did. Something that heard that we had special code we wanted to hand over to Niles. Something that went to check out what it was we'd taken.'

I told him that I knew about the break-in, but his assumption that the Jackaroo had been involved in it

was a fantasy. And I told him, trying to get at him through sympathy, that I understood why he believed it. 'You feel guilty about what happened to your friend. Of course you do. But you have to face the truth, Everett. And the truth is that Sarkka killed your friend. And the only reason he didn't kill you is because he needed your help when it came to mirroring and using the code.'

I was doing the right thing, chipping away at Hughes's misplaced loyalty, trying to isolate him. But he refused to admit that he was in the wrong and became stubborn, saying, 'Jay died, yeah. I shouldn't have left him in that room when I went to meet Niles. He wanted to, in case something went wrong, but I shouldn't have done it. And I'm going to have to carry that, the rest of my life. So yeah, I feel guilty. But I'm not making any of this shit up. And if Niles is such a bad guy, like you claim, let me ask you something. How come he didn't kill me after we mirrored the code, and I ran it through his nav package?'

Captain Foster cut in at that point, and his interference made things worse. 'You admit that you located the original of the code, you and Sarkka? And you mirrored it?'

'Well, yes. We didn't come out to this miserable ball of rock and ice for the skiing, that's for sure. We mirrored it and then we destroyed the original. I'll show you where.'

'The code is a dangerous meme,' Captain Foster said. 'You are probably infected with it. Mr Sarkka too.'

Hughes laughed. 'You really believe it, don't you? That's why you're still wearing your pressure suits I bet. Well, I don't know who told you that nonsense, but that's what it is. Nonsense. Niles isn't infected. Nor am I. And the code, it's no meme. I already knew what it was when I came across it, although I didn't know where it pointed, not until we mirrored it here, and plugged the copy into the nav package of Niles's ship. I *know* code,' Hughes said, tapping his temple with his forefinger. 'I have this knack. Show me any code, I can tell whether or not it's viable, whether it's intact, what it needs to run. People like me know how to make use of all the strange and wild and wonderful stuff that's lying around out here. We should be hailed as heroes. We should be encouraged. Instead, pygmies like you try to tie us down with rules and regulations. You want to make ordinary human curiosity illegal. You want to control people's imaginations.'

He was parroting something Niles Sarkka had told him, no doubt, trying to get a rise out of me. When I told him that the code was dangerous and had to be secured at once, he shook his head and said again that the code wasn't any kind of meme.

'I have a talent,' he said. 'A gift. There's no point being modest about it. That's why I knew, as soon as I laid eyes on it, what that code was. I knew it was information, embedded in a navigation package. And you know what, *I was right*.'

I could see that he wouldn't be shifted on that point, so I backed off and tried another angle. 'Niles Sarkka took it, and ran off, and left you here. Not a great deal, was it?'

Hughes shrugged. 'I volunteered to be stranded. The ship didn't have enough consumables for two.'

'He could have taken you to one of the farms on the inner belt.'

'He was going to contact them, once he got far enough away. Then they'd come and pick me up.'

'How do you know that Sarkka didn't leave you here to die, and went off to Libertaria to sell the code?'

Hughes laughed. 'You think this is about money? Jason and me, we didn't get into this for money. The code is way more important than that. It isn't an executable. It's information. The kind of information that the Jackaroo wiped out of all the navigation programmes of all the ships in all the known Sargassos. But they don't know everything. They missed the code in the wrecked ship out in the City of the Dead for instance, the code that gave us the interface. And they missed the code here. And that gave Niles and me the location of something wonderful. Something that will help us win the war.'

'We aren't at war with them, Mr Hughes.'

'Aren't we?'

There was something chilling and certain in his gaze. Oh, Sarkka had sunk his claws in deep, all right.

I said, 'Tell me what you think the code is.'

'Records, kind of. Where the ship had come from. The location of something. We don't know, exactly. That's why Niles has gone to check it out.'

'Mr Sarkka could have taken you to the farmers of the inner belt. He could have asked for their help in searching for whatever it is he hopes to find. Instead, he marooned you here. Why? Because of vanity and greed. He wants the glory for himself, and he wants the profit, too.'

'I *volunteered* to stay,' Hughes said. 'If Niles stranded me, why would he have left a q-phone here? And if you don't believe me, why don't you give him a call?'

I told him that it was no kind of evidence that he and Sarkka were equal partners. 'Sarkka left it here because he wants to boast about his deeds.'

'Talk to him. See what he has to say,' Hughes said.

'He left you here to die, Everett. And went off to Libertaria to sell the code.'

Hughes laughed. 'You're obsessed with money. Jason and me, we didn't sell it to Niles. We *gave* it to him.'

He really believed that Niles Sarkka had done the right thing. That they were still, in some way, partners. That Sarkka was on the track of something wonderful: something that would change history. He led the soldiers and me to the location of the original of the code, about a kilometre from the impact crater on top of the larger of the rock's two lobes, showed us the pit dug by the prospector who had originally found it, showed us the smashed and scorched pieces of wreckage that according to him had once contained the code, and told us a cock and bull story about how it had been discovered. Certainly, there were traces of code still embedded in those shards, although it was impossible to tell whether they had ever been active, and Hughes refused once again to tell us what the code did, where Niles Sarkka had gone, and what Sarkka hoped to find.

And that's where the trouble began. It was Captain Foster's idea to ramp up the interrogation, and God help me, I went along with it. We were in the middle of a difficult and dangerous situation, we needed to know everything about it, and because our only witness refused to help us, we had to coerce him. It was vital to our security and we needed to know everything he knew right away.

So we cuffed Hughes and made him kneel, right there on the cold black naked rock by the shaft. I explained what we were going to do and told him that he had one last chance: if he answered all of our questions truthfully, if he talked willingly and without reservation, he would be able to walk away from this as a hero. He told me what to do with my offer in language you can imagine. And one of the soldiers

gripped his head while Captain Foster, delicately pinching the plastic straw between two fingers of his pressure suit's glove, puffed a dose of Veracidin up his nose.

Veracidin is derived from Elder Culture nanotechnology. A suspension of machines as small as viruses that enter the bloodstream and cross the blood/brain barrier, targeting specific areas in the cortex, suppressing specific higher cognitive functions. In short, it is a sophisticated truth drug. Its use is illegal on Earth and First Foot, but we were in the field, in the equivalent of a battle situation. We did what we had to do, and we didn't know—how could we?—that Everett Hughes would suffer a violent reaction when the swarm of tiny machines hit his brain.

Perhaps he was naturally allergic to Veracidin, as a very small percentage of people are. Or perhaps the many, many hours of exposure to code had sensitised him somehow. Within seconds, his eyes rolled back in his head and his body convulsed with what appeared to be a grand mal seizure. He jerked and spasmed and drooled bloody foam; he lost control of his bowels and bladder. We laid him on the ground and did our best, but the seizures came one after the other. His heart stopped, and we got it going again. We managed to wrestle him into the pod carried by one of the scooters, and we all took off for the ship, hoping to treat him there. But he was still seizing, and he died in transit.

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Captain Foster was badly shaken by Hughes' death and wanted to bug out for home. Hughes' body was in a sealed casket; the original of the code had been located and confirmed destroyed; there was nothing else for us to do but write a report that would justify our actions and absolve us of any blame. I told him that we were not finished here because Niles Sarkka was still at large, and in possession of a mirror of the code. He had not gone through the wormhole throat, or else we would have been alerted, so there was still a chance of catching up with him. If we did, I said, we would be completely exonerated; if not, I would take full responsibility for Hughes' death.

I already had a good idea of where Sarkka might be headed, and put in a call to our representative with the farmers of the inner reef, asked him if anyone there was an amateur astronomer. Within an hour, I'd been sent a photograph taken through a five-inch reflector, showing a new, small star a few degrees from the crucifix flare of Terminus's G0 companion. Sarkka's ship, without a doubt.

Captain Foster said that we had no chance of catching up with Sarkka. He had too much of a head start, and in any case we didn't have enough fuel to chase and catch him. 'We don't even know that he'd headed for that star. He's infected. The meme is urging him to flee outward, towards no particular destination.'

I said that Hughes showed no sign of infection, and in any case, if Sarkka was gripped by a blind outward urge, why was he headed directly for the star?

'You have that q-phone,' Captain Foster said. 'Why don't you ask him?'

'Oh, I will. In good time.'

I was beginning to formulate what I needed to do. I didn't like it, but I couldn't see any other way to bring this case to a satisfactory resolution, and bring Niles Sarkka to justice.

And so we headed for the inner reef, and a meeting with the farmers' council. They said that they knew nothing about Suresh Shrivastav, the prospector who'd found the code, claimed that he'd been working the outer reef illegally. For what it's worth, I believe them. That kind of piracy is increasingly common, and it would explain why Mr Shrivastav refused to talk to us. The farmers' also said that they had known nothing about the little expedition mounted by Sarkka and Hughes, and made it clear that they resented

the UN's intrusion into their affairs, and the danger to which their people had been unknowingly exposed. Luckily, I found an ally in the council's chair, Rajo Hiranand, a tough, cynical, and highly intelligent old woman. Her motivations were not entirely selfless—she wanted her community to share in whatever profit might be made from whatever it was that Niles Sarkka might discover—but her heart was in the right place.

'I would guess that this is the end of your career with the UN,' she said, after the vote to accept my offer of help had been won. 'After all this is over, when you get back, we might be able to find a place for someone like you here.'

I thanked her, but admitted that spending the rest of my life herding sky-sheep and growing corn and pharm tobacco was low on the list of things I wanted to do with my life.

'That isn't all we do here,' Rajo said. 'Think about it. You'll have plenty of time for that, after all.'

'Before I do anything else,' I said, 'I have to explain this to my boss.'

It was a call I had been dreading. Rightly so. The q-phone that linked me to its entangled twin in the UN building in Port of Plenty relayed with perfect fidelity Marc Godin's cold anger across uncountable light years, directly to my ear and brain and heart. I knew there was no point in apologising, and besides, I agreed with his assessment of the situation. The mission was fubared, and although I had been volunteered for the mission by the Inspector General, I was acting senior officer, and by resigning I was contributing a few extra knots to the intractably complicated tangle of diplomatic and legal problems. But it still hurts grievously to think of how he severed every bond, ignored my years of loyal service, and refused to acknowledge the sacrifice I was making.

When he was finished, I asked for a final favour. 'Have Varneek do a trace analysis on the burned-out motel room. Have him look for any unusual material. If he finds anything, have him compare it with the fragments from the avatar that was destroyed in the hive rat nest in the City of the Dead.'

'Sarkka was lying, Emma. There was no avatar. He killed Singleton. And the mercenary too.'

'I could ask the city police to look into it. But given the diplomatic angle, I think it would be better if you did.'

'I hope that is not a threat,' Marc said, finding a new depth of Antarctic chill.

'I don't want to go public with this. Too much information has already spilled out. But this is too important to ignore.'

'The Jackaroo would not breach the accord,' he said.

'We don't know what they would do,' I said, and would have said more, but he cut the connection then.

He called back the next day. I was aboard the largest of the farmers' ships by then, and Terminus was dwindling astern. Varneek had failed to find any fragments, Marc said, but he had found traces of fused silica and traces of doped fullerenes and an exotic room-temperature superconductor.

'Are they from an avatar?'

'If they were not, I could tell you. As it is, I can neither confirm nor deny that the traces Varneek found in the room matched the fragments of the avatar already in our possession.'

So I had my answer.

‘It won’t make any difference,’ Marc said, after I thanked him. ‘Even if the Jackaroo have broken the accord, a protest would be lodged, nothing more. Because the accord is useful to us. Because no one wishes to disturb our relationship with the Jackaroo.’

I told him I understood, and asked about the search for the prospector, Suresh Shrivastav.

‘The investigation has been closed. I’m sorry, Emma. Even if you capture Sarkka, it won’t save your career.’

‘This isn’t about my career.’

‘In any case, good hunting,’ Marc said, and cut the connection.

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And now, six months later, we are chasing Niles Sarkka’s ship towards the coal-black gas giant. He’s just a couple of million kilometres ahead of us and, as we have long suspected, will soon enter into orbit. We caught up with him because we continued to accelerate after his ship turned around and began to slow. Now we must shed excess delta-vee by dipping into the outer fringes of the gas giant’s atmosphere, an aerobrake manoeuvre that will subject the ship’s frame to stresses at the outer limit of its tolerance, but I’m assured that we will survive it.

The farmers’ ship isn’t equipped for a thorough planetary survey, but the equipment we’ve been able to cobble together during this long chase has not detected any source of electromagnetic radiation apart from the pulse of the planet’s magnetic field, and limited optical surveys have failed to spot any trace of artificial structures on any of the moons. Which does not mean that there isn’t anything there. Absence of evidence is not evidence of absence. Our survey capabilities are grievously limited, and if Niles Sarkka is right, if this is where the last remnant of the Ghajar or some other Elder culture species are hiding out, they won’t want to be found.

And if the code has given Sarkka the precise location of some base or spider hole, we’ll be right on his tail. Fortunately, he’s no more than a point-and-go pilot. It’s obvious now that he didn’t do anything to counter our tactic because he simply wasn’t able to. With the end of the chase in sight, I’m beginning to feel that we have a chance of catching him before he can do any real harm.

I think he knows that the game is up. That’s why he has been trying to make a deal with me, and by extension with Rajo Hiranand and the rest of the farmers’ council. In our first conversations, he assumed moral and intellectual superiority, claimed that his actions should be judged by history rather than by mere mortals. Now, he’s offering to share the greatest discovery since the Jackaroos’ fluttering ships appeared in Earth’s skies.

‘A straight fifty-fifty split, Emma,’ he tells me, as we cross the orbit of the gas giant’s outermost moon. ‘I can’t do better than that.’

‘Fifty per cent of nothing is nothing, Niles.’

‘I will find them. They led me here, after all.’

Niles Sarkka claims that he talked to Suresh Shrivastav before he left Libertaria to meet with Everett Hughes and Jason Singleton on First foot. He says that the prospector told him that he hadn’t stumbled on the code by chance. No, he’d been heading home after searching a couple of rocks in Terminus’s outer reef when he’d detected a brief, transitory pulse of broad-spectrum radio noise—a squeal like a God’s own fire alarm, he said. It had grabbed his attention and he’d swung around and made landfall on

the rock and hiked across its arctic surface to the crash site, following a faint but steady pulse. No other code has ever been so marked, and Niles Sarkka is convinced that someone or something led Shrivastav to it. Not the Jackaroo, but one of the Elder Cultures. He also believes, without a shred of evidence, that this Elder Culture want us to find them. That they want to help us, and tell us all they know about the plans of the Jackaroo, and the true history of the wormhole network.

I've told him many times that I think that this story is nothing more than a fabulous fiction, and I tell him that again now, adding, just to needle him, 'If there is something out there, how about we take all of it, and send you to jail?'

'You have to tell the farmers about my offer, Emma. You are obligated, as their guest. Also, you should tell your bosses back on First Foot, too. Talk to all parties concerned, why don't you, and get back to me.'

Well, I don't want to talk to my boss, of course. I'm in deep trouble with the UN, and haven't been in communication with Marc Godin or any other UN official since the chase began. But I call Rajo and tell her about my latest conversation with Niles, and his offer, and she says that she must consult with the council. Fortunately, it doesn't take long.

'We are not varying our agreement,' Rajo says. 'We will capture him, and whatever you find out there, we will deal with it then.'

I tell her that I'm relieved that she and the council sees Sarkka's offer for what it is.

'Did you think that we would renege on our deal? Have faith in us, Emma. As we have faith in you.'

I call Sarkka. His ship is close to the edge of the cold, carbon-black limb of the planet now, and we are in the middle of preparations for aerobraking. He doesn't answer for more than ten minutes, and when he finally picks up, and I start to tell him that he can't make any kind of deal with the farmers, he says that it doesn't matter. There's something in his voice I haven't heard for a while. An unsettling manic glee.

'It's too late to make a deal. I'll take it all. Everything here. You are not my nemesis after all, Emma. You are my witness!'

He signs off and won't answer when I call back, and then his ship drops out of sight beyond the limb of the gas giant. We won't see him again until after aerobraking.

I help the crew finish tying everything down, and then we all strap into crash couches and plug into the interface and watch the black on black bands of the gas giant swell towards us. And just as the ship hits the fringes of its atmosphere, and begins to shudder and groan as deceleration piles on the gees, and the view is washed with violet light as friction with the atmosphere heats the hull of the ship and wraps it in a caul of ionised plasma, one of the crew posts a snatched shot of a shaped rock orbiting at the edge of the ring system. A cone with a flat face. A wormhole throat.

A moment later, we enter the terminal phase of the aerobraking manoeuvre. Plasma as hot as the surface of the gas giant's star envelopes us and gravity crushes us. I'm trying to breath with what seems like a full pirate crew squatting on my chest, my heart pounding like crazy, black rags fluttering in. The ship quivers and groans and is filled with a tremendous roar as it scratches a flame ten thousand kilometres long across the face of the gas giant. And as the plasma dies back and the pull of deceleration fades there's an alarming bang as the flight crew fires up the solid fuel motors, finessing our delta vee as we climb away from the nightside of the planet, heading out towards the edge of the rings.

We complete our first orbit and fail to find any trace of Sarkka's ship. There's only one place he could

have gone, and there's no question about what we have to do, even though we are perilously low on fuel. Two hours later, we're on final approach. We've been videoing everything, transmitting it via q-phone directly to Terminus. If we fail, others will follow.

The black mirror of the wormhole's throat rushes towards us, and then stars bloom all around.

Thousands of stars, bright burning jewels flung in handfuls everywhere we look. Stars of all colours, and threads of luminous gas strung between them.

We're in the heart of a globular cluster, in orbit around a planet twice the size of Earth, clad in ice from pole to pole. There are so many stars in the sky and they are all so bright and so close together that it takes a few minutes to locate the planet's sun, an undistinguished red dwarf as dim and humble as any of the fifteen stars gifted us by the Jackaroo, outshone by many of its neighbours. Millions of kilometres beyond the ice-planet's limb is a cluster of six wormholes, arranged in the points of a hexagon. Sarkka's ship is moving towards them, riding the blue flame of his solid fuel motor.

All around me, a babble of cross-talk erupts as the ship's crew speculate wildly on where those wormholes might lead, about whether the ice-planet is habitable, whether there are habitable planets or moons or planofomed rocks in this system or elsewhere.

'It's a new empire!' someone says.

My q-phone rings.

'Do you see?' Niles Sarkka says. 'Dare you follow?'

'You haven't found what you are looking for.'

'I've found something better.'

One of the crew tells me that we are critically low on fuel. We have barely enough to return to the wormhole from which we emerged. And if we don't return, the resupply ship will never find us. We'll be stranded here.

I ask Niles Sarkka to come back with us, but he laughs and cuts the connection. And then, as he closes on the wormhole throat, he sends a brief video message. It's startling to see him after all this time. He was once a handsome and powerfully built man, but after six months alone in close quarters and minimal rations he looks like a shipwrecked outcast, long grey hair tied back, an untrimmed beard over hollow cheeks, sores around his mouth, his eyes sunken in bruised sockets. But his gaze is vital, and his smile is that of someone cresting the tape at the end of a long and arduous marathon.

'I name this star, the gateway to untold wonders, Sarkka's Star. I came here for all mankind, and I go on, in the name of mankind. One day I will return with the full and final answer to Fermi's Paradox. Do not judge me until then.'

And then he's gone. We swing past and fall towards the wormhole that will take us back to the G0 star, and the crew is still babbling about new worlds and stars to be explored, and I think: suppose he's right?

Suppose he is the hero after all, and I'm the villain?