

EMERGENCE UNIVERSE

The Edgeless Sphere

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**FINAL FOR DESIGN**

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## :1: When Muldone Went to the White

When Muldone went to the White to witness the Emergence, the other pilots figured he was going to his death. Happens all the time. Pilots fly off, pilots don't come back. Toast his memory, the fool, goodbye, so long. All those other scavengers and beachcombers, loitering on the fused glass runways, staring at the sky, sitting in various disreputable bars and wirerooms littering the port, getting drunk or high or pinpoint. What chance he lives? Fifty-fifty, said the optimists, stare-eyed at the chance that the universe *owed them something* for all the shit they'd dug up with shovels, all the luck they'd run. Twenty-eighty said the realists—and that was *before*. Muldone saw the White explode those thousands of relics and shot off after the bounty, and he had been out there hunting them ever since. "No gritting chance at all," said Wei Li, sucking on a lungstim and blowing a long spear of smoke out of his face. "He'll not be back."

But Muldone came back.

The crowd at Skyward were not remarkable for their powers of accurate prediction. Privateers, corsairs—freelancers, if we wanted to be polite—are not people of fine discernment. These were overwhelmingly human, and most of them were wides. Skyward's planet's gravity was half as much again as standard g: too oppressive for the Shard, only visited by wisps in creaky exoskeletons—and only then for short periods. So the wides had the run of the place.

This particular Skyward crowd was at various stages of corporeal dilapidation, in thrall to various drugs, needful (they would say) to recuperate from a career chasing relics through the strange eddies of the White Fountain. Not to be trusted, and wrong about Muldone, for here he was—swinging his four-tine craft down through the atmosphere to land on the atSoc runway. Back, and alive, and *with something*.

He landed.

His ship sat on the runway, emitting stick-snap cracks and groans as it cooled, steam lifting from its skin. But Muldone then switched his shields *back on*. This was strange: Shields were for space, and were only a power drain and inconvenience on-planet, where they were continually buffeted by air molecules. Nevertheless, that's what he did. The cracks and groans were silenced, and the steam now curled into fern-like tourbillons in the ten-centimeter space between the outer fabric of the ship and the enveloping blur of the deflector.

In fact, Muldone's shields were one reason why the Skyward Ho crew had been sure he wouldn't survive. He had taken a standard model shield and jerry-rigged it, tweaked input-output, destabilized the core dynamic. It made the shield more effective, he claimed, and the wider space surrounding the White certainly was a turbulent and dangerous one, where a more effective shield could be the difference between life and death.

For a long time relics were super rare. Fountainview had been established to monitor those that were discovered, and to survey the White itself. Each century, as the time approached when the White Fountain was likely to eject a new relic, activity upon the station mounted.

The crew at Skyward Ho were reprobates and ground-downs, mostly. They would be the first to acknowledge it. Five years before they had been occupied with the ordinary business of smuggling, stealing, fencing stolen goods, supplying clients with illegal materials, and so on. But then the mega-relic had emerged, and had broken into a million pieces. Some of these had simply tumbled away through space, but others had fallen through warp spaces, or spaces created in some way hitherto unknown even in warp, and scattered themselves far and wide. And so the gold rush had begun, and the Skyward Ho crew had redirected their energies to the potentially more lucrative—though more dangerous—business of tracking relics.

If they'd been more competent, they would have found work at Fountainview, or in one of the intercorps involved in the legitimate tracking of goods through the cosmos. But they were, to a man, woman, and neutral, sure of one thing: that they had *the nose*. They could sniff out relics that the usual detection equipment and A.I. sifting couldn't. Some attributed this to constitution, or to luck, or fate; some gave credit to the Gods. But all believed they were going to fly through the incandescent storm, zero in on an artifact, and bring it back to base. Maybe it would be useless— a high proportion of artifacts turned out to be inert. And maybe it would be harmful, for some artifacts *were* poison and would destroy the body or collapse the mind.

But maybe, just maybe, the artifact would make their fortune. Maybe it would be some new device that revolutionized space travel or terraforming or food production. It could be a comms unit through which to speak to God. A dial that turned back time. Who knew what it might be? But it would make the marauder who found it rich, and they could shake the glassy dust of Skyward Ho off their boots and retire to a Luxury Habitat.

As Muldone sat in his pilotage, waiting for take-off, there had been something off about the sheen of his shields—something, the other pilots noted, uncanny. He shouldn't have tinkered with them! He's overloaded them. He's about to blow. Keep back! A glimpse of rainbow rubies and oranges and greens tangled in with the usual pale yellow, a look of instability shimmering from aft to prow and then back again. "He's dead," said Thalassa, the bottle in her right hand containing an amber-hued liquid that occasionally, disconcertingly, chased across the skin of Muldone's craft.

"We'll not see him alive again," said Wei Li, with lip-smacking satisfaction.

And Muldone flew off. Yet he came back, and he did not return empty-handed. The first transmissions to reach Skyward Ho, immediately after he careened out of alacrity, spoke excitedly on what he had found. "It's the big one," he gabbled, tripping over his own words in excitement. "I got hiccups it's so exciting. It's major. It'll make me *rich*, it'll make my people rich for a thousand generations!"

"Muldone, please advise," said the ground-team at atSoc. "Micro or macro? What preparations will you require?" *What preparations are you ready to pay for*, they meant: unloading, storage, brokerage. Did it need to be maintained at a certain heat, or cold? A pilot might carry a micro-relic off by hand—some were no bigger than a suitcase (indeed, some could be carried in the palm of the hand)—but a macro-relic might need leverage and rocranes, and the port made money by supplying such items.

"It's major!" was all Muldone would say.

“Please clarify,” said the ground-team. “Do you mean it is *physically* large? Is it a macro?”

“Major, major, major!”

“What do you mean, major?”

Then he cut all transmission and couldn’t be reached. The ground team tracked him into orbit: his weird, glitching—yet somehow still functioning—shield profile. Then they tracked him down through the air. They didn’t even know which runway to clear. But Muldone brought his craft down with a certain elegance and pitched it onto the far flange of runway 70.

His shields were off. Then, strangely, he turned them on again, and—still—he wasn’t answering communications. A Port team hovered out to the ship, but with shields on they couldn’t actually get to it.

A couple of other marauders came out to greet the craft. These folk were not Muldone’s *friends*, exactly. Say rather: drinking partners, shady associates, hangers-on. One, Thalassa, was an ex-girlfriend. All members of the same ragged fellowship. They wanted to be the first to see what Muldone brought out of his ship: what new relic had gotten him so excited. They wanted, maybe, to persuade him to let them take part-shares in whatever it was. They wanted, if possible, to steal it out of his hands and dash it away. Honor among thieves, sure. But not necessarily all the time.

And nothing happened.

Nothing continued happening. The ship sat there, shimmering, reds and lemon-yellows spidering up and down its skin. Through the sheen of the shields Muldone himself was visible, sitting in his pilot crib, staring straight ahead.

“He’s dead,” said Wei Li. “I told you! Dead in his pilot’s chair!”

But he wasn’t dead, since—well, see, *here* he blinked, and *here* he angled his face a little to look up at the sky. Otherwise, he just sat there. See for yourself! Take a look through these noculars, like the ground crew did. Magnify the image. What can you see? That? *That’s* what they call an enigmatic smile.

There’s another blink, lizard slow. The chest expands a little, and then sinks back.

What is he doing?

The crew tried various things to deactivate the shield externally, without success. They still couldn’t raise Muldone on comms, and there was no way to access or move the craft whilst the shields were fizzing away. Eventually, they decided to wait until the power drained and the shields failed under the constant battering by the air. It might be a few days, but eventually the shields would die down.

The scavengers stayed on, though. “He’s banjaxed those shields, tinkering with them, is what I reckon,” Thalassa said. “He *can’t* turn them off! He’s trapped himself inside!”

Back before the gold rush, Thalassa and Muldone had been a couple. They had loved together, smuggled together, fought with one another, then they had broken up—the old, old story. And behind Muldone’s lone-wolf persona, his determined self-sufficiency, his aloofness, Thalassa had discovered—as if locating a pearl thrown out by the White itself—a kernel of gentleness. Sometimes the sternness and braggadocio would drop away and, like a butterfly emerging from a chrysalis, a different Muldone would emerge, sweet words and gentle caresses. After lovemaking he would

weep upon her breast. But the carapace of the other Muldone would always harden around this more tender person, and soon enough they would be back to drinking and yelling at one another.

He was a tall, plain-faced man, muscles thin but distinct beneath tight skin as his sunburned hand held onto the controls of his craft. Thalassa was almost as tall, hers a long, regular-featured face with dark brown eyes and a mole, like an apple-pip, tucked beside her mouth.

And here she stood, now, gazing up at her former lover, sitting unmoving inside his craft.

“But if that’s so, then why is he sitting there, looking so placid?” asked Logue. “Wouldn’t he be trying to contact us? To get our help?”

“He does seem pretty happy about things,” said al-Araz, peering through her noculars. She then passed them to Wei Li, who was pestering for them, adding: “The smirking bastard. *Dirty* smirking bastard.”

“Woah,” said Sadakat. “Would you look at that?” Sadakat was a taupe-skinned wedge of muscle, built around a beard as big as a dinner plate. He was, though, notably gullible.

“Those shields could fail at any time,” Thalassa said. “He *tinkered* with them, he monkeyed with them, they’re on the very edge of malfunction.”

“They can and will glitch out entirely,” Wei Li declared, with his characteristic—and, as it turned out, wholly misplaced—confidence.

And so a half-dozen marauders camped out, hoping to be the first to the craft when the shields went down. They were not *explicitly* planning on stealing the relic, whatever it was, from Muldone; nor explicitly plotting to stampede down their fellows and grab it first. But, well...they were just waiting. For what opportunities might arise. You never knew. They threw up bubblehuts twenty meters from the craft’s prow, reckoning that any outlay or blast from the failing shields either wouldn’t reach so far, or else would be so catastrophic as to consume the whole of Skyward Ho, in which case there was no point in being cautious at all. It was what the head-helpers called *displacement*. The Emergence had spread priceless (maybe) relics all across the sky—and these guys were *stuck down here*. Ship broken, and no money for repairs. Ship impounded for non-payment of Skyward Ho port fees. It was frustrating. A blizzard of gold, just up there—just out of reach.

Muldone simply sat there, staring ahead. Sat there for two days. Then, on the third day, there was a change: He was gone from the cockpit. Nobody saw him depart. “Gone to piss and grab something to eat,” said Wei Li. Everybody focused their attention on the craft and, after an hour, they saw Muldone climbing back into his pilot rig and settling himself down again. Back to his old posture: staring ahead, the slightest of smiles, stillness of which a meditating monk would be proud.

One day turned to several, and several became a fortnight. A couple of the marauders gave up and peeled away back to the bars in town, or to their own ships, to repair them, or loll inside them—some even to fly, searching for new treasure. A group stayed on, though...why wouldn’t they? The days were hot, the evenings balmy, the stars overhead were a splendid interlacement of lights and gleams amongst purple-black dustlanes. There was enough to drink, there was conversation, there were games, and with every moment there was the chance, irresistible to the gambler’s mentality these folk all shared, that Muldone’s shield would fritz out entirely—or ignite in an oval of plasma consuming ship and Muldone and whatever cargo he had brought back from the White.

Mouse tried placards. She rigged up a spinjet, and floated herself five meters or so off the ground, to get into Muldone's eyeline. Then she unrolled a screen, with HELLO MULLY! WELL HELLO MULLY. IT'S SO NICE TO HAVE YOU BACK WHERE YOU BELONG written on it. Nothing. She tried a shorter message: WAVE AT US! LET US KNOW YOU'RE ALIVE! Muldone must have seen it, because he didn't avert his gaze. But he did not respond.

No change in Muldone's posture, or gaze, or that slightest of smiles on his face.

"If he was running those shields just on *ship's* power," Thalassa said, "they would have failed days ago." It was another bright afternoon warmed by the glitter of Skyward's silver-white sun, and by the disposal of their money into booze and drugs, and by the flawed honesty of their camaraderie. Later they would ignite the campfire tripod against the cool of night, but for now they basked like lizards, and smoked, and drank. *The shield could fail at any time*, they each were thinking; and some of them were thinking: *When the shields drop, I can get to the ship first, and maybe grab what's to be grabbed.*

"You think that's the relic he found?" Wei Li coughed, and then coughed again, and then resumed. "You think it's a power source, running the shields? Because if so, maybe the shields will run until the heat death of the forking *universe*."

Two months had passed since the Fountain had, entirely unexpectedly, ejected a huge cloud of new relics. It had produced a kind of feeding frenzy. If Skyward's crowd had had properly repaired spaceships, they'd have joined in. Muldone's jerry-rigging was his way of getting in on the action.

"He's just sitting there," said Sadakat, looking through the noculars. "That's what I don't get. We've been here two weeks standard, and he's got up from that pilot rig—three times? In all? How is he doing it! What's he drinking? Eating? Is he pissing where he sits?"

"You can set up your rig for that," Thalassa pointed out, "if you're planning a long-haul that needs lots of hands-on navi. If you need to do a considerable *amount*."

"I figure he's sleeping with his eyes open," was Wei Li's erroneous guess.

"I figure it's not Muldone at all," said al-Araz. "It's a demon, from hell, who has taken Muldone's form."

The white head of the sun. Crusts of multicolor skittering across Muldone's shields. One day an enforcement team arrived from Fountainview. These were not the true Fountaincrew, because they were breathing the regular air like everybody else, but they came with the full Fountainview authority to arrest Sadakat. They came at dawn, because nobody is up and lively at dawn; and there was a deal of shouting and hurly-burly, dragging Sadakat from her bubble. They parked the warrant in the collective feed, but nobody paid it any mind—it was bound to be the usual boilerplate about relics and repossession and illicit secondary trading and false future investments or whatever. Everybody was awake and standing about as the enforcers took a swearing, struggling Sadakat away. "You guys depend on us," yelled Thalassa to the Fountainview crew. "We do *your* dirty work. You wouldn't have found half the relics in existence without us! And this is how you repay us?" There was hissing, somebody spat; but the enforcers were impassive, efficient, and in a few moments they were gone, their craft glinting in the high sky as it accelerated into orbit.

Why was Sadakat being arrested? Nobody seemed sure. Something relic-related, or some other infraction, maybe.

Night came like black hair falling across a woman's pale face.

They were going to have to do something to earn money soon. But there he sat, Muldone: impassive, smiling slightly, just sitting in his cockpit and staring ahead, by day, by night.

"Maybe the relic he retrieved wasn't a power source," suggested al-Araz. "Maybe it was an alien intelligence, of some new, weird kind. Maybe it took over his mind—hollowed him out, took over his body. That's why he's acting so weird."

Wei Li sang a little song:

*The diamond sea below is waiting for us to fall  
Harder than a gemstone anvil to destroy us all*

The others told him to shut up. So he took the noculars and scanned the horizon: distant gorse-covered hills, slate-dark under an emerging stack of black cloudbank. The sight had him cooing with pleasure. "Rain's coming," he called out. "Let's see how Muldone's stubborn shields cope with a bit of monsoon."

Skyward Ho had been a methane world, fast-tracked for terraforming because of its proximity to the Fountain. The weather was pretty steady, and the air was perfectly breathable now, but the planet sometimes threw up huge plummeting storms of heavy rain.

"This'll do it," said Wei Li, doing a little capering dance. "This'll crack Muldone out of his fucken *egg*."

The others were not so optimistic. "We'll see," said Logue. "I'll wait until the storm rolls over and then we'll see. But *if* the shields are still in place after the storm passes, then I'm going. If that don't knock 'em out, nothing will. And I can't wait around here forever. I've got a living to earn."

He wasn't the only one who felt that way.

So they broke open some more drink pods and settled themselves into slung-low chairs and waited. Across the other runways flitters landed, or took off, curtsying like ballerinas in the air before sweeping away. An old-school ignition-scam came down, a ponytail of flame hanging from its underside. The stormfront grumbled closer, coughing now and then with thunder. Lightning poked the ground with its fractured chopsticks.

"Don't demons sleep?" Wei Li called out. "Al! You say Mully's been replaced by a demon from hell—but don't demons sleep too? I think they sleep, like angels, like humans."

"There is no need to sleep in demonworld," said al-Araz. "You think Shaitan sleeps? No, no, *you're* the one who sleeps, and the devil creeps up on you whilst you slumber, helpless."

"Well, now. That's a cheery thought," Wei Li said.

The air was immanent with electricity and the smell of ozone. And then, a swift crescendo out of nothing led to a vast drumroll of rain hitting the ground. A moment later they were soaked. The rain, like swearing, turned the air blue. Great cords of water drawing down hard everywhere, monsoon warm, utterly drenching. The smooth surface of the runway grew a bristling pelt of splashback—a million writhing fluid hairs.

Through the dimness of the rainfall, the oval of Muldone's craft began fritzing and spitting light, like a lit firework: whites and tangerines, lemon flares and crumbs of brightness scattering in every direction.

Wei Li was on his feet, waving his half-drained bottle like a handbell. “Wooh!” he cried. “Wooh!” He danced closer towards Muldone’s craft, and then skeetered back as a glob of superheated plasma spat towards him and hit the ground, digging its own shallow grave. A tongue of brilliance, red as a cherry, shot straight up. “It’s killing the shield!” Wei Li shrieked, dancing a gleeful little dance. “Didn’t I tell you all? It’s slaying the shield.”

The rainfall was drenching, immense. They all stood, staring at the flickering, strobing spectrum of color and light where Muldone’s craft sat. Then the rain increased in tempo and intensity, and then it began to lessen. The fireworks display went on. The clouds rolled overhead and then, with one giant fishbone of lightning and a doomy thunderous crack, the storm began rolling away. The sky behind the procession of storm clouds was gray. Further back, sunlight was breaking through low clouds over the peaks, coming down in angled shafts and long rods of brightness as if in photonic mimicry of the distant rain.

“Now,” Wei Li called out. “Now we’ll see what this old bastard has brought back from the White! He owes us a cut, whatever it is—he owes us each a percentage.”

“Look,” said Mouse.

The rain had stopped. Water lay like cellophane on the surface of the runway. “Look,” said Mouse again. “It’s gone!”

Muldone’s ship had vanished.



## :2: The Edgeless Sphere

1.

"It's very valuable to them," said Seren of Fountainview.

"Sure," Markolos agreed. "But this is the Ghast we're talking about. It's not like we're having to deal with the Shard. I mean, that would be a whole different thing. They'd probably revere it, like an idol. Like a god. But sure, the Ghast *value* the Edgeless Sphere—who knows, their thinking is pretty weird. No disrespect! Their minds are just configured in a way different to humans."

"I only mean," Seren replied, "that you will need to treat it with respect."

"But of course we'll treat it with respect! It *and* its keepers. Science is all about respect."

They were in a consultation space inside Fountainview Station itself. Upon the wall was projected a live image of the White Fountain in all its splendor. Markolos was only visiting, and was in a full body suit; but Seren, a senior observation officer, lived upon the station permanently. She could, in fact, never go home—her genetic code had been mirror-switched by long-term proximity to the White Fountain, and she could no longer metabolize usual human food or breathe air.

Yet there was never a shortage of volunteers for such postings: members of all three galactic races and all varieties within them. Some came out of sheer scientific or philosophical curiosity, observing the Fountain and logging everything that emerged from it. But more came because Fountainview was the focus for political power. Everything to do with the relics was mediated here; all new relics were processed here, all previously released relics—once discovered wherever they had drifted—had to be logged here. All access to relics was negotiated and agreed here. Say a scientific team wished to examine one such—as Markolos's team wanted to test the Edgeless Sphere, to perform certain experiments upon it, to try and decipher it, for the benefit of science—then it was to Fountainview they came to get access.

The only exception was the Triple Relic, which resided upon three mountaintops of the Shard homeworld. The Shard had been the first intelligent species to discover relics, and early on they had come upon three macro-relics. Because each Shard possesses three hearts, they took this triple blessing as a sign from the Gods. High-ranking members of the chief Shard castes carried a tiny piece cleaved from the original Triple Relic inside their person, locked with nano-tech into their brainstems: their version of Holy Communion. The three macro-relics were fascinating objects, and human and Ghast scientists would have loved to get the chance to examine them, but they were too holy, too transcendent, for the Shard to grant access.

"My point," Markolos said, leaning forward, "is that the Edgeless Sphere isn't like *that*. There's no reason for the Ghast to deny a scientific team access—provided, of course, we go through the proper channels." *Proper channels* meant: Fountainview.

Markolos was eager to conclude the meeting and get away. His suit provided him with breathable air and nutrition-water, but the longer he remained upon the station, the higher the risk that the strange effect of the Fountain would start to cascade genetic change through his system. And then he'd be stranded there. And yet Fountainview insisted upon the personal interview, face-to-face. And

what Fountainview wanted, they got. A power play, Markolos believed. A performance of authority, of dominance.

Markolos's team, in their savfrigate *Trampoline*, followed the discussion from several light-hours distance. No point in them all risking such a thing happening to them.

"Well," Seren said. "We have spoken with representatives of the Xenoghast community that hold the Sphere, and they are prepared to grant you access."

"Tremendous," said Markolos, hurriedly. "Outstanding. Excellent."

"There are conditions. You may examine it on *three* separate occasions, but only for seventeen minutes each time. Only three occasions. And a Xenoghast supervisor will be present."

"Sure, sure," said Markolos.

"Also, a member of my team will accompany you."

"Someone from Fountainview? Ah!"

"A junior curation officer. Her name is Jari."

"But—they will leave Fountainview?"

"Obviously Jari will have to spend the voyage and your time on Ghast Station PHI fully suited, with her own supply of air and nutrition. And her presence will limit the time you can spend on the Ghast Station and your movements thereafter. You must return directly to Fountainview at full alacrity as soon as your experiments are completed. Too long away from this environment would prove deleterious to her health."

"Sure! Get her right back, soon-as. No problem."

"You must of course share all data and any discoveries with Fountainview first," Seren said. "We will decide what, if any, you will be permitted to publish, or whether you can be licensed to profit from any of it."

"Profit is the last thing on our mind!" said Markolos, fidgeting. "We're only interested in the science. It's all science for us, truly."

Seren got to her feet. "Well, it is agreed."

Markolos summoned his ship. But then there was a wait, because the Jari woman—a wisp, seven feet tall and skinny as a rope—took her sweet time getting ready. All she needed to do was gather some belongings and fit herself into her habitat suit, a bulky object of white and orange bulgy hoops, inside which she would be spending the whole of the coming voyage. Markolos didn't begrudge her taking time to check that the suit was functional and comfortable, but he did resent her sheer bubbling enthusiasm. The energy of youth. It was exhausting.

"It's soo exciting," she cried, as she flexed each arm and each leg in turn. "The Edgeless Sphere! I'm only a junior curation officer but I'm hoping this might help me move into promotability, you know? It's such a compelling mystery. A sphere of a determined mass and inertia, a measurable heft, a real presence in the world, and yet: no surface!"

"It has a surface. What it lacks is an edge," growled Markolos. "Docta Jari? Are we ready to depart? My craft is docked and ready."

"Of course you don't want to stay here too long, I understand that," gabbled Jari. "I just need to check a few more things." Her head disappeared into a blue-black globe, which sealed, and then the screen of its outward curve resolved to reveal her head again, slightly magnified. "Your ship is called the *Trampoline*, yes? I had to look up the meaning of that word! We didn't have trampolines on Pusht, which is where I grew up."

"Please," Markolos urged. "Docta Jari? Could we ...?"

"Just Jari," she said. "Let's not stand on official titles and whatnot and so on. We're going to be spending three days in close proximity. We must be friends! I love making new friends! I'm so thrilled, really I am." She began singing.

*Three days*, Markolos thought, grimly.

But finally she was ready, and they made their way down the great slide together and slipped into the *Trampoline's* entrance port. Xha and Lane were waiting.

"Hello hello," said Jari, fitting her suit's bulk through the narrow space. "So pleased to meet you. This is my first trip off Fountainview since—since I arrived, a callow little noob. It's so exciting."

"Let's go, then," Markolos said. The seal sealed, the main engine fired up, the inertium unit coughed and shook, and then after that there was no sense of movement, although the *Trampoline* slipped back from Fountainview at several thousand kilometers per second.

"And away we go!" sang Jari. "Oh thrill, thrill, thrill!"

Lane helped Jari through the ship's main passage to a personal cabin she could use. The *Tramp* was not a large ship, and space was at a premium, but the sheer bulk of Jari's suit meant she had to have her own space.

After dropping her off, Lane came back through to the collective space. Fixed himself a drink.

"So," Xha said to Markolos. "She seems fun."

"She is, without realizing it, making it easy for us to do what we have to do," Xha growled. "When the time comes."

"How many Ghast, Captain?" Plaice wanted to know.

"Only one was mentioned," Markolos responded. "But you can't be sure with the Ghast. Their one might turn out to be two. Or three. Or none. You know how their thinking goes. Or rather, you don't."

"Three we can manage," said Xha. "It's if the attending party gets any bigger that we might have difficulty. And what about young madam? Is there any reason to delay the—you know—so far as she is concerned?"

"Her suit will have a tag and a threadline back to Fountainview. We'd better go easy on her until we're sure what we're dealing with on the PHI," said Markolos, unhooking his own helmet and wiping his face with the palm of his hand.

"Aye, aye, Skipper," Xha said, in a not entirely unsarcastic voice.

Markolos shook his head. '*Why did they have to assign us a kid?*' he wondered.

2.

The voyage to the station was 20 hours, give or take. Markolos spent the first hour getting himself comprehensively checked out in the med-bay. It seemed, despite what the docbot called “some fraying at the genetic edges,” he had survived his trip to Fountainview more or less unscathed. Afterwards, he washed, dressed, and made his way to the collective space for something to eat. He found Jari there, holding court: Lane, a smile fixed unconvincingly on his face; Plaice lounging in a recliner; Xha looking patently bored. Jari’s face, larger than life on the fishbowl surface of her helmet, was in constant motion.

“So as scientists you won’t be going in with any *preconceptions*, I know,” she was saying. “I would never accuse you of that! But you surely have a theory as to what the Edgeless Sphere is, don’t you? You must have at least an *inkling* of what it is?”

“Valuable, is what it is,” Xha said in a low voice. Markolos shot a fierce look in his direction. But Jari did not seem to have noticed.

“The consensus,” Jari went on, as if her audience weren’t of course all entirely apprised of the theories about the Sphere, “is that this is a *broken* relic, a machine that has malfunctioned—whatever its original purpose was—stuck in some way between two different phase states. That’s why its edge is radically indeterminate. There’s an outer bound of 41 centimeters and an inner bound of 38-and-a-bit centimeters, but the outer surface of the sphere glitches between these two dimensions—and indeed cycles through *all* the quantum possibilities in between. If so, perhaps the thing to do would be to *fix* the device, stop it cycling through these alternatives, and then maybe find out what it blinking well *does*.” She laughed a high, blipping kind of laughter, one that scraped itself upon the tender membrane of Markolos’s patience most gratingly. “Blinking! How funny that I should choose that word! I only meant it as an exclamation, but it’s *fitting*, don’t you think?”

“I suppose so,” said Lane through his fixed smile.

“Wouldn’t it be marvelous to find out what the sphere *actually does*?” Jari went on. “Some kind of phase *motor*, perhaps? Think of the possibilities! What do you think it is?”

Markolos stepped forward before Xha said anything else compromising. “As you say, Docta, it is best as, eh, scientists not to prejudge matters.”

“Of course not! Only I have been exploring a most intriguing theory, and wonder if you are aware of it. The theory comes out of the Nation Underground collective, and it’s quite radical. They say that the reason the outer surface of the sphere won’t, as it were, *resolve* in our reality, is that the geometry of the object itself is different. Not to put too fine a point on it, they say that this sphere is an object in which  $\pi$  is *three*. Imagine! Not 3.14 and so on, exactly three. It’s hard to wrap your head around.”

Markolos and the others all looked at one another. “Counterintuitive,” growled the captain.

“It oughtn’t even be possible. After all,  $\pi$  is not a variable: It’s a ratio. It’s baked into the very fabric of reality as such. But there’s a way it *could* be true, or so the theory goes. Because we can conceive of a different reality in which  $\pi$  is three—it would be a very different sort of place to our reality of course!—in which case, in which case—and this is only a *hypothesis*, you see—perhaps this object is a point of connection between *our* reality and that *other one*? A wormhole, or transceiver, or something like that? What do you think?”

There was an awkward silence.

"You'll have to, eh, *excuse us*, Docta Jari," said Markolos.

"Jari!" she shrieked. "I insist upon it! We are all friends here!"

"I need to speak with my crew, in private. Just for a few minutes. Perhaps you'd benefit from a little rest in your cabin?"

"Well, I'm supposed to chaperone you the whole time, but of course I've no wish to intrude. And actually I could do with freshening up." Jari moved her tall orange-and-white bulk to the mess hatch and squeezed out through it. "Until we meet again, dear, dear friends!"

There was silence in the collective space for the span of five minutes. Jari could be heard, clanging and scraping her way along the main corridor, and then the seal glommed shut on her cabin and Markolos let out a long breath.

"She's full of youthful energy," Lane said.

"She," said Xha, "is a fool."

"I wouldn't be so sure," Markolos countered. "This may all be an act. If Fountainview suspects that we're up to no good, then of course they'd send a sentry with us. And this kind of playacting could well be exactly the way in which a trained undercover operator disguises herself."

"You think she's a sentry?" asked Lane.

"I think we need to consider the possibility."

"If Fountainview knows what we're doing," said Plaice, supine on his recliner, "then I'm going to be simply *pissed*, perfectly *pissed* with the vendors who sold us our cover story."

"I went through the cover," Xha objected, "in immense detail—immense. It's solid. Anybody checking our references must believe us bona fide scientists."

"This isn't anybody," said Markolos. "This is Fountainview."

"If they know who we really are, then why did they broker access to the Sphere?" Xha asked. "Why not just arrest us?"

"Arrest *me*, you mean," said Markolos. "I was the only body actually to set foot on Fountainview. But it's a good question. Maybe they have other plans. Maybe they've alerted the Ghast and we'll be arrested when we arrive at *their* Station. Or maybe they're playing a longer game: They want to see how far we get with the Sphere."

"Maybe they actually want us to lift it," suggested Plaice. "They can't officially endorse such a thing, but maybe they're frustrated by the way the Ghast are handling the object, keeping it locked away and so on. Not releasing any experimental data."

"And maybe they actually believe our cover story," said Lane. "You know? That story we paid a fortune to construct? Maybe it's done its job, and they believe we're all nice, law-abiding scientists who are going to poke our specialist technical equipment at the sphere and come back to them with lots of lovely data."

"Maybe," said Markolos. "But we can't take chances."

“Look,” said Plaice. “I feel for the kid. Really I do. But that’s just bad luck. We’re going to have to heat-death her universe at *some* point, right? We’re hardly in the business of taking hostages, are we? So I say, let’s do it sooner rather than later.”

“We can’t just shoot her,” said Markolos. “Her suit is pegged back to Fountainview, there’s a threadlink. If we move too soon then they will simply alert the Ghast, and we won’t get anywhere near the sphere. To say nothing of coming after us with police craft.”

“If she’s the ingenuous kid she appears to be,” said Xha, “then killing her will be a shame, a real shame. And if she’s the sentry the captain thinks she *might* be, then killing her might not be so easy.”

“Her genetic code has been mirror-swapped by proximity to the White,” said Plaice. “Without that suit she can’t breathe our air, never mind eat or drink. Crack it like a walnut shell and out she tumbles, to die on her own time. It wouldn’t even be *us* that kills her! I mean, you could say. It would be her own weird, mirror-swapped genetics.”

“Technology,” he drawled, recumbent, stretching like a cat, “does sometimes go wrong, after all.”

“Nothing happens to her yet,” Markolos ordered. “We need to try and determine what, if anything, she knows—and who, if anyone, she is.”

“Aren’t we forgetting the actual heist?” Xha asked.

As a child, Xha had undergone treatment to convert him from the wisp frame into which he’d been born on his low-g ringworld, and adapt him to a high-g new home to which his parents had moved. The result was something odd looking, as if a regular homo sapiens had been compressed in an industrial piston. It had a brutalist, unsettling quality, something into which Lane leaned. “We were all there, Captain, virtually speaking, at your Fountainview meeting. The officer spoke of *a* Xenoghost supervisor being present. Do we take this as one Ghast, and plan accordingly?”

“I’m not sure we can,” said Markolos. “You know how fluid the Ghast concept of *numbers* is.”

They took some downtime to sleep in their various contrivances—e-stim cradles, zero-g pods, nutrient bags, whichever they each believed maximized the recuperative properties of sleep.

Hours ticked by.

Breakfast followed. Jari, in her huge suit, with her larger-than-life face gabbling and gurning and laughing and talking, always talking.

“You’ve heard the story of HagnammunGabbadi? He tried to touch the Edgeless Sphere!”

Of course they all knew this story. They had done more research on the Edgeless Sphere than most scientists, money being a better motivator to work than abstract curiosity. But they smiled and nodded and did not interrupt.

“It was already obvious, once the Ghast probes had recovered the sphere—by the merest chance, by the way, which is in itself an interesting story—but when it became *clear* that it possessed no determinate external boundary, well, they were *excited*. They brought it back and, guided by a series of famous prophecies, or divine visions, or ... I don’t claim any knowledge on Ghast religion. I mean—I mean—who does? Right?” She laughed her grating shrieky laugh.

“But the story goes, so they say, that this HagnammunGabbadi fellow decided that God—or Gods, or whatever pantheon the Ghast believe in—this HagnammunGabbadi decided the Gods wanted him to

*touch* the surface of the sphere *with his naked hand*. It didn't matter that Ghast scientists told him: *No, don't try it; this sphere doesn't even have a surface, not in the conventional sense of the word!* He wouldn't listen. He had already told his followers—we're not supposed to call the various affinity clades within Ghast society *cults*, that's supposed to be terribly insulting I know, but come on, come on. I mean! Anyway he'd already told his cult followers, *I'ma gonna do this.*" For the voice of HagnammunGabbadi, Jari adopted a deep, drawling bass voice which, since Ghast tended to be a good meter taller than even the wispiest humans, and with barrel chests to match, was not a million kilometers away from reality

"And so it happened. He used his influence to gain access to the sphere, and took off his gauntlet, and pressed his hand, palm-out—do Ghast have palms on their hands? It's three fingers and a hook isn't it? Do they have *fingerprints*? I probably should know, but I don't—anyway, he *pressed* his hand against the sphere. Now—I don't know if you know this—"

Markolos stared at her. Either she was a genuine sub-officer in the curation department of Fountainview, seconded to an as-she-believed genuine scientific expedition to investigate the Sphere (in which case, how could she assume such ignorance in her audience?), or she was a sentry, a spy, an assassin—in which case, was she simply trolling them? He smiled and nodded and did not interrupt.

"Because," Jari giggled, "the sphere *has no skin to touch*, no edge with which to make contact. What happens as you pass from the outer zone to the inner is that you enter into increasingly uncertain quantum zones, your finger *may or may not* be intersecting the matter—the material—the whatever-it-is out of which the *actual* sphere is made. Who knows what governs whether *reality*—" she embroidered this last word with air-quotes, but since her hands were inside gigantic mittens, all that happened was her two orange-white flippers flopped up and fell down again. "Whether *reality* decides to accept your finger, or to decide that it has transgressed inside the body of the sphere. The result was, HagnammunGabbadi's hand hovered in the debatable zone and then ... vaporized, leaving only the back of the hand, a few millimeters thick, and a deal of pouring blood and I daresay screaming and whatnot."

She sat back, or at least her gigantic suit slumped further into its couch. "Crazy. He ought to have known. And do you know the *craziest* thing?"

*But*, thought Markolos, *you must know that we know everything about this relic. How could you not?* Still, he smiled and nodded.

"The craziest thing is that *now* his followers imitate it—mutilate themselves, pare away the front of their right hands with lasers or scouring drills or whatever. It must be agony! But it's part of the cult now." She chuckled again. "But look, I'm sure you know all this."

"Tell us more about your own research, *Docta J.*" snapped Lane.

"I really am going to have to bally well *insist* upon you dropping the honorific," screeched Jari, and then laughed her piercing laugh for a distressingly long time.

"Three hours," reported the ship's A.I. "Comms ping from the Station."

"Alright everybody," said Markolos. "I fear we must interrupt this fascinating chat. We are here. Positions, everyone."

“Yes,” boomed Xha. “Let’s get ready to ... *inspect* ... this sacred relic.” And then he laughed. Docta Jari’s puzzled expression was either a genuine response to this statement, or a clever piece of play-acting.

3.

The Xenoghost were the second intelligent species humans encountered in their initial expansion, and early interactions with them had tended to be quite violent. Taller and bigger than human beings, with a militaristic social logic and long, red-blue, mandrill-like faces, the Ghost struck plenty of those early human explorers as scary. Many of the early clashes had been initiated by homo sapiens, a species that tended to embrace the attack-as-best-form-of-defense philosophy. In fact, the Ghost’s belligerence was markedly less than first believed. Though militaristic, they took no pleasure in war. Much of the friction between humans and Ghost could be ascribed to an incompatibility of worldview. To put it plainly, humans very often found the Ghost baffling.

Take numbers. The Ghost had previously informed Fountainview that Markolos’s team could examine the Edgeless Sphere, with one Ghost sentry present to protect it. If this were a human announcement, then Markolos’s crew would have expected one individual to be there. But, without any intention to deceive their human visitors, it was just as likely that three Ghost would show up, or nine, or nine hundred. Where human beings count in units—in ones, adding them up into larger numbers—the Ghost made no real distinction between the human numbers *one* and *three*, and indeed found it hard to fixate on specific integers, pinned arbitrarily on the notional number line. Accordingly, their entire mathematics, or at least their numeracy, was radically different to human math. Not that they were ignorant. In fact, Ghost math was highly sophisticated, and their engineering and spaceflight technology extremely efficient and powerful. It wasn’t a crudeness that defined Ghost counting. Turn it about, and see human counting from *their* perspective: a weird fixation on particular number-line positions. For, after all, why should one be that much more significant than 0.999 or 1.00...001? Whole concepts central to human thought—unity and plurality, particularity and universality—meant very little to the Ghost. The Shard, the other alien species with whom humanity shared the galaxy, used a base-8 numerical system, but at least they counted numbers like humans did. The Ghost were stranger.

One consequence was that, as Markolos’s team readied themselves to steal the Edgeless Sphere out from under the noses of the Ghost, they could not be sure if the “one” guard who would be in place would actually be a single individual, easy enough to overpower, or a larger force.

Then there was the question of their Fountainview chaperone.

At any rate, they had arrived. Here was the Ghost PHI-station, a sword-shaped habitat orbiting a murky brown dwarf star. The *Trampoline* decelerated out of alacrity, swept in and around, and settled into a docking position at one of the station’s access stomata.

One by one, the entire crew moved through the nobol link and into the Ghost ship. Ghost breathe air similar to humans—equivalent amounts of carbon dioxide, lots of nitrogen, rather more argon—but with about half the oxygen level. Humans visiting Ghost habitats generally wore tubes that pumped extra oxygen into their noses.

In the entrance antechamber, a single Ghost warrior-female stood. She had bright red and blue coloration across her huge face and up and down her mandibles. Hair-like scilla covered her arms and chest.



“Howdy-doody, piddly-poody,” she said. She may have said something more formal in her own language. Translation A.I., though usually accurate in terms of semantic content, often found it hard to get the *tone* right in human-Ghast interactions.

“Greetings, representative of the mighty Ghast people,” said Markolos. “We have come from our homeworld, and also from Fountainview, to conduct some modest experiments and observations of your holy relic.”

“So it seems,” said the Ghast warrior. “Such is the rumor. What-what? My name is Tundrammagramata. Woah! Pip pip. You must come to the chamber of the likely.”

“So far, so good,” Xha muttered to Markolos as they followed the giant simian form across the antechamber and into a new hallway. This one was large and empty: peach-colored, scalloped arches above and below, and a walkway through its middle. The inertial gravity sim on this walkway was set at a higher level than had been the case in the antechamber. On the far side, they passed through another doorway and into a further hall, but here the grav-sim was much weaker. Markolos could think of no reason why it would vary from room to room.

“Here,” said Tundrammagramata. “Come.” She made a brief stridulation, an ear-dinny sound that caused the humans to flinch. Her bright-colored throat sac ballooned and bellied. “Come!”

“This is so very very exciting,” burbled Jari from the back of the group. “I’m fizzing, *positively fizzing* with excitement.”

They came into the space where the sphere was held.

“Oh,” said Xha in a low but perfectly audible voice. “Shit.”

The chamber was a long cylinder, dark-pink and variously lit, and at the midpoint the Edgeless Sphere hung in a suspension field. But the rest of the space was absolutely crowded with Ghast, all in warrior garb. Markolos’s system counted 27. *Oh shit*, indeed.

“Greetings!” Markolos said brightly.

Tundrammagramata turned and faced the group. “The globe is a valuable artifact. Sheesh! Blah. You have come to examine it and are permitted to do so. You have come to steal it, and you are unpermitted to do so. You have come to examine it and are not permitted, to steal it and you are permitted.”

“Hold up just one moment,” Lane said loudly. “We are scientists, and Fountainview has—”

“You are welcome here!” Tundrammagramata said in a loud voice. “You must proceed!”

“Madame Tundrammagramata,” said Markolos, stepping forward. “We come in all humility and respect. There have been misunderstandings between humans and Ghasts before, and sometimes those have led to regrettable eventualities. It is important that we communicate with one another clearly.”

“Of course,” said Tundrammagramata. She drew her bright, corrugated upper lip back, revealing her black, tusk-like teeth—the Ghast equivalent of a smile. “You are welcome here! We are welcome here! All are welcome! Knowledge of the Edgeless Sphere to spread the galaxy, once, only once, always, an infinity of time! Eek! Step forward, scientists, and examine.”

“We will do so,” said Markolos. “With gratitude, and—”

Tundrammagramata drew a crystalizer from her belt, pointed it at Lane, and shot him dead.

As soon as this happened, the crowd of other Ghosts began stridulating cacophonously and swaying.

Even as Lane's corpse was breaking into icy pieces and scattering across the floor, Xha had his burster out and was firing at Tundrammagramata. Markolos and Plaice followed suit.

"No!" howled Jari. Her face, projected onto the outside of her helmet, was huge with distress. "No no no!"

The first burst flared brightly off Tundrammagramata's chestplate, but Markolos's weapon followed up with a second, and a shaft was bored incandescently through the Ghost's chest cavity. Still smiling her Ghost smile, Tundrammagramata stumbled backwards and fell.

"Go," yelled Markolos. "Back to the ship. Abort the mission!"

"Not right," Jari cried. There was a different quality to her voice. "This isn't right—this isn't right at all."

"Behind!" shouted Xha, who had opened the gate to their escape. The chamber through which they had come, across the walkway, was filled with Ghost warriors. Some were standing on the walkway, others were floating up by the ceiling or down near the floor, in zero-g zones: legs tucked up, crystalizers out and aimed.

"Cover!" called Markolos. But there was nowhere to take cover.

A crystalizer beam struck the wall, breaking off super-cold shards of material. Xha aimed his weapon and shot one of the floating warriors. "It's no go," he called, and shut the door.

"Everybody, stop shooting," called Jari. "Everyone!"

Plaice, standing beside her, called out in bravado, "Let's blast them all and grab the blamed sphere." He aimed and shot the head of one of the swaying, stridulating Ghost warriors. As this individual crumpled and fell, the Ghost beside it brought out its crystalizer and fired back. The aim was precise, and Plaice collapsed into hundreds of brittle pieces, dead.

"Stop!" cried Jari.

The Ghost fired again, this time at the Fountainview chaperone. But though the beam hit home, Jari's suit only gleamed with the bolstering resistance of a military-grade reflector.

"It's a warsuit," said Markolos, aiming his burster and shooting the midriff of the Ghost with the crystalizer. "I *knew* you weren't just a sappy, low-level Fountainview nobody!"

"Everybody, stop," Jari cried again. "Captain—Xha—put your weapons down!"

Three Ghost lay dead, but the remaining crowd seemed more concerned with stridulating and swaying than returning fire. Markolos and Xha crowded behind Jari's bulky suit, the nearest thing to cover the chamber afforded. They kept their weapons out and aimed.

"What was the plan?" Xha asked Jari. "You were going to hand us over to the Ghost as thieves?"

"I didn't know *they* knew you were thieves," she returned. "My orders were to observe, to keep out of trouble if the Ghost did apprehend you, and if not—to take the sphere from you after you stole it, and return it to Fountainview for further study."

"You're no better than us—you're a thief too. Fountainview's holier-than-thou reputation has always been a sham."

"The relic would have been returned to the Ghost," Jari said, crossly. "But it wasn't supposed to go like *this*. Please!" She addressed the crowd of giant warriors. "Please, let us cease fire. I am not with them—I am an officer of Fountainview."

The Ghosts only grated and swayed. None of them were attending to their three fallen comrades. Nor was the group behind attempting to break through the doorway.

"We're dead," said Xha. "So I say—let's take a few of them with us." He aimed his burster.

"No, don't shoot!" Markolos said. He put his own weapon away. "Something else is going on here."

"Something else—apart from our slaughter?" Xha asked.

"Put your weapon away, Xha," the captain ordered. He stepped out from behind Jari's suit and took a step forward. Then another. He threaded his way between the giant bodies until he stood beside the Edgeless Sphere.

The Ghost stopped their hideous stridulating. It was suddenly, hugely silent.

"I am going to take this," he announced.

"Yes," said one of the Ghost. "You are going to take this. Hee! Eek! No. Yes."

Slowly, Markolos brought out the clasp unit from his backpack, directed it at the floating sphere, and connected it. Then, still moving slowly, he withdrew the item from its holding field and cinched it in front of his body. It shimmered with a weird, disconcerting gleam, but sat happily enough in its holder.

Markolos turned and began to walk back towards Xha and Jari. "I am taking the sphere," he announced again.

"Yes, yes," said a Ghost. And then another said, "No, no, you are not taking the sphere." And a third said, "You do not take the sphere, the sphere takes you. And yet another began calling out, in a rich singsong voice, "Yes, no, yes, no."

"What," hissed Xha, as Markolos reached him, "is going on?"

"We are returning to the *Trampoline*," Markolos replied. "With the sphere."

"What about Lane and Plaice?"

"You want to join them in the afterlife? Stay here." Markolos opened the gateway and stepped into the adjoining chamber.

The Ghost on the walkway stepped aside. "No, you are not taking the sphere," said one of them, and then immediately, "Yes, you are taking the sphere."

"Come on," said Markolos.

"I'm coming with you," announced Jari.

"Oh, sure." Xha scoffed. "So *you* can steal the sphere from us after we steal it from them? I don't think so."

"I can hardly do that now that you *know* about me," she replied. "But more importantly, I cannot stay here on this Ghast station."

"Well, that's tough," said Xha. "Because, traitor lady, here is where you are staying."

"Let her come with us," said Markolos. "Just so as you understand, Jari, that we're not going back to Fountainview."

"I'll make my own way back," she said. "But not from here. This place is about five minutes from going completely, murderously crazy."

All around, Ghast warriors were swaying. Some were moaning. Several had their crystalizers out, and one fired—the beam struck the wall and chilled chunks of the station's fabric broke away.

Xha returned fire, and the warrior clattered backwards. Nobody else reacted.

"Well we'd better move along," said Markolos.

Hurriedly, they made their way back along the walkway, back through the antechamber, and into the *Trampoline*, leaving two of their fellows dead behind them.

Markolos disengaged the ship and pulled away, and for the whole of that maneuver he was certain, dead certain, that the Ghast station was about to open fire with all of their weapons, atomizing them completely. But that didn't happen, and as soon as they were far enough from the brown dwarf, the hypengines engaged and they slipped into alacrity.

"Well," said Xha. "Does anybody want to tell me what the hell that was all about?"

### :3: Interrogation

1.

The disappearance of Muldone's ship was, for a brief time, the only thing anybody could talk about at Skyward Ho.

Things don't simply *disappear*, after all.

The Port authorities came out to see what was going on. "There's no record of the craft taking off, and no sensor images of it in orbit," they said. "It could not legally have launched without notifying us and clearing its portfee debts! Where has it gone?"

"Search me, my dudes, dudettes, neutdudes," said Wei Li giggling. "Maybe it was a magic trick. Abracadab...", he added, waving his hand vaguely, and getting confused. "Cadabra. Ab. Whatever."

Wei Li had taken to wearing stuporpatches, and spent his days lolling in his sling, laughing at the passage of clouds overhead, or the squirling trajectories of bird flight, or the to-ing and fro-ing of his fellow marauders. One big patch on his neck after breakfast, and he freelaxed into most of the day.

As for the rest of the crew, some had drifted away, giving up on Muldone's craft and whatever relic he had brought back from the White. They had money to make, and went off to make it—to scam it, steal it, hustle it, or maybe to settle enough of their port-debts to allow them to take off and search out a new relic. But some stayed. Thalassa, for instance, felt in her gut that the strange story of Muldone's arrival and disappearance was not yet over. That didn't mean she could explain what had happened.

The Port Authority chief investigator asked her: "You witnessed it? In real time? What do you believe happened to this craft?"

"I did witness it," she said. "And what I witnessed made no sense. The shield did not lower. The craft did not take off. It simply—winked out."

"This is not possible."

"Indeed not."

"He claimed to have returned from the White with a relic. He called it major—immediately before he switched off all communication and refused to engage with us further."

"One might think his disappearance was related to that fact," said Thalassa, looking past the officer at the rest of his entourage. They were all dressed in purple and yellow Port livery and expensive jewelry. A nice sinecure, most of the time, being a Port officer— sit back, let the legitimate operators pour their fees and taxes into your financial receivers, every now and then chase up a delinquent or set the police on an actual lawbreaker. But this was different. A whole ship vanishes, and suddenly you have to explain how you let this happen, tell your higher-ups what happened to it, and above all assure them it won't happen again. What if it became a regular occurrence? For all this officer knew, Muldone was even now flying into a fabricator habitat to replicate his new relic, this machine for making ships vanish. What if it became widespread, an addition that allowed any ship to blink into and out of any port in the galaxy, fee-free? That would be commercially disastrous.

"It can't have alacked out," said the officer, in a determined voice. "I don't care what geegaw Muldone brought back from the White. *If* he even brought anything! He didn't declare it, log it, he didn't even exit his craft. He just sat there. Did you see the relic?"

Thalassa shook her head. "And even if he had done, you can't tell what a relic is, or does, just by looking at it. Not necessarily."

"Well," said the officer. "I say it was all a bluff. He had nothing. Nothing! That explains why he didn't turn off his shields and come out. He was embarrassed—he'd boasted he'd discovered a major relic, and in fact he was coming home empty-handed. He was humiliated, he couldn't face you—couldn't admit the truth to us all. So he just sat there, like a lemon. That explains his bizarre actions."

"It doesn't explain how his ship just disappeared," Thalassa pointed out.

The officer walked across the space where Muldone had once been parked. There was a light wind, and it blew bits and pieces over the glassy surface, wrappers and pieces of plastic, dead leaves, strands of grass. He peered at the ground, prodded it with the toe of his boot. His subordinates, gagged together, stared.

"I've been wondering," he said, coming back over to Thalassa, "if he went *underground*. You know, maybe a pothole opened and he fell through. Or something. We do sometimes get potholes. But that runway is in a fine state of repair."

"A testament to the excellent maintenance work you undertake," said Thalassa, deadpan.

"It's a damn mess," sighed the officer. "A damn mystery is a damn mess. You don't, you simply *don't* leave the port without notifying me first, and wearing a locator tag. As for your friends—"

"They're not my friends," said Thalassa.

"I have reasons to suspect your comrade Wei Li is utilizing illogical intoxicants," the officer said. "I could have him detained."

"I'd say Wei Li does a pretty good job of detaining himself with his intoxicants, and you might save yourself the bother."

"Yes," the officer nodded. "I see from records that it's been more than a year since he last had a mission offworld. Been here since then. He keeps stacking up his portfees. He needs to clear those, you know."

"I know."

"Well, well, you—don't leave port. Okay?"

"Since you have impounded my ship," Thalassa said, "it's not likely I will."

"I will come back and ask you further questions at, ah, a further time. At a later time. At—don't you want to know my name?"

"Not really."

"Oh. Oh. Well, the case was logged with the open database at the office portal on the collarchive if you need to—" He marched back to his flitter, and his entourage of junior officers scurried after him.

Thalassa went back to her pod and brewed herself a cup of ertsatz. She pondered the strange disappearance of her friend—for Muldone *was* her friend. More than a friend. The only question that mattered was whether he was still alive or not.

The rain probably had something to do with it. Thalassa knew Muldone had tinkered with his shields, and that his craft contained throughout it various jerry-rigged “improvements,” none of which merited the confidence Muldone had in them *as* improvements. How he had managed to run his shields, continuously, for so long, inside an atmosphere, was a baffling question. It was certainly possible that endless buffeting by air molecules had ramped the shield-generator to near breaking point, and the addition of a swarm of fat raindrops had pushed it over the edge. But in that case you might expect the shields to fritz out, and perhaps the engines to melt and break through the rear of the craft. Possibly—though it was less likely—an overtaxed shield generator might explode, though there was nothing fissile in there, nothing liable to blast out a stormfront of expanding heat and gas. At any rate, there had *been* no explosion—unless Muldone had somehow slipped through dimensions, arrived somewhere else and *then* exploded.

Thalassa attended to some business, checked her portfolio in the collarchive, and then took a nap. As she slept, she dreamed a dream: a voice, persistent but tiny, calling to her. It didn’t sound like Muldone. It sounded like a squeaky door hinge. But it *was* Muldone, for all that. “Down here,” Muldone called to her. “Thalassa! Thalassa! I’m down here.”

In her dream she looked down, and saw that Muldone’s craft was still on the runway, shrunken down to the size of a rice-grain. “How did you do that?” she asked. “How did you get so small?” But all Muldone did in reply was weep and wail. “Your voice, your voice is so big and booming now, it hurts me, it’s going to crush me, your words are like boulders falling on my head!” he cried.

Thalassa woke suddenly, a myoclonic jerk. A ridiculous dream. An impossible explanation. Still, she took a scanner and went outside and walked up and down the runway where Muldone had once been parked. There was nothing but the flotsam and jetsam of the port, rubbish and dead things. If Muldone had been shrunken to a tiny size, wouldn’t his shields still be glimmering? Wouldn’t his transponder still be functioning, pinpointing his location to the world? The valuable plasmetal alloys of his craft’s fabric would still show up on scan. He was not there.

## 2.

The next day Fountainview arrived, in force, compared to which all the pettifogging bluster of the local Port authorities was as nothing.

The main Fountainview vessel was a kilometer long, and it swung slowly from horizon to horizon on low orbit, close enough to make out many of its details with the naked eye. The flitter that came down was military grade. It landed on the exact spot from which Muldone had vanished, as if tempting fate to repeat the mysterious action with this much larger craft. A deputation strode confidently out onto the surface of Skyward Ho: five human beings, two Ghast, and a single Shard, rolling over the glassy surface of the runway on its smoothly choreographed tentacles. Of the eight, all but two wore full-body suits, the kind worn by staff permanently stationed on Fountainview—life-support for those whose genetic material had been irrevocably altered by the White Fountain. The remainder of the team were presumably ancillary to the actual station. But judging by the richness of their attire, and their supreme self-confidence, none of them were *minor* functionaries.

They had not checked-in with the port authorities. They were not interested in any of the other scavengers. They came straight to Thalassa, where she stood outside her pod, hands on hips.

"Can I help you?" she asked.

"We have a legal notification for you, Thalassa abn Kawa abn Statua," said one of the humans. She was an individual in a green imagetoga, unusually tall even for a wisp, leaning forward to bring her face down to Thalassa's level. She wore a globular helmet, with her face projecting in enlarged form upon the front. The higher gravity of Skyward Ho explained her strained expression, but she moved freely enough.

"The notification can be accessed via the tags that we have now placed on all your personal feeds and portfolios."

This was a monstrous invasion of Thalassa's privacy, but there was no point in complaining about such a thing to Fountainview officers. They were a law unto themselves. Literally so, in fact.

"Notification means warrant?" Thalassa asked. "I inquire for clarification. Also I would like to know your name."

The wisp did not answer this. "All pertinent material is posted. You are invited to come with us."

"Onto your flitter?"

"To board our main ship."

Thalassa looked up. The main ship was now appearing over the western horizon and slipping easily along the glistening sky. "Allow me to collect a few things from my pod," Thalassa said.

"Your pod will come with us," said the wisp.

This did not bode well. It rather looked as though Fountainview was taking her into long-term custody. Still, there was little point in protesting, and even less in trying to escape. As two of the Fountainview party folded her pod into a portable lump and carried it back to their shuttle, Thalassa tried: "My friends will wonder where I have gone."

"They are not," said the wisp, smiling broadly, "your friends."

"No," Thalassa said. "Can't argue with you about that."

The interior of the shuttle smelled of lavender and cleanness. The portal closed silently and the craft whipped upwards. The shuttle's inertium units were so finely tuned that Thalassa didn't feel so much as a tremble. Through the transparent portal, the ground dropped away with all the unreality of a rapid zoom in a picture show. In moments, the sky empurpled and grew black. Skyward Ho's horizon bent from flat to curved like a bow being drawn, and moments later, as the stars began pipping into view, the docking antechamber of the Fountainview craft swallowed the shuttle.

The interior of the main craft was set to Fountainview atmospherics, which meant that the escorts could now remove their helmets. Thalassa, on the other hand, was obliged to accept a cape of smartcloth that wrapped itself around her upper torso slightly more tightly than was quite comfortable; then a pair of gloves, and a cylindrical helmet.

The wisp opened the side of the shuttle, and stepped out in one long stride. As Thalassa scuttled out behind her, she said, "To ensure my fullest cooperation, it would be good to assure me that I will be free to leave when you have asked me your questions. Will a flitter or shuttle be placed at my



disposal? I have a craft down below, though it has been impounded.” Her voice, amplified by the helmet, sounded harsh.

“Impounded,” said the wisp. “But yes. It is amusing that you feel you can tell me my job. To ensure your fullest cooperation, indeed!”

They walked a pastel-hued corridor, the wisp in front, Thalassa next, and the remainder of the party coming up the rear.

“There is, I’m afraid, nothing I can tell you,” said Thalassa. “Nothing at any rate that you don’t already know.”

“Defiance,” said the wisp.

“On the contrary,” said Thalassa, “a compliment, to the excellence and comprehensive skills of Fountainview’s intelligence gathering capacity.”

The interview, or interrogation, took place in a domed, pale-mauve space. Seats and a lean-bar emerged from the floor, and Thalassa took a seat. The Fountainview officer still had not disclosed her name. Thalassa checked her internal feed: All the official attachments were accessible, and doubtless this wisp’s name was somewhere amongst that material. But if Thalassa accessed any of this material, Fountainview would see that she had done so, and she didn’t want to give them the satisfaction.

The wisp sat opposite her. The remainder of the party stood, meters away, by the room’s entrance.

“Thalassa,” she said. “Let me say at once: I am not interested in trying to *catch you out*. There will be no trick questions.”

“Trickless,” said Thalassa. “Very good.”

“We already know most of it—your former history with Muldone, your unfortunate run-in and debt situation with the Skyward Ho port authorities, the impounding of your craft. We know that you are *better* than the scums and bums into whose company you have fallen.”

“They were all of them better, once upon a time. Each and every one of them. But shit happens, you know? Things go wrong, and then go wronger, and all of a sudden you find yourself out of options, scraping along the bottom. It could happen to anyone.”

The wisp smiled knowingly, as if to say: *to your type, maybe. Not to me.*

“You owe them no loyalty, is what I’m saying. And I’m also saying: Our authority overmatches the Port authority. If you help us, we can help you: get your ship out of impound, clear your outstanding debts. There are even a few leads we could give you. Not to anything mega, of course, but to the odd smaller item, for you to track down. Stuff that’s barely worth *our* while to pursue.”

“If you’re telling me that *any* relic, no matter how small, is beneath Fountainview’s notice,” said Thalassa, in a level voice, “I’m afraid I just don’t believe you.”

The wisp nodded at this, acknowledging the truth of it. “On the other hand,” she said, “if you insist on defying us, or if you lie to us, then you might find your sojourn here extended longer than is comfortable or convenient for you. We are very patient. We can wait for you to come ‘round.”

“*Sojourn* is a very Fountainview kind of word, though, isn’t it?” Thalassa said.

"I should also point out," said the wisp, "—which you would know, if you had accessed the legal attachments—that this interview will be triaged by a truth-and-lie A.I. If you lie, we will immediately know. And *if* you tell a lie, no matter how small or trivial an untruth, you will be charged with perjury, detained and fined."

"Here's what I think," said Thalassa. "I think strange things happen with relics all the time. It's only been a few years, but already there are plenty of stories circulating Skyward Ho: pilots bringing back relics that blew up in their faces, or turned their bones to liquid, or sprouted follicles in their flesh and drained them. That swapped their hands and feet upon their limbs. That left them unable to speak and able only to comprehend words spoken to them in Ghast. A relic that seemed inert, and lay with a bunch of other dusty crap at the back of a pilot's pod for years until suddenly it gleamed with a bright light and blinded its discoverer. Some relics make us wealthy, and lead to tech that enriches the lives of humans, Shards, and Ghast alike. Some do nothing. Some have malign and unpredictable effects. This? This business with Muldone? Maybe it's just another example of that."

"The port authorities believe he hadn't discovered a relic at all," said the wisp. "They believe he was bluffing, had come home empty, and was too embarrassed to leave his craft on that account."

"If that were true," said Thalassa, shrewdly, "then you wouldn't be here, would you? And here's another thing I believe. I believe Muldone not only discovered a relic and brought it to port, but you *know* that he did. If I had to guess, I'd say that you have an idea what kind of relic, too. Do you want to tell me what it is?"

"What I want is quite the other way around. You must tell *me*." The wisp leaned in. "You must tell me truly, or face the consequences."

Thalassa did not need reminding about the efficacy of Fountainview's truth-and-lie algorithms. Historical lie detectors had worked on crude physiological principles: blood pressure, pulse, respiration, skin conductivity as a person responded to a raft of questions. They were notoriously unreliable. A.I. truth-and-lie protocols checked a thousand qualities: physiology and body-language, electrocephalic patterning—cross-checking everything against a large and continually adjusting database containing everything that was known about the questionee. It was impossible to fool or baffle the algorithm, scrupulous in its exactitude. Impossible to evade a direct question.

Thalassa readied herself, adjusting her idiom. Fountainview doubtless knew a lot about her. Perhaps all available data pertaining to her entire life was in their possession. But they didn't *know* her, and they couldn't gauge when she sounded like herself, as opposed to when her expressions were slightly off. A slim chance is better than a skeletal chance, and a skeleton chance better than no chance at all. And if it didn't work: well, she'd perhaps not be that much worse off than she was already.

"I could start with a raft of trivial questions," said the Fountainview officer. "But I'm going to pay you the compliment of getting straight to the heart of the matter. You and Muldone are friends, yes?"

"Yes."

"Go back a long way, you two?"

"Sure. Long way."

"Were you lovers?"

Thalassa found it easy to slide back into her adolescent self. "Oh man," she said. "Maan. Seriously?"

"I am not a man," said the wisp. "Please answer the question."

"I guess."

"I am not interested in your guesses. I want precise and truthful answers to exact questions."

"The true-lie A.I. can only handle the cut and dry, yeah?" smiled Thalassa, adding immediately:

"Sure, sure. You want a straight answer. My straight answer is, yeah. For about half a minute. I don't mean literally 30 seconds—it's a manner of speaking. My manner of speaking is that we engaged in a brief physical thing, relationship-wise."

"Wise?"

"Or foolish, I wouldn't disagree. There's a lot of folk hanging around the port at Skyward Ho, with not very much to do. Sometimes we fall into one another's beds. Often we don't."

"But your relationship with Muldone predated your coming to Skyward Ho."

When Thalassa didn't answer, the wisp repeated it in a more threatening tone.

"You want me to answer? Only you haven't phrased that as a question."

"How long have you known Muldone?"

"I met him seven years standard, and some, back. But can we say we truly *know* another human being? I don't count Ghasts. Nobody knows what the hell they're on about, half the time."

"You two came to Skyward together?"

"As friends."

"Partners?"

"Just friends. We spent most of our time on separate projects. Then I got into this silly old trouble with the port authorities. Honest to Gods, in whom I don't believe, it was only, say, 20 percent my fault. Mully was always that much better at keeping his nose clean."

"Keeping his nose clean?"

Thalassa leaned in, bringing her face within a few centimeters of the Fountainview officer. "Philtrum to bridge," she said. "Nostrils and all."

The wisp held her gaze, and then sat back. "You are correct, more or less," she said. "We do not know for sure, but we have strong suspicions regarding the relic that your former lover Muldone retrieved, and which, foolishly, he took straight back to Skyward Ho instead of bringing it directly to Fountainview."

"I'm sure Fountainview was next on his itinerary to visit," said Thalassa.

The wisp's voice hardened. "Did he notify you that he was going after this particular relic?"

"He was not a big notifier."

"Is that a yes, or a no?"

"In answer to your question? I'm responding negatively."

"Was he aware of the nature of the relic before he left?"

"Don't know."

"Did he discuss it with you?"

"We were not in a discussy place in the months before he flew off." As the wisp scowled, Thalassa added: "Sso that's a no."

"Thalassa, what *was* this relic? The one Muldone brought back?"

Thalassa shook her head, more or less. "I don't know nothing about that."

"Did he discuss it with you, at any point, before or during his mission?"

"I don't know nothing about that."

"Do you know how it functions?"

"I tell you," she said, "I don't know nothing *about* it."

The Fountainview officer paused. The true-lie A.I. had evidently cleared all of Thalassa's statements as true. She smiled. "I trust you do not consider me adversarial. I speak for the whole of Fountainview when I say that this is not a *punitive* matter. Your ex-lover is, we believe, still alive—and has, we believe, chanced upon an extraordinarily valuable relic. It would not exaggerate matters to say that the entire future of the galaxy depends upon Fountainview taking charge of this item. Your friend Muldone will be extremely well recompensed, believe me; as will you, for helping us locate him—and it. Given the stakes—I am perhaps oversharing when I say so, but I feel you and I have established a certain rapport—given the stakes, for every living creature in this galaxy, I can say that *well-recompensed* means sums of money beyond your imagination. But first we have to track him down, and we believe you can help with that."

"Question and answer," said Thalassa. "This is a two-way, yeah? So let me ask you: If Muldone had zapped away to some new location with this relic, and I truly knew where he'd gone, would I be sitting around uselessly in a pod-tent on a runway on Skyward Ho? Wouldn't I be making my way to meet him?"

"Your ship is impounded."

"Given the stakes here, don't you think I'd find a way? Recruit somebody else, hitchhike on another ship, steal my own out of impound? Do you think I'd just be sitting around if I knew where he was?"

"I believe this to be a rhetorical question. And the salient is: Do you know where he is?"

Thalassa leaned hard into the disgruntled adolescent performance once more. "I *told* you, I told you *already*, I don't know nothing about any of that."

Once more, the Fountainview wisp consulted whatever information she was being fed by the true-lie A.I. Then, forcing herself somewhat, she smiled. "Very well. It was discussed, amongst the ruling committee, whether we might need to detain you on board. But you know what I think? With your ship impounded and none of your lumpenproletariat compadres willing to give you a ride, depositing you back on Skyward Ho is, in effect, to sequester you there. We can find you again, if we want to. Unless"—she leaned forward again—"there is more you wish to say?"

"I don't know what you want me to say."

"I want you to say *I understand*. I want you to say *I will help you*."

Thalassa said: "I don't understand. I cannot help you."

Ping ping ping, went the true-lie A.I., in the wisp's ear, or so Thalassa presumed. True true true.

3.

Thalassa was escorted from the interview room by a junior Fountainview functionary, a warp with an unusual facial adornment—their nose had been split lengthwise down the middle, with gold pins fixing each of the two flaps to the cheeks on either side. The flesh and bone that was thereby displayed was sealed behind a transparent layer, a triangle of pink framing an upward stroke of white. Thalassa flinched a little on first seeing this, but after a few minutes she found she could look without it upsetting her. She had no idea why they had altered their appearance in this way. Perhaps they thought it made them look more attractive, the way people who wore earrings or other facial piercings did. And indeed this person also had an elaborate mesh, draped over and piercing through their right ear.

"Are you taking me to the shuttle?" Thalassa asked. "I also need my pod and possessions. They were brought up on the shuttle."

"No shuttle," said the other. The alteration to their nose gave their voice a blunted, blocked-up quality, as if they were speaking through a heavy cold. "Just a drop-bell."

This was not so comfortable a way of entering a planetary atmosphere, but it would at least get her down. She had been picked up in a large shuttle in part to over-awe her, and now she was being, in a small way, humiliated by being returned in a mere drop-bell. "And my gear is in the bell?"

"I assume so."

They walked on. After a moment, the other said: "A good interview performance, I thought."

"I'm sorry?"

"Your interview. You did very well."

Uncertain what to say, Thalassa responded: "Thank you?"

"Oh you're welcome. It was an expert performance."

Thalassa stared at her escort. "You were there?"

"I watched on the screen. There's a lot riding on this, you know."

"This?"

They looked at her, as though she was being obtuse. "The relic. The relic your lover, Muldone retrieved. A lot riding on it. Still, you did well."

Thalassa decided the best thing would be to ignore this individual, so she did not reply. But as they came around the curve of the corridor, she found she could not stay silent. "I'm sorry, what do you mean, *did well*?"

"You handled the true-lie A.I. like a pro," said the other. "A pro! Your questioner was fooled, but I saw what you did."

"And what did I do?"

"You understood how literal the A.I. is. Your use of the double negative! Very nice. Sometimes we get people in for the interrogation and they try too obviously to game their answers, phraseology like propositions in a handbook of logic, stipulating A, excluding not-B, but not recusing not-A and so on. But when they try it like that, it betrays their true intentions. They tie themselves in knots. But you were subtle! Sliding into a *slightly* less correct form of language, remaining idiomatic within the parameters, and at the crucial moment dropping one elegant double-negative. Bam! Done."

"I don't know what you're talking about."

"Ah, but see, if the true-lie A.I. were still monitoring you, it would flag *that* as false. Because you *do* know what I'm talking about." They turned their disfigured face towards her and beamed, positively beamed, a wide smile. "It's alright," they added. "I'm not about to report you. On the contrary, I'm here to help you. You can trust me."

"Right," she said, resolving that under no circumstances would she trust this bizarre little person. "Let's just grab my gear, and put me in the bell. Then I can get back down to Skyward Ho, alright?"

"Oh, much more than that! I'm coming with you. Thalassa, not everyone in Fountainview marches in lockstep. I agree with my superiors that this relic is important, but I don't agree that the best course of action is to recover it and lock it away in Fountainview Station's vaults. It's a much bigger deal than that."

"What?"

"You're unsure of my motivations. And I can tell you, I have the greater good in mind—that's what motivates me. I only care about the greater good: humans, Ghosts, Shard, the whole galaxy. But I can see that there's no reason you'd believe that just on my say-so."

"Fellow," Thalassa said, with a certain haughtiness, "I have no idea what you're selling, what scam you're proposing, but whatever it is, I'm not interested. Like I told your interrogator woman, I don't know where Muldone is, or the relic—or even *if* he ever recovered a relic. Just drop me back down planetside and leave me alone."

"I have a counter theory," the other said. "You may not know where Muldone is, but you do know that he brought a relic with him when he returned from the White, and most of what you said in the interrogation room was a cleverly crafted lie. So I suggest we both return to Skyward Ho, and with my help, you can evade further arrest by Fountainview, as we work together to reach Muldone."

Thalassa stopped walking. "Say what?"

"You want me to repeat myself?"

"This is a trick, yes? A continuation of the interrogation outside the room, trying to get me to admit to a collaboration with Muldone, or something? Because it's extraordinarily clumsy."

"No trick," said the other. "It's genuine. You can trust me."

"Just on your say-so, I can?"

"It doesn't really matter, at the moment. What matters is that we get away. I'm supposed to escort you to the drop-bell, see you inside and away, and then return to my duties. When I get into the bell with you, the ship will know I've absconded. Then things will get a little hairy, for a while. But don't worry, I'm prepared for that. We can give them the slip. And then get on with the important business of *tracing the relic*."

"You're crazy," said Thalassa. "Permit me to refuse your bizarre offer of criminal conspiracy, and request that you leave me the shit *alone*."

"Here we are, though," said the other, gesturing. The two of them had come into a bulb-shaped chamber, in which a row of seven drop-bells sat like pots. The lighting was pale pink, and the walls of the bells were all transparent. "And I haven't told you my name. I'm Mapanje."

"A name I hope never to have to use," said Thalassa, smiling, "since I trust I will never see you again. Which of these has my kit?" But she didn't need to ask, because she could see, in the bell furthest on the right, the folded-up package that contained her pod-tent and belongings.

She took a step towards this bell, and then she stopped.

"Oh dear," said Mapanje. "This is awkward."

The wisp from the interrogation chamber was there, standing with her back against one of the scalloped indentations of the wall. "Hello again," she said.

"You were monitoring me," said Thalassa.

"Of course we were."

"This is most awkward," said Mapanje.

"Look," said Thalassa, putting up both of her hands, so that the palms faced towards the interrogator. "I don't have anything to do with this. You said I could go, so I'm going. If you need me, I'll be down in the port, you know where. If nose-guy here is in trouble, that's between you and him. I don't know what he was babbling on about, I assure you."

"You do, though," said the interrogator, stepping forward. "And of course it means you cannot now leave the ship. I'm afraid you will have to be detained."

"Look," Thalassa began. But then there was a snapping sound. Because she wasn't expecting it, it took a moment for Thalassa to recognize it as the crack of a burster being fired, and to connect the sound with the reddened oval that opened in the interrogator's tunic. Threads spiraled out and drifted down, wisps of steam rose. They weren't threads of fabric, but of blood and flesh. The interrogator took a step back, then put her hands to her midriff, and then slumped against the wall. There was a surprised expression on her face.

"Inside," urged Mapanje, prodding Thalassa towards the bell on the right. It opened itself, and Thalassa found herself inside, her legs on either side of her pack. But then the other was climbing inside as well, and the space was suddenly much tighter.

"You shot her," Thalassa said, and by saying it she brought the fact of what she had witnessed into her actual consciousness. "Hell, blood, and crap you *shot* her!"

"I'm afraid so," they replied. "And now we really had better go."

"The ship won't let you depart after that! It will lock down all exits—after, after *that*."

"I have," said Mapanje, fiddling with the mesh that covered their right ear, "anticipated this. A great deal of effort has gone into ensuring that external forces cannot override any part of the ship's operation, but it's still possible for an insider to be able to—ah! Here we go!"

The drop-bell's inertium was a lot more rudimentary than the shuttle in which Thalassa had come up, and she felt a lurch in her viscera as they departed the main craft. Through the transparent walls, she saw the aperture close, and the whole flank of the giant craft shrink down until the entire ship was visible against an acne of stars behind. Then the heat of reentry blurred everything red and yellow, and the bell shook and trembled. The heat grew incandescent, and Thalassa put a hand in front of her eyes.

"You shot her," she repeated. "She was your superior officer!"

"She was called Seren of Fountainview, and she was more than my superior. She was my mother. Or one of my mothers. Hold on to something, it's going to get a little shaky now."



## :4: The Strange Room That Terrified the Heart of Me

1.

The *Trampoline* slipped into alacrity and departed the Ghost station at speeds much in excess of the speed of light in a vacuum, which, like a crescent moon, is C.

In space, all velocities exist in the zone between “greater than zero” and “less than the speed of light,” in the same way that all triangles exist in the zone between “polygons with more than two sides” and “polygons with fewer than four sides.” That’s just the way the geometry of reality is made. Before the discovery of the first alacrity relic, out of the White Fountain, spacefaring species could only go faster than light by using complex, energy-hungry machinery to warp space. This was a difficult—and often dangerous—method, but the risks were accepted as the price worth paying for interstellar travel. Then the first (of seven) alacrity relics was discovered, and faster-than-light travel became much easier, required vastly less energy, and was considerably less dangerous. The relic was portable—no bigger than an easy chair, compatible with the full gamut of existing spaceship engines (mass-ejection drives, photonic conics, chemical exhausts) and simple to steer. Most of all, it and its successor units all proved very easy to replicate, which meant that it spread rapidly through the galaxy, becoming the default mode of faster-than-light travel for all three species.

Markolos input a neutral destination, one of a number of unexceptional planetary bodies mostly given-over to farming, to take stock.

“Can somebody please tell me what the hell-in-orbit *that* was all about?” Xha asked.

“Plaice and Lane are dead,” said Markolos. “That’s what that was about.”

“We have the relic,” said Xha. “They just let us *walk out* with it. Plaice and Lane are dead? We should *all* be dead. Why aren’t we? That—that—that is what I’m asking.”

“I don’t know,” said Markolos. “Ghost are sometimes unpredictable, but they are not absolutely fucken *illogical*. They don’t just hand over precious relics to strangers.”

“Shooting Plaice and Lane with a crystalizer doesn’t read to me like just handing over the sphere.”

“And yet here we are, sliding through the alacrity, and the sphere is ours.”

“I don’t know how that happened,” Xha agreed. “And as for you—” he turned to the fat-suited Fountainview operative, “perhaps you could start telling us the truth about yourself?”

For a while Jari didn’t reply. She had turned off her helmet display, presenting a featureless blank globe to the world. Her voice came out of the blankness: “I don’t understand what happened. With the Ghost. That’s not like anything I’ve ever seen before.”

“And what *have* you seen?” Xha scoffed. “You’re what, twelve years standard? Not much older, I’d say.”

“I’m an experienced officer,” Jari replied. “You shouldn’t judge by appearances.”

“You were assigned to us?” Markolos asked.

"We're not interested in *you*," Jari said. "Fountainview has bigger targets in their sights. Do you know who hired you to steal this sphere?"

"We take the money," said Markolos. "We don't go poking into things just for the hell of it. If our employer wanted us to know more about them, they would tell us. I'm assuming *you* don't know any more than we do? That's why you infiltrated my crew—to trace the people who hired us?"

"And bring the wrath of Fountainview down upon their heads," snarled Xha.

"We know very little about the people who hired you," Jari conceded. "And yet, it seems we know more than you do."

"We are professionals," snapped Xha. "We are hired to do a job, and we do it."

"With a 50 percent attrition rate," said Jari.

Xha whipped out his burster. "I don't think it's altogether wise, you mocking us," he said, in a dangerous voice. "You are marooned, my girl, on our ship, light years from home."

"You want my helmet?" said Jari. "Come and take it."

"Wait," Markolos said to Xha, holding out one hand. "Don't shoot her just yet. Tell us what you know, Docta. Tell us what's going on."

"What's going on is that you have just stolen a priceless relic from a notoriously warlike species. In the process of doing so you have killed a number of them."

"They let us! Let us walk away with it!"

"Something..." Jari began, her expressionless globe-head sinking a little and then perking up.

"Something strange happened there, I agree. But the fact remains. You were hired by whom-you-do-not-know to steal something, and you have executed your mission with extraordinary clumsiness."

"Is this a *death wish*?" Xha called. "You keep right on insulting us to our faces, as our comrades corpses are still cooling, and see how far it gets you."

"At last, a plan I can really get behind."

"So tell us: Who *did* hire us?" Markolos demanded.

"You really don't know?"

"You say Fountainview knows—or, you say they have some idea. Perhaps you would care to share that information with us?"

"You were happy to remain ignorant before," said Jari. "Now you want to know?"

"Things have not gone to plan, as you so pointedly remarked," said Markolos. "We were hired to take the sphere, and this is something we have done. Maybe our best option now is simply to deliver it to our drop-off, as originally agreed. But we made that agreement before we realized that Fountainview would be all over us—and before our two crewmates got themselves killed."

"Before you yourself killed four Ghast individuals."

“That too. And here’s what I’m thinking: Maybe we have other options. Fountainview seems pretty interested in this sphere. Maybe we deliver it to your people, and you offer us better terms—including protection from our original employer.”

“Fountainview is a neutral body,” said Jari. “Humankind, Xenoghast, Shard—all three mainline species make up its fellowship. Our business is to monitor the White Fountain, and to keep oversight on all the relics that emerge. Any one of these relics could have the potential to destabilize the galaxy—or transform it into a utopia. Any one could be a death-dealer on an unprecedented scale, or could dissolve the structure of society on a thousand worlds, or do something hideous that we can’t even anticipate. Oversight is an absolute necessity, and Fountainview must have the power to do what it has to do. You think we would sacrifice its moral authority, and piss off the Xenoghast—one-third of its constituent base—just to get you a slightly better illegal deal than the illegal deal you previously brokered?”

“I’ll take that as a no,” said Markolos.

Xha fired his burster. The air inside the cabin fizzed and mewed, and a smell of ozone expanded throughout the small space. The beam struck Jari in the middle of her chest, and her suit immediately sparked. It flared. But the burster beam did not penetrate. As water poured on a stone separates into petals of flow and tumbles away in droplets and splashes, so did the energy directed at this target spread out. Markolos felt the heat wash over him, and he staggered backwards. The walls of the cabin spat and bubbled like fat thrown on a fire. Xha yelled, in pain or frustration, and dropped his weapon. The small space was filled with the smoke of burnt plasmetal, that eagerly bitter stench of it. For several moments, Markolos could see nothing. He and Xha were coughing. Then the ship’s system kicked-in, purging the foul air and replacing it. Xha was sitting on his ass. The walls were corrugated with blobs and runnels where the material had melted and then reformed. A power unit was fried. There were scorch marks on the ceiling.

Coughing, Markolos picked up Xha’s burster from where it had fallen, and pointed it again at Jari. A futile gesture.

Jari removed the opacity from her helmet. “You want to have another go?” she asked. Her expression was not mocking. Rather, she looked mournful.

“Let’s take stock,” said Markolos, coughing again, taking a breath. He wiped his free hand down his face. “You’re in a pretty impressive suit, for sure. I commend you.”

“You think I’d step onto your ship wearing a paper toga?”

“Military-grade suit,” said Markolos. “You’re still dead outside it.”

“You’re saying removing my helmet is liable to kill me,” said Jari, “and I say again: Come here and try taking it off. See how far you get.”

“She’s lying,” gasped Xha. His face was scorched, the hair on his chin and cheeks blackened to burnt stubble, and his eyes were red and watering. He got up.

“You are in a military-grade suit,” said Markolos, “and it may be that there’s nothing we can do that can harm you. But though your suit is fancy, it is not a spaceship. If we pitched you through a spacelock into the vacuum, you’d just drift. Is that how you’d like to die? I don’t know how long your suit can keep you alive: weeks? Years, maybe? That’s a long, lonely time to be drifting light-years from anywhere, in the ultimate desert of space. You would, what—die, eventually, of old age? I’m not known for being soft-hearted, but even I would think that a cruel way to die.”

"My suit is not a spaceship," agreed Jari. "Full marks. This perceptiveness must be why you are the captain, and Sieur Xha, here, is a mere cabin boy."

"Give me the burster again, Cap," growled Xha. "I reckon I can find a vulnerable spot on that suit if I aim carefully enough."

Markolos looked down at the weapon in his hand, and tucked it away in his belt. "You have the suit, Docta Jari. But we have the ship. If you kill us, you'll find the ship will not respond to your commands, and there's no way you can override that. Even to try would be to provoke self-destruct. I don't know—" Markolos smiled, and opened his palms to her, "maybe your suit is potent enough to protect you against even that. But where would that leave you? Shelled out of this craft like a pea from its pod, drifting in space. So what do you do? Put out a distress signal and it crawls, light-speed, across the gulfs of nothingness. Maybe it's picked up by somebody. Maybe not. Years and years pass, alone, drifting, until you run out of air—or your recycled water becomes too ureic to drink, or you just succumb to despair and take off your own helmet. I cannot believe this is a future you wish to inhabit."

"There isn't a weapon you possess, Captain, that could injure me, wearing what I am."

"I disagree. The ship listens to me, not you. Here's an idea: What if I seal you in this room, then pre-program the ship to autodestruct—while Xha and I exit *with* the sphere, in the ship's evacbell, and you're flown automatically lightyears from anywhere. Or fly it into a star. I lose my ship, sure, but the more I discover about this Edgeless Sphere, the more I think I can trade it into wealth more than sufficient to get me a new ship. That sounds like a winning stratagem to me."

"A bit scorched-earth," said Jari, wrinkling her nose. "You'd torch your entire ship because a teenage girl wouldn't put her burster in safety-mode? Think of the mockery you'd endure from your fellow pirate captains."

"Sometimes circumstances force you into extreme actions," said Markolos. "I'll deal with any mockery. The question is: What are *you* going to do?"

"You're going to suggest an alternative?"

"Let us agree," said Markolos. "Come to an arrangement. That's a military suit. It will have weaponry. You're going to have to disarm. In return, we can take you to a station, or maybe a planet."

"Not back to Fountainview?"

"In light of what you've said, no. I think we'd best give Fountainview a wide berth."

"So you're going on the run from the Xenoghast, and also from Fountainview? Good luck with that."

"Your concern is kindly meant, I am sure. But do we have a deal?"

There was a long pause. "Captain," said Jari, eventually, "I think we—you and I—have more pressing problems." There was a click and, with a liquid sound, the arc of her helmet rolled back. Her actual face, diminished by reality, peered out.

"I knew it," snarled Xha. "Everything was a lie. She can breathe our air just fine."

"Captain," she said, "I fear there is one, and quite possibly more than one, Ghast frigates tracking us through alacrity. I can't be sure, but I strongly suspect that as soon as you return to

Einsteinian-space, they will attack you, retrieve the Edgeless Sphere, and then blast the three of us into constituent elementary particles.”

“This is the nonsense,” scoffed Xha, “This is *exactly* the sort of nonsense Fountainview is continually spouting.”

“The Ghast do not have the technology to track a craft through alacrity,” said Markolos. “There is no such technology. It can’t be done.”

“And yet, if you check, you’ll find a strange proximity.”

2.

The nature of passage through alacrity was, in a quite precise sense, confused. Dimensions, such as length, were contracted, and though a given destination could be calculated, direction was subject to chaotic orientation.

In regular space it was easy for one craft to spot, and lock onto, another, because in ordinary space the lock-on was always the shortest line between the two points. In alacrity, things did not work this way. You might scan the entire surround—before and behind, starboard and port, up and down, the full gamut of axes x, y, and z—and spot nothing. Or you might receive sensor data of another craft above you when *in fact* it was below, or far in front, or behind. You might believe you had detected a dozen ships when there was only one, or none. You might see yourself, inverted and hurtling backwards, a sensor-echo of where you had once been, or where you were going. And say you wished, for reasons of belligerence or self-defense, to fire upon this other craft, these other crafts. Where would you aim? Shoot in any direction other than the one in which the enemy appeared to be, and hope for the best?

Alacrity was a cloud of unknowing.

Nonetheless, when Markolos called up the flight screen and collated the sensor data, there were three Ghast frigates directly behind—a mere kilometer or so away, or so it seemed.

“This is a ghost image,” he said. “It’s one frigate, in some other orientation to us altogether.” He adjusted the *Trampoline’s* alacrity-passage and swung round. The three crafts tracked the maneuver precisely.

“I’ve never seen anything like that before,” Xha said.

“*How* are they following us?” Markolos boggled aloud.

“And *why* are they following us?” Xha asked. “They let us walk away with the fucken sphere. Why do that, and then come after us like this? They could have stopped us in the first place.”

“They stopped your two comrades,” Jari observed. Xha snarled at her.

“If we drop out of alacrity now,” said Markolos, “we would still be back in einspace, and those three will continue to zip through alacrity to somewhere else.”

"They will sense that you have dropped out, and immediately follow. Once we're back in einspace they'll harry you," said Jari. "Have you ever seen a Ghast-fleet coordinated attack? I can assure you, one thing the Ghast are very good at is deep space ambush."

"If they can track us precisely through alacrity," said Markolos, "then they could fire upon us in alacrity."

"And if they wanted only to destroy us," said Jari, "then they might do that. But we can assume they want to recover the sphere, and destroying us would risk damaging it."

"We seem to be in something of a pickle," said Markolos.

"Why, though?" Xha repeated. "Why let us go *and then* chase us?"

"The Ghast are rational beings. They have logic. But that doesn't mean their logic is the same as human logic," said Jari. "That's the mistake you're making."

"And the mistake *you're* making," barked Xha, his squashed, hefty features contorted with disdain, "is believing I won't just pick up another burster and pass the beam through your helmetless head."

"Xha—" said Markolos. "Be calm. We need to figure a way out of this situation."

"You could surrender the Edgeless Sphere," Jari said.

"And tell me, Docta Jari," Markolos returned. "What makes you think the Ghast wouldn't take the sphere and then annihilate us anyway? What's to stop them? If it's only the fact that we have the sphere on board that's stopping them from blasting us here and now, then we'd be foolish to give it up under these circumstances."

"I don't mean surrender it *to the Ghast*," said Jari. "I meant surrender it to me."

"To *you*," Xha repeated. Then he laughed. "I take it back, Cap. We shouldn't kill her. We should keep her on as ship's entertainment. She's *hilarious*."

"At the moment," Jari said coolly, "you guys are unaligned humans, criminals. You're pirates who have stolen this extraordinary and priceless relic from the Ghast. That's where we are right now. But surrender the sphere to me, and give me the ship—fully, that is: Hand over all control protocols—and the situation changes. Now the Ghast are not hunting down pirates, but taking on the might of Fountainview. You don't think they might look at the situation a little differently in that case?"

There was a pause. And then Markolos started laughing. It was a very different sound to Xha's grating hilarity, open and warm. "I completely underestimated you, Docta Jari," he said, nodding. "First, when I fell for your ingénue act, your sophomoric performance ... and now a second time, after you removed your helmet. You are a much more considerable individual than your youth suggests."

"I suppose," said Jari, "that you are complimenting me, which is very gratifying I'm sure. That's all very well, but it doesn't help us with our present, difficult situation."

"If the Ghast wouldn't destroy us if they believed you were in charge of this ship," Xha suggested, "then surely the mere fact that you are aboard would have a dampening effect upon their martial ardor."

"You mean to suggest using me as a hostage?" Jari asked with a smile. "They might withhold their weaponry on that consideration, I suppose. But as I said, their first move will surely be to seize, rather than destroy, the *Trampoline*—to recover the sphere, you know, and only afterwards to decide

its fate. And in that eventuality, surely they would “rescue” me. Which would leave you in a poor position, don’t you think? Now, consider the alternative: you turn over control of the ship to me, I explain to the Ghost that any attempt to apprehend the *Trampoline* would be an act of aggression against Fountainview, and they stand down. Don’t you think that might lead to a better outcome?”

“And then you use your control of my ship,” said Markolos, “to fly directly to Fountainview Station itself, delivering both my ship and the sphere to your superiors, and committing the two of us into arrest.”

Jari smiled again. “Better than dying.”

“My sense,” said Markolos, “is that there are other avenues worth pursuing. For now, I’m going to ask you to shuck off your suit. All the way out of it, please.”

“I’m very well trained,” said Jari, “and in complete control of my temper. But I will get out of the suit—if you and your pet troll, here, place all your hand weapons in a sealed space, and get the ship to confirm that they are locked away.”

Xha laughed grimly at *troll* and said: “Sure, why not? The captain can countermand any seal and we can recover our weaponry.”

“And I can operate my suit remotely,” said Jari, smiling pleasantly. “But let’s at least perform the illusion of mutual trust, eh?”

“What an excellent idea,” Markolos said. “And what better demonstration of trust than you telling us exactly what Fountainview knows about this sphere—and the people who hired us to steal it.”

“Get me a drink and I may.”

“A drink!” barked Xha. “Alcohol, you mean. I guess if I’d spent three days inside that suit drinking my own recycled urine, I might like a drink as well.”

3.

Jari sat down, the neck to her suit widened further, and she stepped entirely clear of it. Then she ordered the suit to close itself up again. It remained there, like a sleeping orange bear. Jari stretched herself, lithe and poised—her motions were those of somebody in command of her body, somebody trained in combat. Markolos began to wonder how he had ever thought her a foolish kid.

The captain ordered the ship to extrude a secure container, and placed both his and Xha’s bursters inside. Then he gave orders on sealing them. “You have plenty of other weapons about the place, I don’t doubt,” said Jari. “But I’ll take that as a good-faith gesture.”

The walls of the mess extruded seats for the three of them. “Whisky,” said Jari, “if you don’t mind.”

“A hardcore kind of drink for a kid,” scowled Xha. But then: “I’ll have one too—we need to toast our fallen.”

Markolos did not drink alcohol, but for him the ship produced an ethyl-free equivalent. The three clinked their glasses. Xha sipped his. Jari downed hers in one go.

“Now that we’re all friends, and each of us trusts the other implicitly and absolutely,” said Markolos, “what can you tell us, Docta Jari?”

"Are you a Docta?" Xha added. "Or was that another one of your lies?"

Jari ignored this. "'Gentlemen,'" she said, leaning back in her seat, "why don't we start with the Edgeless Sphere?"

"The sphere," said Markolos.

"From the mere existence of such an artifact you could deduce most of what I can tell you, anyway. If you put your minds to it." Jari smiled at Xha. "Or *your* mind, Captain, at any rate. I don't want to overstress your subordinate by asking him to actually do any hard thinking."

"Cap," said Xha, "could you please get the ship to release my burster? I'd like to mix this individual's brain into a hot soup inside the bowl of her skull."

Markolos ignored him. "What is the sphere? I mean, I know what it is. It's a relic. But what is it capable of?"

"It's capable of making us a lot of money," said Xha. "I know that much."

"Sure," said Markolos. "But I'm asking the more fundamental question. What actually is it? It's a globe, and so spherical. In our universe, the ratio between the surface of any sphere and its diameter is four  $\pi$ . We all learn *that* in kindergarten. And we learn that  $\pi$  is an irrational constant, 3.14159 and so on. In our universe that holds for all sorts of things: not just circles and spheres, but all sorts of things. From the droplets of water all the way up to supergiant stars, all embody this ratio. It's just how our cosmos *is*. So the edgeless sphere is an anomaly. It has come out of the White Fountain, from wherever all those relics come—who knows? And for *it*,  $\pi$  is exactly three. It doesn't make sense. It can't make sense."

"Yet you have it, suspended in your hold," said Jari.

"Exactly. So what does it mean? How can it *be*?"

Xha scoffed. "The Fountain has chucked out a lot of crazy things. Machines and relics and fragments and who knows what. A lot of them don't make sense. This is just another one of those."

"No," said Jari. "This one is far more fundamental. We don't know from whence it came, but we can make some guesses. It has to be one of two things: Either this is a machine for altering the fundamental constants of cosmological and topographical reality—which would make it just about the most destructive relic ever to emerge from the Fountain...or else this is a thing from a different reality altogether. A different dimension, a place where those physical constants are set differently."

"It's a curio," said Markolos. "Nothing more."

"You think the people who hired you to steal it would be ready to pay you so much money for a mere curio?"

"You know how much they are paying us?" Markolos asked.

"We do," Jari confirmed. "And here's another thing we know: Now that your two comrades are dead, your shares have doubled in value." Xha hissed at her. "But you're ignoring the key thing. This is an object that ought not to exist. Calling it edgeless is just another way of saying that it is struggling to *be*, in this reality, where  $\pi$  is 3.14. It fizzles between incompatible ratios. Its being-in-the-world *is* that incompatibility."

"I venture to repeat my question," said Markolos. "So?"



"You have carried this object into alacrity. You are being closely followed by three Ghost ships, even though that kind of tracking ought to be impossible in alacrity. You don't see the connection?"

"You think they are able to track us through alacrity *because* we're carrying the sphere?"

"They are tracking the sphere. I think the mere *fact* of it means that it operates in alacrity differently to any normal object. All direction in spacetime encodes  $\pi$ —trigonometric functions rely on angles and radians, and  $\pi$  plays an important role in all angles, measured in radians. So what happens when a new function of  $\pi$  is introduced into this medium? It messes it up. It tangles the smoothness of the continuum. It stands out, like a whirlpool in an otherwise smooth lake, a cloud in an otherwise cloudless sky."

"So what I'm hearing is," said Xha. "if we ditched the sphere, if we chucked it out of the spacelock directly into raw alacrity, then they wouldn't be able to track us anymore?"

"They would find the sphere and retrieve it," said Jari. "But you'd slip away. Yes."

"And our fee would slip away too," said Markolos. "*This* is not an option."

"You're missing my point. We need to determine whether the Edgeless Sphere is a relic from *our* reality, or an object that has slipped through from another reality altogether. If it has been manufactured, then that has immense implications."

"It has the same attributes, regardless where it comes from."

"But if it's from some other dimension then it just *is*, one of a kind. In that case, sure, it comes close to being a curio. It just is what it is. Valuable, sure, because it's the only one of its kind, little more than a collector's piece. But if it's from *our* reality, then that means somebody, something, some creatures like us—maybe us, in the future, or some alien super-civilization that has transcended and scattered these gifts before it died out—it means that somebody has worked out how to build a relic on a different ratio of  $\pi$ . And if it is built, then it can be built again. We can replicate it. Make our own. And if we do that, then it changes everything."

"Ships could track other ships through alacrity," said Markolos. "It would change the nature of war—of spaceflight as such. The Ghost's warrior caste would love that. Think of the advantage it would give them."

"As they are demonstrating!" said Xha. "Right now, with those three ships chasing our tail."

"Not everything is about *war*, captain," said Jari. "Fountainview takes the position that, if the sphere can be replicated, then it could be used comprehensively to map alacrity—to provide fixed points in that idiom that would not only enable much more precise navigation, but act as waystations for instantaneous communication galaxy-wide. Everything would change. It would be very major."

"This is all very interesting," said Xha. "But it doesn't help us with our current situation. If you're right, the only reason the Ghost frigates haven't opened fire on us—something you say they will be able to do, and hit us too, even though we're in alacrity—is that they're worried they might destroy the sphere. But as soon as we drop back into einspace, they will rush us, grapple and board, and it's game over. We can't stay in alacrity forever, though."

"Docta Jari," said Markolos, "let us explore alternatives. You suggested I hand my ship over to you, since you believe the Ghost would be inhibited from attacking and boarding a Fountainview craft. But what if we harnessed your presence here in some other way? Say we altered trajectory, and emerged near Fountainview itself? That would inhibit the Ghost from actually attacking us, surely?"

"Invoking Fountainview is invoking the rule of law. The Ghast are the legal possessors of the edgeless sphere. If we actually flew into einspace near Fountainview, then Fountainview would have to compel you to return the sphere to its rightful owners. Fountainview is the rule of law, after all. And afterwards there would be consequences for you two."

"Consequences for what?" Xha snarled.

"Thievery. Come along, you know all this."

"But," said Markolos, looking shrewdly at Jari, "Fountainview doesn't want to return the sphere to the Ghast. It wants the sphere to itself."

"The Ghast discovered the sphere. They are entitled to it. Fountainview exists to uphold the rule of law."

"Fountainview is entirely lawful and transparent and proper—says the Fountainview secret agent," Markolos said. "So, sure. I think we can strike a deal. You, on behalf of your overweening and some would say tyrannical organization; me on behalf of this ship. We *were* going to deliver the sphere to our employers, and they were going to pay us. Fountainview can pay us more, and we can deliver the sphere to them."

Jari seemed to consider this. Eventually she spoke: "How?"

"Clearly we can't just rock-up at Fountainview, with three Ghast spaceships on our tail, weapons charged, and drop the thing off in plain view. No, we'd have to be a little more circumspect than that. But surely you can speak to your superiors, and they can arrange a subterfuge of some kind—set up a fake sphere, some special effect or hard hologram, enough to fob-off on the Ghast, whilst the real sphere is taken into the bowels of Fountainview itself for study and replication. By the time the Ghast realize what has happened and demand the actual sphere, you might have cracked its mystery and can return it." Markolos smiled. "It is, at least, a chance."

"I'd have to contact Fountainview itself," Jari pointed out. "And I can't do that from inside alacrity. We'd have to drop out and send a message—and wait around for the reply. And in that time the Ghast would be all over us."

"It would be tight," Markolos conceded, "but there are precedents. Battle maneuvers sometimes require ships to re-enter einspace for less than a second, inject their messages, and move back into alacrity before sustaining too much damage. It might be possible."

"And you want me to sell Fountainview on this bait-and-switch? It's pretty far-fetched. Could we even do it? Concoct a fake version of the sphere? I mean, at all? Let alone at such short notice?"

"Your lack of confidence in Fountainview's capacities is surprising," said Markolos. "I'm sure their labs and workshops will be able to rustle up something."

"I have another question," said Jari. "So, you are suggesting that Fountainview outbid your original employers, pay you off for delivering the sphere to us, rather than to them as you originally agreed..."

"Yes," said Markolos. "And your question?"

"What makes you think that Fountainview *aren't* your original employers?"

Markolos and Xha digested this. "Well," said Xha. "I think I need another drink."

## :5: The Fence Around the Port

The drop-bell was Fountainview design, top-spec, and though small for two it was perfectly comfortable on the inside. But Mapanje, in overriding its standard down-and-return programming, introduced an imponderable into its functioning. It did not work as it should. Once it slowed sufficiently, and the glare of reentry flames dialed down their incandescence, the drop-bell should have funneled aerodynamically to retrobrake, and sunk gently to the ground. Instead it wobbled, spun, and then sheared away to the north of the port complex and dumped itself thumpingly into a stretch of gorse-covered land.

The door opened, and Thalassa exited the bell rapidly. “The hell,” she called. “Was *that*?”

“It’s not such an easy matter,” said Mapanje, climbing out after her. “Rewriting Fountainview tech, you know. Even for an insider like me.”

“That’s the clumsiest I’ve ever arrived on a planet,” Thalassa said. “I think I’m actually bruised. And where the hell *are* we? The middle of nowhere!”

“Could have been worse,” said Mapanje, peering down the long, bracken-covered slope. The exterior fence of the port complex was just visible on the horizon. “I mean, we might have ended up at the north pole. Or in the middle of the ocean!”

“You inspire such confidence,” Thalassa said. “So—is it going back up now?”

The usual functioning of a drop-bell was to deliver its passenger—or cargo—and then sweep back up to orbit immediately, utilizing the equal-and-opposite tensions wound up by the descent and stored in its onboard temporary quantum wrap.

“No, no,” said Mapanje. “I’ve overwritten its mechanism. It’ll stay here, in camouflage mode, so Fountainview doesn’t know exactly where we went. They’ll figure we’re in the port somewhere—for after all, where else is there to go on this god-lost dump of a planet? But that’s a very large facility to search. And we won’t be staying there for very long.”

“We won’t?”

“Of course not. We’ll take a new ship and go follow your friend Muldone. Trust me, I know what I’m doing,” he said.

At that exact moment, the drop-bell sealed its door, shook, and shot upwards like a boulder hurled by a trebuchet. Mapanje and Thalassa stood, angling their heads back to watch its trajectory.

“Oh,” said Mapanje. “I guess the stored potential energy is, eh, bouncier than I—”

Four hundred meters up in the air, the drop-bell, somehow, stopped. It didn’t slow to an apex and then begin, slowly, to fall again—it stopped completely, vertical motion arrested as if it had struck an invisible ceiling. Then it hovered, spinning with increasing rapidity.

“O-ho,” said Mapanje, in a worried voice. “It shouldn’t do that.”

Abruptly, it plummeted, coming down like a meteorite. “Run!” yelled Mapanje.

The two scattered. The bell hit the ground with tremendous force. Fragments of torn-up gorse and great clods of dry soil were splashed up and outward in a mighty ejection of stuff. Thalassa, her feet tangling in the gorse, put her arms over her head as she fell, and felt sods and chunks of dirt clatter against her back. The dry, percussion sounds of dirt raining down. When it stopped, and Thalassa got herself to her feet again, Mapanje was already standing at the crater.

“That’s broken now,” he observed.

“It’s also marked pretty clearly where it landed,” Thalassa pointed out. “For anybody looking down from above.”

“Yes,” Mapanje said in an unhappy voice. “That’s not ideal. Ah, well, let’s make the best of it, not the worst. Come on—no time to waste!”

He started away at a brisk march, lifting each knee excessively high in turn—like a poorly controlled string puppet—to avoid tripping amongst the gorse. Thalassa stared after him. “Where do you think you’re going?” she called.

“We need to get inside the port,” he called back.

“You think Fountainview won’t find you there?” Then, as he was receding from her, she upped her volume: “You killed your own mother!”

“I know,” hooted Mapanje. “One down, seven to go, eh?”

“What?” Thalassa broke into motion, hurrying after Mapanje to catch up. “Eight, did you say?”

“Oh Seren is probably still alive,” said Mapanje. “I didn’t shoot her in the head, after all.” He offered this as if it was evidence of his exceptional compassion.

“Your own mother, though?”

“Fountainview is riddled with— Mapanje began in a loud voice, but then he caught his foot in a loop of ulex and lurched forward, disappearing into the gorse. “Aar!” he cried. Thalassa marched down to him, and by the time she got to him, he was sitting up.

“Tricky stuff,” he said. “It’s not native, but when it was introduced it spread everywhere. Suits the climate: hot, mostly dry, occasional heavy rainstorms.”

Thalassa held out a hand and helped him to his feet again. “Why are you talking about gorse?”

“It’s interesting!”

“Not compared to the fact that you have eight mothers, one of whom you just shot.”

“Oh,” said Mapanje. “That.”

They started again down the long slope, picking their way through the tangles. *It will be blindingly obvious to Fountainview where our bell landed*, Thalassa thought to herself. *They’ll be coming after us, and will probably sweep down before we get to the outer fence.*

*What*, she asked herself, *am I even doing? They were going to drop me back in Skyward Ho anyway—and now I’ve somehow got myself on the run with a Fountainview rebel who committed possible matricide! They’ll lock me away, now, and reprogramme the key.*

She looked up. The sky was a smooth, navy blue, and a vagrant procession of clouds—each one unshapely, white as cotton—passed before the sun and then moved on, dragging cloaks of shade over the open country below. “I know what you’re thinking,” Mapanje said.

“I doubt that,” Thalassa replied

“Eight mothers,” said Mapanje. “There’s a program where eggs from eight women are combined: four pairs, then two pairs, then one pair, which is brought to term. It’s a Fountainview program. It literally made me.”

“This is the product of some relic out of the White Fountain?”

“No, no. This is genetic exploration. The twist is that they sculpted one of these products—mine, only mine—into a Y-chromosome. I have, like, forty sisters. I’m the only male in the family.”

“Is that why you’re so maladjusted?”

Mapanje stopped and glared at Thalassa. “Maladjusted? A pretty offensive term to use, don’t you think?”

“You shot your own mother in the stomach.”

“I’m fighting for freedom! A little matricide is a small price to pay for freedom—freedom from the tyranny of Fountainview. Who has a better perspective on the autocracy of that institution than me? I’m striking a blow for liberty! I rescued *you*. You might be grateful.”

“Rescued me? Fountainview was releasing me back to Skyward Ho! Which is exactly where you and I are romping now, bright boy—except that now, instead of simply going back to my regular life, I’m being pursued by the forces of justice and am likely to be arrested and imprisoned. Rescued me, fish-for-brains? You’ve messed up my perfectly unobjectionable life with your crazy intervention.” The longer she spoke, the angrier and louder Thalassa became.

“I may not,” she said, “have lived my life *entirely* in accordance with every single bylaw and regulation, but I have principles, there’s a line I won’t cross, and cold-hearted murder is on the other side of that line. You know what I’m thinking, you say? I’ll *tell* you what I’m thinking: I’m thinking that it’s a large and populous galaxy, trillions of people on a hundred thousand worlds, but that I’ve somehow stumbled into the company of the single *stupidest* individual in all three major species on any planet. That’s what I’m thinking.”

At the beginning of this speech, Mapanje’s face was a mask of outrage. But as Thalassa went on, growing more furious, something strange happened. Mapanje’s features relaxed, and a smile crept along the line of his mouth. By the end he was nodding.

“That’s pretty funny,” he said. “Pretty funny. You’re a funny person!”

“I am not trying to amuse you,” Thalassa said.

“Sure! You’re angry, I get that. But we need to get off this sloping hillside before Fountainview comes swooping down onto our very heads.” He resumed his high-knee march towards the fence.

“Stupidest in all three major species! That’s funny. That’s funnily put.”

“May the strong force and weak force of universal providence preserve me,” Thalassa sighed. She stomped after him.

"It's not so big a deal as you think," Mapanje said, as the terrain started to level out and the fence marking the boundary of the port drew closer. "It's not even the first time I've shot my mother."

"Whoa," said Thalassa.

"Well, I've never shot her in the midriff before," Mapanje said thoughtfully. "But I guess—I don't know. She'll be alright. Don't you think? I think so."

"You have a history of running around Fountainview spaceships shooting people, and you're not locked up? Shooting your own mother, and they let you wander loose? What kind of an operation does Fountainview run?"

"I'm in a special category," said Mapanje, offhandedly. "Anyway, here's the fence. Once we're inside, we'll lay low until we can get a ship."

The fence had reared up before them. Thalassa looked up. It was imposing.

"A ship?" she asked.

"Yes. You'd better handle that. Not your ship—that's impounded anyway, I know, but even if it weren't—Fountainview would obviously be watching it, expecting you to try and fly it away."

"You want me to source another ship? A completely new ship?"

"Well," Mapanje chuckled, tipping his head from side to side with amusement, "I'm hardly in a position to know how to do that!"

"Do you have money?"

"No no," said Mapanje cheerfully. "But I'm sure you'll find a way past that."

Thalassa swore. "And when I somehow magic-up this ship, for free, and we fly away on it—where will we be going?"

"After your lover of course. To Muldone! It's *very* important we locate him before Fountainview does."

"And you know where he is?"

At this, Mapanje opened his eyes very wide and stared directly into Thalassa's face. After several long seconds of this, he suddenly started laughing. "Oh you're funny, very funny! I like that. I wasn't expecting it, but I'm glad. It makes this whole jaunt more enjoyable!"

Thalassa took a deep breath and then, after a pause, let it out, to prevent herself from swearing further. "Just so I'm clear: We're on the outside of Skyward Ho, on the wrong side of a charged barrier specifically designed to prevent us from getting in, and all we need to do is get past it, find a free ship, and fly it off to wherever Muldone is hanging-out?"

"The barrier is designed to stop wild animals, really. Not people," said Mapanje. "After all, people usually fly in from the sky, so a fence isn't going to stop them. I mean, if you think about it."

"It's stopping us," Thalassa pointed out.

Mapanje peered at the barrier. It was a hexagonal mesh, along which a charge ran and fizzed. Probably not enough to kill, but perhaps enough to knock them out. On the far side, through the haze, could be seen the outbuildings of one of the many shanty villages that surrounded the actual

port. An individual sat on a rusted chair, inhaling and exhaling on a particularly large lungstim. Another had climbed out of his bubblehut and was pissing onto the ground. He stood, hands-free, relieving himself and staring across the intervening scrubby ground at the two strangers on the wrong side of the fence.

"Hello!" Mapanje called, waving. The stranger stared, finished his business, and ducked back inside his pod.

"I'm thinking," said Thalassa, "that my best option here is to wait until Fountainview comes to arrest me. Then I can explain the strange circumstances by which I've come to end up in this situation, and hope for the best. It's been nice knowing you, crazy-boy." She turned, and began walking back up the slope.

"Wait," said Mapanje. "Let's at least get inside the port. We can find a facility, order some food, something to drink."

"And the fence?"

"I will use *this*," said Mapanje, bringing something out of one of his pouches, "and then after I've used it, I'll toss it back over to you, and you can use it."

Thalassa looked. Mapanje was holding a flat, dun-colored something, like a large coin. Grinning at her, he went down on one knee and pressed this medallion against the sole of his other foot. There was a rushing of air, and he was gone—Thalassa put her head back and saw him, high above her, swooshing through an arc in the sky, and then coming down again on the other side of the fence. He was holding the leg with the device on the end of it stiff and straight, but his other leg was wobbling and kicking out. He did not look well-balanced, but he managed to hold himself together. He came down slowly enough and landed without falling over.

"It's really easy to use," he called to her, peeling the impeller, or whatever it was, off the sole of his boot. "I'll throw it to you. You just slap it on your foot and join me."

"You're serious?"

"Here." He brought his hand back and threw the device. It sailed towards the fence, but not high enough to clear it. Striking near the top of the barrier, at one of the hexagonal gaps, it fizzed sharply and then went dead. Stuck there.

Thalassa stared at it. Mapanje stared at it. "Oh dear," he said.

"Like I said," Thalassa called to him. "It's been nice knowing you."

"Wait!"

"There's no way I can get past this fence, my mentally-challenged friend. I'm going back to the crater to wait for Fountainview."

"Can't you walk 'round to a gate-post—an entrance point? I'll join you there!"

"There are no gateways in this fence," Thalassa called back. "Are you serious? There's nowhere else on this fate-forsaken planet except Skyward Ho. Who would be going out, or coming though, any gate? Where would they be going?"

"Wait—" said Mapanje. "I still have my burster."

“Don’t!” Thalassa yelled. But it was too late. Mapanje had whipped out his weapon and fired it at the fence. The beam struck the charge matrix, spread out, flashed, and scattered. The air, suddenly heated, snapped outward in a mini shock wave. It pushed Thalassa backwards. She had to turn her face away and steady herself with her back foot. When she looked back, Mapanje was sitting on his ass, looking at his burster as if it had personally betrayed him.

“My dude,” she called. “Let it go. I’m going to yomp back to the bell—Fountainview can pick me up from there. They’ll maybe lock me up, but I’ll explain that it was all your idiot-fault, and maybe they’ll let me go.”

“No,” said Mapanje. He sounded close to tears. “We can’t let Fountainview take us! This is way, way too important! Do you know what Muldone found?”

There didn’t seem any point in denying it. “Sure.”

“You know!”

“Don’t you?”

“I only know that it’s super important to Fountainview! That they intend to use it to consolidate their control of the galaxy. What is it?”

“Time,” she said. “The control thereof.” She turned to walk away.

“You can’t go!” Mapanje wailed. “I burned my bridges for you! I burn my bridges for you and your lover Muldone, and this, this ... so it’s a *time* device! Wow! But wait—you can’t leave me!”

‘Sure I can, my friend,’ said Thalassa. “I mean, maybe you could have landed the bell inside the port facility? Just an idea.”

“But then Skyward Ho security would have tracked us! They’d share that info with Fountainview!”

“Well,” said Thalassa, “I don’t know what to tell you. We’ve had our little adventure. But not everything is destined to work out the way we’d like it to.”

“You have to get inside the port!” Mapanje urged, stepping towards the fence. Then he made a strange, rather strangulated and high-pitched noise. Thalassa wondered if he had stood on a thorn. He was pointing up. She followed the direction of his arm and saw, breaking through a single spherical cloud, a couple of four-vane scramkites. They were unmistakably Fountainview craft.

“Well,” said Thalassa, “that saves me the hike back up to the bell, I guess.”

“They’re not coming to *arrest* you, woman!” Mapanje shrieked. “Run! Run!” He immediately took his own advice and began sprinting across the scrub-land, in the direction of the center of the port.

“Run!” he screamed again, elongating the vowel to such a degree that its pitch was slightly dopplered as he went.

“It’s not every day,” Thalassa said to herself, “that you meet a genuine galactic-class major loon. But this kid is amongst the majorest I’ve ever encountered.” She stepped a little away from the fence, to give the scramkites space to land. Then she waved her arm. The two craft were coming down very rapidly. More rapidly than they absolutely needed to, given that there was nowhere for her to run. Their two smooth bellies gleamed bright red, and their bulk swelled with rapidly increasing proximity. The sound of their screeching through the resistant air was like vuvuzelas.

Why were they in such a hurry?



Thalassa glanced through the fence. Mapanje was nowhere to be seen, but a few of the indigents living in their shacks and pods in the outskirts of Skyward had come out to see what the noise was. They were standing around, staring upwards.

Thalassa looked around her. There was plenty of space for either—or both—of the scramkites to land. Neither was slowing down, though. And then she thought to herself: *A scramkite was a strange craft to send in order to arrest someone. There was very little space inside one of those.*

Thalassa understood what was happening a moment before the leading scramkite opened fire. There was time, just, for her to register: *but—why?* Not time to move, barely even time to flinch. The leading edge of the scramkite's vanes flared white, and Thalassa understood that this brightness was going to be the last thing she ever saw.

As to what happened next—well, Thalassa thought about that afterwards without coming to any firm conclusions. The very fact that there *was* an afterwards was something that baffled understanding, somewhat. It certainly wasn't a case of the scramkite shooting at her *and missing*. That was impossible. A simple target, direct line of fire. They didn't miss. Yet, with a dizzying sensation in her head, Thalassa found herself having an out-of-body experience. She was looking at where she was standing, but she wasn't there anymore. The blast from the scramkite plowed a superheated line into the dirt, and a geyser of molten glass and brick-cooked shards of dirt flew up and out. The blast shoved into Thalassa, the expanding wavefront of heated air. The detonation. It felt like a running bull had collided with her. She began to fall backwards, her feet leaving the ground as the last quantity of blast struck and exploded before her.

She was up in the air.

This seemed to happen slowly. The fence passed smoothly beneath her. Then she was lying on her back in plain air, and sliding. She felt icy, which was strange because the air all around was striated with heatwave distortions.

Then she was upside down in plain air. This was less comfortable. Head under heels.

Then the ground was right in front of her, alarmingly rushing right at her face, and then her whole body jarred, painfully, into impact. The air had entirely gone from her. She was, she realized, lying on her front. She was in the dirt, struggling to breathe. She rolled onto her side and strained to fill her lungs. A gasp, a thread of air. Everything hurt. She rolled onto her back, and got a little more air into her lungs. There was a sore, throbbing, fizzing sensation on her front. High above her the two scramkites screeched through the air, exercising figure-eight movements, straining to circle back around.

One of them had tried to blast her to atoms. That was astonishing. What was more astonishing was that it had missed.

Then, with a howl, the scramkite came swooping down upon her again, and this time she knew it would not miss. She struggled, and managed, just, to sit up. She drew in a breath and her ribs complained, but at least the air went in. The scramkite was suddenly directly overhead. Thalassa felt as though she could reach up and touch it. Then it was gone, and she took another breath, and the tourbillons of air pushed over her and around her, and then stilled.

It had not fired.

She looked to her right. She looked left. A couple of folk had come out of their bubblehuts and were gawping at her.

She was on the other side of the fence.

Some part of her understood that the Fountainview craft could not have fired upon her once she was inside the Port-authority territory without violating the integrity of Skyward Ho's rights of self-determination. *Outside* the fence, in the wilderness, was a different matter, and nobody's jurisdiction. But she was—amazingly—inside. Part of her thought this, and thought also: *but why try to destroy me at all? Why not just arrest me and lock me up?* But mostly she thought to herself: *Ow*.

*Ow*, she thought. *Ow, ow*. Her body throbbed with pain.

The scramkites were the size of rice grains, with spider silk contrails squirreling off their vanes. And then they were gone, back up into orbit.

*Get up*, Thalassa told herself. *Get up. See if anything is broken*.

She pulled herself upright.

She looked around. Mapanje was nowhere to be seen. *Think*, Thalassa told herself. *What would Fountainview do next?* They would—even now, she realized—be contacting the Skyward Ho authorities, with a view towards effecting a warrant.

She drew the deepest, sorest breath, and started toward the center of the port.

Overhead, a meteorite was coming down, drawing a scuzzy charcoal line diagonally across the sky. Thalassa heard the crack as the rock—if that was what it was—broke apart, and pieces shattered away in tendrils and threads through the distant sky. The thump, as the remainder of the object hit the ground, was audible too, though it came down far off, over the horizon somewhere.

## :6: The Greatest Imperfection

So long as they stayed in alacrity, the Ghast ships neither closed in nor fired upon them; they just hung, impossibly, in a tight orientation immediately behind the fleeing *Trampoline*. “Behind” ought to have had no meaning in alacrity, and yet there they were. Markolos had already abandoned their original einspace destination. He now tried a couple of zig-zag evasive maneuvers. It hardly mattered where they ended up, in terms of reentry points to einspace. The unpredictability was the point. But it didn’t matter how he threw his ship around: The three Ghast craft were still right there, unshakably behind the *Trampoline*.

They couldn’t stay in alacrity forever. Even with the most up-to-date drive, and with the shields at full power, the strange geometry of this realm seeped through. In time, it started to alter the tensile strength of tendons, to mess up the simple passage of electrical and chemical signals across the synapses of the brain. People who stayed too long in alacrity collapsed, physically and mentally. There were stories of a pilot who had entered alacrity and never left it, and who was still hurtling through the realm, entirely insane, kept alive in his cradle by the operation of his ship. From time to time, entirely unpredictably, his craft would loom out of alacrity as another ship passed from einspace exit-point to einspace entry-point. There was even a story that, one day, this wanderer would re-emerge into the regular universe in a peacock-tail of energetic glory, bringing with him news that would shake the entire cosmos.

No, the *Trampoline* could not stay in alacrity forever. The longer they stayed, the higher the risk of bodily and mental damage. On the other hand, Markolos knew that as soon as he pulled the ship back into einspace, the Ghast craft would immediately engage him. Impossible though it seemed, they were locked-on, and once back in regular space they would close in—grapple cables, the two large-bore separator cannons each craft carried, the swarm-weapons and squads of highly-trained marines ready to melt their way through the hull. *Trampoline* was completely outmatched. She wouldn’t stand a chance.

“We need a third way,” said Markolos, with determination. “I don’t like being caught in the middle of two choices—surrender to the Ghast, or surrender to Fountainview. There’s always a third way. Ship!” he called, “assess the cargo identified as Edgeless Sphere, as a power source for the main engines.”

“Processing,” announced the ship.

“Are you crazy?” Jari said, getting up and stepping towards Markolos. Xha was on his feet in moments, interposing himself. “It’s not a power source—it’s inert. Didn’t you do even the most basic due diligence on it?”

“If it’s inert,” Xha said, “then you don’t need to worry about linking it to the engines.”

“I’m worried you’re going to channel the majority of the ship’s power through it and *destroy* it, you caveman,” Jari cried. “It’s immensely valuable, valuable beyond anything your money-shaped brains can comprehend. You can’t simply burn it! You can’t! Is that your plan?” She lurched forward, and Xha had to grab her shoulders to stop her coming right up into Markolos’s face. “Wreck it? You think the Ghast will stop pursuing you if you *wreck* it? They’ll kill you in a thousand ways! They’ll take revenge upon everyone you’ve ever known!”

"It's inert," Markolos conceded, "*in einspace*. You think I didn't research this globe? I did indeed do my due diligence, Docta Jari. I was leading a team to steal the blamed thing—of course I researched it. I checked everything that had ever been compiled about it. Inert, sure. But we're not in einspace now. We've already seen—which nothing in the diligence prepared me for—that it figures in alacrity as a kind of beacon, something that amounts to a fixed point. Well, alright, let's see what happens if we couple it to the drive."

"You'll annihilate it!" Jari yelled. "You'll be taking a forge-hammer to an egg! The reason it's valuable is because it's a sphere constructed on the principle that  $\pi$  is three, that nonetheless exists in a universe where  $\pi$  is 3.14. That's all! It has no moving parts, it just is. Please, Captain Markolos, *please*."

"Sedation is looking like an attractive option," Markolos said. "Jari, do you want to step back, please? Or shall we restrain you?"

The look on Jari's young face was extraordinary: desperation, fury, inner turmoil manifesting. She looked for a moment as if she might launch into a berserker attack. But the prospect of taking on both of these large males, and their own security-rigged ship-systems, got the better of her anger. She took a breath, shook Xha's hand from her shoulder, and went back over to the cabin wall. "You are, with respect, captain, a *perfect idiot*. You'll damage the sphere—and probably kill all of us. But maybe enough of the sphere will be left, floating amongst the wreckage, for the Ghast to retrieve. Crazy to think that that's now the least bad option! Xha, my friend, now might be the time to make peace with your God. Or Gods. Or whatever it is by which you orient your life. The Captain I shall not implore—he's clearly beyond all reason."

"*Trampoline*, what's your assessment?" Markolos asked.

"The name-tagged-identifier *Edgeless Sphere* is resistant to interior analysis. Scans are scattered by its indeterminacy of surface."

"Can you route main power through the containment unit in which the sphere is suspended?"

"Yes."

"Ready yourselves, Xha, Jari. Ship: If there is any augmentation of drive, I want you to re-steer, double-back, and as soon as we lose sensor readings of the Ghast ships, to drop into einspace."

"It will not be possible to ascertain whereabouts," the ship began to reply, but Markolos said: "Never mind, never mind that. Just activate my commands."

"Wait," Jari cried, "what about—?"

There was a hiatus.

A hiatus.

Reality yawned.

The structure of the *Trampoline* was still there. Hull, inner partitions, drive-unit, disseminated systems operation, life-support, and the mass-tract that simulated gravity, the threads of structural and computational webbing running through the whole. It was all still there. Markolos stared through it all at something else. But what else was there? This was his world which was the whole world, for what other world is there except the one which we inhabit? Outside the world is not hospitable to us; alacrity, Einsteinian-space, an endless vacuum into which we would vomit all the air

from our lungs and die acidly gasping and struggling. And yet, Markolos saw, or thought he saw, there was something else: a line, perhaps an alphabet, a thread embroidered upon the fabric of everything, and it wasn't part of his world. There was a dark-green tint to the blackness. Then there was a cone, vastly larger than the galaxy. Then, out of the oceanic three-dimensionality of everything, Markolos glimpses two circles, or perhaps spheres, distantly glinting. Human brains being the pareidolia machines they are, Markolos confected these into eyes, looking straight at him, and the fizzing underspace of quantum textures resolved into a shield-shaped visage. And then, everything was upward-pouring bubbles, like champagne, like pigeons released in a flurry from a basket and ascending. Bubbles everywhere. Markolos could feel the texture of the bubbles breaking against his skin, and the air he drew into his lungs was tart with a metallic quality.

The idea is eternal. What we make of the idea is not.

A vivid dream: Himself, Markolos, pirate king, gangster, professional thief, was slumped in a curving chair of some kind. He moved, pushed himself up and slid down again. He was inside a glass globe, and outside the glass was a deep-green blackness, dotted all around by stars. A little way outside his globe was another one, with somebody inside it—a human being, a male Markolos didn't recognize. He was not slumped like Markolos. This individual was squatting on both feet, resting his elbows on his own knees, inside his separate sphere. *Hello*, the person said. *Where did you come from?*

*I*, said Markolos, and the word echoed 'round and 'round the space inside which he was stuck. *Am*, echoed. *Unsure*, hissed and echoed.

*Well*, said the other, looking Markolos up and down, *I don't think you'll be here for very long, judging by your interference pattern*. Markolos couldn't see any pattern. Then the other said: *what you need to hold in mind—*

Yes?

What?

All was blank. Markolos felt briefly nauseous, but it was only that top of the roller coaster feeling in the pit of the stomach that everything was hanging, suspended, on the edge of hurtling back down again.

*—the greatness and perfection is*, said the voice of the other person. Or perhaps he said *—the greatest imperfection is*. It was hard to know.

Markolos didn't hear what followed *is*.

He was floating.

He was inside the main cabin of the *Trampoline*, and floating. Zero-g.

That was a bad sign.

Xha was floating nearby, his feet up near Markolos's head, his dangling arms near the floor.

The mass-tract had malfunctioned. The inertium was off. The lights were off too, except for three bars of light on the wall by the door. These strips of light moved smoothly to Markolos's right.

These bars of light were sunlight coming through the three slit-shaped portholes in the hull on the far side of the cabin. The ship was without power. It was rotating in space—they were back in einspace, and near enough to a sun for there to be light. Markolos was in the middle of the cabin,

and nothing was within reach. He could see Jari, asleep or dead, over by the wall, on her back. Bars of light stroked across her body, and Markolos could see her chest moving, filling and expelling air. So she was alive.

"Xha," Markolos called, "you alive?"

Xha's eyes snapped open. "What the ever-loving—" he said. Then he coughed.

"Power's out," Markolos said. "But we're in einspace again. Is anything functioning? Sensors? Life support?"

Xha reached out his right arm and grasped the nearest panel, pulling himself over towards it.

"Nothing. Nothing at all. Not even emergency air-scrubbers."

"Better go easy on the breathing, then," said Markolos. He curled himself up into a ball and then kicked all his limbs out. This didn't alter his position. He hated zero-g. It was a massive inconvenience.

Xha pulled himself along the wall to the porthole strips. "I can't see any Ghast ships. But I don't have the panorama."

"If they were in the vicinity, we'd know it already," said Markolos. "They'd have fired on us, and grappled us, by now."

"Unless they're also floating without power?" Xha suggested.

"Why would that be? We were the ones who supercharged the Edgeless Sphere, not them. Keep looking. What else can you see?"

"There's a sun," Xha reported. "And a planet—we're close to a planet. And unless my old eyes are mistaken, that object dominating the sky is the White Fountain itself."

"How far? To the White?"

"A couple light years, maybe."

"So we're not actually at the Fountainview station. That's something. What are the habitable worlds a couple light years from the White?"

"There are several dozen, I think," said Xha, peering through ports. "This could be any of them. It's kind of—taupe."

"Taupe?"

"Beige. Dun. Color, I mean. If that's any help."

"That's not of any help."

"The planet is getting larger as I look at it. So I guess we're going to have a closer look."

"Without power, we're going to come down like a meteorite shattering on impact."

"Well, I guess we'd better restart power," said Xha.

"Ship," Markolos called, "what's the problem with the power?"

There was no reply.

"The ship will need to be restarted and rebooted," said the captain. "Xha, can you get me moving? I need some momentum. As it is, I'm just hanging here."

Xha took off his boot and threw it at his captain. Missed. The boot caught Jari on the head and bounced back a little. Very slowly, she began to drift towards the wall. "Hey!" she called out. "What gives?"

"I hate zero-g," said Xha. "It is simply not natural."

"I'm moving," said Markolos.

"Me too," said Xha. "I'm being pressed very gently against the wall."

"We're either accelerating in *that* direction, or decelerating in *this one*," said Markolos.

"Moving towards the planet, I think," said Xha.

"Why am I floating?" Jari called out. "Are we in zero-g? I haven't been in zero-g since basic training."

"The power is out," Xha called. "It's quite out."

"Oh," said Jari. She grasped the wall behind her, and palmed herself into the same orientation as Markolos and Xha. "Main power, you mean. We still have emergency?"

"Nothing."

"But the emergency air-scrubbers have their own hard-baked source."

"They're out. Everything."

"This air is going to get pretty stale pretty fast," Jari said. She sounded concerned. "With all three of us breathing it. You'd better ping out emergency distress."

"Such an action," Markolos observed, "would also require power."

"Hardly!" said Jari. "It's just—" But then she stopped. "I mean, I suppose it does. Need power, I mean. I hadn't really thought about it before, but *everything* on a spaceship requires power. Wait! I'm moving." And indeed she had drifted away from the wall, and was drifting in the same direction as Xha and the captain: towards the strip portholes. "Is that the inertium starting up again? Is that a bit of microgravity? Because if that's working, then other things might be working too—and if worst comes to worst, we can divert some of its power to scrub the air."

"We have a bigger problem than stale air," Markolos said. "There's a planet out there and we're falling into it."

"A planet!" said Jari. "How exciting. Which one?"

"We don't know," said Markolos.

"But I guess we'll find out once we land," said Jari.

"Why yes, the bloody, heat-seared fragments of our bodies will be able to ask a native what the world is called," Xha said.

"Don't be absurd," Jari said. "Surely we can land the ship with—" She stopped, again. "Oh," she said. "Yes, I suppose that is a problem."

"There's a Fountainview craft out there," Xha reported from the porthole. "I can see it now. It's just swung 'round the shoulder of the planet. A big one!"

"Signal it!" Jari said. "We're saved!"

"Signal it?"

"Can't you just—" She stopped, for a third time. "This is most annoying. Can't we get *any power at all*, from any source? How did the ancients do things—steam power? Light a fire?"

"The ancients," Xha observed, "were not big on interstellar flight."

Markolos had reached the hullside wall. He scrambled, hand over hand, to the porthole. The deceleration was increasing in magnitude, and Jari was drifting closer.

"Maybe they'll spot us anyway," she said. "And pull us aboard?"

"We are putting out literally zero energy emissions of any kind. So far as that cruiser is concerned, we're just a lump of nothing. A rock."

"They might detect the Edgeless Sphere?" Xha offered.

"It's not an energy source. The Ghost used it to track us through alacrity, but they were scanning for it—in that idiom it represented a knot, an anomaly. In alacrity space. Here in einspace it's just a weird, inert relic."

"Maybe planetary defenses will spot us?" Xha suggested. "I mean, if we really are coming down like a meteorite?"

"And blast us to dust? That would be a quick end, at least." Markolos peered through the porthole grid at the swelling vista of the planet. "It's pretty much uninhabited. Look—one small settlement, there, but otherwise all empty land and sea. I can't imagine the settlement would run to the expense of maintaining a dedicated planetary defense."

"Will we burn up?" Xha asked.

"The structural integrity web-circ won't be operating, I suppose," said Jari. "It's amazing how many systems on a ship need power! I mean, the circuitry doesn't need a *lot* of power. But I guess it needs some."

"It needs some," Markolos agreed. "And what we have is none."

"So we need to calculate the tensile strength and heat-resistance of the actual fabric of the spaceship." Jari was now on the hullside wall, a few meters from the other two. She turned onto her back and called out: "Ship, what is the composition of the hull fabric? How will it react to heating to, let's say, two thousand degrees?" Silence. "The ship's computer *isn't working*?" Jari exclaimed. "Surely *it* doesn't need main power?"

"What did you think it ran on? Wishes and fairy dust?"

"I figured it ran like our brains run. I mean, our brains are still functioning, aren't they?"

Xha stared at Jari. "Questionable assertion in some cases," he said.



The quality of light coming through the three-pane porthole was changing, ripening into darker yellows and hints of orange. "It looks like we're going to find out how the hull fabric reacts to uncontrolled deceleration, at any rate," said Markolos.

"This is *insane*," said Jari. "We're just going to—what, drop like a stone out of orbit onto the hard ground?"

"We need to strap ourselves in, somehow," said Markolos. The force pressing him against the hullside wall was increasing, and was indeed starting to become uncomfortable.

"Get the wall to extrude some webbing," Jari said, immediately adding, "of course not, that requires power, everything requires power—this is *crazy*." Then she said: "We're going to die. We're all going to die, Captain Markolos, because you were too proud and—too *cowardly* to surrender to Fountainview when we had the chance."

"We're not dead yet," said Markolos, sliding his way along the wall and wedging his left leg under the outcrop of a curving survey unit. "Xha, Jari: Brace yourselves."

The light was bright orange now, and the triple windows were incandescent and flaring. Hard-edged shadows ducked and parried across the cabin walls.

"So far as I can see," said Jari, remaining where she was, on her back, against the smooth hullside wall, "we have a couple of minutes before the whole craft burns up like a lump of pure sodium dropped in a bucket of water. I hardly think bracing ourselves is going to make any difference."

Almost exactly on the last syllable of this utterance, the *Trampoline* juddered, spun, and lurched. The deceleration force that had had Jari pressed against the wall stuttered and intermitted; a burst of bright-orange light swelled through the portholes, and Jari's body flew the length of the cabin and smacked hard against the far wall. "Ow!" she yelled.

The ship began to rotate. Xha was scrambling to find something to hold onto. Jari, bruised but whole, was trying to fit herself into the door jamb. The ship glowed, burned, and slowed more rapidly. Jari, unable to brace herself or hold anything, slid out of the door and half-fell, half-slid across the cabin floor. "Whoa!" she wailed.

Something snapped, with a sound like a bone breaking. The hull. This noise was followed by a rapid din of bangs and thuds and crazy creaks. The light pouring through the porthole was now too bright to look at directly. It evanesced and pulsed, oranges and reds and sharp whites, and the slow rotation of the *Trampoline* stopped, and began to reverse.

Xha had managed to grasp one of the seats the ship had extruded, prior to its loss of power. He strained to wrap himself around it. The whole ship shook like a flag in a hurricane, and Jari was thrust backwards—she bounced off the rear wall and then careened to the hullside wall. "Ooo!" she cried.

"Hold on," yelled Markolos.

For several minutes, the space was noisy. An almost harmonic balance mixed the chords of the ship's fabric deforming and complaining under the severe pressures of reentry, with the high-pitched keening sound that emerged from Jari's mouth. She had grabbed the base of a console and, by dint of sticking her toes into a slot and grasping the other side with both arms, managed to stay in place during the resulting rodeo. The ship spun. The air inside warmed. The stink of scorched plasmetal began to permeate.

The ship was not designed for this kind of use.

And then, with a startling abruptness, the red and orange lights died away, and the rotation slowed and stopped. The *Trampoline* was freefalling in the ocean of air that was the planet's atmosphere. The bangs and cracks were augmented by a great rushing, whooshing sound. Air resistance. A mighty wind.

"We didn't burn up!" cried Jari.

There was a snap and a crack and a piece of hull the size of a man broke away. The whole cabin was filled with a tornado of air. Anything loose inside the cabin was blown about into a vast clattering rush. Jari's hair struggled wildly, as if desperate to break free from her scalp, but she managed to hold on. Other cracks and booms from elsewhere in the craft indicated that other portions of the ship were breaking away.

Jari screamed something, but she could in no way be heard over the vast cacophony of the wind.

Overlaid on the hugeness of all this noise came something deeper, grumbling and trembling, a subwoofer groan. Though the three inside the cabin couldn't see it, the *Trampoline*—pocked and torn—had oriented itself in atmospheric freefall along the dynamic of its basic aerodynamic lines. Second by second, more panels and pieces, weakened and charred by reentry heat they were never made to sustain, broke off, and with each the overall structure became more holey, more draggy, and slowed. It was still hurtling groundward at a killing speed, but then the spine of the whole ship peeled away, taking with it the hooped rounding supports. Great chunks of the craft scattered and buried away into the wide air.

That portion of the cabin—it would, under the logic of the inertium's artificial gravity, have been the ceiling—came off like a lid. The corner opened, and the force of the air snapped it off and spun it away. Xha's legs flew up, flapping like pennants in the wind. He gripped his holding point.

The three were in an open-topped box: a bathtub, and the ground was rushing towards them at terminal velocity.

And then the air jammed itself against the wider side of their abbreviated space. The wall groaned and shuddered, but held, and—as every action has an equal and opposite reaction—the whole structure tipped. Inverted. Xha's legs smacked back against the floor—that now abruptly became the ceiling—and then immediately yanked back down again as the structure, a rigid parachute, slowed sharply.

The horizon swam up all around, and the remnant of the cabin hit the downslope of one of Skyward Ho's innumerable gorse-clad hills with a huge whump. The walls buckled and the floor—or roof—sheared away. It reared up and flipped over, and when it landed again, it was a giant toboggan sliding down and along.

At the bottom of this particular hill was a long, shallow lake with brackish-brown water. The last remaining bit of the cabin with any kind of integrity splashed mightily into this, and a huge spout flew out and up.

Slowly, it began to sink. Markolos felt chilly water seep up around him, and he knew that he had to let go now. But for a moment, he could not tear his eyes away from the fireworks display above him. Scalloped and threading lines of smoke and dust reached in every direction, blots of blacker smoke, a few gleaming portions shooting down like comets.

There was a large, gloopy, splashing sound, and somewhere over the top of it Jari's musical wail. They were down.

## :7: The World Exists To Be Remade

1.

Thalassa walked on, heading towards the center of Skyward Ho. She proceeded through the various shanty-patches of human and alien settlement—pods, bubblehuts, folk sitting with nothing but an umbrella to cover them, smoking and watching the world—into the more substantial areas: low-roofed buildings, built of glass bricks or printed from plasmetal; two- and three-story towers; workshops.

From here it was past the main block of Port administration buildings. Here there was more of a to-do: People hurrying in and out of the main building. From behind the cellblock, a drone-flitter took to the air and swung away, buzzing out into the wilderness beyond the port.

Thalassa spotted someone she knew: a health officer of the port called Josipovici. Thalassa was on friendly terms with him: a tubby, bald-headed wide with a stammer that grew worse when he became anxious, something that happened often.

“Joss,” she called.

“Thalassa,” Josipovici called back. He ran over to her and dragged her by her elbow ‘round the corner and along an access path. “What are you d-d-*doing*? You need to get away.”

“Get away?”

““They’re l-l-looking for you.”

“The Port authorities?”

“Fountainview has made a f-formal application. Three Ghast warships have appeared! In orbit! F-Fountainview is worried about war—war! They want a rogue Fountainview officer called ma-ma-Mapanje, who’s gone to ground here. He’s somewhere about the port. All the officers are ah, eh, are *out*, searching for him.”

“You’re going to hand him over to Fountainview?” Thalassa was shocked.

“Didn’t you hear what I said? War. It could be war!”

This is one of Fountainview’s own—there’s no reason for us to stick out our neck to protect him. He’s rogue. But you’re different. We’re f-f-*friends*, you and I.”

““Good friends, Joss.”

“You need to get away. They’re coming for you too.”

“What’s this all about? War? War about *what*?”

“Some object stolen from the Ghast. Some suspicion that Fountainview is involved in the theft. Something super v-v-v-valuable, or *holy*, or something. Something! I don’t know. But you were interrogated by Fountainview—taken up to their ship.”

“I was.”

“Well, they want you back. You’re in league with this rogue guy—or something. I’m only a health officer, I haven’t seen the w-warrant. But everyone’s talking about it.”

Another flitter zoomed low overhead, banking and spitting through the air in the direction of the impound yard.

“Warrant for what?” Thalassa demanded. “I haven’t done anything wrong!”

“You need to lie low. Or better still, get away. Can you r-r-redeem your ship?” Josipovici knew all about the circumstances of Thalassa’s debts, and the fact of her confiscated craft.

“What do you think, Joss?” Thalassa returned. “Do I look like I’ve suddenly inherited a fortune? No, I can’t redeem my ship.”

“Then hide. Once they arrest this Mapanje guy, maybe Fountainview will relax, turn down the heat a little. I don’t know. I’ve never known them so agitated. Something h-huge is h-happening.”

“They tried to shoot me,” Thalassa said.

Josipovici stared at her. “What?”

“I was outside the fence—it’s a long story, but I came down outside the fence, and this Fountainview scramkite came screaming down at me and fired its main weapon right where I was standing.”

“And,” Josipovici stuttered, “y-you survived? What happened? D-did they miss? How *could* they miss?”

“I don’t know.” Thinking back to that moment, an hour earlier, Thalassa was suddenly struck by how bizarre it had been. How *did* they miss? They couldn’t have missed.

The ground shook.

This was unprecedented. Skyward Ho was not a world particularly prone to quakes or tremors, and the port, built in the middle of the planet’s largest tectonic plate, was the most stable place imaginable. Yet there was no question that the ground beneath their feet shuddered and trembled, and then was still.

“What,” said Thalassa, “was *that*?”

“Quake?” Joss replied uncertainly, looking around.

“There are no quakes here.”

“Get a-away,” Josipovici advised her. ‘Hide your h-h-head. I have *not* seen you, Thalassa.’ He ran back down the service alley and across the yard beyond. Thalassa stood, trying to process what she had heard.

Overhead, higher up, another flitter swished by. Somewhere on the far side of the building to her left, Thalassa heard the sound of raised voices, a scream, and then the unmistakable sound of a burster being fired.

Time to make herself scarce. She hurried to the far end of the service alley and emerged onto a wide road, busy with hovs and pedestrians passing to and fro. Worried faces on every side. To the end, down a set of steps, like giant mahjong tiles, she stepped, and turned left into a courtyard. This was

the entrance to the Rain Bar, where Thalassa had often drunk. She trusted the owner, Rain herself, to give her sanctuary—at least for a short while. Provided, of course, she kept buying drinks.

Inside, it was dark. A single globe shone pale blue on the bar, and everywhere else was gloomy: The windows were shuttered, nobody else was around. Thalassa made her way to the bar and called Rain's name. There was no reply. At the far end of the bar, an automated unit whirred, poked-up a sensor on a vertical stick, and then pulled it in again.

"We are closed," the unit declared.

"The owner is a friend of mine," said Thalassa. "She'll want to see me."

"We are closed," said the unit.

"Never mind that. Get me a drink. Get me a glass of cold vodka."

The unit whirred and then was silent.

"I'll get it myself," said Thalassa, pulling a glass down from its overhead rack and stretching across the bar to where the bottles stood.

The cap came off with a click, and the vodka poured cleanly, gulpingly, into the glass. "Cheers," she toasted the unit.

"We are closed," the unit said again.

"Here's to closure, then." She took a drink. The alcohol icily scorched her throat.

What was she going to do? Fountainview had taken her up to their ship and interrogated her, and then were ready to let her go again. Then Mapanje intervened. The next encounter she had with Fountainview, they were trying to kill her. What changed? How had she suddenly become such a threat to Fountainview—to Fountainview's mission of preserving peace, of monitoring and controlling the distribution and use of the relics, for the good of all sentient galactic life—that they were prepared to *assassinate* her? She didn't even have a relic! And now Ghast warships were orbiting Skyward Ho? She could imagine Fountainview violating their own scruples, and killing someone to prevent a war. But the Ghast arriving had nothing to do with her, did it?

None of it made sense.

Then, with a sense of something slowly gathering momentum, the room began to shake. The floor shimmied, the bar against which Thalassa was leaning grumbled and shook. All of the glasses dangling overhead swayed and tinkled, a sound like crickets chirping all together. The circle of vodka inside the top of the bottle tipped and angled. Behind her, at the back of the bar, a chair fell over.

The ground settled again.

The shake seemed to upset the automated unit. It squeaked "We are closed! We are closed! We are closed!" It burred and clicked, and then calmed down.

Thalassa had lived on Skyward Ho for seven years and had never before experienced an earth tremor. Now there had been two in 20 minutes.

And here was Rain, emerging from the shadowy door that led from the back of the bar to the depths of the building. She was holding a burster, and aiming it at Thalassa.

"Hello Rain," said Thalassa. "That for me?"

"You," said Rain. Then she swore. She tucked the weapon away. "Thalassa—what are you doing here? I thought you were a robber."

"I am." She lifted the glass and the vodka inside it. "I figured I could presume on our friendship. And actually, I have a favor to ask you. I need a place to hide, for a day or two."

"I mean," Rain said, grabbing a glass for herself, "the police are all over the port at the moment, looking for this major threat. A rogue Fountainview operative, public enemy number one. All their officers are involved in that search, so they can't promise to prioritize a simple robbery in action." Rain poured a slug of vodka and drained it. "That's not *you*, is it? That major threat?"

"That's not me, no."

"And yet you want to lie low? Hiding from who, if not the Port police?"

"It's a complicated story," said Thalassa, as she reached again for the vodka bottle. "Muldone found something."

"We all know about Muldone," said Rain. "Local celebrity, with a mystery attached. He said he found something. Flew out to the White Fountain and came back with something, wouldn't say what it was, wouldn't pay his Port fees, wouldn't even come out of his blamed spaceship. Then: pff. Gone. People are saying he came back empty-handed and was too embarrassed to admit it."

"He certainly brought something back," said Thalassa. "I know it."

"I see." Rain poured herself another drink. "You and he still together?"

"Not like that," said Thalassa. "But he heard of something, and came to me—for us to go into business together. A sphere."

"A relic?"

"Of course."

"What did it do?"

"Story was it was cursed. A Ghast found it—an outlaw Ghast, exiled from the homeworld, living by its wits. It found this sphere and then went mad. Disappeared. They later found its body, buried in rock. The sphere was among his possessions, and a human called Grieg got hold of it. Then Grieg disappeared. But Muldone said he knew where Grieg would have stashed the sphere, and that he and I should fence it together. He would go get it, then I would use my contacts with the Ghast to sell it back to them."

"So why did he act so weird when he flew back into Skyward?" asked Rain.

"I don't know."

"And where is he now?"

"I don't know."

"Sounds like this sphere is indeed a disappearance machine. I wouldn't touch it if I were you—cursed, like the stories go."

"Muldone didn't think it was cursed," said Thalassa. "He said it was a time machine. Think what *that* would be worth!"

"Time machine?"

"That's the rumor. I don't know, it's not clear to me how it's supposed to work. And Muldone didn't have any better information. Maybe there's no truth in it! But imagine if it is."

"Going backward and forwards in time? Like, zip back to ancient history, or zap forward to the end of the universe?"

"Muldone didn't think that, but maybe to slow time, or speed it up. Dilation, without acceleration. Imagine the uses!"

"Hard to think Fountainview would allow such a dangerous thing to circulate freely about the cosmos. Or to be replicated. If it's replicable."

"When Muldone landed, and then wouldn't come out, I figured his journey had been a bust," said Thalassa. "But then he vanished. So something's up. At first I figured he had dialed time right down, so that we could no longer see him from our position—you know, from our one-second-passing-a-second perspective. So I waited around. But if that's what he did, he didn't dial it back up. I don't know where he is. But I know Fountainview wants what he's got."

"They know you were connected with Muldone," said Rain. "And so they want to arrest you."

"They did arrest me. They interrogated me. But I managed to hide the truth from their A.I. truth-teller. They let me go. But then something changed, because the next time they came after me, they were trying to assassinate me."

"Kill you?"

"No lie. I was lucky to get away."

"So you don't want them to get a hold of you a third time," said Rain. "I understand."

"I was willing to go back into their custody, that second time," Thalassa said. "But they'd upped the stakes. Panicking, I figure. Something is up. Something major."

"Three Ghast ships in orbit," said Rain. "Threats of war. That's a major development."

"So I heard," said Thalassa.

The ground grumbled and shook again. The automated unit clicked and chirped: "They're here!"

Thalassa was lifting the glass to her mouth for another sip when she heard this. She put it down on the bar. "They?"

"Sure, Thal. I'd already called the police."

"You called the *police*?"

"I thought you were a thief!"

"But now you know I'm not."

"That's right," said Rain. "Now I know you're a woman for whom a reward is offered for information leading to her apprehension."

Thalassa stepped back from the bar. "You sold me out."

"It's too late," Rain said levelly. "It was already too late. The unit automatically sent your facial details to the database. They knew you were here before I stepped into the room. I might as well get the benefit from your arrest, right? You wouldn't begrudge me the reward? Lord knows I need the money."

Thalassa looked around the bar. She had no weapon, so she couldn't fight her way out or take Rain hostage. She thought about picking up a chair and using it, like a lion tamer, to fight off the arresting officers. But that was a crazy notion. Behind Rain was a doorway that led into the backrooms of the bar, and presumably an exit. If the police had any sense, they would have that door covered.

"No hard feelings, Thalassa," said Rain.

Thalassa looked at the pool table, the poles mounted on the wall. "Four cue," she replied.

Rain took the point. "It's the Port Authority," she said. "I mean, I guess they'll extradite you to Fountainview soon enough, but at least it's not a hit squad."

"Small mercies," said Thalassa.

There was a smash and a clatter behind her, and three Port police officers, armored and carrying long barrel bursters tumbled through the main entrance into the bar.

Thalassa said, "I'll have to owe you for the vodka."

"Take it as a gift, my friend," said Rain, pouring herself another glass. "I hope it helps you through these, our end days."

The Port Authorities pulled Thalassa out of the bar, prodded her up the stairs, and bundled her into a flytvan. The smart sense in the gel-cuffs glued themselves to the interior wall of this windowless compartment. The slump in Thalassa's belly let her know that the flytvan had lifted off, and in a few moments the leap in her belly let her know it had descended. When she was pulled out, she discovered they were on the roof of the detainment block. Then it was into an elevator, wide enough to encompass an elephant, through a plasma-sealed security gateway, past a set of shoot-on-sight dart guns—set, one of the officers informed Thalassa with improper glee, to *cripple*—and through a second security gateway even more elaborately established than the outer gate. Impossible to escape all that.

They hurried her down a corridor, stopped her in front of a blank door as they disabled the gel-cuffs, and finally opened her cell. Pushed her inside. The door slid shut with a hefty thunk.

Thalassa, rubbing her left wrist with her right hand, and then her right wrist with her left, sat down on the bench. Here she was, in her windowless room. End of the road. Even if she could get out of this lock-up and past the security gates beyond, and evade the Port authorities—and Fountainview—she had no money, no ship, no weapons. She was, she concluded, out of options.

Then there was a sense of something shifting. A tickle in her inner ear. The air in the room stirred, briefly, and settled.

There was a middle-aged adult human sitting on the cell's one bench.

It was Muldone.

"Hello, Thalassa," he said. "Good to see you. But we can't stop here. The world is ending."



2.

Thalassa was startled enough to stand up and back off. Muldone had definitely not been in that space a moment before, and he definitely was here now. Unless she was hallucinating? She stepped forward and kicked him on the shin. "Ow!" he said.

"You're real," she told him.

"I am."

"The world is ending, you say? Is that just some shit a person says? Or is the world *actually* ending?"

"The latter," said Muldone.

"Okay," said Thalassa. "Okay, I'll bite. How could you possibly know I would be delivered into this exact police cell?" Then, because she wasn't in a mood to wait for an answer, she added: "And where have you *been*, man? What happened? How was it you were parked on that runway for all those days and never even acknowledged us? Never mind not leaving your stinking ship, or turning off your jerry-rigged shields. What were you *doing*?"

Instead of answering directly, Muldone said: "You were interrogated by Fountainview? Up in orbit?"

"Yes."

"Did you divulge anything?"

"You mean—about you and me? No, Muldone. No, I did not."

"That was clever."

"What the hell happened, Muldone? Where did you *go*?"

"*Where* is the wrong modifier," said Muldone, and again he favored her with his sly smile, and Thalassa remembered that sometimes he just annoyed her. Just annoyed her so much. For all his charm, and all the good times they had shared, there was a kernel to his personality that simply grated her.

*It was never going to work out between us*, she thought. Despite all the good times they had had. Fundamentally, he was just too annoying.

"So now we're both locked up in here," she said. "You realize they're going to hand us *both* over to Fountainview? And from my experiences today, I have the distinct impression that Fountainview will simply execute me. Capital, the capital of punishmentland. They tried to kill me once today, you know."

"I know. I was there."

He was, she decided, joking. "Right, sure. Well, I've been wracking my brains, and the only reason I can think of for their animus is—is *you*, Muldone. It was you they were asking after when they interrogated me. So I have to assume they'll want you too; and I can't imagine they'll be any kinder to you than they will to me."

"They think I picked up a valuable relic on my travels."

"Which you did! Like we planned."

"Yes."

"Well, isn't that marvelous? Just marvelous. And now we're going to die."

"I disagree," he said, smiling his annoying smile. "I think we're going to walk away."

Her temper flared. "Well, you really are the most," she told him. "I don't know if you noticed the state of the security here? It's pretty hardcore. You perhaps have a plan for deactivating those two barriers? Disarming the guards?"

"Might it be that maybe you're asking the wrong question?" Muldone suggested.

Thalassa moved over to the bench and sat down next to him. For a moment, she didn't say anything. Then, in a level voice, she asked: "What did you find?"

"There are *two* spheres," said Muldone.

"Two?"

"We knew about one. That's what we were planning on grabbing, and fencing. But I have since discovered that the sphere we were going after—the *time* one—is one of a pair. Two relics that came out of the White together, though they've now been separated. I found one of them."

"And the other?"

As if in answer to her question, the floor of the cell grumbled, shimmied rapidly left and right. The blocks making up the walls groaned and deformed. The tremor was hard enough to slide Muldone and Thalassa along the bench. It took longer to settle.

"Well," said Muldone, "here we are. So: two spheres. One is in the keeping of the Ghast—or was. It's called the Edgeless Sphere, and the Ghast revered it."

"Yeah," said Thalassa. "Sure, I heard about that. It's famous. It doesn't do anything, but the Ghast kind of kneel to it. Yes?"

"It's precious to them. Then again, they let a crew of human thieves steal it."

"They *let* them?"

"It wasn't easy. The Ghast both wanted and didn't want the relic to go."

"Why?"

"Well, they didn't want the relic to go because it was valuable to them, holy. But they wanted it to go because their gods had told them it had to go. There was a scene—blood spilled, as I understand. But it was taken. Then the Ghast chased it. They're here now. Three big ships."

"Great big ships, sure."

"They're after the sphere."

"This sphere is here?"

"Oh, yes. That earth tremor was a sign."

"And you stole it? From the Ghast?"

"No, no," said Muldone. "I'm sorry, I'm not explaining it very clearly. It's hard for me to hold it in my head—the consecutive nature of it, I mean. My relationship to time has changed. Has been changed. I didn't steal the *Edgeless Sphere*. That was a different group—a professional crew. But they were chased and ended up here. They crashed, in fact, in the wilderness, outside the perimeter. We need to go get them, actually."

"We do?"

"Sure. It's the humane thing. But also—well, there are important reasons. Because of the nature of the two spheres."

"Do you know them? This crew?"

"Good grief, no!" Muldone laughed.

"I don't understand what *your* relation is to this edgeless globe, this sphere."

"Everything changes, from this moment. Now that the two spheres are both in play. The one this group of thieves took. The one I took."

"You have a second Edgeless Sphere?"

"Mine is different. But the two make a pair. Whoever made them, constructed them—the old question as to where all these White Fountain relics come from, of course—built them as a pair. The Edgeless Sphere is a spatial anomaly: It is a sphere defined by the relationship between half its circumference and its radius. But its radius is 3, exactly. In our universe, where  $\pi$  is 3.14, it doesn't quite exist in the way that a normal sphere does."

"Yeah, I heard about that. Edgeless, that's it. But it doesn't *do* anything, does it? I thought it was just a kind of weird curio."

"It's doing something pretty major as we speak," said Muldone.

The ground trembled another time.

"And your sphere is the same?" Thalassa asked.

"The Edgeless Sphere is a *spatial* anomaly. Mine is a *temporal* anomaly. Since time is, fundamentally, an oscillation—a periodization, like the swing of a pendulum— $\pi$  plays a part in the equations that govern it. But my sphere isn't edgeless like the other. You can pick mine up with bare hands. It feels a little cool but is otherwise inert to the touch. The Edgeless Sphere isn't like that—if you tried to touch it, the indeterminacy at its surface would destroy your fingers."

"And this time sphere is of a pair with the other? The space sphere?"

"Space and time are intimately connected, of course. Perhaps the two globes came out of the White at the same time, but they became separated. The Ghast picked up the space one. I located the time one, much later."

"How does it work? I mean—it does work? Or is it just a curio, like the other?"

"It works. The edgeless sphere is a  $\pi = 3$  structure in a  $\pi = 3.14$  universe: Its edgelessness is a function of that incompatibility. The time globe is at once an object for which time passes at one second per second, and an object for which time passes at 2.718 seconds per second—per our second, if you see what I mean. It's both at once."

"Whoa," said Thalassa.

"It is our time matrix, but overlaid on a very different one. Or the other way around. But it does more: Once you figure it out, it opens a recension of different temporal rates. Engage it, and a second passing for you could be hours—or years—for everybody else. Or you can fine-tune it, ratchet it. It's how we're getting out of here."

"How? Adjust our time scale to centuries, so our guards grow old and die?"

"Dilate or contract time, and you more-or-less stay where you are, in space. But stop time and something different happens. You're frozen, temporally, and so you slip out of space altogether. And when you re-engage, space has moved on."

"Moved on?"

"Planets rotate. They orbit their stars. The stars themselves swing 'round their galactic cores. Fundamental spacetime itself is shearing outward, as a consequence of the Big Bang. If I stopped time long enough, this planet that we're on would whiz and spiral away from us and we'd come back in deep space. But I'm not suggesting we do that. A millisecond will do it."

"Translate us through space?"

"Exactly. Pop out for a millisecond, and when we pop back in, this whole building will have slipped away. We won't be breaking out, so much as *it* will be shucking us out, like peas from a pod."

"This sounds pretty crazy, Muldone."

"Oh it works. I've done it many times. You too."

"Me?"

"How do you think I saved you from the scramkite?"

"That was *you*?"

"A fraction of millisecond, and then you weren't where the scramkite was aiming its weapons."

"You sound like an eye-witness."

"Oh I was there. You didn't see me. But that's one of the ways you can use this sphere."

"You have it now?"

"It's on my ship. I've plugged it into my systems and can control it from here. The ship is not visible, don't worry about that. But it means—look, why don't I stop talking and start showing?" Muldone got to his feet. "Come on Thal. For old time's sake. Hold my hand."

She got up and took hold of his proffered hand.

"So, we take a step towards the wall," he said, putting his best foot forward. She copied him, and when her foot came down she was outside the cell—outside the jail compound, and her foot came down onto dirt.

The downstep was further than she anticipated, like when you climb stairs and reach the top without realizing it. But there they were, outside. The sun winked at them. A magnolia bush like an upturned chandelier, a myriad of flowers galactically white. The scent of the flowers. A breeze stroked Thalassa's cheek.

"This is like a dream," she said. "This is dream-logic."

"It's real, though. Come on," Muldone urged.

They hurried off, and then another quake struck, this one hefty enough to trip Thalassa up. She went down on one knee and almost fell. Muldone was there, grabbing her arm. "What the hell are these quakes?"

"This crew," said Muldone. "The people I don't know, and have never met—the ones who stole the other sphere. They've crashed on Skyward Ho. The Edgeless Sphere was kept in a suspension field. It wasn't touching anything, because it would eat through any material it came up against. The crew that stole it held it in a portable field, and that's how it was stored on their craft. But then their craft crashed, and the sphere tumbled out onto the landscape."

"So?"

"So, it's eating its way down towards the center of the planet. It may be edgeless, but it has mass, and mass is affected by gravity. But there's nothing it won't chew up as it goes. So, down it goes."

"What?"

"We need to be offworld by the time it reaches the core."

"Bigger and bigger quakes, you mean?"

"At the core it will, in effect, determine the logic of this globe—this big one, on which we're currently standing. The planetary surface will no longer be a clear plane from pole to pole. It will become an impossible zone. Skyward Ho will become edgeless, like the sphere."

"But what about the people who live here?"

"They need to get away. Get offworld. Or they won't survive. That's why we need to pick up the crew, or whoever has survived that crash. They don't have a ship."

"Neither do you," Thalassa pointed out. "What's the plan—to use your time-sphere skills to, what, teleport aboard?"

At this, Muldone laughed aloud, and Thalassa got a memory-stab of the good times they had shared once upon a time. "Dear me, no. That would be super dangerous. The ship would have to be in exactly the right place, and I would have to stall time for precisely the right length of fractions of a second. Given the distances involved, I would mess it up. This isn't magic, Thal. This is the alteration of physical reality, and as unforgiving as any physics. No, that's not the way."

"How did you get down here?"

"In a bell, of course. But the authorities confiscated that when they seized me. Anyway, we have a better option. *Your* ship."

"My ship."

"But we need to hurry. These tremors are growing deeper, and larger."

"And you can get me into my ship?"

"Not from here. But if we get to the impound, I can zip us past the wall."

They ran. Flitters flew through the sky above them in all directions, like autumn leaves blown by the mistral. People were rushing through the streets. The unprecedented earth tremors had clearly spooked folk; away to the left, beyond the cluster of buildings, halls, and businesses, where the first of the port's many runways was located, ships were leaping into the high sky on icicles of flame.

There was a good deal of police activity at the impound facility's main entrance, but there was no need to approach that way. Muldone and Thalassa made their way 'round the perimeter barrier. Another tremor, much bigger than the previous ones, took the ground from under their feet, and they both sprawled. The wall waved and shook like a strand of seaweed.

"The next tremor might knock the wall over altogether," said Thalassa. "Maybe we don't need your rough teleporting skills."

"Might pull the wall down on top of us, killing us both," said Muldone.

"Is this Edgeless Sphere really going all the way to the planetary core?"

"Don't really have time for a kindergarten lecture on how gravity works."

"But I mean—won't it be destroyed? Won't it just, you know, melt, when it gets to the magma?"

"If it were a regular sphere, then yes, of course. But there is no edge by which the heat of the planet's core can convect itself into the sphere itself. No, it's going all the way. And we need to be gone before it gets there."

Another tremor, stronger yet. Screams could be heard from various places across the port, and then a succession of crumpling, thudding sounds. Buildings were starting to collapse.

"Come," said Muldone. "Take my hand." The next thing Thalassa knew, they were on the inside of the compound. The tall, curving, yellow hull of a space freighter was less than a centimeter from their faces.

"What happens if we teleport into something?" Thalassa asked. "I mean, if you stop time and then start it, and we're like...in the middle of a wall or a piece of hull?"

"We die," said Muldone. "And it's hard to anticipate. So I don't propose we do it too often. Let's just find your ship and get away."

The ground shook again. They darted between the various crafts, some the size of huts, some as tall as multistory buildings. Here was Thalassa's craft, the *Technoteacher*—a pinecone-shaped block of scorched plasmetal, dusty on the outside, standing on three retractable legs. But the main portal still recognised her DNA, and opened.

They were airborne in minutes. The belly of the craft transparented, and as she piloted, Thalassa glanced down at a city collapsing. The buildings wobbled like jelly. Drones and flitters and larger ships flew up and away in every direction.

"There," said Muldone, pointing. Thalassa tipped the *Technoteacher* forward and accelerated, then swept over the port perimeter and skimmed the landscape beyond, uphill and over valleys, until, coming down on the far side of one long slope, she saw a huddle of people. Three of them. Wreckage was scattered across a wide area. At the foot of the hill was a long lake, the waters of which were jittery and pocked with vibration.

Thalassa brought the ship down until it was hovering a meter above the ground, and opened the main portal. The three people struggled over the leaping, shaking ground towards her, and with Muldone leaning down and helping them up, they entered the ship. She closed the portal.

As these passengers lay on the floor, Thalassa pulled the craft up into the higher sky. All around, like inverted autumn, crafts of all sizes and types were drifting upwards and into orbit. Below, the ground blurred, the whole landscape growing uncanny. The air darkened, and soon enough they were in space.

“Well,” said Muldone. “That was a close-run thing.” He smiled at the three strangers. “Very pleased to meet you, I’m sure.”

The three were a female juvenile, an exceptionally ugly wide, and a taller, better-looking male: all human. The last of these got to his feet. “Don’t misunderstand me,” he said. “We’re grateful for the pick up, but who the hell are you?”

“That,” said Muldone, “is a very good question.”

Below them, the color, the very caliber of the surface of Skyward Ho was changing. From a scuffed yellow-brown, it was changing, shimmering across the whole of its huge surface. The horizon-line incandescing. Uncanny spectral glooms shuddering over the whole; a kind of visual tinnitus, a shudder in the very nature of reality. This world was no longer everything that was the case.

Muldone steered the ship into space. Through the viewscreen, the occupants of the craft looked back at Skyward Ho. The whole planet had changed into something entirely new. It was no longer a regular planetary body. Now, it was a vast, planet-sized, Edgeless Sphere, in orbit around its sun.

“Does somebody want to explain what happened here?” asked Markolos.