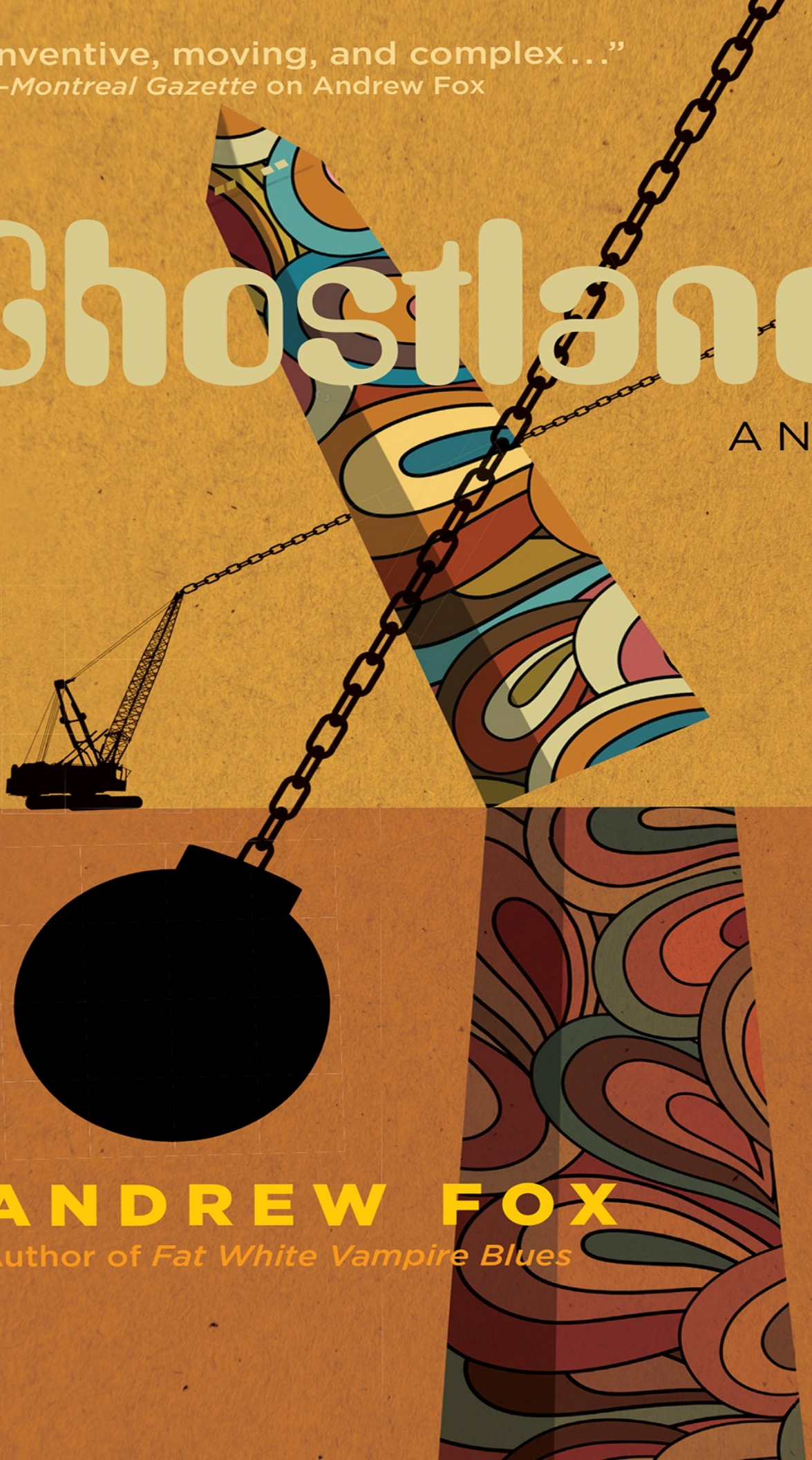
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—*Montreal Gazette* on Andrew Fox

Ghostlands

A Novel



ANDREW FOX

Author of *Fat White Vampire Blues*

ARK PRIZE

WINNER

Ghostlands

ANDREW FOX



Ark Press
Los Angeles, CA

GHOSTLANDS

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for Dara, with love

for Robert Silverberg, with admiration

and for Levi, Asher, Judah, Natalie, Zoe, and Matt,
who carry the past into the future

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Gordon Van Gelder on Ghostlands

Modern men are afraid of the past.
It is a record of human achievement,
but its other face is human defeat.

—Walter Lippmann

We live in a world where amnesia is the most
wished-for state.
When did history become a bad word?

—John Guare

The past grows gradually around one, like a placenta
for dying.

—John Berger

• PART ONE •

GROUNDSKEEPER

• ONE •

The Earthquake on the Great Lawn

FRANCESCO HELIOS had never experienced an earthquake before. Nor had anyone who'd lived their life in New Shining Capital.

Yet his Mower, seventy tons of metal with a wrecking arm eight stories tall and steel tractor treads eight feet wide, quivered like a slender branch of a sapling when leaped upon by a fat squirrel.

Far more ominous, the looming mushroom Francesco knew he would need to dismantle six or seven months hence—the Washerman's Monument, already grown to more than three hundred feet tall—shook like an obelisk made of uncooked bread dough. Not fully solidified, it could topple at any moment.

Its fall would crush hundreds of tourists who surrounded the Great Lawn, gathered to watch Francesco perform his duty.

They'd come to watch him work. He was responsible for them being here.

Their screams from the far side of the wooden fences reached him even over the throbbing groan of the Mower's engine and the roar of breaking earth. He had to save them.

He'd been reversing from the spreading fissures, trying to keep the Mower from suffering damage. He couldn't be concerned about that now. His powerful right hand desperately grabbed hold of the transmission lever and jerked it into its first forward gear, steering his colossal mechanism directly toward the even more colossal mushroom.

The Mower lurched up and over fissures, its front claw wheels pointing momentarily skyward and spinning over empty air before the machine's center of gravity brought the front portion of the tracks crashing

to earth again. The closer he drew to the Washerman's Monument, the more afraid he became. Big as his Mower was, the trembling monument made it seem puny by comparison, a mere sandlot toy. If the obelisk insisted on toppling west, could he shift its fall by even a single degree? Or would his sacrificial tackle simply add him and his machine to the earthquake's victims and not preserve even one life?

He crossed one more wide fissure and was then within grappling range of the monument. The fissure boxed him in; a good ten feet of his tracks still dangled over distended roots and open air, meaning he wouldn't be able to deploy his stabilizers. In front of him, the obelisk blocked out much of the sky, a thick slash of milky whiteness across the cloudless blue.

He swung out the Mower's wrecking arm so that it would traverse the widest arc possible before pressing against the monument's western face. Simultaneously, he spooled out the wrecking ball's cable to its full extent so that the ball would add its maximum momentum to the force of the push. He didn't dare strike the monument with the ball directly—that could split the obelisk in half and send the top portion plummeting onto the trapped crowds. Instead, he'd have to give it a good, strong shove with the steel arm itself, praying that would be enough to change the direction of the monument's fall without prematurely breaking it into pieces.

The Mower's cabin and everything inside it began shaking again. The rumbling wail of an invisible freight train returned. *Aftershock*, Francesco thought. Grabbing the wrecking arm's control lever with both fists, he muscled it all the way to the right. The ground danced beneath the Mower's tracks. Thick gray cracks scurried across the obelisk's midsection, close to the spot where the wrecking arm's blow would land.

The laws of physics had taken over—nothing could be stopped now.

Realizing he might have only seconds to live, he prayed for the health of his pregnant wife, Aleedia, and for the futures of his daughters and sons. He braced himself for the colossal impact. Eshrae, his youngest son, might never receive Francesco's final tendarm; the boy's life, barely begun, teetering on the brink of puberty, would be stunted and twisted in ways Francesco could hardly imagine. That, possibly, was the most crushing thought of all.

The force of the collision threw him against his safety straps. It bludgeoned the breath from him. The sound of the crash was muffled by the rumbling of the still-accelerating aftershock. As though it were happening in slow motion, underwater, the wrecking ball orbited the obelisk like a great black moon, winding its taut cable around the cracking stone monument. Obelisk and Mower had wed, fusing their fates for whatever brief duration shuddering ground and gravity would allow.

The ground's trembling surged. Francesco felt the Mower lurch backward as the earth disintegrated beneath the rearmost portions of its tracks. He heard what sounded like demolition charges exploding, then saw the monument's southern face buckle, cracks darting like lightning bolts above and below where the cable had wound itself. Then he was falling, the sky tilting, his stomach heaving, his seat dropping away from him until the restraining straps, loath to let him escape, snapped him backward.

The sky is falling …

Locked in a mutual suicide pact, the backsliding Mower pulled the toppling monument down upon itself. The obelisk's pointed tip aimed at the center of Francesco's forehead. He threw his arms across his eyes. Before he blocked it from view, his slayer seemed to be falling in slow motion, giving him ample time to remember the strange steps of the past half hour that had led him here to his death …

• TWO •

The Woman Who Sank into the Ground

HAD IT BEEN ONLY A HALF HOUR AGO? Just thirty minutes since Francesco had driven his Mower across the Great Lawn and aimed its wrecking ball at the marble columns surrounding the giant, solemn, seated figure?

Such a familiar task—he'd done it eight times before, demolished this same mushroomed monument, and he'd fully expected he'd need to do it eight or even eighty times more before he eventually got too old for this work. His gloved hands had manipulated the control levers with the confidence of years of experience; the Mower and its controls felt nearly as much a part of him as his own fingers or tendarms. He knew exactly where to strike the key columns so that the monument's stone roof would topple sideways to the ground in two or three massive pieces, rather than plunging straight down onto the sitting statue and shattering it and themselves into hundreds of chunks and, far worse, clouds of chronome-contaminated dust.

He felt the unstoppable momentum of the two-ton iron ball pull his giant tracked machine askew. The wrecking ball struck the first of the key columns with a satisfying smack. The impact which reverberated back into the bones of Francesco's arms confirmed the accuracy of his pre-demolition survey—this mushroom was fully mature and solidified, with none of the sponginess that indicated additional subterranean growth yet to sprout.

The struck column broke into three cylindrical pieces when it hit the ground. None of the roof followed it down, not yet; although stress fractures spread along the precariously hanging corner, marking the stone like erratic silvery traces left by a family of snails. Old Frog Face was a stubborn relic. Francesco marveled at the fact that during his eighteen years as a groundskeeper, he'd been directed to demolish this incredibly tenacious

mushroom nine times now. Its endless sproutings from the Great Lawn's soil meant, at least, that his children's children would never lack for work.

He climbed down from the Mower's cabin to survey his work thus far, needing to carefully select the most efficacious point at which to next aim his wrecking ball. This was the part of his job he liked best, the part most like a game. His skill, his judgment, the wordless wisdom of his muscles, and the weight of that massive iron ball, all versus the mushroom … or the CASPA, the chronologically anomalous stationary phenomenon (actualized), to use the most up-to-date acronym promulgated by the Department of Environmental Sanitation.

He stared at the Reflecting Pool, a long, rectangular pond that stretched from the foot of Old Frog Face's temple almost all the way to the base of the towering Washerman's Monument. How deep was it? He'd learned to swim at an early age, but opportunities to practice since then had been regrettably few. The ocean and most lakes were off-limits to swimmers because of the chronome infestation, and he hadn't had access to a community swimming pool since he and his family had been put out of their spacious apartment on East High Street when Francesco had been six, their eviction set in motion by the birth of his second brother, Malvechio. Before they were forced to leave, he'd taken a pair of his father's old, worn-out work boots to the edge of the pool, deserted in the early morning, slipped the boots on, and used their extra weight to submerge himself. Then he'd walked across the basin's bottom, staring up at the water's sun-dappled surface, kicking free of the boots only when he could hold his breath not a second longer.

He climbed the steps to the temple's interior and stared up into the stone eyes of Old Frog Face. They were sad eyes, some of the saddest he'd ever seen. No tendarms extended from the statue's back; whatever else he may have been, this man had been father to at least five sons, the same as Francesco.

"Who were you?" he asked the statue.

He wished it could talk. There was so much he wanted to ask. "Were you a man from my great-great-grandfather's time? Could you tell me what he got his medals for?" He read some of the words chiseled into the marble

panels which framed the statue's chair. A HOUSE DIVIDED AGAINST ITSELF SHALL NOT STAND. What could that mean? In his work, he'd actually seen mushroom houses cleaved in half prior to final demolition, and sometimes the two halves could stand independent of each other. So the statement must've had a meaning other than the literal one, a hidden meaning more lost in the choppy eddies of time than the builders of this monument themselves.

"Why did the people of your time decide to honor you with a temple?" Francesco asked. "And what did you do that was so horrible that my bosses order me to smash your face again and again?"

He reminded himself not to dawdle too long. The weight of hundreds of eyes pressed upon him. Most belonged to tourists, visitors who leaned against the tall wooden fences that surrounded New Shining Capital's Great Lawn, peering through seams and knotholes to watch the mushrooms gradually rise from the soil. But lurking among them were low-level supervisors from the Department of Environmental Sanitation, minders assigned to report on any groundskeepers who succumbed to curiosity, who entered the Great Lawn's mushrooming ancient museums to peek at their ghost exhibits before leveling them and loading the debris into boxcars.

He'd even heard rumors of a surveillance camera installed at the top of the Washerman's Monument, the stone obelisk which, when it reached its full height, would tower taller than any non-mushroom building in New Shining Capital. An irresistible lure for tourists, it was only two-thirds its maximum height now, not yet solid enough to bother dismantling. It looked like an angular tendarm pointing at the sky, a lone tendarm like the sole limb remaining on Francesco's back, which squirmed uncomfortably within the confines of his protective coveralls. The flesh surrounding its base had already grown soft and pulpy, ripe for the father-to-son gifting which would occur within months, when Francesco would pass on his last tendarm to his youngest son.

"Francesco!"

A woman ran toward him from the northern perimeter of the Great Lawn. How she'd managed to climb the wooden fence he had no idea. He didn't recognize her, nor was she dressed in the garb of his department.

He tried waving her away. “You aren’t supposed to be in here!” he called. “This is a restricted CASPA demolition and removal site. Go back! These mushrooms aren’t entirely stable! You could get hurt!”

“Francesco! Protect yourself! There’s going to be an earthquake!”

He could barely hear her. Had she said something about an *earthquake*? She was young, barely out of her teens, with long, black hair and features like those of a Native Sixer, uncommon here in the east, even given the steady influx of westerners into New Shining Capital. Her feet—had the brightness of the day skewed his vision, or were her feet sinking into the earth up to the tops of her ankles as she ran toward him? But the ground was bone dry; there hadn’t been any rains in weeks …

She stopped running when she stood ten feet from him. Immediately, she began sinking—very slowly, but the ground gradually swallowed her, quarter-inch by quarter-inch, as though she stood in a bog of quicksand.

“Who *are* you?” he asked.

“There’s no time for that,” she said. “You couldn’t understand who I am; not yet. I’ve been bouncing through the decades inside the rubber room; endlessly, it felt like, always waiting for a chance to see you. Then I landed here and now and saw the date—the earthquake is going to happen any minute now. I know how you are, Francesco; I know you want to do good and keep people from getting hurt. But just this once, you have to ignore that part of you. When the quake begins, you’re going to see people, tourists, who need rescuing, and you’re going to want to help them. *Don’t!* You’re too important! Instead of sacrificing yourself to save a handful of people, save yourself so that you can rescue *millions* later!”

“What are you talking about?” Francesco said. “We’re hundreds of miles away from the nearest fault line. There’s never been an earthquake here, not in recorded history.”

“This quake isn’t a normal one. You don’t know it yet, but there’s a massive island drifting off the eastern seaboard. It’s just collided with our continent, midway between New Shining Capital and Space City. The collision will cause the quake.”

Was he dealing with a madwoman? She’d mentioned a “rubber room,” after all. Perhaps her madness was contagious and he’d already

caught it, which was why he watched her slowly sinking into the ground? Her intrusion had forced a surreal overlay onto an otherwise flawless day. The sky was cloudless, a brilliant aqua blue mirrored in the Reflecting Pool. Wildflowers carpeted the Great Lawn, and hundreds of birds, white and pink and gray, feasted on insects attracted by the nectar.

"Did you—did you get out of a hospital?" he asked, at the same time realizing that this wouldn't explain the puzzle she represented. If she were an "ordinary" madwoman, how would she know his name? And those sinking legs …

"I'm not crazy, Francesco," she said. "Although I wish to God I were. If I could gain freedom from this endless bouncing simply by taking the right medication, rather than having to chase you all around the rubber room with my 'sisters' and try to keep you on track, I'd be much better off __"

The surface of the Reflecting Pool quivered. The birds took to the air, rising in a cloud of squawking plumage. Seconds later, Francesco felt the ground begin to shake.

"It's here," the woman said. "Francesco, get in your Mower! Drive away from the Monument!"

The noise arrived next, a percussion-heavy orchestra that had missed its cue and now rushed to catch up with its conductor. To Francesco, it sounded like all the cacophonies of his various work sites jumbled together, amplified by a power of ten—the rumbling of the great tracked Mowers as they crept across a rock-strewn field; the crash and clatter of time-lost debris being dropped into boxcars; the thunder and roar of debris-removal trains hurling through echoing valleys toward the coast.

Like horrors from a fever nightmare, fissures cut through the earth all along the Great Lawn as though a gigantic, invisible planting machine were digging furrows for the next season's crops. Earth cracks lanced between the mysterious woman's sunken feet. They quickly widened into a chasm. Francesco half expected her to levitate above the suddenly missing ground. But just like a normal person would, she fell, disappearing from his sight.

He jumped down from the cab of his Mower. Stumbling over the broken ground, he ran to her assistance. He found her in a five-foot-deep

chasm, her legs embedded in mud and crumbled sod. He knelt by the edge of the hole and reached for her. “Grab my arms! I’ll pull you out—”

“Get *out* of here, you idiot!” she screamed up at him. “I don’t matter —I’ll come back again and again! But you matter! You’re the Time Breaker! Save *yourself*, you thickheaded—”

He never had a chance to learn what additional insult she would hurl at him. A fresh tremor threw him backward. He rolled away from the chasm. When he regained his footing, the hole had been forced almost entirely closed. Only the woman’s right hand and wrist protruded.

Far above him, the top of the Washerman’s Monument swayed like a thin pine in a winter squall. The obelisk’s doughy surfaces flexed with the oscillations. They retained their integrity, but for how much longer, Francesco dared not predict. He couldn’t do anything more for the woman, whoever she was. Except do his best to follow her last wishes.

He ran back to his Mower and climbed the rungs into its cabin. A spare safety helmet fell from its overhead storage bin. His two-way radio leaped out of its holder above the control panel and struck his knee, then crashed into the floor. He started the Mower’s engine. If he didn’t move his machine to safety, both he and it stood a good chance of being crushed by chunks of the Washerman’s Monument.

A mile north of the swaying monument, one of the wing-shaped concrete amphitheater pavilions attached to the New Capitol Building crumbled and fell.

Fresh cracks darted across the Great Lawn, jagged black snakes devouring acres of wildflowers. Some grew wide enough for him to see the root systems of long-dead trees, now stretched across yawning chasms like webs spun of frayed rope. Where could he take the Mower? The Mower was no sports car; once he’d chosen a path, he was committed to it, at least for the minute or so it took him to stop one set of tracks and begin the machine’s achingly slow pivot.

For now, at least, the ground south of Old Frog Face, adjacent to the Tomaic River, appeared the least disturbed. He threw the Mower’s transmission into reverse, staring over his shoulder and praying he’d be able to see any newly appearing fissure before he backed into it.

Then he heard the screaming.

He whipped his head back around. The terrified cries came from the far side of the fence, adjacent to the Washerman's Monument. Cracks had appeared ten feet above the monument's base. The obelisk leaned ominously to the west, overshadowing the fence like a gigantic spear. He had no idea how many people would be crushed if the monument toppled west—the tourists' path of retreat might be blocked by upheavals he couldn't see.

How had the woman known? How had she known tourists would be trapped? She'd specifically warned him not to try to help them …

To hell with that.

He headed straight for the Washerman's Monument. His Mower was built to have extraordinary stability; its tracks extended eighty feet from claw wheel to claw wheel, and the machine's width exceeded half that length. He could extend hydraulic outrigger braces to provide even greater steadiness—assuming the ground beneath the braces didn't give way. With luck, he could use either its grappling arm or its wrecking ball arm to force the monument to topple north or east, away from the fence.

The banks of the Reflecting Pool ruptured as he drove alongside it, releasing a chronome-infested torrent into the maze of miniature canyons that had been a flat field moments before. Thus far, none of the fissures had grown wider than fifteen or twenty feet, still within the Mower's abilities to traverse. The machine moved infuriatingly slowly, no faster than Francesco could run, and the spreading mud reduced its speed even further. He saw pieces of gelatinous stone fall from the tip of the Washerman's Monument, heavy and solid enough to crush a man. One chunk struck the top of the fence, bludgeoning a section to splinters. Tourists scurried out of the way, but their routes to safety were blocked—he saw that the street paralleling the Great Lawn had been compressed into a mountain range of broken asphalt, caging dozens of people in a zone of escalating danger …

Now he'd done everything he could to save them. But he couldn't even save himself.

The Mower had only tumbled halfway through its backward fall into the gorge when the first giant chunks of the Washerman's Monument struck the rim of the chasm, exploding like meteors. The earth erupted, shattering the Mower's windows and peppering him with clods of stony dirt. Then the largest portion of the obelisk, the central section tethered by the wrecking ball's cable, toppled onto the Mower's front end, crumpling the steel wrecking arm as though it were a cardboard tube. It sledgehammered the Mower to the bottom of the gorge.

Francesco's body quivered like a struck gong. The cacophony of rending metal gradually subsided. Amazed to be still alive, he opened his eyes. His legs were above him, dangling from his bent waist; he was upside down, suspended by his safety straps. Had the straps been fastened more loosely, the top of his skull would have cracked like an egg against the cabin's roof.

Looking upward, he could see only a sliver of blue sky. The monument's central portion lay across the top of the gorge like a massive stone bridge. Had his Mower been struck on flat ground, he would presently be a puddle of blood, bile, and spinal fluids soaking into the earth.

But unless he was now a ghost, a chronologically anomalous human-seeming phenomenon (emergent-insubstantial), the same unquiet earth that had so recently dug his grave had seen fit to save him.

• THREE •

Heroism's Reward

HOURS PASSED before a rescue party from the Department of Environmental Sanitation extracted Francesco from the gorge. He'd spent every minute of his upside-down imprisonment inside the wrecked Mower tortured by thoughts of what might have happened to his family. At least his Wildwood Village neighborhood sat on a substratum of granite bedrock, as opposed to the drained marshland, reclaimed from the Tomaic River, where the Washerman's Monument had risen and toppled. He prayed that the tremors had been less severe in his neighborhood and had caused much less destruction. Unfortunately, his intimate familiarity with the shoddy, haphazard construction of the congested townhouse apartments gave him little confidence.

He didn't recognize any of his rescuers. As they cut him loose from the restraining straps, he begged them for information. "How bad was the damage outside the city's core? Do you know anything about Wildwood Village?"

"Wildwood Village?" one asked. "You mean Breeders' Estates? No, don't know a thing about Breeders' Estates. Power's out all across downtown. Plenty of gas lines have ruptured—there's some wicked bad fires raging."

His two rescuers dragged him from the gorge using a rope they tied around his waist. He tried to stand, but his legs folded under him like sacks of wet cement. He gasped with an onrush of renewed sensation as blood began flowing through them again—hundreds of invisible pins stabbed him. Across his thighs, his blood had spread into subcutaneous purple pools in the rough shape of the restraining straps. Steadying himself, he watched his

rescuers examine the crumbled Mower. One man took photographs while the other jotted down notes, shaking his head at the thoroughness of the machine's destruction.

"Can you take me home?" Francesco asked.

The man with the camera paused to change his roll of film. "Our orders are to bring you back to headquarters, unless you're in need of immediate medical attention. Any broken bones?"

Francesco ran his hands up and down his limbs, then gingerly probed his chest and collarbone area. No sharp pains answered his probing, only dull aches that he knew would become much more pronounced in coming days. "I seem to be all right," he said. "I have to get home. There are no phones in my neighborhood. I don't have any way to find out what happened to my family."

"You're in the same boat as everyone else, then. The quake took down most of the phone lines. Thousands of folks are wondering about their loved ones."

"Let's get you to the truck," the man with the notepad said.

The two men helped Francesco cross the broken ground toward the toppled fence. He didn't see any sign of the dead woman, not even her hand, which had remained unburied when he'd fled back to his Mower. Passing the narrow haven of level ground where the crowd of tourists had cowered, he felt a surge of relief when he saw no blood or bodies. *I did the right thing*, he told himself. He had done what his father, the man whose tendarm formed part of Francesco's body and which would soon be fused with the body of his youngest son, would have expected of him. What his grandfather and great-grandfather, he presumed, would have expected of him.

The men helped him climb into the bed of a small, three-wheeled utility truck. The sputtering clatter of its little two-stroke motor was quickly obscured by the blare of sirens, which echoed from the man-made canyons of downtown office buildings. The truck's simple suspension wasn't designed for the comfort of passengers, particularly not those riding as cargo. The driver zigzagged around mounds of broken pavement and fallen masonry, throwing Francesco from one side of the ridged metal bed to the

other. M Street, the most direct route from the Great Lawn to the Department of Environmental Sanitation's headquarters building, was cordoned off by a row of warning barricades. Francesco smelled the metallic odor of natural gas, indicating a ruptured main, another potential disaster awaiting its spark.

Who could the dead woman have been? Over his years with the department, he'd met a handful of Native Sixers, but he'd never gotten friendly with any of them. Members of the upper caste, they were rarely willing to associate too closely with "breeders" such as himself, the ostracized patriarchs of large families. Citizens who dared to flout convention by spawning more than a single child were silently and not so silently accused of despoiling the Earth Nest, a shared home already pushed to ecological crisis by omnipresent, never-ending invasions of mushrooms, ghosts, and creepers.

He remembered the woman's feet, sinking steadily into the dry earth prior to the quake. The more he pictured the vanishing of those legs into solid ground, the more convinced he became that she had been either a ghost or a creeper, a CAHSPEI or a CAHSPAM, a chronologically anomalous human-seeming phenomenon (emergent-insubstantial) or a chronologically anomalous human-seeming phenomenon (actualized-malignant). A ghost could walk through walls; he'd seen them do it. Conceivably, they would sink into the earth, too. But ghosts were mute. A creeper was as solid as he was, capable of speech. But a creeper's feet would not have sunken into the ground the way hers had. So she'd been neither a ghost nor creeper. Perhaps something in between? Ghosts, if left unmolested long enough, evolved into creepers. Maybe she had been a ghost on the verge of creeperhood, forced from the shadows by her knowledge of the coming earthquake and her enigmatic compulsion to protect him …?

Yet even these seemingly congruent pieces of the puzzle refused to join together. Ghosts and creepers, like mushrooms, came from the past. Logically, the woman could have told him of events from three decades or a century ago, but not of events even five minutes in the future.

And even if he *had* tumbled into a zone of surreality (had the earthquake released underground miasmas which had unmoored his mind?) and met something as uncanny as a ghost-creeper with precognitive powers, why had she needed to speak with *him*? With all the hundreds of prominent, powerful citizens in New Shining Capital she could have chosen to contact, why had she selected a "breeder" groundskeeper, a man on the verge of surrendering his final tendarm and being subsequently reduced to a mindless, vegetative lump by a forced regimen of grayhead drugs? He'd witnessed ghosts before, aboard the mushroomed warships docked in the old Navy Yards or wandering the mushroomed streets of Turtle Hill, but none had ever attempted to communicate with him in any way. They had always acted as though he hadn't been present—which, to their eyes, he hadn't been.

So what made this ghost-creeper woman so different? She'd called him a "Time Breaker" … He had no idea what that even meant.

The truck took a wide detour, swerving from Blue Avenue to P Street and then onto Indigo Avenue. Francesco noted with some small satisfaction that the six-story-tall headquarters of the Department of Family Optimization had lost its entire front facade. Desks teetered three stories high on the edges of offices sliced in half by the collapse. Filing cabinets littered the rubble; the wind scattered hundreds of forms detailing the purported antisocial behaviors of those citizens who had chosen to forego civic approval by burdening the Earth Nest with superfluous offspring.

It'll take them months to reconstitute their files, he thought as the truck turned onto an unbarricaded stretch of M Street. *Maybe my records are drifting down Indigo Avenue. Maybe the entire complex will go up in a gas fire, and the family service workers will forget that Aleedia is due to bear us a fourth daughter; and I won't be demoted again, and my family won't be thrown out of our home, and I won't be changed into a simple-headed fool after I grant Eshrae my last tendarm.*

Shame colored his face. As a government employee, how could he wish misfortune on a sister department? He was a government man and had been one his whole adult life. He owed his country everything. It had once inspired his forefathers to feats of great bravery and honor, from the little he

knew. He wished he could learn more, but those opportunities were denied him.

Maybe things would get better for once, rather than worse. He had survived, hadn't he? Maybe all his superiors wanted from him was a debriefing regarding the Mower's destruction. Maybe once he explained how necessary his actions had been, they would allow him to go home …?

"Mr. Helios, you have deprived the department of an asset worth millions of dollars." The office's emergency lighting failed to adequately illuminate Disposal Section Chief Michael Laurent's expression, but his tone left no doubt as to his feelings. Laurent was a hawk-faced man of diminutive size, a full halfhead shorter than Francesco, and he possessed the preemptive aggressiveness typical of many small men. "Explain, if you can, why Miss Seeling and I should not immediately terminate you, revoke your pension, and permanently bar you from future government employment."

Francesco's body throbbed. His head felt like a balloon being inflated beyond its tolerances, nearer and nearer to its bursting point. Laurent's office, decorated with a minor potentate's rococo taste, was Francesco's least favorite place in New Shining Capital in which to find himself. He couldn't make out Jenerette Seeling's face in the dimness, but Francesco thought the young underchief's stiff posture indicated how uncomfortable she was with her boss's choice of words. Perhaps she just wanted to get this reprimand over with, then send Francesco home to recuperate. But she was merely his first line supervisor; she would have to toe whatever line Laurent chose to draw.

"Mr. Laurent," Francesco said, "I hope you know I would never do anything to harm the department. I tried to save lives. If the monument had fallen onto the fence, a dozen or more people would have been crushed."

"None of your coworkers have verified that."

"Francesco was working alone on the Great Lawn," Jenerette Seeling said. "None of his coworkers would've witnessed the incident. Of course, we haven't been able to review the tapes from the surveillance cameras yet, assuming any of them survived the quake intact."

“This is all irrelevant,” Laurent said. “Mr. Helios, do you understand what your job is? Is your job to uproot and eliminate CASPUs and CASPAs and to prepare chronologically anomalous warships for disposal? Or is it to play would-be hero, jeopardizing vastly expensive government equipment in the process?”

Five years ago, I would’ve taken this with more grace, Francesco thought. Back before Aleedia and he had their first child, he was the one who hired Mike Laurent and trained him.

He managed to keep his hands still on his lap, but he was less successful in controlling his tendarm’s reaction—he felt the whiplike appendage, with its three stubby “fingers,” stiffen above his head, rather than remain submissively hidden behind him. Its mute challenge called forth a response from Laurent’s five tendarms, each adorned with the copper bracelets and gold tasseled ribbons that advertised his rank; they reared back in a bunch, like a nest of rattlesnakes readying to strike.

“Mr. Laurent, those tourists would’ve been crushed if I hadn’t done what I did,” Francesco said with more heat than he’d intended. “Of course I understand my job. No, I’m not a safety officer. But isn’t preserving human health and lives the justification for everything we do, why we cut down mushrooms in the first place—?”

“Do not use slang when engaged in official business. I will not abide the terms ‘mushrooms,’ ‘ghosts,’ or ‘creepers.’ You have been trained in the proper terminology. Use it.”

“Fine.” Francesco recalled that Laurent’s first official action upon his promotion to section chief had been to massage the department’s arsenal of acronyms. Laurent had then obsessively campaigned for his rejiggered acronyms to be adopted across all departments, not merely within Environmental Sanitation. “I’ll rephrase my question.” He silently cursed the day when he had taken the young Michael Laurent under his wing as a lowly sanitation intern. “Isn’t the goal of our removal of chronologically anomalous stationary phenomena (unsolid) and chronologically anomalous stationary phenomena (actualized) to prevent an infestation of rogue chronome particles, which could adversely impact human health?”

Laurent stiffly folded his tendarms atop his shoulders. “Don’t presume to prescribe the department’s objectives and purposes, Mr. Helios. That is far above your pay grade. You need only concern yourself with the proper husbandry of those assets I trusted you to utilize—”

Jenerette Seeling cleared her throat. “If I may make a suggestion, sir?”

Laurent nodded. “Go ahead.”

“I don’t mean to diminish the seriousness of this incident. But I would counsel holding off any decision on suspension or termination until after the present emergency has passed. Despite his possible recklessness today, Francesco remains our sole resident expert on the propulsion and steering systems of the CASPA warships at the Navy Yards. We couldn’t pilot the larger vessels out to sea and sink them without his expertise. And please remember, he gained that expertise on his own initiative. He’s also one of my most experienced heavy equipment operators. I’ve lost contact with a third of my staff. Reports are coming in that scores of CASPU structures have fallen in non-sanitary districts all over New Shining Capital. The longer that debris sits broken and crumbling, exposed to wind and weather, the more chance there is of toxic dust contaminating inhabited parts of the city. I know it’s unproven, but there are indications the dust acts as an accelerant, nurturing the development of CAHSPEIs and speeding their evolution into CAHSPAMs. I need Francesco back out in the field, or this disaster will only get worse.”

The tip of one of Laurent’s tendarms snaked beneath his chin. Its three squat, pink digits rubbed his jawline as he mulled Jenerette Seeling’s request. “Very well,” he said. “Put him on one of the dump trucks. They cost only a twentieth what a Mower costs, so we won’t be putting too valuable an asset at risk.”

He turned back to Francesco. “How old is your youngest son, Mr. Helios?” he asked with unconcealed satisfaction.

“Eshrae is eleven,” Francesco answered, wary that his family had been pulled into this discussion.

“And when will he turn twelve?”

“Two months from now.”

“Well, then, I imagine you must be very proud.” Laurent stared at Francesco’s sole remaining tendarm and smiled without warmth. Francesco’s face flushed yet again. “Ms. Seeling,” Laurent said, “make as much use of our Mr. Helios as you can over the next eight weeks. I don’t imagine he’ll be field deployable too long beyond that. As soon as this crisis has passed, assign him a trainee so we don’t lose his specialized knowledge when the grayhead drugs begin eroding his memory.” The tips of his tendarms tapped lightly together behind his head, a gesture of self-congratulation that made Francesco want to rip the offending limbs from his superior’s back. “There’s no need for us to speak further regarding his disposition in the wake of today’s incident. I believe the passage of time and the application of medical law will take care of that for us. You are both free to go.”

Jenerette Seeling lit their path down the dark hall with a pocket flashlight. Francesco paused next to a row of windows that overlooked M Street; exhaustion and suppressed rage forced him to lean against the windowsill. The only parts of the northwestern sector of New Shining Capital that weren’t cloaked in darkness were those structures lit from within by flames, like jack-o’-lanterns.

“Before I return to duty,” Francesco asked, “will you let me go see my family?”

“I can’t let you go, Francesco. Not under these circumstances.”

“How can you expect me to be productive,” he said, his throat tight, “if I don’t know whether my wife and children are alive or dead? I can’t call them. There are no phones.”

“I’m sorry,” she said. Silhouetted by the distant light of the gas fires, she looked, Francesco thought, much like Aleedia had once looked, before the ordeals of bearing nine children and the daily abrasions of raising them had coarsened her petite softness. “I know it’s a sacrifice,” she said.

She doesn’t know, Francesco thought. *She’ll never know.*

“But until the immediate crisis is over, I’m putting the entire staff on lockdown. No one goes home, including me. I’ll arrange to have ready-to-eat meals delivered to your work site. You’ll have to sleep in the truck. If we’re lucky and things go well, I’ll lift the lockdown in a week. Do the kind

of work I know you're capable of, and maybe I'll be able to send us all home a little sooner."

Francesco said nothing. He wondered whether, if their positions were reversed and it was she who suffered the agony of not knowing the fates of a spouse, three daughters, and five sons, he could manage to be so hard. Just as he had trained Michael Laurent, so had he trained and mentored Jenerette Seeling. Both she and Laurent owed their careers to him.

"Francesco," she said, "don't I get a thank-you?"

Funny, he thought, *I could ask you the same question.* "For what?" he said, unable to restrain a hint of bitterness.

"For saving your ass from oblivion. For at least delaying what Michael clearly wants to do to you. You gave him the excuse he's been waiting for, you know. You think I'm a bitch for insisting you stay on duty? Think how much worse it would be if your income had been taken away, along with your housing and sustenance benefits. What would happen to your family then?"

Francesco slouched onto the windowsill. "Can you tell me why he hates me so much? What did I ever do to him? Is it my father? My father's supposed crimes?"

"Your father? I doubt it. Michael's never mentioned your father's alleged crimes to me, and it's not as though he would have refrained out of tact or decency." She sat down next to him and lit a cigarette. She offered him one, but he waved it away. "As for his hating you, I don't think 'hate' is the right word. It's more of an aversion. Your offspring are an affront, almost a crime in and of themselves. To make it worse, your family has a prominent military heritage, or so I hear. There's no way to sugarcoat this—you and your family disgust him."

That came as no surprise. Francesco had grown inured to the quiet but omnipresent infamy that accrued to him whenever he ventured outside his neighborhood with his children. "Do I disgust you, too?" he asked quietly.

She shook her head. "No. I'd never do what you and Aleedia have done, not in a million years, but my parents raised me not to judge others." He felt the weight of her gaze on the pouches sagging beneath his eyes, the

crow's-feet etching his temples. He was, at most, seven years older than she was; but a passerby could easily take him to be her father. "I do feel sorry for you, though. I wish …" She glanced at his one remaining tendarm, then quickly looked away. "I wish you hadn't felt the need to push things so *far*, that's all. I wish you could've stopped at one or two, so you could still enjoy a decent life."

"I *have* a decent life. I have everything I ever wanted. I wish you could understand, Jenerette … I wish you could know how much they all mean to me. They're the sun and the moon and the stars to me."

She exhaled a long stream of smoke; the cloud mirrored the grayish white pall floating over the office blocks of the northwestern sector. "For your sake, Francesco, I hope they're worth what lies ahead for you."

After a dozen years' experience maneuvering a Mower, handling a dump truck felt like driving a child's pedal car. The pain and stiffness from Francesco's multiple contusions reached their zenith on the second day following the quakes. But he welcomed the physical aches—they helped distract him from a far worse pain, the pain of not knowing.

The days and nights of that first post-quake week bled together like watercolors dripping down a humid canvas. In Packardville, grappler trucks scooped up loamy chunks of archaic automotive assembly plants and dropped them into his dump box; then he drove five miles to the railhead, where he deposited the debris into boxcars hooked to disposal trains and covered the cars with thick tarps to prevent any small pieces from bouncing free and contaminating the countryside. In Green Bottom and Bridge Town, he backed his truck dozens of times to where the steam shovels and front loaders waited, and he carted the jumbled remains of time-lost commercial main streets and row houses and churches to the waiting boxcars. In the Ironworks District, he subbed for the operator of a claw-head grappler who'd been injured on the job, and he helped pull apart the mushrooming replica of a past century's grand exposition pavilion, a marvel of glass panels and filigreed iron lace.

And the trains ran south through New Shining Capital, once known as Fedopolis, before that known by other names, blotted out or long ago forgotten. The trains turned east, following the Tomaic River to the coast of Chess Peak Bay and thence to the edge of the chronome-infested sea, where remotely controlled barges floated in their concrete docks, waiting for operators in protective suits to hoist the filled containers from the trains and load them onto the barges' decks. The barges, guided by radio waves transmitted from steel towers even taller than the Washerman's Monument, steamed east, toward the horizon. After the unmanned vessels crossed the edge of the continental shelf and the depth of water beneath their broad hulls leaped to miles uncountable, the radio waves ignited demolition charges that cracked each barge in two, plunging the nameless vessels and their time-lost cargoes into graves deeper than the expanse between the waves and the highest clouds.

No mariners dared to sail this haunted sea. But if any defied the prohibitions and risked the unknown furies of ghosts belched forth in sea spray and kelp, they would find themselves navigating by constellations different than those utilized by their ancestors. All celestial points of reference shifted south by a few fractions of a degree of latitude each month as the continent, pushed by the Lantana Stream current, drifted steadily northward—a floating island, untethered from the sea bed, carrying three and three quarters of a million souls; its thousands of living cables, each tens of miles in diameter, having been aged to brittleness and premature decay by that which had once nurtured and sustained them, the sea, the chronome-infested sea.

• FOUR •

Uncle Rumberto's Proposal

"DADDY! *Daddy!*"

Prima, Francesco's nine-year-old daughter, reached him first, nearly knocking him off their cramped home's stoop with the force of her fierce embrace. He marveled at how much stronger she seemed than her brother Eshrae, two years her senior. Arista, five years old, trailed her older sister by only a few steps, despite being burdened with the baby of the family, little Sophia, whom she dragged behind her. Arista, who had borrowed her mother's baby-handling gloves, hugged her father's waist, burying her face in his ribs, and two-year-old Sophia wormed her way between Prima's legs to grab him around his knees.

His five boys, all older, excessively aware of the dozens of faces peering down at their family reunion from the twin rows of redbrick tenements lining Wildwood Street, hung back, as though this were merely an ordinary workday evening and they had last seen their father twelve hours ago. Even Eshrae, who just a year ago would have raced Prima in a supreme effort to be the first to fling himself upon his father, did his best to appear nonchalant—but Francesco saw a glint in his youngest son's eyes and a quivering of his lips that gave lie to the pose.

He kissed both of Prima's cheeks, then her neck, then kissed the top of Arista's head, burying his nose in her wavy auburn hair, which smelled of candle wax. And the baby, Sophia—she looked nearly twice the size she'd been when he'd seen her last, although only eight days had passed. He lifted her up, kissing her again and again on her sweet mouth. He felt the heat generated by her infantile secretions on his lips and cheeks, and he knew he'd need to slather salve on minor burns later, but he didn't care.

He'd suffered through burns with all of them. He embraced the three girls with his one remaining tendarm, reveling in their nearness. The soaring emotions of this reunion made all the hardships of the past eight days more than worthwhile.

"Boys!" he cried. "Get over here! Your sisters won't let me move!"

His command shattered what masculine reserve they'd managed to muster, and they rushed him in a pack. In seconds, he found himself the epicenter of an avalanche of hugs, a swirl of arms and faces and tendarms. Only Aleedia hadn't emerged from their apartment to greet him. But knowing his wife's limitations, he was neither surprised nor hurt. He grabbed Leonardo's shoulders; at fifteen, his eldest surviving son. "Leonardo, how is your mother? Did the earthquake harm her?"

"Mother's fine, Father. Our building wasn't badly damaged. There are cracks in the walls, but we've stuffed them full of paper so you hardly notice. A lot of our dishes and lamps fell and broke—"

"What about her new baby? Does she still feel the baby's kicking?"

"Yes, the baby's fine, too. Uncle Rumberto's visiting. He's been with Mother and us the last few nights. He found out where you were and that you were okay, but he wasn't able to send you word of how we were."

"Rumberto, here? Really?" Francesco wouldn't have expected his younger brother to have taken such a keen interest in his nieces' and nephews' welfare. The middle child of three surviving brothers, a high-ranking official with the National Space Colonization Agency, and an acclaimed amateur poet, dramatist, and symbol renewalist, Rumberto had always seemed uncomfortable around his extended family, embarrassed by his brother's stubborn, atavistic fecundity. Francesco tried not to hold his brother's aloofness against him; Rumberto was a public figure, after all, and Francesco's enormous set of offspring could only be a drag on Rumberto's career. This seeming turnabout greatly cheered him. "Shared disaster can bring out the best in a family," he told Leonardo. He found himself more eager to see his brother than he had in years.

He gave each of his sons an individual embrace. Leonardo, he noted proudly, had already exceeded him in tallness, and all four of his son's self-generated tendarms now rivaled in length and girth the tendarm Francesco

had gifted him three years ago. Adriano had lost much of the gauntness that had so worried his parents; how he'd managed to accomplish this despite the paucity of the family's rations was a mystery of adolescence—had he been absorbing nourishment from the air? Bertonio and Victor still looked like mop-headed twins, despite the fourteen months separating them. Differences between their tendarms helped set them apart; Bertonio's four self-grown tendarms now looked like pink river eels, whereas his younger brother Victor's had barely developed beyond the nub stage.

Only Eshrae, wavering on the border between childhood and sexual latency, still retained a good measure of his juvenile looks. Francesco cradled his youngest son's chin with his tendarm. He remembered with almost painful nostalgia the five packets of uncontainable boyhood energy that had once bounded around the cramped apartment like firecrackers whose fuses had been accidentally lit. If he let himself, he could easily imagine that he cradled not his youngest son's face, but Primo's, his firstborn son's. Eshrae, with his sunken cheeks and earnest eyes, looked startlingly like Primo had, the year Primo had passed on. They shared the same malady, the same shortness of breath— He cut the thought off before it would lead to places he didn't want to go. Adriano had grown past his asthma and gauntness. Eshrae would, too.

"Come, children," he said. "Let's go see your mother and uncle."

Candles set in open windows provided Wildwood Street's only illumination. He knew his neighborhood would be among the last in the city to have its power and services restored, if they ever were. Similarly, the supposedly quarantined mushroom district of Turtle Hill, a once opulent neighborhood that adjoined their crowded blocks of tenements, would probably never have its quake-damaged structures removed and disposed of at sea; the chronome-infested dust that so worried his superiors somehow was of little concern when inhaled by the residents of "Breeders' Estates." Yet he and his neighbors would find ways to make do, as they always did.

In some ways, the government's neglect helped them. Because the Mowers never chopped down Turtle Hill's mushrooms—and in some years that district was overlooked even on Angels' Night, escaping the fires set by citizen volunteers—Turtle Hill remained for the inhabitants of Wildwood

Estates an illicit resource, one outside the strict rationing regimen. Packs of children regularly circumvented the ill-maintained fences surrounding the mushroom district, scavenging time-lost foodstuffs, clothes, and other household goods to supplement their families' meager official grants. The older children trapped small game. The situation would seem almost ideal, were it not for two major concerns: the unknown long-term health effects of consuming mushroomed foods, and, even more frightening, the various carnivorous CAMPAs, chronologically anomalous mobile phenomena (actualized), which roamed Turtle Hill, the worst being the Catamounts and Dire Wolves. And just as the fences failed to keep the children out, oftentimes those same fences failed to keep the CAMPAs in.

He heard a child—no, two children—crying from somewhere within a zone of darkness, a portion of the street unlit by any candles. "Leonardo," he asked his eldest son, "do you know why those children are crying? Have there been any sightings of Dire Wolves or Catamounts in the neighborhood since the quakes?"

"We haven't seen any wolves or cats," Leonardo said. "I think those crying kids are the Berkshire family's littlest daughter and one of her older brothers, who got left behind to watch her. Their building fell down earlier today."

"Where are their parents?"

"They got hurt. The older kids had to dig them out. Then they loaded them into a cart so they could pull them to a hospital somewhere."

"Why hasn't anyone gone to help those two?" Francesco asked, directing his question at all of his older children.

"I think they were waiting in the backyard of the falling-down house until a little bit ago," Prima answered. "So nobody knew they'd gotten left behind. Uh, nobody but us. I guess they got scared and came out to the street to look for their family."

"Leonardo," Francesco said, not softening the reproach in his voice, "go gather those two, right now. Bring them back to our apartment. They'll eat and sleep with us until their family returns." He waited until Leonardo crossed the street, then addressed his other children. "Adriano, Bertonio, Victor, Eshrae, and Prima … you all should know better. Those children

aren't much older than Arista and Sophia. Would you leave Arista and Sophia alone in the dark, crying, where a Dire Wolf might get them?"

"No, Father," the children and teens answered as a group.

"I'm sorry, Father," Eshrae said, sounding genuinely aggrieved with himself. "I was waiting for you … I guess I wasn't thinking …"

The other boys, visibly chastened, remained silent.

"We're *all* sorry, Daddy," Prima added, tugging hopefully on his sleeve.

"All right, then," Francesco said, climbing the steps to their front door. "Be good friends and helpmates to the Berkshires' children, and you are all forgiven."

He paused with his hand on the door, remembering how Aleedia would once have greeted him after a prolonged time apart. He remembered how she would run to meet him at the threshold and fling her arms around his neck, refusing to let him go until each of his tendarms had caressed every bare inch of her smooth, pale skin—her shoulders, her cheeks, her arms, her sandaled feet, the lovely hollow at the small of her back. But that was years gone by; many, many children ago.

Refusing to allow bittersweet nostalgia to dampen this reunion, he pushed his front door open.

"Darling," Aleedia said, holding her scarred arms out to him, "thank whatever God there may be that you've arrived home safe."

He went to her and knelt in front of the crude wheelchair he'd made for her three months ago, when her advancing pregnancy had made it impossible for her to maneuver about the apartment with her cane. He kissed her arms and her swollen belly, then rested his cheek gently upon it. "I thank God, too, that I find you as I left you. I've missed you."

"Not the way I've missed you," she said. Her inflection spoke volumes, words which did not need to be said to be understood. "When a rumor reached us that a Mower had been crushed on the Great Lawn … what could I assume but the worst?" She glanced at her brother-in-law, who'd been forced into a corner by the press of nieces and nephews who'd crowded into the parlor. "Rumberto has been a blessing," Aleedia said,

smiling at her children's uncle. "He was able to use his contacts to find out that you were safe."

Francesco stared at his younger brother and mentally erased the repeated disappointments and slights that had corroded their bond. "Rumberto, I hardly know how to thank you. Our father, were he still with us, could not be more proud and grateful than I am."

Rumberto's colorfully adorned tendarms quivered; whether this was due to embarrassment or discomfort at being pressed against the parlor's cracked plaster, Francesco couldn't tell. "Please," Rumberto said, "don't mention it. It was simply the decent thing to do. Besides, Aleedia is stimulating company. If you've done one thing right, brother, it was marrying her."

Leonardo entered the front door, followed by the two young Berkshire children. "Leonardo," his mother called, her view partly blocked by her other offspring, "who is that you have with you?"

"Sarah and Heath Berkshire, Mother," Leonardo answered. "Father said to keep them with us until their family returns from the hospital."

"Where will you put them?" Rumberto asked. "Suspended from hooks in the ceiling?"

Aleedia dispelled the noxious comment with a quick but unfeigned laugh. "Oh, we'll find room," she said. "We always do, somehow. Sarah and Heath, are you hungry?"

"Yes, ma'am," they answered shyly.

"Eshrae, Prima, there should still be some stew left on the stovetop. Split it between our guests, please."

"But Mama," Prima said, "isn't that the food you put aside for Daddy, in case he was coming home?"

"Don't worry, Prima, dear," Francesco said. "The department fed me one last meal in the field before sending me home. Take Sarah and Heath to the kitchen and show them where they can wash up." He turned to his wife, a concerned look on his face. "Aleedia, the food you left for me, it isn't—" He stopped himself from uttering the rest of the question, reminding himself of his brother's presence.

“No, it isn’t too spicy for the little ones,” Aleedia said, catching his meaning and smoothly finishing his sentence. “It’s the same bland stuff the children and I eat.” He saw her glance quickly at Rumberto, but the latter appeared oblivious.

Ever since Eshrae’s birth, Francesco had chosen to give his portion of their official rations to the children, opting to subsist on whatever canned items he could scavenge from Turtle Hill. Aleedia used two cooking pots each time she prepared a meal, one for her children and herself, and one for her husband. Francesco would no more feed the Berkshires’ children mushroomed food than he would serve it to his own.

He wondered whether Aleedia had set aside some of her own portion for him, as a homecoming gift. That wasn’t proper, not with her needing to eat for both herself and the coming baby. As though she’d read his thoughts (and after so many years as his helpmate and partner in all things, she probably could), she dispelled his sudden moodiness with an incandescent smile. “Leonardo,” she said, “why don’t you tell your father the wonderful news Uncle Rumberto has shared with us?”

Francesco noticed that his eldest son gazed at his uncle with an almost worshipful awe. “I’m still not sure he isn’t joking with me,” Leonardo said.

“Be assured, I’m not,” Rumberto said. “I joke about many, many things—your father’s peculiar fondness for the nasty old relics he knocks down, for example—but I don’t pull my nephew’s tendarm when I offer to make him my apprentice.”

“You’d make Leonardo a trainee bureaucrat at the National Space Colonization Agency?” Francesco asked with no slight astonishment.

“That’s what I said, isn’t it? Actually, it’s potentially even better than that. If he does well with me, I get to pass him along to the engineering staff, and they’ll make a proper propulsion engineer out of him.”

“But how? Aren’t all of those traineeships filled through competitive examinations? And aren’t the exams closed to any student who isn’t an only child?”

Rumberto shook his head. “All that was true—six months ago. This is a … a new program, a pilot program. I lobbied long and hard for it. Why

toss aside promising talent merely because the possessor of that talent happens to come from a family of, well, of socially frowned-upon size? Our corps of engineers has been growing increasingly elderly. We've actually found a few of the ancient codgers keeled over atop their drafting tables. And—well, there've been other problems which have deprived us of some of our most technically skilled personnel. The ranks need *replenishing*! So, as soon as Leonardo is done with his standard elementary training tapes a few months from now, he can come work for me."

Aleedia grabbed her husband's hand. "Oh, Francesco, isn't that simply *wonderful*?"

"Of course, of course it is …"

Francesco knew he should be thrilled—this opportunity for Leonardo represented a lifeline for all of them, and a potential solution to the coming conundrum that threatened to squeeze his family until they all suffocated. Given the lofty Grade-and-Status of nearly all the employees of the National Space Colonization Agency, Francesco estimated that, even as a trainee, Leonardo would be earning salary, rations, and benefits nearly equal to those his father earned now. And in just a few months, after he gifted his last tendarm to Eshrae, Francesco would be compelled to begin taking the drugs that would ward off his change of life, his grayhead fury, but which would set him on a long glide path toward senescence and complete dependence. He would continue working as long as he was able, or as long as the department would keep him on, but his duties would grow more and more restricted, as would his salary, benefits, and rations. Yet now, Leonardo's promised rise as a space propulsion engineer could sustain the family during its patriarch's decline; perhaps even raise its standard of living, for eventually Leonardo's compensation would dwarf that which Francesco had earned during his best years.

He should be thrilled. And enormously relieved. But for some reason he couldn't quite nail down, he wasn't.

Should he be made a space propulsion engineer, Leonardo would be assigned to Space City. Francesco had been there. Three times over a fifteen-year span. His department had repeatedly sent him and his Mower on a freight train so that Francesco could uproot and obliterate an ancient

and massive research facility mushrooming on land between the NSCA's engineering, testing, and launch campus and the regenerating relics of an obsolete railroad junction and frontier town, Iron Horse.

That massive black dome, windowless, made entirely of some dense basalt, a devil's fortress … Francesco had never felt such a powerful aversion to any other mushroom he had been assigned to destroy. All the other mushrooms seemed benign to him, eliciting his fascination and even reverence, in sharp contrast to the aversion they inspired in his superiors. Yet the basalt dome was different. Each time he'd encountered it, it had seemed to radiate a kind of phantom evil, an uncanny miasma of disaster. The last time he'd battered it into rubble, he'd encountered a ghost among its ruins, a ghost on the verge of solidifying into a creeper. A ghost capable of speech.

We physicists have known sin, the ghost had said. It repeated those words three times. What did they mean? Then the partly solid apparition had been crushed by a collapsing wall before Francesco could question it about the dome's purpose, why it had been built.

Francesco didn't want his son living and working anywhere near a phenomenon so menacing, even though he couldn't explain his reaction to that giant black mushroom.

He sensed Aleedia's, Leonardo's, and Rumberto's eyes all pinioning him as they waited for him to respond to the news. "Rumberto," he said, "we'll need to speak more on this."

His brother laughed with surprise. "Good heavens!" he exclaimed. "You make it sound as though I'm offering you dirty goods, or mushrooms for gold! You must know that the NSCA is one of the most prestigious departments in the entire government. We're the agency that's supposed to save the Earth Nest from Man's depredations, aren't we? We're the good shepherds who will take tired old humanity away from the mushrooms and creepers, allow the Earth Nest to heal itself of chronological anomalies, and find ourselves a new, virgin home among the stars. Berths in my agency are highly sought after. There is absolutely no downside to this arrangement, Francesco. None at all."

“I’ll make my *own* judgment of that. When it comes to the prospects of my eldest son, I have every right to learn all details and to consider them very carefully.”

“Dad,” Leonardo said, his normally baritone voice cracking with emotion, “shouldn’t you, I mean, shouldn’t you be consulting with me, not Uncle Rumberto? Isn’t it my future we’re talking about? I thought you’d be *happy* for me. I’m fully grown, almost done with my basic education tapes. Don’t I have the right to make my own decisions?”

Francesco tamped down a surge of anger. Was this what his brother had intended? To cause discord in his household, to turn his children against their father? “Leonardo, son,” he said in a low tone, “so long as you live under my roof, you will heed my guidance. Am I completely understood?”

“But *Dad*—”

Rumberto threw his hands into the air. “Well, I see that no good deed goes unpunished in this household!” His five tendarms, reacting to the tensions boiling in the room, flattened themselves against the wall, their trios of stubby digits quivering. He looked to his sister-in-law with pleading eyes. “Aleedia, will you talk some sense into your husband? Perhaps he suffered a blow to the head when his Mower tipped over?”

Prima hid her face in her mother’s lap. “Mama, why is everybody arguing?”

Francesco started to rebuke his brother for questioning his authority in front of the children, but a lance-sharp glance from his wife stilled his tongue.

“I think we need to table this discussion,” Aleedia said. “Everyone is tired and overwrought. I know *I’m* exhausted, and it’s already past the younger children’s bedtime. Rumberto, you’ve been an angel these past few days. We all know you want only the best for Leonardo. Francesco and I will talk as soon as we’ve had a chance to rest. Let’s all say good night for now, and hasten ourselves to our beds …” She stared pointedly at Francesco again. “And part on the *warmest* of terms.”

Francesco knew his wife was not a woman to be trifled with. “I’m sorry I raised a fuss, Rumberto,” he said. His inchoate objections were based on suspicions so flimsy he was embarrassed to voice them aloud, sans

any supporting evidence. “As Aleedia said, I’m tired, too tired, apparently, to properly police what comes out of my mouth. Still, another time, I’d be eager to hear much more about your trainee program.”

“Of course,” Rumberto said, smiling tentatively. “I apologize if I took offense at your parental caution. More pertinently, I beg forgiveness for not having been the sort of supportive uncle and brother-in-law I should have been, prior to this week.”

“That’s not necessary, brother. You came through for Aleedia and the family when they needed you.”

“You give me too much credit. Listen, Flag Day is later this week. I’d like to invite you and the children to join me at my temporary home in the mountains. The earthquake damaged or destroyed the homes of a number of us senior managers, and the government has set us up in a delightful old rustic mountain camp while our apartments and houses are being rebuilt. The camp is actually a mushroomed place, I believe, but the people who know such things assure us that it’s been properly decontaminated and is entirely safe. It’s quite beautiful up there, and my fellow ‘refugees’ have decided to keep up their spirits by planning a big holiday celebration. There’ll be music, games, ceremonial entertainment … and abundant food, of course. I’d be delighted to drive you all there, then drop you at home in the evening.”

Francesco saw his wife’s ears perk up at the mention of food. “I think you and the children should definitely go,” she said.

“Actually,” Francesco said, “I was hoping the older children and I could honor the holiday by salvaging as much of the Berkshires’ possessions as we can.”

“How about this, then,” Rumberto said. “Why don’t you spend that morning helping out your neighbors, and I’ll come by to pick you up around midday? Would noon be acceptable?”

“That sounds like a good compromise,” Aleedia quickly said.

“Agreed,” Francesco said. The notion of spending Flag Day in the company of a crowd of senior bureaucrats, rather than with his immediate neighbors, set his teeth on edge. But Aleedia was right not to let him pass

up an opportunity to bulk up the children's diets with plentiful, high-quality, free food.

He walked his brother to the door. He noticed that Rumberto still seemed to be physically shy with the children, flinching away from their enthusiastic hugs and kisses, the touch of their dirty fingers. But then his brother surprised him with a warm embrace of all five tendarms; it'd been years since Francesco had received such a hug from his younger sibling. He reciprocated as best he could, slipping his sole tendarm over his brother's five, then hesitantly adding his two mundane arms to the embrace. He was painfully aware how taboo it was for him, a grown man, to utilize those limbs that performed the dirtiest and lowliest of tasks to express affection. But he hoped his brother would accept this as a token of love in the face of unavoidably encroaching paternal realities.

To his credit, Rumberto said nothing of it. Only a slight, repulsed twitching of his tendarms betrayed any awareness that Francesco's mundane arms and hands had touched him.

"Until Flag Day, then, brother," Rumberto said.

"Safe travels until we see you again," Francesco replied.

A moment after Rumberto's departure, the household erupted into the flurry of activities that nightly preceded bedtime. Aleedia acted as traffic cop, issuing instructions to the children and her husband with an efficiency outdoing that of Francesco's supervisors at work. Dishes and cups had to be washed, dried, and carefully returned to their cabinets. Playthings had to be gathered up. The baby's diaper needed to be emptied, rinsed, and changed. Eight children and two guests needed to wash up, taking turns in the apartment's sole bathtub (Francesco noted with relief that their pipes, attached to rooftop cisterns, still worked), younger siblings sharing space in the tub, older siblings wielding scrub brushes on their younger counterparts before bathing themselves.

"Daddy," Prima called, "Sarah says she ate too much and now she's got a tummy ache."

Francesco looked up from the straw mat where he was fastening a clean diaper around Sophia's slippery bottom with pins, struggling to avoid

puncturing her skin. “Have her lie down in the girls’ bed. Ask her if she wants a cup of water—”

“Oh! She just threw up all over the floor in the hall! Yuck!”

“Aleedia! I’m diapering Sophia. Who’s available for cleanup?”

“Bertonio and Victor just got out of the tub.”

“Bertonio! Victor! Get the mop from the broom closet and clean up the mess. Prima, take Sarah to the sink and wash her face.”

“Daddy,” Arista whined, “I can’t find Miss Poppy. I think Adriano fed her to a Catamount, like he said he would.”

Francesco winced as a pin punctured his finger, then swore under his breath when a droplet of Sophia’s acidic skin secretion rolled into the tiny wound. “Adriano! Stop teasing your sister, or I’ll assign you a month’s worth of her chores. Be a good brother and help her find her doll.”

Twenty minutes later, the hectic ballet of bedtime had wound down. The children had all squeezed themselves into their sole bedroom, divided in two by hanging blankets, which contained two beds for the five boys and one bed shared by the three girls. Those snug accommodations were made even more cramped by the presence of the two guests, but none of the Helios children voiced any complaints.

Francesco considered sharing with the children the special gift he’d picked up in the Ironworks District—an ancient book of adventure stories, beautifully self-restored, which he’d recovered from the ruins and hidden in his knapsack. But he realized he was far too tired to read to them and then field their myriad questions. Better to save the book for tomorrow night. He kissed each of his daughters and the Berkshire girl, too, then made sure Sophia remained tightly wrapped in her padded blanket so that she couldn’t snuggle up against her sisters and accidentally burn them. Then he crossed the barrier of blankets and kissed his sons. Eshrae clung to his arm, silently begging him to stay with them a while longer. Francesco kissed him a second time, then gently freed his arm. “I need to spend some time with your mother,” he whispered.

When he returned to the living room, he found that Aleedia had lowered their bed from the closet and had strung up the curtain, which offered them a modicum of privacy. While she was more than capable of

pulling herself from her wheelchair into the bed, her strong arms compensating for her arthritic hips that had been fractured multiple times during childbirth, Francesco lifted her gently from the chair and placed her beneath the covers. He delighted in the touch of her pregnant belly against his chest, a sensation both intensely erotic and a sensual reminder of the reverence his owed his Creator, the original Progenitor. Although each new child they added to their family made Francesco and Aleedia more despised in the eyes of their betters, he knew the new lives he and his wife abetted were repayment to the Creator for all He had given.

He removed his shirt. Aleedia's eyes grew wide when the candlelight revealed his bruises. "They look worse than they feel," he said. "They were much uglier a week ago." He slid into the narrow bed beside her. "Were you afraid for me?"

"You shouldn't have to ask." She caressed his shoulders, then planted butterfly kisses on his archipelago of gray bruises.

"I was afraid for you, too," he said, stroking her hair with his tendarm. "And the new baby. And the children. What was it like for you when the quake hit?"

"Terribly frightening and unreal. The house quivered as though it were a newly emerged mushroom. But the neighbors told me that other districts suffered far worse tremors than we did. We were lucky, for once." She traced his lips with her fingertip. "What was it like for you, when the Washerman's Monument fell onto your Mower?"

He briefly considered telling her about the ghost-creeper woman and her cryptic message. But his wife had more than enough to worry about without a dose of the uncanny. "Bad," he said, "but not half as bad as when the children jump all over me when I'm sleeping."

He laughed, and Aleedia laughed with him. Yet her mood quickly turned serious; her hands fretfully orbited her distended belly button, smoothing the stretch marks that crossed her stomach like a network of tiny streetcar tracks. "Francesco," she asked, "why were you so resistant to the notion of Leonardo becoming Rumberto's intern? I think it's a godsend."

Francesco had hoped to avoid this conversation, at least for tonight. But now that she had raised the issue, he refused to run from it. "It makes

me … uncomfortable."

"Why? Is it that Leonardo would achieve much higher job status than yours?"

"Of course not. Any decent father should want more for his sons than what he's had."

"Then why? The National Space Colonization Agency is a *wonderful* place to work, from what I've heard. And the fact that they need young engineers—it's as though we discovered a chest full of gold buried in our backyard. Don't you trust your brother to look out for Leonardo's best interests?"

"It's not that I don't trust Rumberto …" He propped himself up on his elbows. How could he explain to Aleedia the irrational fear he'd felt every time he'd been sent to Space City and found himself facing that black basalt dome rising from the soil? "I do trust him to do what he thinks is best. It's just that … I'm afraid he has very different ideas than mine about what constitutes 'best' for Leonardo." He remained quiet for a few seconds, gathering his thoughts. "My brother never married. He's never surrendered a single tendarm to a son. For years, he disavowed us and our children, out of shame. He lives the pampered, easy life of an eternal bachelor …"

"And you're afraid his mentoring Leonardo will seduce your son away from the responsibilities of family life?"

"Yes," he glumly admitted. It wasn't the heart of his discontented foreboding, but it played a part.

"Oh, my husband, my dear, dear husband …" She laid her head upon his chest. "If Leonardo hasn't learned by now what having a family of his own should mean to him—if he hasn't already absorbed that like the grass absorbs the rain—then nothing you can possibly say to him about his uncle's choice of lifestyle will mean anything."

She sat up and rubbed his shoulders. "You may not have noticed, my dearest darling, but Leonardo has become a man. He may not voice them very loudly, but he has his own opinions, his own instincts. You need to trust those instincts, or learn to trust them. Otherwise, you run the risk of always being disappointed by him. He'll make mistakes—haven't we all? But they'll be his mistakes, and he needs to own them in order to learn. You

can't make his choices for him anymore. If you insist, you'll only hurt him … and your relationship."

Francesco stiffened. He recognized the wisdom in what she said, but the thought of withdrawing his protective cloak from Leonardo, of leaving his son open to the world's corruptions, tied his insides in knots. "It's just that … it feels as though the whole world is conspiring against me, that everyone hates what is precious to us, what was precious to our fathers and mothers and grandparents. Soon I won't be the man you married anymore. I won't be my children's father anymore, not the same way I've been."

"It won't matter," she said. "Things will change, yes, but nothing essential will; you'll still be my husband and the children's father."

"Let me finish. It will change. The drugs … no matter how hard I try to hold onto myself, they'll chip away at me. They'll dissolve me, bit by bit, like the tide washes away a beach. You haven't seen it happen up close like I have. I've witnessed it in my office—men I respected, who taught me my job, who struggled for years to raise a decent family, like I have—when they're forced to go on the drugs, the first thing they lose is their vitality. I know it's supposedly for their own good, for society's good, but they melt, Aleedia. It's horrible. God knows I shouldn't be telling you this, but three years from now, or four or five, you'll hardly know me anymore, and neither will the children. I'll be a tranquil, friendly, but distant stranger. Ten years from now, I'll be a babbling burden, barely able to take care of my own basic needs, and you'll want nothing more than to have the State put me away somewhere you'll never need see me."

"*No!*" She covered her ears. "Stop saying those things! It won't be like that! Not for us! They say they're improving the drugs all the time. Reducing the side effects. Ten years from now, the pills might not change your personality any more than aspirin does, or taking insulin."

He'd heard the hopeful propaganda, too. But believing it was a temptation that could swallow him whole. Grabbing hold of that illusory lifeline was fine for Aleedia; healthy, even. But not for him. So long as he retained his faculties, Francesco needed to push aside comforting fantasy and stare cruel reality in the face.

“You’re right, my wife,” he said, wrapping his tendarm around her shoulders. “It’s good to hope. We were very lucky with the quake. Perhaps we’ll be lucky in this, too.” The word perhaps allowed the words that followed it to stretch so far they no longer held any meaning. Some of the tension eased from her neck; at least his lie had been helpful in that way. “I’m sorry I upset you. Particularly on my first night back home.”

“It’s all right, my husband.”

“I wanted you to understand why I seemed so cautious about my brother’s offer. Given the likelihood that Leonardo will replace me as head of the household, the one who sets an example for the children, surely you see why I’m wary of influences which might lead him astray.”

“Maybe you misjudge Rumberto. Maybe he’s looked into our future with a view as merciless and hard-eyed as that which you just shared, and his offer is his way of averting disaster for our family.”

“Perhaps, Aleedia. Perhaps.” There was that word again, stretching its sweet taffy of wishful thinking around all the other words it touched. But the taffy tasted bitter in his mouth. He looked six months down the road and saw a black tunnel looming, inescapable, devoid of detours.

No *legal* detours, at least. But his father had discovered a detour, an escape. He’d become … something else. A phantom who’d found a way to invisibly deliver food, clothes, and even an occasional luxury to his bewildered family. Yet some department had ultimately hunted him to ground and disappeared him, leaving only his stained reputation behind.

Aleedia nuzzled her face against his tendarm. His infinitely flexible limb felt brittle as balsa wood, fragile as glass. He’d been through this cycle before, four times, so he recognized the sensations which heralded the readiness of his body to surrender a tendarm. The skin, muscles, and cartilage of his back surrounding the base of his tendarm had grown soft, pulpy, inflamed; a few months from now, when the imperative call of the pheromones emitted from Eshrae’s maturing body reached its peak, the portion of Francesco’s back that cradled the tendarm would become viscous as syrup.

He felt droplets glide down the hairless skin of his tendarm. Aleedia, kissing its three finger nubs that surrounded and protected the transmitter of

Francesco's seed, silently wept. "Hush, darling, shush," he whispered. "It'll be all right. We'll make it all right. Somehow."

A surge of desire and need overcame him, despite physical and emotional exhaustion. *Dying embers often glow the brightest.* "Aleedia," he whispered, suddenly hoarse as a virgin groom, "how do you feel? Are you strong enough for, for—?"

She answered him silently, taking his tendarm and guiding it beneath her round belly, demonstrating to him that her eyes were not the only parts of her that had grown moist. He closed his eyes and swam through memories of other nights, when the children were small or before the children had come, nights when the most delightful sounds imaginable were the two syllables, "*Again*," which issued from her lips endlessly, endlessly, for she never ceased wanting more; and back then, he'd never lacked more to give her …

"Father?"

Francesco's eyes sprang open.

"Father? Are you all right? I heard you and Mother arguing."

Eshrae's slender form was silhouetted by candlelight on the far side of the curtain.

"Eshrae, go back to sleep. Your mother and I need to be alone."

"But I'm afraid. Are you all right?"

"We're *fine*," Francesco said, irritation darkening his voice. "Get back to your brothers."

"But I can't fall asleep. Leonardo's talking to himself, and Heath keeps rolling over and kicking everyone. I—I missed you so much. I'm afraid your work's going to send you away again. Can't I stay with you and Mother, for just a little while?"

"*No*. Absolutely *not*. Your mother and I are entitled to a little bit of privacy."

He heard Aleedia sigh. She didn't need to say anything more. The mood was broken; lovers reverted to parents. He withdrew his tendarm, coiled it against his back, and scooted over, leaving just enough space in the bed for his son, who, teetering between childhood and pubescence, had decided to be a child tonight.

“Come on in then, Eshrae,” he said softly.

“Shall I close the curtain behind me, Father?”

“No, there’s no need.”

His son’s cheek rested warmly against his back. Soon, Eshrae was snoring contentedly.

Time Breaker? Francesco thought groggily. If only it could be so. If only he could break Time in two and hollow out a little enclave, a timeless, tiny space for him and Aleedia alone. He wouldn’t want to spend an eternity there—just a night would suffice, only a single night for the two of them.

By morning’s first light, five more children had wiggled their way between or atop their parents, or nested on blankets and pillows they’d dragged next to the narrow hideaway bed.

• FIVE •

The Helios House of Turtle Hill

FRANCESCO WALKED SWIFTLY to a broken spot in the shabby wooden-slat fence that surrounded the Turtle Hill district. The Dire Wolves and Catamounts normally slept or remained in hiding during the day. But at night, the CAMPA predators, solidified nightmares from mankind's childhood, emerged from their dens and sought warm meals—mushroomed rabbits and opossums, larger than their present-day counterparts; creepers who'd had the misfortune to solidify before fully gaining their bearings; or present-day children who foolishly lingered in Turtle Hill past dusk. *Like mine*, he thought ruefully. Bertonio, Victor, and Eshrae had been sent by their mother to gather mushroomed foods for their father's consumption. They should have returned home an hour ago. *Probably found some mushroomed toy to play with and lost track of time.*

He crept through the broken spot in the fence. Even in their state of decrepitude, scarred by the fires of past Angels' Night celebrations, the homes of Turtle Hill made the tenements of Francesco's Wildwood Village look shabby and pinched by comparison. Typical houses here, if situated in other parts of New Shining Capital, would be large enough to shelter half a dozen family units. But a century or more ago, these gargantuan residences, amazingly, had housed single families. Francesco knew that for a fact; he had explored some of these old mushrooms over the years and seen the family portraits that adorned their mantlepieces, oil paintings of families even larger than his own. He had become familiar with some of the family names carved into the ornate lintels above the front doors. The same houses rose from the soil of Turtle Hill year after year, no matter how many times roving bands of teenagers burned them down on Angels' Night.

“Bertonio! Victor! Eshrae!”

His cries echoed from rows of uninhabited houses but elicited no replies. The breeze from the Tomaic River below the bluffs changed direction. Francesco’s nose twitched as the musky tang of the scat of a large animal reached him. He hurried onward, deeper into the district, toward the old street of shops.

He saw that the house next to the Miracle Cures Pharmacy & Sundries store was illuminated from inside. That was Sirena’s house, the home of the old woman who called herself a ghost talker. She claimed to all who would listen that she could call upon ghosts for knowledge of the past and even of the future. Although he’d never been tempted to make use of her “services” and thought them dubious in the extreme, Francesco had instructed his children to be kind to the old woman. He’d gotten them in the habit of leaving her a portion of whatever mushroomed canned foods they were able to collect. Other residents of Wildwood Village regularly sought her counsel; they said she’d once been the mother of a large family, a woman who’d been forced from her home after her husband, a groundskeeper like Francesco, had been reduced to a vegetative state by the grayhead drugs. How her children could have allowed her to sink into vagabondage, living in a mushroomed house and dependent upon the charity of superstitious “customers,” this Francesco couldn’t fathom. His own children would never allow such a fate to befall Aleedia; they would die first—or he would return from his vegetative stupor and make them wish they were dead.

He knocked on her door. She might have seen in which direction his sons had gone. The floorboards of her porch creaked sharply, causing a trio of large rats to scurry into the street. Sirena opened her door. Beneath the grime, wrinkles, and matted gray hair, Francesco could see traces of what had once been a beautiful woman. Now, however, her arms and the left side of her face were marred by badly healed sores; rat bites, Francesco suspected. Her nose, patrician in its shape, was disfigured by an alphabet of distended blue veins. But her eyes retained their intelligence and cunning.

“Mr. Helios,” she said. “I’ve been expecting you to show up on my doorstep. The ghosts have been whispering your name, Mr. Helios. In their

own silent way, they've been shouting it from the rooftops. I knew it was only a matter of time before you would come to see me."

Francesco felt himself blanch. Whatever else she might be, Sirena was a master saleswoman. The way she focused on him with such intense sincerity caused him to understand why so many of his neighbors frequented her parlor.

"Actually," he said, "I've only come looking for three of my sons. Their mother sent them to gather food. Have you seen them? Do you know which direction they headed in?"

"Yes, I have seen them," she said. "Your sons are very good to me; far better than my own have been. One of the lads—Eshrae, I believe, the littlest, the especially polite one—left a few tins of food on my doorstep not more than an hour ago, then inquired about my health when I came outside."

"Do you know where they are?"

"They headed toward the band park next to the bluffs, I believe. Feisty young men, but well-mannered."

Francesco pointed southeast. "That direction?"

"Yes. There's a Helios house back that way. Did you know that? A house marked with your family's name."

"I've never seen it."

"Look for it," she said. "I suspect you will find at least one of your boys there."

"Why? Did one of the boys mention the house?"

"None of them did," she said. "But I've heard whispers. Whispers from a waning moon."

I'm sure you hear whispers all the time, Francesco thought. *Being bereft of your family, living in the rough for so many years ... Those tragedies have weakened your mind.* "I'd better continue looking for my sons," he said. "Thank you for your help. Take good care, Sirena." He stepped down from her porch.

"I'll be seeing you again soon, Mr. Helios. On a more formal basis. I'll look forward to doing your reading … Mr. Time Breaker."

He whirled around to face her again. "*What* did you just call me?"

But Sirena had already slipped, catlike, back through her door. “Another time, Mr. Helios,” she said through the brass mail slot. “We’ll speak more another time. Go find your sons. It’s getting toward dusk. You’ll come back to me when the necessity weighs on your heart like the rubble of a crushed monument.”

The sky’s washed-out blue shifted to the glowing pink of sunset. The air rapidly turned cooler. The odor of fresh scat seemed more and more pervasive the closer he walked toward the bluffs. Francesco called for his sons again, shouting their names in all directions but the direction from which he’d come. At last, he heard Victor’s and Bertonio’s voices, wavering between the high pitch of childhood and the bass register of adulthood, answer him.

He found them kicking a striped ball between them, each using a tower of cans of mushroomed food stacked on the opposite curb as his goal and target. “Where’s your younger brother?” Francesco demanded.

“Oh, he’ll be back soon,” Bertonio said. He juggled the ball between his feet, then kicked it straight at Victor’s tower, only to frown when his brother blocked the shot.

Francesco grabbed Bertonio’s arm. “You let him wander off *on his own*?”

“Nuh—*no*, Father,” Bertonio said. “He didn’t go by himself. An adult took him.”

“An *adult*?”

“A nice lady wanted to show him one of the old houses,” Victor said. “She said she could show him where our great-great-great-grandfather lived. She said she was a friend of yours, that she worked with you on some island. Crackle Island, something like that.”

“I’ve never worked on any island,” Francesco said, feeling the beginnings of panic. “What did she look like?”

“Like somebody from out west,” Victor said.

“She was really, really tanned,” Bertonio added. “And her eyes were kind of squinty and slanted. But sorta beautiful, even though she’s older than Mother, even.”

Another Native Sixer woman, Francesco thought. *What can they possibly want with us? What is this all about?* "Boys," he said, "you're never to allow Eshrae to go off with anyone you don't know, never again. Now take me in the direction they went. Help me look for a house with our surname above the front door."

Victor spotted it first. It was an imposing edifice, the house with the Helios name carved into its lintel post, its gables and turrets accented by five towering brick chimneys. Its front door, nearly invisible in the dusk gloom of the wraparound porch, was slightly ajar. The tiny light of a candle or small lantern flickered through the parlor windows.

"You stay here," Francesco told his sons. "Don't move from this porch while I go inside."

He pushed the door open. Eshrae stood before the parlor's fireplace with a slender woman barely taller than he was. The woman, holding a lantern, turned toward the door as Francesco entered. Apart from streaks of gray running through her long, black hair like silvery ribbons, she was a near double of the woman Francesco had briefly met on the Great Lawn, before the quake had swallowed her. "Frank?" she said. "Or is it still Francesco?" Even her voice sounded eerily similar to that of the dead woman.

"Eshrae," Francesco said, "come away from there. Stand behind me."

"There's no need to be afraid," the woman said. "I'm very fond of Eshrae, at any age. He's a lovely, gentle boy."

"Eshrae," Francesco repeated, "get behind me." He waited until his son complied, then said, "What do you want with my boy?"

"She just wanted to show me this house," Eshrae said. "And that picture above the fireplace. She was just about to tell me all about it."

"I wasn't speaking to you, son," Francesco said. He turned to the woman. "We don't know you."

"Not yet," the woman said.

"I don't appreciate strangers walking off with one of my children after pretending to be my coworker. I've never worked with you. I've never seen you before. But I think a member of your family came to talk with me

the day of the earthquake. Your daughter? Your niece? The resemblance is striking. She was killed in the quake. I tried to help her, but I wasn't fast enough. Is that what this is about?"

"The earthquake? The day the Washerman's Monument fell onto your Mower? That would've been one of my 'sisters' you met, I imagine. I'm sure this is very confusing for you. I apologize. It's rare that we have any opportunity to coordinate our actions." A Dire Wolf howled several blocks away. The cry echoed through the gathering darkness. "You'd better invite Victor and Bertonio to come inside."

"Boys," Francesco called through the open door, "get in here." Bertonio and Victor ran inside, then stood next to their younger brother.

"I was about to show Eshrae this painting," the woman said. "You might like to see it, too." Francesco took a few cautious steps toward the fireplace. The woman held up the lantern so that its weak light illuminated the painting. "It's your great-great-grandfather Paulo's submersible boat, the *Tridentfish*. He commanded it during the Great War. See? It's there, in the center. The *Tridentfish* is sailing on the surface, surrounded by its fellow vessels of the First Lantana Fleet, battleships and armored cruisers such as those you visit at the Navy Yards."

"How do you know all this? I never knew the name of Paulo's ship. I only know that he was a navyman, back in the days when navies still existed. Why did you want to show this to Eshrae?"

"To impress upon him your family's heritage. That heritage still flows in your blood and that of your children—even after generations of prodigious effort, the State has been unable to completely erase the past. Your family's tendarm of the ages was passed to you, and you soon will pass it to Eshrae. Once it belonged to Commander Paulo Helios. Have you ever asked yourself where your natural proficiency with the engines and mechanisms of the great warships comes from? Why it was so easy for you to teach yourself the skills to pilot the big cruisers and battleships down the Tomaic River, simply by reading the old manuals you found and engaging in some trial-and-error experimentation? It is your ancestors' knowledge you are drawing upon. You've reinforced that intergenerational gift with years of consuming foods from your great-great-grandfather's time."

“How do you know all this about me?”

“From your own mouth, my friend.”

“But we’ve never met before.”

“I wish I could tell you more, Francesco. But my hours in your time are very limited. And if I do more than merely nudge you with small morsels of knowledge, I risk steering you onto the wrong path. I only ask that you return to this house whenever you are able, and that you ponder this painting as you learn more regarding the noble purpose for which those warcraft were built, and the even more noble purpose they may serve in years to come. The State teaches that those mushroomed ships which rise from the banks of the Tomaic River are toxic. They’re just floating masses of time-lost rubbish which must be sunk into the deepest canyons of the ocean. But you don’t believe that, do you?”

“I’m a loyal employee of my department—”

“I didn’t mean to imply you aren’t. You love your country. You could be of no help to us if you didn’t. But your strongest loyalty is to a country you don’t even fully recognize. A country whose history, laws, and customs you sense only intimations of, a country the present State has done all within its considerable power to bury at sea. I speak of your great-great-grandfather Paulo’s country, and the country of the man you know only by the belittling nickname Old Frog Face.”

“The mushroomed statue on the Great Lawn? Do you know his actual name? Why a monument was built in his honor?”

“Paulo knew of him. Paulo believed the same things that man believed. That was why Paulo was willing to do what he did. Why he risked his life and the lives of his men dozens of times, and finally lost them all. Paulo saved his country, but at a terrible price. Without knowing it, he built one wall of the rubber room. He set off the chain of events that sealed us all inside the room and turned it into a factory of unending suffering and death. Only his descendant can demolish the opposite wall. Only his descendent can set us all free.”

“You’re talking gibberish.” The woman who’d died the day of the earthquake had also mentioned a rubber room. “‘Rubber room,’ walls—is it an asylum you’re talking about? Is that where you’ve escaped from?”

Enticing as the notion of the Native Sixer being a madwoman was, this was too facile an explanation. How did she know about his connection to the ghost fleet? About his great-great-grandfather Paulo? Was she a vagabond like Sirena who had discovered this house, rummaged through its contents, read the name on its lintel post, and then learned that a present-day resident of Wildwood Village shared that name? Was this some sort of twisted attempt at extortion? But what thing of value did he have that she could possibly want?

"I'll ask you one more time," he said. "And I want a straightforward answer, not more double-talk. What do you want of me and my family?"

"Set us free, Francesco," she said. "You're about to undergo the biggest changes of your life. Outwardly, you'll become an entirely different man. But inside, the core of you must remain the same—the root of Francesco, grown from your past and nurtured by the lives of your ancestors, that must remain unchanged. They'll try to extinguish that root. They'll try to crush it—"

"*Who?* Who will?"

"—then dump it at sea like they do all other persistent traces of the past. Hang onto that core, Francesco. Hang onto it for dear life. Your life and all our lives depend upon it. That's all I can tell you."

She turned to leave. Francesco grabbed her wrist. "You can't just walk out on me!"

She twisted her wrist and yanked it from his grasp with an ease that amazed him. "I'm out of time. The longer I linger in any one place, the easier it is for the grubbers to find me. You want to speak with me more sometime? Then don't impede me now."

She ran through the front door, her swift footsteps as silent as the sound of the padded paws of a Catamount. Francesco began to question Eshrae when he heard the woman's choked gasp from the bottom of the porch steps.

He ran out onto the porch. The woman, silhouetted in the fading, purplish light, struggled with something affixed around her neck. Francesco could barely see a thin cord that stretched from a loop around her throat to

somewhere above the porch roof. He leaped down the steps to help her. He'd have to act quickly—she was being strangled.

"Stay out of this, Francesco," a bass voice commanded from above.

Francesco grabbed for the cord. Something thunked into the ground an inch from his right shoe.

"That's a knife," the voice said. "Lay a finger on that rope, and my next knife will get embedded in your back, not the ground."

Before Francesco could think of a way to respond, a jerk of the rope pulled the woman off her feet. Her unseen assailant dragged her kicking body to the roof, yank by savage yank. Violence of this degree was unknown in New Shining Capital—unthinkable, even.

"You're crushing her windpipe!" Francesco shouted.

"She won't suffer for long," the bass voice replied nonchalantly. "Have to give the bitch credit, though—for a skinny little creeper on the downslope of fifty, she's a game fighter."

He peered up at the roof. The sun had settled behind the office towers of downtown. He could see no more of the man than a bulky, musclebound outline. "She didn't do anything!" Francesco shouted. "She didn't harm my son. She hasn't committed any crime—"

"Her existence is a crime," the man said. "A crime against the State, against the natural order, and against the proper flow of Time. Enjoy being ignorant while you still can, Francesco. You'll understand my business soon enough."

The man slung the woman's now motionless body over his shoulder and disappeared across the dark rooftops, jumping from eave to eave like a marauding ape from a mushroomed book of nightmare fables.

• SIX •

The Wolf at the Picnic

THE FOLLOWING NIGHT AND MORNING were filled with uncomfortable silences. Victor and Bertonio had peppered their father with questions on their hurried walk home through the darkness of Turtle Hill. Francesco had parried their frenetic queries as best he could, then made them promise not to mention a word of the bizarre encounter to their mother. He hadn't needed to warn Eshrae; Francesco's youngest son had been traumatized by the events, reduced to a muteness that lasted throughout the night and the following morning, although he hadn't directly witnessed the woman's murder.

Saturday came. Francesco and his sons spent the early hours retrieving the Berkshires' salvageable possessions from the ruins of their earthquake-crumbled townhouse. When Francesco's younger brother Rumberto arrived at noon, Francesco and his sons hadn't yet washed the mud of their salvage efforts from their clothes and shoes. Oddly, Rumberto didn't appear fazed by their dishevelment, which threatened to soil his vehicle's gleaming chrome and buffed leather upholstery. He whistled happily to himself as he opened the vehicle's rear hatch and pulled out blankets to cover all three rows of seats, then clucked indulgently at his dirt-spattered nephews, who eyed this new-looking vehicle (a Saturn Conquistador, Francesco noted, a make which hadn't been manufactured since his great-grandfather's day) as though it were a winged elephant.

Rumberto grandly gestured for them to climb in. "Nice, isn't it?" he said to his brother, patting the Saturn's chrome-adorned roofline.

"What happened to your Plymouth coupe?" Francesco asked, eyeing the vehicle's anachronistic music player and gauges.

"Oh, this isn't mine. You think I'd want to drive a leviathan like this on a regular basis? It's a loaner from the office. Practically a bus, isn't it?" He laughed. "Absolutely amazing, the size of the vehicles people once drove. This one's a restoration job, of course. Completely retooled with newly made parts. Someone from the office discovered it rusting in a garage somewhere and thought it would be useful for field tours and such."

Francesco took a closer look at the Saturn. *He's lying*, he thought, *or someone else has lied to him.* He had seen restoration jobs, festooned with crude hand-tooled metal replica parts or, worse, fiberglass or plastic pieces. This car was a mushroom. The seams of the dashboard and the fit of the exterior were too well aligned, too exact, for this eighty-year-old Conquistador to be anything but all original. He considered asking his brother about this when he was distracted by an urgent tugging on his dusty trousers.

"Me go, too? Me go, too? *Pleeeease?*"

Sophia looked as though she'd rather be eaten by a Catamount than stay behind. Francesco had assumed she'd remain at home with Aleedia, who wasn't feeling up to an excursion into the mountains. He looked questioningly at his brother.

"Oh, *no*, little sweetheart, no, no," Rumberto said to her. "I'm afraid those blankets on the seats would be sadly overmatched by you. I can't very well turn this car back over to my bosses with holes burnt into the leathericky." He turned to Francesco. "How much longer until she grows out of secreting noxious substances all over herself?"

Francesco grasped his daughter's hand reassuringly; Sophia might not understand all of her uncle's words, but she had to sense the distaste behind them. "It should be sometime between her third and fourth birthdays, based on our experiences with her older brothers and sisters. About another year or so."

Rumberto shook his head. "A shame, truly, that the reappearance of Dire Wolves and Catamounts should make such atavistic biological protections necessary again." He nearly patted Sophia's head before catching himself. "No Dire Wolf would find *you* a tasty morsel, would he?

If one were ever foolhardy enough to gobble you up, he'd spit you right out, no harm done. Isn't that so?"

"Spit me *out*?" Sophia repeated, staring up at her father with confusion and supplication.

"Poor Aleedia," Rumberto said. "So, for close to a year, she'll have *two* little creatures underfoot who can burn the upholstery off the furniture."

"We've managed it before," Francesco said. "We'll manage it again."

"You've made arrangements for the new baby's operation?"

"The Department of Neonatal Health and Child Development has already scheduled it," Francesco said.

"Efficient, aren't they?"

The most efficient government department I know, in what they do, he thought bitterly. The official justification for the compulsory surgical removal of tonsils from babies born to large families was to grant those infants some protection from the formerly extinct large predators that had reemerged in the midst of New Shining Capital. Removal of the babies' tonsils activated otherwise dormant glands, vestigial organs that during prehistoric times had promoted acidic skin excretions in small children, as well as explosive sprays of burning, jellylike stool in times of extreme stress. Mothers back in those ancient days, Francesco assumed, had been immune to their babies' defensive secretions. As his and Aleedia's multiple scars attested, today's parents weren't so lucky.

"Leonardo," Francesco said, "walk Sophia back to the house, please."

Sophia shrieked. "Daa-*deee, no*! Wanna go! Wanna go in big bus car!"

"Sophia, you're not old enough. Arista and Prima couldn't go many places when they were two, either—"

Sophia threw herself onto the street and pummeled the broken asphalt, her tiny fists a blur. Leonardo emerged from the Conquistador and eyed his younger sister with caution. Rumberto looked as though an anarchist had planted a bomb next to his Saturn. "Uh, Francesco," he stuttered, "the paint, her tantrum—she won't, uh, you know—?"

Francesco would not have been terribly displeased if an eruption from his youngest child's bottom pockmarked the Saturn's finish. He removed his shirt and gave it to Leonardo so his son could wrap it around his right arm and protect himself while escorting his sister home. "Don't worry," he told Rumberto, "the diaper should hold." He scooped Sophia off the street and cradled her against his bare chest, ignoring the pain. So much of his dermis had been transformed to leathery scar tissue, he could feel only a fraction of the burning he once would have suffered. He held her close until her temper fit subsided, then nuzzled the top of her head and placed her gently upon the ground, offering her arm to Leonardo's protected hand.

"See her safely home," he said.

He thought of the creeper woman, garroted by a hangman's noose, being pulled upward onto a cold, gray slate roof.

On their way to the mountains, the family passed through the upscale districts of Ambassadors Row, Foggy Paths, Gorge Town, and Observatory Heights. These neighborhoods' severely angular town houses and apartment buildings, built in the fashionable Forward Modernist style, housed senior bureaucrats, captains of essential industry, and cadres of elderly scientists and engineers who shuttled between New Shining Capital and Space City, located two hundred miles north. These districts had suffered less severe earthquake damage than those closer to downtown, but they received swift attention. Francesco lost count of the cranes and earth movers they drove past, a massive contrast to the complete neglect his own, more severely shaken neighborhood had received.

On Gorge Town's main commercial street, which had not suffered visible quake damage, they drove slowly around a row of bucket trucks. The vehicles' operators secured rows of fresh flags to light posts and building cornices. "Look, Leonardo!" Rumberto said, pointing proudly to the colorful rectangles of bunting. "The new flags, freshly unveiled for Flag Day! You see the design elements in the upper-left quadrants? The floating gold triangles? That's the work of my friend Albert Johnson in the National

Renewal Agency. How he comes up with something completely fresh each year, I'll never know."

The new flags failed to interest Francesco. He watched workers from the Office of Cultural Infrastructure distribute rows of steel barrels along the sidewalks, so that at dusk the fires could be lit. He fingered the flag he had carefully folded and placed in his pocket. The old flag. Not last year's flag; the *old* one. The one that never vanished, not permanently. It bloomed anew every Flag Day, accepting its annual defilement and destruction again and again. *A monument*, he thought, *to perseverance, to endurance and tradition, despite what the founders of Flag Day may have intended.* The chemicals he'd treated it with made the cheap fabric feel gritty and stiff. But that didn't lessen the sense of reverence he experienced whenever he touched it.

Francesco was certain this was the flag his great-great-grandfather Paulo had honored, for he had seen it on the masts of the mushroomed warships at the Navy Yards. Had it also been the flag Old Frog Face had once stood beneath?

They entered open country. The road undulated along rolling hills and passed through dappled shadows cast by groves of birch trees. The children enjoyed the ride enormously, thrilled by the Conquistador's effortless speed.

They passed what had once been an exit ramp from the main road. He stared across a field at an expanse of tremendous detached houses, spread out over a hundred acres. Their gray, shingled roofs had mostly fallen inward, and rare was the window that still contained glass to reflect the sun. Several homes featured mature birch trees peeking through the remains of their roofs, making them look like gigantic planter's pots. Those buildings weren't mushrooms, he judged; they'd been abandoned at some point, either during the Great War or during the gradual migration to New Shining Capital that the government had long encouraged. For whatever reason—perhaps because of the houses' relative isolation and distance from the city—the Department of Architectural and Urban Renewal had never gotten around to plowing them under.

“Daddy,” Prima asked, “what are those old houses over there? Does anybody live there?”

“Nobody lives there anymore,” he answered. “Nobody’s lived there for a long, long time.”

“But *why*? They look like nice houses. They’re sure big.”

“I’m sure they were nice, once,” Francesco said. “But … people’s needs change. They move on to new things. Would you want to live out here, so far from the city, with only raccoons and deer for neighbors?”

Prima looked dubious. But Victor, Francesco’s twelve-year-old son, seemed enchanted by the idea. “Oh, *I* wouldn’t mind that,” he said. “I think it would be *grand*. I could have my own bed, in my own bedroom, even! What’s so great about the dumb old city, anyway? I’d rather have raccoons and deer for neighbors than some of the kids on our street, or that weird old lady, Sirena. And Bertonio and me, we could go exploring all we wanted, not like at home. ’Cause we wouldn’t have to worry about Dire Wolves—”

“How do you know the Dire Wolves aren’t out here, too?” Eshrae asked.

“What’d you say, pipsqueak?” Victor said, sounding affronted. “What makes you think you know anything about *anything*? Dire Wolves live in mushroom fields in the city.”

“But wouldn’t they come out here, maybe, to feed on the deer? Isn’t that why they wander into our neighborhood, because they’re looking for food?”

“I think, a long time ago, Dire Wolves mainly lived in places like this, rather than cities,” Francesco said, hoping to snuff out an argument. Still, he was happy to hear Eshrae speaking again. “So it’s possible they would migrate back to wild lands like these.”

“Awww,” Victor said, “even if there are Dire Wolves out in those woods, we could still live in one of those houses. We could get us some guns—”

“Sure!” Bertonio, Victor’s near twin, interjected. “We could hunt the Dire Wolves with guns! Just like the hunters in the stories you’ve read to us, Father! Pow! *Pow!* Grubbers have guns. Grubbers have guns and knives

and all *kinds* of weapons. If we moved out here, we could buy a gun from a grubber."

"Grubbers aren't real, boy," Rumberto said. "They're urban legends, white lies adults have concocted to make children less afraid of ghosts, creepers, Dire Wolves, and Catamounts. That's all. They're no more real than the Tooth Fairy."

Bertonio's brow furrowed. "But Uncle Rumberto, Father met a grubber last night, and we heard him talking—"

"Heed your uncle, Bertonio," Francesco said. "Uncle Rumberto has been kind enough to take us with him to his Flag Day celebration. So we'll have no more talk of grubbers or guns."

The car's passengers settled into an uneasy silence. Eshrae leaned over to his father. "Daddy," he whispered, "that man on the roof last night —he was a grubber, wasn't he?"

"I … I think so, Eshrae," Francesco said. "Which means you shouldn't worry about him. He only harms creepers, not little boys of the present day."

His answer seemed to satisfy Eshrae, at least for the moment. Francesco stared out the windows at other distant, abandoned houses.

Grubbers are no urban legend, he thought. *No one in the department will speak of them, certainly no one at my level. And they won't be found on any payrolls or employee manifests. But that murderer last night was one. They must exist—otherwise, New Shining Capital and Space City and all places in between would be overrun by ghosts and creepers. We'd have no end of them. There'd be more creepers among us than citizens …*

A transgressive notion bobbed to the surface of his thoughts like an iceberg newly split off from an undersea ice shelf. *But what if there* are*?*

He immediately rejected this vertiginous, topsy-turvy idea on grounds of logic. For the government, the past was anathema; he couldn't conceive of his department knowingly allowing even a single creeper to exist. CAHSPEIs and CAHSPAMs, chronologically anomalous human-seeming phenomena, both emergent-insubstantial and actualized-malignant, were classified as toxic invasive organisms, potentially the most dangerous forms of all; far more so than common mushrooms, which were ruthlessly

cut down and dumped at sea. Therefore, if grubbers didn't exist, the State would have to invent them.

The Conquistador's transmission kicked into a lower gear as the road climbed the foothills leading into the Shandough Mountains. Rumberto cut his speed in half as he carefully maneuvered his large vehicle around sweeping turns with no guardrails. The children gasped as the ground seemed to disappear beneath the Saturn's rightmost tires, leaving only a view of distant ground and patches of mist.

The road leveled off at the top of the tallest of the foothills. They passed beneath a large sign in the shape of a welcoming arch. The sign's crest had been covered over by sheeting, but a gust of wind blew the fabric momentarily askew. Francesco was able to quickly read the words beneath: *Fort Wayne.* He remembered his grandfather once saying how many places had once been named Fort Something-or-Other, but now none were. They passed empty guardhouses, then rows of tidy clapboard cabins. They arrived at a lake that reflected the image of one of the Shandough Mountains on its tranquil aqua surface. About two hundred people sat at wooden picnic tables or on blankets spread on the lawns and brown sand beaches surrounding the lake. Clumps of guests carried trays of food and drink from the porch of an anachronistic-looking two-story building reminiscent of mushrooms Francesco had repeatedly knocked down within New Shining Capital, its eaves and flagpoles festooned with newlymade flags of the design Francesco had earlier seen in Gorge Town.

"Here we are," Rumberto said, gesturing at the fashionably dressed men and women sunning themselves by the water. Others ate from plates heaped high with roasted meats and fresh fruit, each plate, Francesco noted, containing the equivalent of an entire meal's worth of rations for his family of ten. "Welcome to Emergency Refuge Camp Number Six. It's a bit spartan, not much to look at, but pleasant enough for a rustic Flag Day outing."

The children spilled out of the Conquistador. Francesco gestured for them to remain close to the car, although they clearly longed to kick off their shoes and run to the lake. "Rumberto," he asked quietly, "are you certain it's all right for us to be here?"

“Of *course* it is!” Rumberto said. “I made special arrangements. You’re all expected.” He turned to his nieces and nephews. “Children! Run and play! Eat as much as you want! Act as though this is your own backyard!”

“Wait!” Francesco called to them before they could scatter. “Remember that you are *guests*. I won’t tolerate any of you acting like wild monkeys—”

“Oh, fiddle-faddle on that!” Rumberto said with a laugh. “It’s *Flag Day*! *I* give you permission to be wild monkeys. Now *go*!”

Before Francesco could voice any further protest, his children skipped and ran to all points of the compass. The older boys made an immediate beeline for the food tables. Arista, hooting with excitement, pulled Prima to the water’s edge. Bertonio and Victor raced up and down the beach, pelting each other with handfuls of sand before deciding to join Leonardo and Adriano in the food line. Eshrae, his interest captured by something in the woods at the far end of the lake, a bird or a promising-looking climbing tree, wandered past the refreshments house alone, shyly avoiding the stares of the dozens of adults he passed.

“What about you, brother?” Rumberto asked. “What’s your pleasure? Would you like to be introduced to some of my colleagues, or would you prefer to eat first?”

The choice between filling his stomach and making small talk with high-ranking bureaucrats was an easy one. “Let’s go eat,” he said. “I worked up an appetite digging through the rubble of the Berkshires’ home.”

They’d just set their plates down when Francesco heard a woman scream. The scream came from a section of lawn near the edge of the woods and was quickly joined by other panicked shouts. Francesco saw a dozen adults flee their picnic blankets, the men’s bejeweled tendarms in disarray.

And then he saw Eshrae, seemingly rooted to a patch of bare ground in the shadow of the tree line, facing a snarling Dire Wolf twice his size.

Without thinking, he began running toward his son. He grabbed the metal lid off a trash can, then scanned the ground for something to beat it with, or, if the beast could not be scared off by noise, to use as a weapon.

Don't turn your back on it, Eshrae, he prayed. The moment his son broke eye contact, the carnivore would have won the contest of dominance. It would overtake Eshrae in two easy lopes, knock him to the ground, pin him, lock its giant jaws around his neck—

Eshrae, I won't lose you the way Father lost Carmelita. That thing will have to rip my remaining limbs off before I'll let it touch you.

Without breaking stride, he scooped up a large wooden serving spoon someone had dropped on the grass. Useless as a club, but a serviceable noisemaker.

The beast lowered its head and took a step toward Eshrae. Francesco was near enough now to see the saliva dripping from its lower jaw. "Get *away* from him, you monster!" He beat the trash can lid with savage desperation, prying the wolf's gaze from its small prey. "Scat! *Get away!*"

The noise failed to startle the animal into flight. It uttered a low growl and shifted to face Francesco, eyeing this new threat with orbs like chunks of blue-flecked ice. Francesco estimated it must weigh nearly two hundred pounds, with the majority of that bulk concentrated in its shoulders and gargantuan head.

"Eshrae," he said to his trembling son, "get behind me, slowly."

He backed away from the wolf. His lid would have to serve as a shield, should the beast lunge. Would it still stalk Eshrae, now that a larger human faced it? The creature signaled its intent by matching them step for step, its saliva spattering the dead leaves that littered the grass.

Francesco's heel bumped into a hard object, which fell over with a glassy clink. "My bottle—" Eshrae said, voice tight.

"What?"

"I—I was gathering flowers—"

"Pick it up and place it in my free hand. Slowly."

Francesco felt the bottle being pressed into his waiting fingers. A wine bottle, to judge from its shape and heft. He let it slide along his palm until he could grasp its narrower neck, the better to aim it. It had a useful weight, heavy enough to bruise a skull.

He would only get one throw. If he missed, or merely grazed the beast, he would provoke an immediate attack. Then he'd have only his

flimsy shield for protection, his paternal desperation as his sole weapon.

"Eshrae, count silently to three. Then I want you to run toward the crowd."

"I—I won't leave you—"

"Do as I say."

Francesco prayed to a God he'd never been properly introduced to, using blunt, unadorned words he imagined a distant ancestor may once have uttered before hurling his last remaining spear at a predator much like this one. He lifted the bottle above his head, mentally pictured it striking the wolf between those ice-blue eyes, then threw it with all his strength.

Eshrae ran.

The thick end of the bottle smacked the wolf's head just below its left ear. It yowled like a dog that had stuck its nose into the business end of a grass cutter. A surge of triumph soared to the tip of Francesco's last tendarm as the wolf, disoriented, stumbled in a complete circle and then fled into the forest, dazedly banging its wounded head against low-hanging tree limbs.

It appeared to be running toward another figure waiting in a deeper section of the woods. Francesco could barely make out the distant silhouette of a man standing in the shadows, who made no move to avoid the wolf's pain-blind charge through the foliage. Francesco felt the pressure of the man's gaze; he was certain the man had watched the entire encounter.

Hesitant to break that long-distance eye contact, he turned to make sure Eshrae had found sanctuary. He was relieved to see his youngest son standing with Rumberto, Leonardo, and Adriano. When he looked back toward the forest, he could spot neither the fleeing wolf nor the man who had dispassionately observed Francesco's and Eshrae's near-deadly encounter.

• SEVEN •

Flags and Phantoms

FRANCESCO FOUND HIS LUCKY BOTTLE nestled between the roots of a maple tree. A portion of its base was matted with sticky blood and bits of gray fur. He picked it up and brought it to Eshrae. “A souvenir,” he said. “Keep it, and maybe you’ll think twice about wandering into a strange patch of woods on your own.”

“I’m sorry, Father,” Eshrae said. “I was collecting flowers for Mother. I saw a rabbit dart out of a bush, and I followed it, and then the wolf was there …”

“This comes as a complete surprise, brother,” Rumberto said. “There’ve been no indications of large predators skulking anywhere near here. Thank heavens you were quick enough to reach Eshrae before the beast attacked.”

Francesco stared hard at his sibling. “A dozen grown men and women ran at the sight of that wolf, leaving an eleven-year-old boy to fend for himself,” he said. “If I hadn’t been here, no one would have helped him, would they?”

Rumberto looked as though he might try to formulate an excuse for his colleagues, but then he glanced away and remained silent.

“Prima! Arista!” Francesco called. The girls had remained on the beach, unable to see the source of the tumult at the forest’s edge. “Come over here and stay with your brothers!”

He scanned the crowd for his other two sons. “Where are Victor and Bertonio?” he asked Leonardo. “I thought they’d decided to eat with you and Adriano.”

“They, uh, they *did*, but then they decided to go exploring,” Leonardo said, blushing a deep red. “You know how they are. I’m *sorry*, Father. I didn’t think it would be dangerous …”

“Damn it,” Francesco muttered. He thought of the near-twins playing with a ball the prior night while Eshrae had been led off by a creeper woman. “Did you see where they went?”

Leonardo shook his head.

“I saw,” Adriano said. “They took their plates of food and walked over that way.” He pointed away from the lake. “You see those buildings over there, the ones with the funny windows? I heard them say they wanted to go look at them.”

“Thank you, Adriano,” Francesco said. He quickly walked toward the buildings his son had indicated.

“Father, should I come with you?” Leonardo shouted after him.

“No,” Francesco called back. “Stay with your uncle and siblings. And don’t let the two girls out of your sight. You understand, Leonardo?”

“Yes! I’ll guard them!”

Francesco hurried his stride and walked across what may once have been a parade ground or mustering yard. He told himself he’d probably find Bertonio and Victor hiding in a culvert or a crawl space beneath one of the buildings, poking at some bug with a stick, or maybe offering a morsel of roasted meat to a squirrel. He’d scold them and send them back to join the rest, no harm done. But the memory of a dozen supposedly responsible adults abandoning Eshrae to his fate gnawed at him. *That kind of thing wouldn’t happen on my street*, he told himself. *Anyone selfish and cowardly enough to fail to protect a child would die of shame.*

He reached one of the buildings, a three-story brick structure that looked similar to dozens of mushrooms he’d demolished over the years, all with steeply sloped roofs supported by square white posts. Rounding a corner, he saw that two identical buildings faced each other across a spacious yard; in the yard’s center was a tall flagpole crowned by a golden eagle.

He found Bertonio and Victor alongside one of the buildings, plates of food discarded at their feet. They stared at the flagpole. Rather, they

stared at the hazy, shimmering phantoms that surrounded it.

"Boys, come away from here," he said. Neither Victor nor Bertonio appeared to hear him, nor to have noticed his arrival. The phantoms at which the boys stared were as insubstantial as wind-driven mist, as wavering as a heat mirage. *They're not full-fledged ghosts, not yet*, Francesco thought. *They're just the dreams ghosts have of themselves, if such things can dream*. Four soldiers in full dress uniform unfolded a large flag. They reverently attached it—the old flag, Francesco noticed—to the hoist rope, then raised the banner. When the flag reached the midpoint of the post and completely unfurled, the soldiers and the rope and the flag disintegrated into particles that fluttered like tiny snowflakes, which melted away into the air.

The silent sequence then began again. The particles unmelted, rose from the grass like dust billowing from a beaten carpet. They coalesced into four figures who faced each other, standing at attention until limbs and cargo attained a semblance of cohesion. Then they raised the flag once more.

Francesco saw that they wore closed-back jackets; they bore no tendarms. *Was my great-great-grandfather Paulo like those men?* He longed to question them. *But they can't talk; they haven't tongues to speak with yet.*

"It's like a broken movie," Bertonio whispered. "Y'know, like when the film gets stuck in the projector and busts, and the projectionist tries taping it back together but it keeps busting in the same place?"

His son's comment broke Francesco's reverie. The instincts of a lifetime's work screamed at him to remove his children far from this source of contamination. "You shouldn't be here," he said to them. "It could be dangerous. Take your food and get back to the picnic area—"

"Listen to your father, boys," a deep male voice commanded.

Francesco turned. He recognized the voice from last night. The voice of the murderer on the roof.

The man stood between the white posts of the building on the far side of the courtyard. Unless Francesco's long-distance vision had begun to fail, this was the same man who'd stood in the forest and watched him and

Eshrae face down the Dire Wolf. Francesco also recognized the equipment he held—the red steel canister with its connected hose and spray nozzle was a CAHSPEI disrupter. He'd seen several sets of similar equipment stored at his department's headquarters, kept in readiness for the ghost outbreaks that seemed to occur whenever Old Man Penheimer occupied a room for more than a few hours.

"Kids, leave us alone," the stranger said to the boys. "Your father and I need to talk."

"Go back to the family, sons," Francesco said. "Take your food. I'll be along in a few minutes."

"Father," Victor asked, "is he—?"

"Just go. *Now*."

The stranger waited until the boys disappeared. "It's good that your sons get to eat a decent meal, isn't it?" he asked, carrying his equipment to within ten feet of the flagpole. His bare arms and shoulders, covered only by the straps of a tautly stretched sleeveless tunic, were massive, almost disfigured by the angularity of their muscles and bulging veins. Francesco had never seen such arms on a man, not even the most toughened of his fellow Sanitation workers.

"Why have you been following me and my family?" Francesco asked.

"Who says I've been?" the man said. "Maybe we run in the same circles. Maybe fate has been bringing us together, like a pair of young lovers." He smiled. Several of his teeth were missing.

"Do I know you from somewhere?"

"I don't imagine you do, although we work for the same employer. I know *you*, though. Or at least I know about you. Francesco; Francesco *Helios*." His voice lingered on the name, savoring it as though it were a choice cut of meat. The flickering movement of the phantasms caught his attention. "Hang on a second while I get rid of these distractions."

He aimed the canister's nozzle at the apparitions, then pressed the switch that turned on the spray. Silvery jets of foam—as silver as the stranger's sparse, thin hair—burst from the nozzle. He coated the entirety of the chronological anomaly with fizzing foam. Francesco had seen how the

foam worked; it entrapped the particles in chemicals that disrupted the influence of rogue chronomes, preventing the phantom bits from coalescing, dragging them to the ground in soggy clumps that could then be swept up and properly disposed of.

"They're so much easier to get rid of at this stage," the stranger casually remarked, "much less of a nuisance than they are later. But you know, I hate having to do it to *these* guys. These phantom soldiers. Truly regret it. Do they want to come here, to our time? Or are they forced to? These were good men. The best of their day. Rangers. Mountain soldiers. If I were given a choice, I'd take one of them in exchange for that whole sorry lot of paperpushers near the lake. I'd have the best of the deal, by far."

He set his canister down on the ground. "I bet you agree, right? You watched that shameless bunch of pansies run when your son was in danger of his life. Do you doubt that the ghosts I just dispatched would have behaved in an infinitely more honorable way?"

"What did you do with that woman last night?"

"The creeper? I disposed of her the same way you dispose of mushrooms, Francesco. Our jobs aren't as different as you might think."

"Who are you?" Francesco asked. He glanced at the discarded canister. "That equipment's from the Department of Environmental Sanitation. You're a *grubber*, aren't you?"

"Call me Harry," the man said. "It's not my original name, but I've learned to answer to it. As for what I am … 'grubber'—that's not my *official* title, but we don't need to get into details. There'll be time for that later."

"What do you want of me and my family?"

"Of your family? Nothing. You're the Helios I'm interested in."

Francesco's patience evaporated. "*Why?*"

"Because you're a man facing a deadline." Harry stared at Francesco's sole remaining tendarm. His weathered squint did not entirely lack empathy. "You've chosen the hard way, not the soft, pampered path, like those others. In a few months, you'll be forced to give up the life you've known until now. You'll lose the man you've been. You think you're trapped, that you don't have any choices left. Am I right? That the

combined consequences of all your old choices now force you into a dead end of slow oblivion. But you'll have another choice to consider. Your future isn't carved on a granite headstone. And I intend to be there for you, Francesco. To help you make that choice."

"*What* choice?" Francesco's tendarm quivered with pent-up frustration. "When this last tendarm is gone, I'll have no choice. The government will leave me no option but the drugs. But what would *you* know about that? You've never had a son, not one. You've retained all five of your tendarms …"

Or *had* he? Francesco observed the stranger's five tendarms more closely. Their movements weren't as fluid as they should be—each tendarm shifted about with serpentine jerks, as though they were afflicted with arthritis or some form of nerve damage. It could be due to their owner's age, possibly. But the longer he stared at them, the less natural the tendarms appeared. The more *artificial* …

"Aahhh," Harry exhaled with satisfaction, "very good. Maybe one man in five hundred would notice what you just did. Excellent. You've reinforced my initial assessment."

"Your tendarms—are they—?"

"No more questions. We'll talk more about my tendarms, and yours, another time. Go back to your children. Your hosts probably lit their Flag Day bonfires early—the better to keep Dire Wolves at bay." He laughed. His short, sharp cackle was itself suffused with wolfishness.

Francesco didn't move. "How can you expect me to ignore what you've told me? *Explain yourself!* I won't let you leave until you give me answers."

"Don't flatter yourself, boy." Harry picked up the steel canister with one hand and hoisted it effortlessly onto his shoulder. "Your legs may have twenty-five years on mine, but you could no more keep up with me than you could outrun your brother's Saturn Conquistador. You want to embarrass yourself? Try following me. You'll get your answers. Just not today."

"But—"

The stranger waved him off, then walked toward the forest. “There’s only one thing you need to remember,” he called back just before disappearing. “Harry Erath is your friend. One of your only friends. Don’t forget that.”

“Was that the same man from last night?” Victor asked when Francesco returned. “What did he say to you?”

“He wished me a happy Flag Day,” Francesco said.

“That’s *all*?”

“Drop it, boys. Don’t ask me about it anymore.”

He counted his children to make sure no others had wandered off. He found all of them sharing a long table with their uncle, making quick work of plates of roasted chicken, sausage, rice, and greens. The only child not wholly absorbed in eating was Eshrae. Francesco’s youngest son sat alone at the far end of a long bench, appearing even more pale and wan than he normally did, staring at the tree line with glassy eyes.

Francesco knelt next to him. “Eshrae, are you all right?”

He didn’t respond. Francesco placed his hand on his son’s knee and gave it a gentle squeeze. “Eshrae?”

“That was the closest I’ve ever been to one,” the boy said, his voice a whisper. “I’ve seen Dire Wolves before, but they’ve always been far away, slinking behind mushroom buildings in Turtle Hill …”

He suddenly threw his arms around Francesco’s neck. “Oh, Daddy … I thought it was going to bite my face off! But you *saved* me!”

Francesco returned his son’s embrace, trembling with the delayed realization of how close he’d come to losing him. “I’ll always be there for you, Eshrae. Always, son. *Always*.”

He wished his utterance could make it so.

Senior bureaucrats from the Office of Cultural Infrastructure lit the ceremonial bonfires about an hour before dusk. The pyramids of stacked cord wood, designed to burn well into the night, encircled an open space as long as a city block, large enough to accommodate the processions and

dances. At the center of this circle stood a temporary flag post, far taller than the one that had attracted the phantom soldiers.

The first dance celebrated the work of Rumberto's colleagues, the engineers and scientists of Space City. Some dancers were costumed as cosmosnauts, others as rocket shuttles or the gigantic sleeper ships that would be constructed in orbit, and still others as star-spanning pioneers, eager to colonize planets free of mushrooms, ghosts, and creepers.

Eshrae tugged Francesco's sleeve. "Father, will *we* get to go out into space?"

"I don't think I will," Francesco said. "But you and your brothers and sisters might. Or your children."

"Will we find better worlds out there? Worlds without Dire Wolves?"

"Worlds without chronome infestations and creepers, yes. That's the goal everyone at the National Space Colonization Agency talks about. Maybe your brother Leonardo will help make it possible."

"Will you be sad not to go?"

Francesco hugged him close with his sole remaining tendarm. "The only thing that would make me sad, darling, would be not being able to celebrate the birth of your first son with you and your wife."

The space dances ended, and the flag dances began. Rumberto distributed pairs of paper flags to his nieces and nephews. Each flag, about as big as a postcard, was glued to a slender stick of balsa wood. The boys looked uneasily toward their father, hesitating before accepting the flags, but Francesco nodded that they should take them, and he quietly thanked his brother. Prima and Arista were delighted with their new acquisitions. Prima planted hers in the remains of a sugar bun she'd been too full to finish, and Arista danced around the picnic table, a flag clutched in each delicate fist. One flag of each pair was the current national flag, an assemblage of purple half circles and green crescents that had reached its expiration date. The other flag was the old flag, the one the phantom soldiers had raised.

"Brother," Rumberto asked, "may I give you a pair?"

Francesco noticed his brother staring expectantly at him, his eyes tense. *What does he expect me to do—throw them in his face?* He graciously

accepted the offered flags. “Thanks, Rumberto,” he said mildly. He set the about-to-expire flag down on the table. The other one, the old flag, he twirled reflectively between his thumb and forefinger. Even this crude reproduction, purposefully printed with splotchy colors and stars misaligned, aroused a tender glow of devotion from him. *Why is that so?* he asked himself. *Has my steady consumption of a mushroomed diet affected my mind? Can foods from ancient days make one susceptible to old modes of thought, old symbols?* This hypothesis crumbled in the face of his childhood memories. He had *always* felt this way in the presence of the old flag, as far back as he could remember, either when he saw it mocked and abused on Flag Day, or when his grandfather showed him the moth-eaten example he’d hung behind a false wall panel in the back of his clothes closet.

The children enjoyed the dances, clapping loudly at the end of each performance. Prima and Arista adored the bright costumes. The older boys adored the comely women wearing the costumes, undoubtedly picturing their still-maturing tendarms removing soft fabrics from those shapely knees and thighs.

Francesco recognized one of the dancers, a middle-aged Native Sixer man to whom he’d donated excess furniture once, during one of his family’s earliest evictions, following the birth of Adriano. Native Sixers, men who grew six tendarms rather than five, were a protected class, granted special privileges as atonement for dimly remembered societal sins. Each time Francesco and his family had been ordered to move into smaller living quarters, they had given away their excess furniture and possessions to families of Sixers. He wondered what the man, obviously well off, judging from his clothes and his presence here, had done with the somewhat shabby furniture he’d been given. Sold it? Given it away to friends more in need? Just thinking the questions made him feel slightly dirty; looking out for the welfare of Sixers was as much a social obligation as burning the old flag on Flag Day.

Still, it pained Francesco to watch the dancers hurl flag after flag upon the burning pyres. Not the expiring national flags; those held no more purchase on his emotions than would a pile of worn-out scrubcloths. The

others, however … watching them burn, smelling the smoke produced as their threads turned to ash, felt like being forced to witness the cremation of the threads that bound him to family, alive and dead. He felt a twisting in his guts, as though his last tendarm, his prime, the one passed from generation to generation, had been ripped from him and tossed onto the bonfire before he could gift it to Eshrae.

At the conclusion of the dances, members of the crowd rose, table by table, and approached the bonfire nearest them. They then tossed their paper flags into the flames. Francesco hadn't attended a Flag Day observance this formal and solemn since the long-ago days before he and Aleedia had been blessed with Primo, their first child. On the streets of Wildwood Village, he'd become accustomed to a much more spontaneous, irreverent Flag Day, a rowdy neighborhood celebration that provided an excuse for pranks and silly contests and the consumption of extra allotments of alcohol … provided the inhabitants of "Breeders' Estates" first performed their civic duty by burning the boxes of flags the government provided.

Rumberto motioned for his relatives to stand. "Come, children! It's our turn. We can't raise the glorious new flag until there are none of the old ones left."

He led them to the nearest bonfire, then demonstrated to Prima and Arista how to fling the paper flags into the flames from a safe distance. Francesco watched his children dispose of their flags, some with innocent exuberance, others with halting trepidation, and Leonardo with a strained attempt to muster enough enthusiasm to please his uncle, but not so much as to displease his father.

Eshrae hung back, clinging to Francesco's belt. "Do the flames frighten you?" his father asked. "If they do, I'm sure one of your brothers would burn your flags."

"No, that's not it," Eshrae whispered.

Francesco kissed the top of his head, then removed his son's hand from his belt. "Go ahead, then," he told him. "Your uncle and these people have provided you with hospitality and a very good meal. It's only polite that you honor their custom."

"You won't be angry?"

"No." He had so much more he wanted to say to his son, about representations of ideas versus the ideas themselves, about symbolic action versus *real* action, but this wasn't the place or the time.

Eshrae threw his flags into the fire. Now it was Francesco's turn. He approached the bonfire, felt its heat on his face and exposed arms. *They're just small pictures made of paper and cheap ink, that's all, he told himself. Representations of what these people have been taught to hate—not representations of what I've somehow learned to love. There's a difference.*

He threw the flags at the heart of the bonfire, not caring which of them he hurled first.

There. I've done my duty as a guest. Now I have my own custom to perform. It was my father's before becoming mine, and I hope that someday it will become the custom of at least one of my sons.

He dug the cloth flag out of his pocket. He unfolded it, glad to see that the flame-retardant chemicals he'd doused it with hadn't faded its stripes or discolored the concentric circles of white stars contained within the blue field in its upper-left corner. Disregarding the searing heat, he gently laid the flag directly upon the fire, stretching it flat so that when it fell the last few inches onto the burning logs, all of it would remain visible.

He watched the flames bite at it, then draw back, thwarted. *Hot enough to burn, he thought, but it is not consumed.*

Francesco backed away from the bonfire and continued observing his handiwork, oblivious to the adjacent crowds.

Eshrae wasn't oblivious. "Dad," he urgently whispered, "everyone's *staring* at you."

Francesco looked around him. While he'd been focused on his flag, a sizable circle of senior bureaucrats had gathered around him at a distance of a few paces, including his brother. They stared at him as though they were anthropologists studying the primitive behaviors of a troglodyte, a missing link they'd discovered in a virgin jungle on an island at the edge of the world.

"You were right, Rumberto," one of the older men said, his voice colored with astonishment. "He did exactly as you'd predicted."

“I wouldn’t have believed it if I hadn’t just seen it with my own eyes,” a woman, one of the flag dancers, added. “I thought you’d been exaggerating, trying to sell that mentorship program for children from aberrant families …”

Rumberto smiled grimly. “No. When it comes to my brother and his ways, it is impossible to exaggerate. Wildwood Village is crawling with men who act just as he does, who teach their children reverence for discredited, dangerous practices and ideologies. Isn’t it a colossal waste to abandon youths of talent to such corruption?”

Francesco stared at his brother and at the bonfire raging thirty feet behind him. It was all too easy to imagine grabbing his sibling by the tendarms and hurling him into the inferno.

Harry Erath also watched, from the edge of the forest. Once again, Francesco could feel the man’s eyes drilling into him.

“Come, children,” Francesco said, his voice tightly controlled. “We’re leaving.” He wouldn’t give these people the satisfaction of reinforcing their stereotypes by assaulting his brother, verbally or otherwise. Certainly not in front of his daughters and sons.

“Leaving with Uncle?” Arista asked.

“No.”

“But Daddy, it’s a *bazillion* miles back to our street—”

“We’ll walk. Your brothers and I will take turns carrying you.”

He led his children onto the road that ran between the twin sentry posts and connected with the main road down the mountain. Rumberto caught up with him when they were well out of sight of the crowd.

“You’re angry,” Rumberto said.

Francesco did not slow his stride. The younger children struggled to keep up, fear dawning on their faces that they would not reach their beds before nightfall. “Yes, Rumberto, I’m *angry*,” he said. “Wouldn’t you be, in my shoes? You invited me and my children here to be circus *exhibits*. To appall and amuse your colleagues. ‘Look at the caveman and his brood! Toss them a bit of roasted meat and they’ll do tricks for you!’”

“That’s *not* what I intended,” Rumberto said. “I did what I had to do. For your own good.”

“Don’t make it worse by insulting my intelligence!”

They passed the sentry posts. The sun had already sunken below the green crowns of the maple trees massed along the western side of the road. “It’ll be dark soon,” Rumberto said. “It’s thirty miles back to the city. Let me drive you.”

“Go to hell.”

“Don’t let your pride make an idiot of you.”

“We’ll stay in one of the abandoned houses. We cavemen are used to primitive conditions, remember?”

“Think of your children, brother! And of Aleedia! Do you want her to spend the whole night waiting for her family, first with anxiety, then with terror?”

Francesco had no answer.

Rumberto blocked his brother’s path. “Stop. Just stop and listen to me a minute. Do you think I enjoyed doing what I did back there? It was for your *own good*, I tell you!”

“And you know better what’s good for me and mine, because I’m too *thick-skulled* to recognize my own interests?”

“Not thick-skulled, no. Just *stubborn*. Honestly, brother, I think the progressive loss of your tendarms has rendered you more and more emotionally volatile. I actually think the drugs may do you some good.”

“I don’t need more insults from you. Get out of my way.”

Rumberto, although clearly intimidated, stood his ground. “I *had* to do it! For Leonardo’s sake! And for Adriano’s, and Bertonio’s, and the other children’s sakes! I hate to say this in front of them, but it has to be said—you can’t provide a future for them! But maybe *I* can. Did I humiliate you back there? Did I bruise your pride? I would have done worse, *far* worse, if that’s what it would have taken to get my bosses to sign off on the mentorship program. Can’t you see the painful *wisdom* in that?”

Rumberto dropped them off in front of their apartment a half hour past dusk. The children said goodnight to their uncle. Francesco could muster only a brief, silent wave.

The children went inside, except for Leonardo. He gestured for his father to pause on the front stoop. “Father, are you angry with me?”

“I’m not angry with you.” *I’m too tired to be angry anymore.*

“Are you against my mentoring with Uncle Rumberto?”

“No.” After a moment, he added, “It’s the right thing to do. For you, and for the family.”

“You aren’t disappointed I won’t become a heavy equipment operator like you and Grandpa did?”

Despite his emotional exhaustion, or maybe because of it, Francesco laughed. “Disappointed? I don’t think so, son. I’d almost rather see you *plant* mushrooms than spend a lifetime plucking them. It’s a lousy, thankless business, and there’s never any end to it.”

“If I become a rocket engineer … you’ll still be proud of me?”

Francesco pulled Leonardo closer with his remaining tendarm and lightly kissed his forehead. “I can’t imagine ever *not* being proud of you. Let’s go inside.”

Seeing Aleedia brightened his spirits some, as it always did. The children, unusually taciturn, gathered around the kitchen table and on the sofa and living room chairs to eat the small dinner she’d prepared. She seemed surprised at her family’s subdued greetings. *She must’ve expected to be overwhelmed with excited chatter*, Francesco thought.

“Darling,” she said, wheeling over to give him a kiss, “how was the day?”

“Tiring,” he said. “And tiresome.” He hated keeping things from Aleedia. But with the new baby only weeks away, he wanted to shield her from any additional anxieties. Grubbers and Dire Wolves … those weren’t things she needed to be worrying about now.

Aleedia glanced at Leonardo, then turned with a concerned gaze back to her husband. “Is anything the matter?”

Francesco shook his head. “It’s been worked out.”

She looked ready to question him more, but instead gestured toward the stove. “I’ve made some light supper. Are you hungry?”

He shook his head again. “I had my fill at the picnic. I just need a few minutes to myself. We’ll talk later, after the children have gone to

sleep."

He slowly walked into the children's bedroom, then opened their crowded closet, jammed with clothes of all sizes. He got down on his hands and knees and reached over the children's shoes and old, worn toys to the lip of a small panel set into the closet's back wall. He slid the panel aside and removed a wooden box, dulled by age and the oil of many, many fingertips.

He sat on one of the boys' beds, placed the box on his lap, and opened it. He heard footsteps behind him, then felt Eshrae sit next to him.

"I wasn't hungry, either," Eshrae said. "Is it okay if I look at your great-great-grandpa's medals with you? I figured you'd come in here to look at them, just like every other Flag Day."

"Of course you can look at them with me. It's just another of my 'odd' Flag Day customs. Only this one won't get me laughed at."

"I'd *never* laugh at you, Daddy."

"I know."

Eshrae pointed at the largest of the seven medals: a pair of golden anchors crossed above an unsheathed cutlass, with faded red and white ribbons hanging from the cutlass. "Which one is that one?"

"That's the Navy League Medal of Nautical Valor," Francesco said. "My grandfather told me it belonged to his grandfather Paulo."

"What did he get it for?"

"I wish I knew. By the time I got to know my father's father, my grandfather Angelo, his memories had mostly been erased by the grayhead drugs. All I learned about any of these medals was their names. Since this one is from something called the Navy League—"

"'Navy'? You mean, like, *ships*?"

Francesco nodded. "Yes, ships, like the ones I go to inspect down at the old Navy Yards. Like the ones we saw in that painting at the old house in Turtle Hill. Since this one is from the Navy League, I think we can assume that my great-great-grandfather Paulo got it for serving on that submersible boat we saw in the painting. The *Tridentfish*."

"So he fought his country's enemies on the *Tridentfish*?"

"If what that woman told us is right, I believe so."

Eshrae thought about this for a few seconds. “My learning tapes say that fighting is *bad*. That fighting almost destroyed the whole world once. It’s why the summers get shorter and the winters get colder every year, and why the ghosts and creepers come, and why we can’t go near the ocean. If fighting is bad, why would Grandpa Paulo have gotten a *reward* for it? Medals are rewards, aren’t they?”

“Yes, they are. Very special rewards.” He scooted closer to his son and put his tendarm around his shoulders. “I don’t think *all* fighting is necessarily bad. Sometimes we find ourselves having to do something that seems wicked or hurtful, in order to prevent something worse from happening. That’s what your uncle tried to explain to me before we drove back from the picnic. Other times, very frightening times, violence might be the only way for you to protect someone you love—”

Eshrae’s eyes widened. “Like when you threw the bottle at the Dire Wolf?”

“Yes. Exactly. I would have done anything to have kept that wolf from hurting you. I would’ve used any weapon at hand, even my own teeth. You haven’t told your mother about the wolf, have you?”

“No.”

“Good. It’s better she doesn’t know.”

Eshrae spent another few minutes looking at the medals. With his father’s permission, he picked them up and read their inscriptions. “Did all of these belong to Grandpa Paulo?”

“No. The ones that aren’t from the Navy belonged to his father, my great-great-great-grandfather Niccolaso.”

“He was in the Army?”

“Apparently so. All I know is his name.”

Eshrae turned the silver cluster of oak leaves over in his hands, rubbing away the dust. “Why don’t we have an army anymore?”

“I guess we don’t need one. Our country hasn’t had any contact with other countries in many, many years. We can’t be certain other countries even still exist, far away on the other sides of the oceans. You don’t need an army if there are no other countries. An army is to protect you, in case other countries threaten you.”

“But if we still had an army, couldn’t it protect us against the Dire Wolves and Catamounts? They threaten us, too.”

Eshrae, you’ve asked a better question than you know, Francesco thought as he hugged his son closer. The government spent enormous sums every year to root out and dispose of CASPAs, mushroomed buildings and monuments that were officially viewed as serious threats to public safety, but which, to Francesco’s eyes, only presented a hazard in the exceedingly rare event of an earthquake. The human-seeming ghosts and creepers, the CAHSPEIs and CAHSPAMs, seemed to be kept at bay somehow, most likely by a shadowy cadre of grubbers like Harry Erath. But the reemergent wild carnivores?

So far as he could tell, the Dire Wolves and Catamounts were left unmolested. Free to roam the mushroom districts and the breeders’ ghettos that surrounded those districts. Free to prey on children.

As though the government *wanted* children to be eaten.

“Daddy, why do you love your country? Your country doesn’t seem to love *you*.”

None of his other children had ever asked him that question. It was a question he’d rarely asked himself. “That’s not true, Eshrae,” he said, more shaken than he wanted to reveal. “The government feeds us. It gives us a place to live, and it gives me work to do.”

“Then why won’t it let you keep doing it? That’s the whole reason why Leonardo getting a mentor job with Uncle Rumberto is a big deal, right? Because in another few months … after you give me my first tendarm … they won’t let you work anymore?” Eshrae’s voice grew tight. Francesco felt him begin to tremble. “They’ll give you some shots or pills that’ll make you different, and less smart, won’t they? Isn’t that what they do to all the fathers?”

“There’s a reason for that, Eshrae. The drugs will help me live longer. Otherwise, I might die in ten or twenty years, instead of forty or fifty, and I wouldn’t be around to see *your* children. You see, what the drugs do is, they make an older man’s body think it still has tendarms. That way, the man’s body doesn’t undergo certain changes, changes that can be … dangerous, bad for society, and not only because those changes burn up a

man's remaining years. You asked me before why our country doesn't have an army any longer. This is another reason. The Army and the Navy were made up of men without tendarms. Fathers who had five grown sons. Or, in the case of Sixers, fathers who had six grown sons."

"But armymen and navymen didn't take the grayhead drugs, did they?"

"That's right. The drugs hadn't been invented back then."

"So were Grandpa Paulo and Grandpa Niccolaso dangerous? Were they bad for society?"

Dangerous? Francesco asked himself. *They probably were. Otherwise, they couldn't have earned those medals.* "I imagine they were … skilled at violence, son. That's one way of saying they were dangerous men. So far as their being bad for society … *no*. They were dangerous to society's enemies, not to their own communities and families."

"So *you* wouldn't be bad for society, either! Why do you have to take the drugs? Why can't you say you won't take them, and just stay like you *are*?"

"Oh, Eshrae, I wish, I wish …" But no matter what Francesco wished for, no matter what his family wished for, he had no choice. Men who thought they had choices ended up *gone*.

And yet, Harry Erath had insisted that Francesco would have a choice. But Harry Erath could have been lying.

"Eshrae, let me try to answer your first question a little more honestly than I did a few minutes ago. You asked why I love my country, when it seems like my country fails to love me back. Through my work, I've learned a lot about buildings and houses. Sometimes, even when a house looks like a shambles from the outside, a real wreck—windows broken in, shingles missing, all covered in mold—when you go inside it, you discover that its structure is still solid, its foundation strong. It has good bones. Bones you can build upon again."

"Like those big houses out in the country we drove by today?"

"Yes. I expect all those houses must have very good bones. Otherwise, they would've fallen down long ago. The way I look at it, our country is a lot like those houses.Things could be so much worse than they

are. So why aren't they? The government and a majority of its people are solidly opposed to any families having more than one child. They pile up laws and regulations and penalties that make it increasingly burdensome to have more than one offspring; and when a family reaches the size ours is, the burdens become almost unbearable. But why go to all that trouble? Why pay hundreds of employees of the Department of Family Optimization and the Department of Neonatal Health and Child Development to make our lives miserable, when it would be so much easier to simply *outlaw* large families? Why don't they just make having more than one child a capital crime, a hanging offense? Wouldn't that be more *efficient*? Why don't they drown 'superfluous' babies in the Tomaic River?"

Eshrae stared up at him with massive eyes that reflected dim candlelight from the next room. "Gosh, why don't they?"

"Because our country has *good bones*. It *has* to. I've asked myself those questions for years, and it's the only answer I can come up with. They don't want us to see those bones. They hide them. Honestly, I don't know why. But I've learned a few things here and there. Some from books I've rescued from the mushroom districts, like the Tom Quick story I want to read to you and your brothers and sisters. I've learned that, at its core, our country isn't about fear or compulsion. It's about decency, about honoring people's choices, or at least it once was. *Good* bones, *decent* bones.

"Maybe what stays the government's hand from clenching into a fist is no more than an atrophied, vestigial set of habits and manners. If I have any hopes left, Eshrae, they rest on a faith that those good bones will rise from the earth again, no matter how many times my coworkers and I uproot them and dump them in the ocean, and that better men than I will recognize how to clothe those bones once more in flesh. May you and your siblings be those better men—that's my hope and my faith." A knock on the bedroom door interrupted him. "Yes?"

Victor stuck his head into the room. "Mom said to tell you there's a visitor for you. A messenger from your work."

What couldn't wait for tomorrow morning? "I'm sorry, Eshrae," he said. "I hope this'll only take a few moments."

"Would you read us that Tom Quick story tonight?"

“We’ll see. Meanwhile, put the box of medals back in the closet, please.”

He stepped into the living room. He vaguely recognized the courier, having seen him zipping around the equipment yards on his electric scooter, but couldn’t recall his name. “Good evening. What can I do for you?”

“Are you Francesco Helios?” the short man asked, fidgeting with buckles on his leather coat.

“Yes,” Francesco said.

“This is for you.” He handed Francesco a pale red envelope.

“What is it?”

The courier shrugged. “I don’t make the orders; I just deliver them. Good night to you.” He exited the apartment, unlocked his scooter’s rear wheel, turned on the tiny vehicle’s single headlight, and whirred off.

Francesco tore open the envelope. Stunned by its contents, he neglected to shoo away the children who’d clambered onto furniture in an effort to read over his shoulders.

“Francesco,” Aleedia asked, “what is it? What is all this about?”

“It’s … it’s about the earthquake. What caused the earthquake.”

“What did? Tell me.”

“Our continent … it’s been struck by another landmass. A free-floating island, maybe a miniature continent; no one’s certain yet how big it is. It collided with our eastern coast, about two hundred and forty miles northeast of New Shining Capital.”

The creeper woman who’d run to him the day of the earthquake had said a drifting island would be the quake’s cause. And now her prediction had been confirmed.

“What does this have to do with you?” Aleedia asked. “You’re no geologist. I thought your bosses were having you figure out how to steer those big floating mushrooms in the Navy Yard.”

He stuffed the papers back in their envelope. “Apparently that can wait. There are indications this invasive landmass is a gigantic hot rock.”

“I don’t understand.”

“Extensively chronologo-active. Completely infested with rogue chronomes. Imagine a mushroom district like Turtle Hill, only a thousand

times larger. It's seething with mushrooms and ghosts, probably creepers, too. I'm supposed to be part of a survey expedition. Our mission is to determine the extent of the infestation, and the likelihood the chronological anomalies will spread to our mainland."

He knelt next to Aleedia and cradled her hands between his. "My superiors want us to scour that island clean. I could be gone for months."

• EIGHT •

Kraken Island and the Charnel City

THE TRAIN'S STEAM WHISTLE BLEW, awakening Francesco. He hadn't slept well on the crowded carriage's hard bench; the contortions his confines had forced on him left him with an aching neck and bruised shoulder and hip. He felt the train slowing and heard the foremen shouting for everyone to collect their belongings. Francesco and his fellow groundskeepers disembarked. A substantial collection of cross-country lorries and Mudders, dispatched from Space City, awaited them in a desolate valley. Francesco tossed his duffel bag into the back of a Mudder and hauled himself over its tailgate.

The convoy headed due east, following the trace of an old highway mostly hidden beneath a carpet of vines and overgrowth. A cool rain soaked him to his underclothes. Wooded hills surrounded the remains of the road. Rubbing his wet arms and torso to stay warm, Francesco could make out the ruins of water towers, farm silos, and gas stations scattered throughout the hills, some of them hardly more than lumps in the triumphant green.

Then, just as the sun touched the tops of the western hills behind him, Francesco's Mudder reached the peak of a rise overlooking the ocean. And there it was, about a half mile offshore, its white, chalky cliffs stretching from the northernmost edge of the sea horizon nearly to the southernmost, its highest prominences blending into low-lying clouds.

The unwelcome visitor. Kraken Island.

The survey teams loaded their vehicles and equipment onto a trio of mushroom debris disposal barges sent north from New Shining Capital so they could cross the recently formed straits between their continent and the invasive island. Francesco stood near the prow of his vessel, heedless of the

chronome-infested spray, and watched the white cliffs draw closer. The other survey team members stood far from the prow, huddled in their isolation suits, wary of any direct contact with the barge's contaminated surfaces.

Francesco had been offered an isolation suit, and he'd put on its pants, shirt, jacket, and boots, happy to have dry clothes to change into after the rains. But he didn't bother with the gloves or the helmet and its air filter. He'd spent ample time among the mushroomed buildings of Turtle Hill, searching for foodstuffs; he'd never worn an isolation suit or air filter, and he hadn't grown a second head, not yet.

Their pilot steered them toward a beach free of boulders. The brown dunes led to a cleft in the chalk cliffs, a pass into the island's interior. Francesco let his mind wander and imagined how difficult it would be for a force of marine soldiers to invade the island, at least from this quadrant; even a small defending force could block that narrow pass almost indefinitely with some stone obstructions and a few well-placed cannons.

The three barges buried their noses in the sand. Francesco assumed their pilots would wait for a high tide to back the vessels out. Heavy equipment operators maneuvered cranes that had been installed amidships on each barge, lifting Mudders by their sturdy frames and setting them down on the beach, then unloading pallets of supplies. He could have performed the work easily, and with far greater dexterity than a couple of the operators demonstrated. But no one had asked him. It was as though everyone knew how close he was to surrendering his final tendarm, how soon he would change into something not himself.

He helped deploy a collapsible ramp from the barge's prow, then walked with the other survey team members onto the beach. This was the first time he'd ever set foot upon a landmass other than his home continent. Where had Kraken Island come from? Had it drifted all the way from the far side of the Lantana Ocean? Did the geologists who'd accompanied the expedition know?

Foremen divided the sixty-five men into survey pairs, assigning each pair a Mudder, a list of supplies to collect from the pallets, and a 225-square-mile section of the island to explore. Waiting for his name to be

called, Francesco knelt in the sand and dug out some half-buried shells, using a piece of driftwood as a shovel. All of the shells were novelties to him—like everyone else in New Shining Capital, he'd been taught to fear and shun the beach—but several were extraordinary, works of fantastical art that a careless artist had misplaced in the sand. The most beautiful was an iridescent spiral, big as a dinner plate, that changed color from white to pink to various shades of indigo, depending on the angle at which he held it.

"Francesco? I'm afraid you're the odd man out. You'll take Mudder Number Thirty-Three on your own. Come get your quadrant map and your list of supplies."

Was there something alive inside the spiral? He tried to peer into the curving, pearly tunnel.

"Helios? Pay attention, man."

He put the shell down. The head foreman had been talking to him.

"Come get your documents. Don't let yourself get so distracted. I expect it's dangerous out there."

He loaded up his Mudder's open cargo bed with containers of fuel, water, and rations. He grabbed a tire repair kit, a first aid kit, a compass, eye-irritant spray to drive away any aggressive carnivores, and two large, back-mounted canisters of CAHSPEI disrupter, similar to the one Harry Erath had worn at Fort Wayne. His lack of a partner left room in the passenger seat for extra cans of petrol. He'd need it; he'd been assigned to explore one of the most distant quadrants, all the way at the far end of Kraken Island, whose size had been estimated by circumnavigations of robot tugs.

It was for the best that he would travel alone, he consoled himself. That way, he'd be free to think, unencumbered by the obligation to make small talk with a partner who probably wouldn't want to share the Mudder's small cab with him. With no superior present, he'd be free to study any especially fascinating mushrooms he came across—and Kraken Island promised to be replete with them.

He felt his spirits lift as he lowered the Mudder's windshield and folded down the vehicle's canvas top. He'd be exposed to rain and mist, but he wanted to experience the island and its mysteries as fully as possible, not

peer out from inside a bubble of glass and metal. He patted one of the Mudder's knobby front tires, tall as his chest, for luck. Then he hoisted himself into the truck's spartan cabin.

Francesco put his heavily laden vehicle in gear, maneuvered around a row of more cautiously driven Mudders, and sped toward the pass, eager to see whatever Kraken Island cared to show him.

He drove through a barren valley, a vast plain of grassless mud, massive boulders, and slabs of bedrock. He parked the Mudder and observed distant foothills through binoculars. What had appeared to the naked eye to be vast mounds of darker-colored earth piled against the foothills were actually middens of dead trees, the graveyard of a tremendous coastal forest that had been uprooted and scattered like straw by some unimaginable catastrophe.

He descended from the truck and scooped up a handful of damp mud. The earth had a whitish haze to it, as though it had been saturated by salt. He placed a few crumbs on his tongue—he tasted the salt. Not even weeds grew upon this plain; the only flecks of green he could see were patches of lichens that had colonized some of the boulders and bedrock slabs. The only similarly barren places he had seen previously were parts of the eastern coast surrounding the mouth of Chess Peak Bay, near where the brackish bay met the salted ocean.

As he drove further away from the coast, the land grew gradually less barren. Scrub trees, hardy enough to take root in the mineral-choked soil, grew singly or in small clusters. Minute black birds with red beaks flitted from branch to branch, searching for scarce berries. They fought with one another when a rare morsel was found.

He spotted what appeared to be far larger birds, silver or gray, near the far northwest horizon. They ascended from the ground at a steep angle, reached a height of several thousand feet, then vanished. As he watched, they reappeared close to the ground, six of them, and rose on the same trajectory before disappearing again.

Francesco checked his map. The aerial phenomena did not lie on the direct route to his assigned quadrant, but he detoured west to get a better

look. As he drove closer, he saw that the flying objects were much larger than he'd first thought; they were all considerably bigger than his Mudder. Also, they weren't living creatures—they were machines made of a silvery metal, with rigid wings and glassed-in canopies that glinted in the sunlight.

They were things he'd heard about, objects he'd seen only as battered wrecks on the fantails of a couple of the mushroomed battleships at the Navy Yards; machines he'd never seen actually flying before.

Aeroplanes.

After his brief detour, he did his best to follow his compass and stay true to a northeasterly course. He hoped to reach his assigned quadrant within a day and a half; the quicker he reached it and completed his survey, the quicker the foremen might allow him to return home to Aleedia. As he crested hills throughout the late afternoon, burning towns appeared on the horizon, their buildings and spires and houses wavering like heat mirages, the flames themselves as pixilated as a swarm of agitated fireflies. Were these phantom memories of some natural disaster, the landing of a meteor whose shock waves also knocked down all the forests closer to the coast? Or were they afterimages of a war, maybe the same war the men of the *Tridentfish* had fought in?

In the still well-lit early evening, he came across a two-lane road heading in his direction. It was in reasonably good shape, less encroached upon by vegetation than the abandoned roads he'd seen from the train on his trip north from New Shining Capital. Pleasant-looking cottages and green farm silos mushroomed from tracts of land close to the road. If he looked indirectly at the rolling fields and their imperceptibly rising wooden fences, he could see the glimmers of herds of cows, their black-and-white hides less substantial than mist.

The road led toward a large city. Francesco could see no way to detour around it. The notion unsettled him. Night was fast approaching. The Mudder was equipped with nightbeams and a swiveling searchlight bolted to its bed, but a primitive dread screamed at him: *Don't enter that place in the dark! Pull off to the side of the road and camp in the field!* But he

reminded himself: *Ghosts can't hurt you.* At least that was the common folk wisdom. He hoped it was true. He parked so he could raise the Mudder's windshield and lower the canvas roof, giving himself an illusion of separation from his surroundings. Then he pressed on.

Whatever this city had been, a national capital, a regional capital, or merely an industrial or commercial center, it had once rivaled New Shining Capital in expanse and the magnificence of its buildings. He traversed broad avenues six or eight lanes wide and drove past banks, cafés, government buildings, dry goods stores, groceries, vehicle repair shops, news vending stalls, pubs—all in varying stages of mushroomed resurrection. He discovered he could read the signage, although some of the words and phrases were unfamiliar. Tall, boxy, black vehicles wavered into visibility, advanced a few dozen feet, and then dissipated like fog scattered by a wind. He drove slowly, unsure when something more solid might dart out into his path.

He heard whispers. All around him, whispers. Not merely whispers of conversations, but aural traces of all the sounds of a city—the rumblings of streetcars, lorries' air brakes hissing, taxicabs honking their horns, dogs barking, music from a theater's loudspeakers.

He heard a siren. Not a tenth as loud as it should have been, but still audible above the whining of the Mudder's engine. Two phantom water-pumper trucks rushed past him, their red flanks translucent, a splash of blood against the streetscape.

He decided to follow them. He whipped the top-heavy Mudder around a corner, toppling his stacked supplies across its bed. Twelve blocks later, the fire trucks arrived at an inferno. Seven of eight buildings on the block had collapsed entirely or had lost walls or chunks of their upper stories. The fire, a hundred feet tall, possibly fueled by a phantom gas main, looked to Francesco like masses of orange, yellow, and red tinsel blown upward by a gigantic fan.

He'd witnessed fires of similar intensity during various Angels' Nights and in the aftermath of the earthquake. He should feel searing heat on his exposed skin. But the early evening air remained cool. He exited the Mudder and walked closer to the blaze. Only when he walked a few feet

from the burning rubble did he notice a rise in the air's temperature, and even that extra ten or twenty degrees proved fleeting. Ahead of him, ghost firemen dragged their hoses as close as they dared and directed streams of insubstantial water above the shattered walls.

He climbed back into his Mudder and tried finding his way back to the main avenue. He found himself on a street that appeared blocked by piles of broken bricks and concrete from collapsed buildings on each side. Unable to tell whether the rubble was insubstantial enough to drive through or solid enough to drive over, he backed down the block and turned right at the first intersection. The new street's appearance was much different. Whereas the blocked street had shown signs of recent devastation, here the fires and explosions had taken place at some earlier time, months or years before. The rubble had been cleared away, and some of the blown-out doors and windows had been boarded over, although none of the severe structural damage had been repaired.

Ghost soldiers occupied the block, men in black uniforms and black helmets emblazoned with twin lightning bolts. They appeared to be snatching people who had hidden within the ruined buildings. And the people they grabbed—the sight stunned him—the painfully thin, rag-clad refugees the soldiers manhandled were Sixers, men with six tendarms rather than five. Back in New Shining Capital, no one would ever say so much as an unkind word to a Sixer. Promoting the well-being of Sixers was one of the few traditions and longstanding social obligations that his society never tried to overturn. But here …

He halted the Mudder and got out. The eyes of those children as their fathers were slammed against burnt-out walls or struck with rifle butts—those haunted, terrified eyes reminded him too much of his own children's eyes. A soldier unsheathed a field knife. He plunged it into a young father's stomach, then cut off the man's sixth tendarm after he fell. While the soldier's black-clad comrades held the murdered man's wife, the killer took the severed tendarm and wound it around her neck, throttling her.

Francesco felt something ugly stir inside him. All the anger, resentment, and fear he'd experienced over the past month curdled within his aching muscles, burning him from the inside. The only way he could

expel the bile was to lash out—and he'd finally found an appropriate target. He grabbed a canister of CAHSPEI disrupter from the Mudder's bed. Holding it by its backstraps, he coated the murderous soldier with thick, clumpy spray. His finger never releasing the trigger, he sprayed down the other soldiers—their bloodied bayonets and rifle butts, their lightning bolt insignias, their shining black uniforms, their leering faces. He stalked every ghost soldier on that block, wishing they were more solid so that he could impale them with their own knives; he scattered the foam over every moving form until he noticed the flashing red warning light that told him he had expended more than three quarters of the canister's contents. Only then did he release the trigger. Only then did he see that in his furious need to annihilate the victimizers, he had dissolved their victims, too.

Emotionally spent, yet exhilarated in a way he couldn't recall ever having felt before, he climbed back into his truck. Letting himself indulge his sudden, fierce passion had been a mistake; he'd gone through nearly a full canister of CAHSPEI disrupter, almost half his allotment, and he hadn't even reached his assigned survey quadrant yet. And what had he accomplished? In all likelihood, in a month or a year, those same soldiers, those same murdered parents, those same hollowed-out children would be back on this same block, playing out their pantomime of ancient atrocity and suffering again … the same way Old Frog Face always returned on his marble throne, and the Washerman's Monument continued to thrust upward from the Great Lawn's soil, no matter how many times Francesco knocked it down.

He forced himself to remain impassive while he navigated the subsequent streets, trying to stick to a northeasterly course. It wasn't easy, keeping himself in check. Not even the barbarous pirates in his Tom Quick book had indulged in the depravities he now witnessed—severed heads mounted on fence posts, their maggot-eaten mouths stuffed with severed tendarms; entire families hung by their necks in a row; naked bodies of women with their breasts and genitals cut away. The phantoms who walked quickly past, covering their mouths and noses and averting their eyes, weren't the black-clad soldiers. They were civilians, indistinguishable from the slain except for one fewer tendarm among the young men. These were

the countrymen of those who'd been tortured, now trying to pretend, in the abjectness of their defeat, that their murdered fellows had never existed.

The charnel city seemed to have no end. Francesco wanted more than anything to find a place of refuge where he could safely sleep, or at least rest, until the morning sun and a high vantage point would reveal a path back to open country.

The intersection ahead of him was bright, its illumination not granted by fire. The streets were bathed in pink, then green, then yellow light; the colors alternated every four seconds, as though a powerful traffic signal had shifted to a dangerously fast cycle, inviting vehicular chaos. He turned the corner and saw the lights' origin—a cinema theater adorned with long glass tubes filled with glowing neon gas, an extravagant form of lighting he'd only seen previously in New Shining Capital's fancier mushroomed neighborhoods. The neon-filled glass tubes spelled out the words *crystal ball theater*. The words surmounted a facade three stories tall, the letters flickering on one by one, slowly fading, then changing color.

He parked and got out. The ticket booth, appropriately enough, had been built to resemble a giant crystal ball. The ticket seller, a pale brunette woman in her late teens, looked through him, staring out her glass enclosure at people walking by on the clean, rubble-free sidewalk.

He tried to pull the lobby's door open, but his hand extended through the polished wooden handle and the glass door. Rather than drawing back, he followed his pioneering fingers into the lobby, stepping past the uniformed ticket taker. The man appeared weirdly tall. Looking down, Francesco saw that his feet and legs up to his knees had disappeared into the floor and the lobby's substructure. He was able to walk easily enough; walking felt like pushing through a shallow pool of tiny foam pellets, the deceptively solid-looking marble floor offering next to no resistance to his legs.

He passed by a concessions stand, where a few patrons waited for orders of tea, candied jellies, and caramel popcorn. Entering the theater proper required climbing five broad steps to a pair of wide brass doors. He waded through the wood and marble, which rose to his mid-chest, then pressed his face through the lower part of the brass doors. The insubstantial

brass felt cold and prickly against his exposed skin, as though he'd stumbled into a hovering swarm of metallic gnats in wintertime.

As soon as he passed through the doors, he heard music at the same subdued volume as the fire engine sirens he'd heard an hour earlier. High above him a projector's beam, sparkled through with dust, flickered from the auditorium's rear wall to a massive, rectangular, reflective screen at the front. The auditorium's floor sloped from its high point at the brass doors to a low, level area below the screen, so the patrons in the back could see over the heads of those closer to the front. Walking down one of the aisles, which was illuminated by rows of small, circular lights set into the floor, Francesco experienced the illusion of growing gradually taller as the seats surrounding him sloped downward. He found a spot on the aisle where he could watch the screen comfortably, then stood still.

A cartoon played on the screen. A dozen frisky puppies tormented an old alley cat until the cat, at its wit's end, sealed itself inside a trash receptacle, then sent it rolling madly down a hilly street. The can, with cat inside, flew off the edge of a dock and plunged into a harbor. The cartoon's end was followed by a second of darkness and silence, and then by a fresh fanfare and a new set of titles—

The Anglish Broadcasting and News Service
Presents:
MOVIETONE NEWS OF THE WORLD

A montage of scenes from wildly differing locales flickered across the screen: men in long, flowing robes and headdresses crossing a desert atop strange animals with doubly humped spines; children in exotic costumes performing twirling dances in front of rows of women beating enormous drums; a fleet of warships steaming through heavy seas, clouds of black smoke billowing from their funnels. And then another title—

THE PM SAYS:
"PEACE FOR OUR TIME!"

A shot of a twin-engined, aluminum-bodied passenger aeroplane landing on an aerodrome runway followed. The aeroplane was met by a

large crowd, which parted to allow a delegation of diplomats to descend to the runway. An offscreen announcer described the scene: “Prime Minister Norville Chambers returned from Goetha-Saxeland in triumph on Tuesday. He told a vast gathering of well-wishers that the Four Power talks in the city of Muniker had defused the political crisis over the disputed territories of Leevakia, and that the outbreak of war on the Continent had been averted.”

The scene shifted to the interior of a vast governmental meeting hall. “The following day,” the announcer continued, “the prime minister addressed the combined Houses of Parliament, providing additional details on the landmark agreement.”

> “*My good friends and colleagues, this is the second time in our history that there has come back from Goetha-Saxeland to this Parliament peace with honor. I believe it is peace for our time—an enduring foundation for a true peace, an appeasement of the rough passions of our Continent. And now, dear friends, I recommend you return to your homes and sleep quietly in your beds, warmed and comforted by this news I have brought.*”

Was this peace the prime minister spoke of a peace that ended the Great War of which Francesco knew so little, or a false peace that preceded the outbreak of fighting?

Francesco had only seconds to ponder this before the newsreel provided the title for its next story.

FAMED PHYSICIST PENHEIMER ADDRESSES NORTH EMERICAN CONGRESS;
REVEALS SCIENTIFIC BREAKTHROUGH—
INEXHAUSTIBLE ENERGY TO POWER CITIES!

The film showed a vast meeting hall filled with rows of long, curved tables at which sat an assemblage of several hundred dignitaries being addressed from a central podium by an honored guest. The announcer described the scene: “World-renowned particle physicist Dr. Bertolt

Penheimer returned to his birthplace, Washingmont District, to accept the honor of addressing a joint session of the North Emerican Congress. The occasion? His announcement of a new source of energy that promises to be inexhaustible, as well as remarkably affordable for city dwellers who will benefit from revolutionary and highly efficient power plants. Only four years ago, Dr. Penheimer spearheaded an international team of scientists who together discovered one of the elementary building blocks of our universe—the chronome particle, the foundational basis of time's flow."

The newsreel's audio cut away from the announcer's narration to Penheimer's speech, but Francesco found himself too stunned to listen after the camera delivered a close-up of the famous young scientist.

Dr. Bertolt Penheimer was the semi-manifested ghost who'd stood in the ruins of the great black basalt dome after Francesco demolished the structure with his Mower's wrecking ball. The ghost who'd uttered that cryptic statement, twice: *We scientists have known sin.*

The newsreel's view shifted to a residential district as startlingly familiar to Francesco as the physicist's face had been. "Following his address to Congress, here Dr. Penheimer visits the neighborhood of his youth," the announcer said. "Former neighbors, friends, and school chums line up to greet the hometown boy made good."

Penheimer stood on a street corner in Turtle Hill. Francesco reeled as he recognized the Helios house in the background, the place where he and Eshrae had encountered the creeper woman who'd then been murdered by Harry Erath.

The newsreel ended. Francesco inwardly raged at its brevity. What tantalizing glimpses of the past he'd been given! He yearned to see and hear more. He stared up at the screen as the first feature film began, a romantic comedy about Anglish soldiers rescuing a group of tourists lost in the desert. Was Kraken Island Angland, or a piece of it? Had Angland fought alongside North Emericus in the Great War? He wished he could have heard what the phantom soldiers had shouted at the Sixers they had pulled from bombed-out buildings. This cinema theater and its surrounding block formed an island of un-savaged space and time, an inhabitant of a period prior to the brutality and devastation he had driven past. He had uncovered

a few crumbs of the knowledge he yearned for, but every crumb he swallowed made him hungrier for more.

Neither the first film nor the one that followed, both silly and trite, offered any answers to the questions bedeviling him. Still, he paid strict attention to every line of dialogue, each costume, all the sets and locales, hoping to capture further nuggets of information concerning the times his ancestors had lived through. Finally, exhaustion overcame him. Once he found himself no longer able to keep his eyes open, he stumbled over to the low, flat part of the floor beneath the screen, a place where he could lie down and not be enveloped by foamy mushroomed lumber. If this theater were an island of pre-war time, at least he wouldn't have to worry about being engulfed by falling masonry or burning rafters in his sleep.

Just before he managed to drift off, the newsreel played again. The prime minister's words echoed through his uneasy dreams. "*Peace for our time*"… the peace of the grave.

He felt a presence next to him.

He wasn't sure whether he remained asleep, and this sense of being intruded upon was part of a dream, or whether he slowly emerged from slumber. Back pain from hours of lying on hard ground made him suspect the latter.

He opened his eyes. A woman knelt next to him. She stared at his face with great concern. She had the long, straight black hair, high cheekbones, dark, ruddy skin, and almond-sliver eyes of a Native Sixer woman from the western plains of North Emericus.

He squinted, then rubbed his eyes to clear them. His blood shuddered in his veins—she was a virtual duplicate of the creeper woman Harry Erath had slain in Turtle Hill. Not only that—she looked *at* him, not through him. She could *see* him. Unlike all other personages he'd witnessed in this city, she wasn't a ghost.

"Frank," she said, "come back to your family. You shouldn't be mourning here alone. Your family needs you—Aleedia, Malvechio, your remaining children. Even *I* do. Don't run away from us in your grief."

He could barely see her face. The cinema theater was dark and vacant; the only light came through the open brass doors that led to the lobby, where the crystal-ball-like ticket office allowed the morning sunlight to stream into the theater's interior. "I knew I'd find you here," she said. "You always come here when you need to think, when you need to be alone. But you're running away, and you can't."

"Who *are* you?" he said. "The last time I saw you was in Turtle Hill—how did you get *here*? And how do you know my wife's name, like you knew Eshrae's name and Paulo's name?"

"Are you really that far gone?" She flicked strands of hair from her face and looked more closely at him. "I've known Aleedia for over two years now. Poor man, now you know what it's like to watch your child die before your eyes. I didn't watch mine die—I *felt* him die, inside me, after your bullet went through my spine and my womb."

"*What*? I've never shot *anyone*. I saw you die, but it was Harry Erath who killed you—and he strangled you rather than use a gun. My son Primo died a long time ago."

"I'm not talking about Primo, Frank. I'm talking about Eshrae."

"*Eshrae—?*"

"It wasn't your fault. If you have to blame someone, blame me. I know you don't want to face it, but you *have* to, it *happened—*"

"*What* happened? What about Eshrae?" Hearing his youngest son's name in this insane context made him frantic. "Did something happen back in New Shining Capital? *Tell me!*"

She stood up suddenly and backed away from him. "Frank, you need to get hold of yourself. *This* is your home now. This is where we buried your son. Until you do what you've sworn to do, Kraken Island is your home, your family's home—"

He leaped to his feet. "Tell me about Eshrae!" He reached out to shake her, to force her to stop spouting nonsense. He grabbed her shoulders. It was like grabbing wet sand. *Electrified* wet sand—his buried fingers sizzled as bolts of disruptive force darted up his arms and collided in his head, stunning him. He screamed, and she screamed. He stumbled backward, momentarily blind, and tripped over a hidden rut in the ground

beneath the floorboards. He fell into the front row of seats, plunging through them as though they were sea foam, disappearing into a slanting mass of insubstantial wood and concrete.

When he managed to stand, he saw that the woman had backed away from him, halfway up the aisle. “Oh, no,” she moaned. “You’re not my Frank. I’ve made a mistake. You still retain a tendarm; how could I have missed seeing that? Either you’re an almost-creeper, or—or …” She stared at him pushing through the substance of the seats and the sloping floor, then stared at her own feet, which supported her on the floorboards. “It’s … *me*. *I’m* the almost-creeper. I’ve made a mistake, a terrible mistake, it could ruin *everything* …”

“*What* mistake?” He pushed closer to her, furious at the resistance of the furniture and floor structure against his legs. “Why do you keep calling me Frank? I won’t use that name until after Eshrae’s manhood ceremony. Where did you come from? Why do you keep haunting me?”

“This is your first trip here, isn’t it? The survey expedition?”

“My *only* trip here!”

She looked wildly around her, seemingly trying to decide between holding her ground and fleeing. “I shouldn’t *be* here. You shouldn’t—you shouldn’t have heard *anything* I said.”

“Why? Stop *toying* with me!”

She began backing away from him again, having the advantage of not being impeded by a partially mushroomed floor. “I can’t ask you to forget what I said. But remember this—the story keeps changing. *You* can change it. The harder we push against the river’s banks, the more the banks give way. Until finally, *finally* the engorged river will rush free and find a different, a *better* bed to flow through. Keep pushing! What I told you—it needn’t happen the way I said! The story keeps *changing*!”

She turned and ran through the brass doors.

“Don’t go!” He did his best to run after her, but it was like running against the surf of an incoming tide. “There’s so much to ask you—”

She briefly paused next to the crystal ball ticket office, just long enough to tell him, “You’ll see me again. Maybe not *me*—the me who’ll remember meeting you here today—but someone who’s almost me. I hope

she'll give you all the answers you need, at the right time. Until then, kiss Aleedia and the children for me."

She fled through the front entrance. By the time he passed through the insubstantial glass doors and reached the sidewalk, she had disappeared into the mushrooming city.

• NINE •

The Ghost Fleet

FRANCESCO DECIDED to halt his survey early. What he'd already seen in the charnel city had been more than enough to tell him any campaign to cleanse Kraken Island of its endless multitude of ghosts and mushrooms would be a madman's folly, like trying to empty the ocean with a spoon.

He'd expected to be the first of the survey corps to return to the embarkation beach. But the sight of dozens of parked Mudders indicated the other surveyors had also decided to cut their observations short.

"No need to give me your report, Francesco," the crew chief told him. "The decision's already been made."

"We're disengaging from Kraken Island? We're going to try pushing it back into the open sea?"

"Yep. This island's a cancer. Way beyond any resources we've got to clean it up. It's up to the engineers and geologists now. They'll figure out the best spots for the underwater demolition charges to break up the dead root tendrils that've gotten entangled. After that, for a final push to get this island back to the open sea, they'll tow some of your old war boats into the channel here, fill them up with explosives, and make some damn big waves."

Upon his return to New Shining Capital and the headquarters of the Department of Environmental Sanitation, Francesco discovered that news of the scope of the chronally anomalous infestation on Kraken Island had traveled faster than he had.

Jenerette Seeling called him into her office as soon as he checked in. In sharp contrast to Laurent's regal nest, Francesco's immediate supervisor's office was stark in its austerity, holding little more than a desk, two chairs, a lamp, and a bookshelf. "I've got an urgent assignment for you, Francesco."

"Actually, Jenerette, I'd hoped to take the remainder of the day off. I haven't seen my family in over a week. I don't even know whether Aleedia's had the baby yet."

"Your visit home will have to wait. I need you to survey the biggest of the mushrooming warships at the old Navy Yards, see which one is most suitable to be used as a floating bomb against Kraken Island. You're the only employee in the department qualified to take this on."

Francesco felt his stomach tighten. "Can't this wait until tomorrow? I understand the threat Kraken Island poses, but given that it'll take months to get any of the cruisers or battlewagons ready for what you intend, a day's delay in my looking them over shouldn't make a difference."

Jenerette frowned. "Maybe it doesn't make a difference to you—or to me—but it does to Michael. He wants you out at the Navy Yards this afternoon, with a report back to him no later than noon tomorrow. He needs you to evaluate stability, seaworthiness, condition of stored ammunition, and capacity to hold explosives taken from other ships or the Navy Yard's supplies. Should none of the big ships be immediately ready to be used to dispel Kraken Island, Michael wants you to provide your best estimates as to when the one that's in the best shape will be solid enough to make the journey."

Francesco sensed a new looseness, a pulpy softness in the flesh and muscle surrounding his sole remaining tendarm, the one he would soon gift to Eshrae. "Will I be expected to pilot whichever ship is chosen?"

"I expect so. Unless you're able to train someone else in the time available."

"What if no ship is ready until months after my son Eshrae's manhood ceremony? Taking grayhead drugs would incapacitate me from piloting a big vessel. I might even forget my ship-handling skills, be unable to pass them on to another department employee. Under those

circumstances, might I be granted a deferral from starting the drug regimen?"

His supervisor rubbed her temples as though trying to relieve pressure building to dangerous levels. "We'll cross that damn bridge if and when we come to it," she said.

The Navy Yards sprawled on the northern bank of a broad bend in the Tomaic River. Francesco surmised that the land beneath the Yards had once been mud flats; the huge, archaic facility sat at the base of a set of chalky bluffs that now formed the southernmost boundary of the Turtle Hill district. He parked his work truck in the shadow of a supply depot and emerged into the warm sunlight, smelling the not unpleasant (to him) odors of heavy fuel oil and dead fish.

Mushrooms from two vastly different ages faced one another here. Mushroomed mansions up on the Turtle Hill bluffs, products of an era of gentility, overlooked an industrial assemblage from a harder era: mushroomed foundries, machine shops, dry docks, giant derricks, and launch slips a city block wide, all dedicated to the construction and maintenance of the Fleet. The Fleet—Francesco knew how much his superiors loathed these vessels. They were a growing gray rebuke to the ideals of New Shining Capital, a transgressive panorama of steel armor plate and gun turrets, aggressive masts layered with fighting tops, and barrel-thick cannons each as long as an electric bus.

His periodic trips here to survey the regeneration of the warships had provided some of his happiest work memories, as well as several of his most harrowing occupational accidents. Despite the hazards, he had many reasons for enjoying coming here. He prided himself on having become the department's resident expert on the deck layouts and schematics of these ships. As a heavy equipment operator, he was merely one among hundreds, but as an expert on the guts and mechanical systems of mushroomed warships, Francesco could count himself unique.

On a deeper level, Francesco felt a special bond with these long, gray, menacing ships. The Yards felt nearly as much like home as the

cramped rooms of his family's apartment. Whenever he came here, he sensed the near presence of his great-great-grandfather Paulo, a man whom he'd never met, whose photograph he'd never seen, who he knew only from a box of dusty medals.

During his nineteen years with the department, Francesco had participated in three evacuations of the Yards. He was the one who determined when the various warships had solidified enough to be adequately stable for towing out to sea by radio-controlled tugboats, where they were then sunk beyond the continental shelf by remotely detonated explosives. His expertise regarding archaic mechanical systems had been called upon whenever any of the larger, more ungainly warships had to be moved. He'd assisted the robot tugboats by working the ships' steam-powered steering gear, helping to pilot battleships and armored cruisers through the Tomaic River's more narrow channels. Then he'd disembarked when the ship and its tugboats reached Chess Peak Head, the bluffs where the river's flow spilled into Chess Peak Bay and the ocean beyond.

Today, however, his assignment was different, more urgent. For the first time of which he was aware, the government intended to use one of these ships for the purpose it had been built: the application of destructive force to defend the nation.

He left his toxic-environment protection suit in the back of the truck. If the chronomes were to do him any irreparable harm, they would have done so by now. Wearing the suit made him clumsy, and he couldn't afford to be clumsy, not while ascending ladders, walking narrow catwalks, and climbing through tight hatchways. Especially not while having to continually probe the deck in front of him to ensure its solidity. Terrifying experience had taught him the importance of extreme caution when boarding any vessels of the mushroom Fleet—what *looked* solid wasn't necessarily so.

Francesco took only the minimal necessities from his truck's bed: a hard hat, a camera, a battery-operated lantern, his diagramming pad, an extendable pole he'd built for the purpose of probing the decks in front of his feet, and a spray canister containing enough foam to disrupt and disperse three or four ghosts. He slotted most of these items into a backpack

and hooked others onto his belt. He then scanned the Yards for silhouettes of vessels he recognized. Following each purgation of the Yards, the same ships regenerated themselves, but they tended to mushroom within different building slips or floating dry docks, or adjacent to different piers than they had before. Upon each subsequent resurrection, the warships emerged in vastly different condition from their prior appearance. A previously battle-scarred destroyer might reappear with fresh paint and a clean, straight hull, looking ready for her trial runs; or a once pristine battleship might arise from the Tomaic's waters as a battered hulk, armor belt cracked and punctured, a mangled gun turret dangling off the side of her foredeck like a broken limb.

Which ship should he board and examine first? Certainly not the unidentifiable battleship that had only recently begun its regeneration next to Pier Number Two. He walked out onto the pier, poking its boards with his surveying pole to ensure they could be safely trod upon. Huge bubbles, as large as his head, bobbed to the surface of the water. The bubbles trembled for an instant before bursting, suffusing the air with odors of oil and iron.

He stared down into the water. Twenty feet below the surface, on the river's dredged bottom, lay the keel plates of a thick-beamed warship, stretching over six hundred feet from prow to stern. He could see the honeycombed layers of the battleship's double-bottomed hull forming up. Eventually, months or years from now, enough buoyancy would be created through the steady accretion of engine spaces and oil tanks and watertight compartments, each filled with remembered oil or air, that the vessel's keel and bottommost decks would rise from the muddy river floor to the water's surface, the beginnings of a ghost ship. In his experience, about a third of these resurrections would include phantom sailors; why this happened with some vessels and not others, he hadn't been able to parse out.

Beyond the piers, close to the Navy Yards' western boundary, Francesco noticed a part of the base he'd never explored, a large concrete marina that emerged from the Tomaic River like a flood-sunken horse stable. From this angle, standing far out along Pier Number Two, he barely could see the sheltered prow of what might be a submersible boat.

Submarines were much too small to be used as floating bombs to drive Kraken Island back out into the open ocean. But curiosity overpowered him. His ancestor had served on such a vessel. He hurried back to shore and found a road that led to the looming concrete structure. Its northern wall anchored it to the edge of the Tomaic River's bank, as though the building were a gigantic amphibian that lived partly on land but mostly in the water. A sign mounted above its door read, PORT WASHINGMONT NAVAL YARDS SUBMARINE PENS, BUILDING 71. Vast multipaned windows, like those on the sides of a mushroomed aeroplane hangar, surrounded the door on both sides. The windows were yellowed with age and dirt. Francesco rubbed the dirt away from one of the panes and peered inside. He counted four submersible boats, moored side by side within the concrete grotto like a family of gargantuan metal seals.

The door was locked. Francesco considered breaking a window to gain access, but then he thought of a less intrusive way he might be able to get inside. He began poking the building's wall with his probing pole, searching for a "soft zone." Although visually the structure appeared completely solid, Francesco knew that, depending on when this building had mushroomed (and he didn't recall having seen it on his most recent visit to the Yards a year and a half ago), there was a chance that portions of it had not yet fully manifested. The vast majority of the structure might be solid CASPA, chronologically anomalous stationary phenomenon (actualized), but small sections could remain phantomlike CASPU, chronologically anomalous stationary phenomenon (unsolid).

He found his hoped-for CASPU section near the building's northwestern corner—his probing pole sank into the structure as though the wall were built of blocks of marshmallow, rather than concrete. He tried sticking his hand through. The wall's substance was thicker than he would have hoped, but with effort, he managed to poke his arm deep enough that his fingers sensed air on the far side. Recognizing the difficulty of crawling through, Francesco removed his backpack and left all of his equipment, save a portable battery-powered lantern and his probing pole, by the side of the road. Then he took a deep breath, protected his face with his arms, and plunged into the wall.

It felt like entering a pool of cool tar. He experienced a brief interval of terror when he found himself entirely encased by the wall, cut off from air and light like a fly trapped in amber. But his terror and the involuntary lunge it inspired propelled him through to the submarine pen's cavernous interior.

The wall sealed up behind him with a barely perceptible gurgle. A concrete pier led to the sterns of the four submersible boats, each approximately two hundred feet long, with narrow, grooved decks surmounted by even narrower conning towers. Bright morning sunlight streamed into the pen's open southern end, illuminating the boats' sharklike bows but leaving their similarly pointed sterns in deep shadow.

Tapping his probing pole in front of him, Francesco walked the length of the pier, reading, with difficulty, the names of each of the boats, laid out in block letters on their shadowed sterns. *Archerfish. Lanternfish. Tigerfish* … He held his breath until he read the name of the fourth and final boat.

Tridentfish.

Francesco felt tears well within his eyes as he stared at his great-great-grandfather's boat. *I'll never get to meet you, Grandfather Paulo*, he thought, *but at least I can tell myself that I've held your medal in my palm, and now I will walk the same steel deck you once walked.*

He cautiously climbed the steps onto the *Tridentfish*'s stern, tapping each step with his pole before he set foot on it. *At least this boat sits low in the water*, he told himself. If he somehow missed a "soft spot" or "dead zone" with his probing pole and trod upon a section of deck that failed to hold his weight, he would fall, at most, fifteen to eighteen feet before hitting the water beneath the boat's keel, rather than the fifty to sixty feet he might fall in the same situation aboard a battleship or armored cruiser, with their comparatively lofty deck heights. The fall could still kill him, particularly if he collided with more solid portions of the boat on his way down. But death by falling was less likely here.

The hatch closest to the stern was sealed from the inside, but he saw that the hatch atop the *Tridentfish*'s conning tower lay open. He climbed a

set of rungs to the top of the conning tower, then switched on his portable lantern before descending through the hatch.

This must be akin to what settling into one's coffin feels like, he thought as he climbed down into the constrictive darkness. Had the men of his great-great-grandfather's day been considerably *smaller* than men of the present? How had they borne being confined within such tiny working and living spaces for weeks, even months at a stretch? This wasn't a ship like an armored cruiser—it was a tin can, a torture device for anyone with even a trace of claustrophobia.

But such thoughts quickly fled as he shined his lantern on the conning tower's cramped stations. *So this is where Grandfather Paulo worked*, he thought, feeling a shiver of delight as he touched the handles of the periscope. *This is what he used to spy on enemy ships on the surface. Here are the speaking tubes he used to communicate with the engine room. I can almost see those men. I can almost see my Grandfather Paulo, picture his face, hear his shouted orders …*

He yearned for Paulo, whom he'd never met but whose prime tendarm he'd carried since the age of twelve and would soon pass on to Eshrae. He yearned for his Grandfather Angelo, a friendly but pathetically faded presence from his early childhood, who'd been reduced to an amiable simpleton by the grayhead drugs even before Francesco's birth. He yearned for his father, the man of endless mystery who'd shrunken to little more than a furtive shadow in his family's life by the time Francesco became a teenager, who subsequently disappeared so completely it was almost as though he had never lived.

He smelled a scent that triggered memories from very early childhood. His grandfather Angelo's body odor when the old man had been lying in bed for days without bathing, roiled by restless slumbers. Then the beam of Francesco's lantern caught the edge of what appeared to be a cascade of dust. He turned the fullness of his lantern's light on it. The particles, almost too small to be individually seen, glittered as they fell and rose, forming a rough, airy column about six inches shorter than Francesco. The last time he'd seen this phenomenon this close, he'd been at the Flag Day celebration at Fort Wayne, watching the ghost soldiers manifesting

around the flagpole. A ghost had begun to materialize, barely five feet from him.

The lower part of the particle column separated into two parallel shafts. The proto-ghost moved away from him, gliding down the narrow metal corridor on proto-legs.

Francesco followed, ducking his head as he stepped through successive portals into machinery spaces, crew berths, and the galley with its compact oven and stove top. The ghost, still hardly more than an amorphous gathering of floating dust, turned left into a small but well-appointed cabin, where a fold-down desk, a wash basin, a set of cabinets, and a bunk had somehow been squeezed into a room no bigger than seven feet by five.

He watched as the ghost "sat" at the desk. Francesco placed mental quotation marks around the word, for the ghost had no discernible lap or torso, and its glittering, wispy substance enveloped the metal chair rather than impress itself upon it.

Francesco noticed a framed photograph mounted on the wall the ghost faced. He moved closer. It was a group photo of approximately forty men lined up on the deck of the *Tridentfish*, standing in neat rows behind their captain. Francesco peered at the captain's countenance. It was a younger, sharper, less bloated version of his grandfather Angelo's features —not the same man, but clearly a relative, with the same nose and eyes.

Was he standing in his great-great-grandfather Paulo's cabin? And if so—was this ghost an echo of Paulo?

He turned away from his close observation of the photograph, hoping to see some hazy reflection of the captain's image in the ghost. But the chair now sat empty. The ghost, whether a time-lost ripple of Paulo or not, had departed.

Francesco sat on the chair himself. He could still smell a faint, quickly fading intimation of the ghost's presence. Much of the small desk was taken up by an archaic typing machine, but what caught Francesco's attention was a thick, leather-bound volume wedged into a space next to the machine. He tried grabbing it. His fingers sank into it as though it were a bathing sponge. Fearful of damaging the book or ledger, he slid the far more

solid typing machine to the left and gently nudged the book from its space onto the desk's flat surface.

What he read on the ledger's cover sent a thrill of anticipation racing through his heart.

N.E.N.S. Tridentfish Mission Log
Lieutenant Commander Second Class Paulo Helios,
Recording Officer
August 15, 1945 to _____

Fingers trembling, Francesco attempted to open the book. The cover would open only partially; the front page stuck to it, and the remainder of the pages clung stubbornly to each other. He realized that trying to separate the pages in their partly substantiated state would only succeed in shredding them. If he hoped to read the log entries, he would have to wait until the book completely solidified. He took the cloth dust cover off the typing machine and wrapped the logbook in it, avoiding damaging the fragile tome with his fingertips' oily residues. Then he placed it securely under his arm.

On his way back to the conning tower and its exit hatch, he searched for signs of the ghost. He detected not a glimmering of it; his failure to find his momentary companion left him feeling oddly melancholic and lonely, as though all the paternal figures in his life had abandoned him once again.

Back out in the sunlight, he reminded himself that he had real work to do. After carefully placing the logbook in his backpack and retrieving his equipment, he scanned the Yards for ships both large enough and solidified enough to be useful in the pending assault against Kraken Island. An armored cruiser with four towering funnels, moored two piers over, looked potentially promising. With a surge of happiness, Francesco recognized her as the *Saint Indianna*, the first big ship he'd ever been ordered to pilot into Chess Peak Bay, fourteen years ago. Going aboard her would be like visiting an old friend.

He walked eagerly toward Pier Number Four. It soon became apparent, though, that this *Saint Indianna* was a far different ship from the one he'd boarded fourteen years ago. Then the cruiser had been a charming vessel, almost picturesque. He vividly recalled her long white hull,

smokestacks and turrets painted a brilliant indigo, and, most memorably, cannons that appeared to have been cast of gleaming gold. But this *Saint Indianna*, wearing the same name and identification number as the ship he remembered, had been treated shabbily by her most recent resurrection. The ship had been shorn of her white, indigo, and gold paint and transformed into something battered and despondent. She now wore a coat of drab gray, the color of a wintry sea. Jagged holes in her steel sides had been plugged with temporary patches thrown together from lumber and scrap iron. An entire row of her secondary cannons had been blackened by fire, the paint on their gun shields and muzzles blistered and peeling. One of her four smokestacks leaned drunkenly against two of its fellows, its base caved in. But her two main turrets, fore and aft, still held their heavy guns level and ready, and her flag—the old flag—fluttered in the breeze, high upon her foremast.

Is she seaworthy? Francesco asked himself. It was impossible to judge from just a quick glance at her port side. None of the holes in her hull seemed dangerously close to her waterline, although he estimated that any seas heavier than flat calm would quickly dislodge those patches and flood the damaged decks. Still, the *Saint Indianna* would not have far to travel, just out of Chess Peak Bay and then two hundred miles up the coast, where a robot tug would lodge her in the shallow straits between Kraken Island and the mainland.

Francesco lugged his equipment onto Pier Number Four so he could examine the cruiser's starboard side. This side of the vessel was relatively undamaged; whatever the *Saint Indianna* had fought— another warship, shore batteries, or attacking aeroplanes—her enemy had engaged her on her port side. Were her engines intact, or had the shells that had pierced her port-side armor disabled them? The only way to find out, he knew, would be to board her and descend to her dark machinery decks, deep below her waterline.

Can't ever find a mushroomed boarding ramp when you need one, he thought. Instead, he located a rope ladder that hung from the *Saint Indianna*'s foredeck, thirty feet above the pier, and dangled into the oily water. He fitted a hook to the end of his probing pole and pulled the ladder

to him. He yanked on it, hard, to assure himself it was solid enough to bear his weight. Then he checked that his lantern and spray canister were securely clipped to his belt, tightened the straps on his backpack, and began to climb.

When he was ten feet below the cruiser's foredeck, the rope ladder suddenly slipped, then jerked tight. He fell no more than three feet but experienced the full-body terror of plummeting a mile. Time elongated, then snapped taut—he felt the eerie coldness of sharing space with a ghost, of falling through its powdery form, his hammering heart cleaving its insubstantial ventricles, and knew with shocking clarity that the ghost was *himself*.

What the hell was that*?*

He clung to the rope ladder until he could get his breathing under control. Had he collided with, then passed through his own phantom? *Impossible*, he thought. *Ghosts come from the past, not the future. I never suffered an accident on the Saint Indianna until just now. So it couldn't have been me, or any form of me.*

Had it been a ghost at all? Maybe his uncanny experience had been a bizarre reaction to his body's memory of a similar, earlier trauma. Nine years ago, he'd nearly died while walking the decks of the battleship *New Leviathan*. One second, he'd been walking a deck of solid teakwood that covered steel subdecking two inches thick. The next second, although nothing had visibly changed, he stepped onto air, then plunged forty feet through what appeared to be solid metal and machinery into the cold water of the Tomaic River. Had any of the lower decks proven more solid than the insubstantial section of the main deck upon which he'd strayed, he would have shattered every bone in his body. He'd gotten lucky, though. Even the keel plates had been only solid enough to resist the water pressure, but not so solid as to impede the passage of a 180-pound man falling at a speed of a hundred feet per second. After that day, he'd never boarded a mushroomed ship without a probing pole.

He shivered at the memory, then completed his climb as quickly as he could. The forecastle deck of the *Saint Indianna* was even more of a shambles than the cruiser's port side. The dark gray steel, repeatedly holed

by plunging shells or bombs and scarred by bursts of shrapnel, had the perforated aspect of a cheese grater. He would need to be doubly careful traversing this battlescape, wary of holes both visible and unseen.

He debated giving up on the *Saint Indianna*, finding another big ship to survey. But none of the other battlewagons appeared to have attained anything near the substantiality of this one, his old friend. So he made his way slowly toward the bridge, where he knew he'd find hatches leading below, all the while tapping the deck before his feet like a blind man navigating with a cane.

He twisted a hatch cover's rotary release wheel and pulled the heavy door open. Then he lit his lantern and peered down into the dusty dimness. *Thank God I've been blessed with an excellent spatial memory*, he told himself. He carried a map of this ship's decks, hatches, and passageways in his head. This talent was one of the main reasons his superiors called upon him again and again for this work, despite the cloud of official infamy that he labored under.

The first deck he descended to was far better illuminated than it should have been. Shafts of sunlight streamed in, not merely through the portholes arrayed above the cruiser's armor belt, but also through holes in the ceiling punched in by enemy projectiles. These holes were bordered by ribbons of twisted steel that hung from the ceiling like the dangling tentacles of giant jellyfish, pointing toward corresponding holes in the floor.

Francesco clambered down another set of steep stairs to the next deck below, which held the crew's sleeping and washing quarters and the mess halls. Here he found the worst of the devastation he'd yet encountered. Bulkheads had been blackened and crumpled. Entire walls had been blown out. Multiple explosions had scattered mattresses, desks, wash basins, toilets, mess tables, and biscuit ovens into a wartime collage. This was the last deck above the armor belt, the lowest deck to feature portholes, every one of which had been shattered. The floor of this deck formed the top of the ship's armored citadel, that box of thick steel that surrounded the cruiser's engines, boilers, generators, and ammunition magazines like a protective womb. The top of the armored citadel had been designed to burst any armor-piercing shells that failed to explode on contact with the main

armor deck above. From the look of his surroundings, the protective deck had met its designer's intentions. The furious destruction all around him was actually a positive sign; every bomb and shell that had expended its explosive force here had failed to cripple the *Saint Indianna*'s propulsion plant.

Francesco needed to go deeper. The first hatch door he located had been welded shut by cordite fire. The next hatch's rotary release wheel had been so severely deformed that it could not be turned. He headed aft, away from the worst of the destruction, picking his way through debris as he nervously tapped the deck ahead with his probing pole. Ten feet starboard of the after-main turret's armored barbette tube, he found the hatch to which his mental map had led him. Having been shielded from the explosions by the stout barbette tube, this hatch's release wheel remained fully operable. With a heave that nearly dislocated his shoulders, Francesco swung open a hundred-pound disk of metal, relief coming belatedly with a hiss of pneumatic springs.

The air that escaped stank of fuel oil, cordite gunpowder, and rotted meat; whether that meat was human corpses or defrosted slabs of beef, he couldn't tell. The deck below was as dark as a cavern buried a quarter mile beneath the earth's crust. He shined his lantern down the steps, which descended steeply about fifteen feet to a floor that appeared clear of shell holes. As he climbed down, the odors that rose to greet him made him think he was sliding down the gullet of a gigantic shark, about to be engulfed and dissolved by its gastric juices.

He reached the floor.

Plink, plink, plink.

The tapping of his probing pole echoed throughout this double-height deck, a mausoleum of machinery and steam pipes.

*Plink, plink, ***

A missing *plink*. He'd struck an area of flooring no more substantial than air.

Francesco directed his lantern's beam at the dead spot in the deck. It didn't look any different from any other part of the floor. But he was able to thrust his pole through it as though it were made of mist. He probed the

contours of this zone of insubstantiality, mentally mapping it. It was roughly oval in shape, about six feet from starboard to port and ten feet from fore to aft. He looked for some small object to drop through it and found a wrench on a table. He knelt by the edge of the zone and dropped the wrench, then counted the seconds until he heard a distant clamor. He estimated it had dropped about fifteen to twenty feet, either one double-height deck or two standard decks.

He removed a writing pad from his backpack and noted the location of the dead zone. It might be merely a hazard to him or whoever would return here to prepare the cruiser for her voyage north; or, if the zone encompassed parts of the propulsion plant or steering gear, it could render the *Saint Indianna* lame and crippled, a much less useful tool.

While putting his writing pad away, he felt the previously stagnant air behind him shift, as though displaced by something moving swiftly.

He wasn't alone down here.

Francesco swung his lantern around, so that its light made a complete circuit of the room. *Nothing*. Had a draft blown down from one of the upper decks? No draft would have reached him this far from the steps. If it had been another man or an animal, he would have heard its footfalls, not merely sensed its passing. Anything small enough to be silent—a rodent or feral cat—wouldn't have disturbed the air the way this something had.

That left just one possibility: another ghost. Had he become a magnet for them, both here and on Kraken Island?

He felt it again. Different, this time. The air moved, and something passed *through* him. The sensation felt the same as when he'd imagined he'd fallen through his ghost doppelganger earlier.

When he swung his lantern around this time, the light caught it, part of it. It sparkled like a drifting puff of gold dust—a ghost, coalescing rapidly, far more rapidly than the ghost aboard the *Tridentfish* had. It darted out of the path of his beam.

On the chance this one might prove hostile, Francesco reached for his canister of dissolution spray. But then he reconsidered. Why should he hastily dispel his hyperactive companion? No one from the department was monitoring him, not here. If he was patient enough, might he manage to talk

with it? Would this long-dead sailor tell him what had befallen the *Saint Indianna*, or explain the war? Could Francesco gain any insight at all into why his entire society had chosen to block out its past and seemed to abhor its future?

Ghosts were deaf to the voices of present-day people, but this one seemed to be manifesting with unusual swiftness. He spoke into the darkness. “Can you hear me?”

No reply. It continued avoiding his beam. But it hadn’t fled. He could still sense its presence, circling him, dodging his attempts to illuminate it again.

No ghost had ever reacted to him this way before. They’d always been utterly oblivious to his presence. This one certainly seemed aware of him, though. Why was it acting so furtively? What did he look like to the partially solidified eyes of a ghost? Some fleshy blob out of a nightmare?

“I’m not an enemy,” Francesco said. “I don’t want to hurt you. I only want to talk. Can you tell me what happened to the *Saint Indianna*?”

He felt it edging around behind him.

“Who were you fighting? What caused the war? I only want to know —*aaagghh!*”

His *calf*! Something had sliced through his right calf!

He limped to the shelter of a bulkhead adjacent to the immaterial zone in the deck floor. He set the lantern down and examined his calf in its light. His pants leg wasn’t torn, nor was it bloodstained. He removed his dissolution spray from its holster—whatever its motivation, this ghost was assuredly hostile—then pulled up his pants leg to have a look at his throbbing calf. His skin hadn’t been broken, but the ugly bruise already spreading and what felt like a severe charley horse indicated that his hamstring and calf muscle had suffered some kind of trauma.

“I can hurt you worse than you can hurt me,” he said, scanning the shallow pool of light cast by his lantern. “I can obliterate you, but I don’t want to. I want to communicate.”

The outer aura of light directly in front of him twinkled like a swarm of enraged fireflies. The ghost charged him, wielding a sword or machete

poised to decapitate him. Francesco discharged his canister, engulfing his assailant in sheets of foam.

By the time the canister's contents indicator needle sagged to zero, nothing remained to be seen but a pile of rapidly dissolving white foam.

He couldn't be certain. Too much about today had violated the boundaries of the uncanny for him to feel certain about anything. The ghost's face had been masked by rivulets of blood, but he thought he'd seen its lips mouth a single word as it had charged toward him—*Frank*, the name Francesco would be forced to bear once he surrendered his final tendarm. The name the creeper woman had called him on Kraken Island.

And just before the foam hit the phantasm, Francesco would have sworn he recognized the musclebound physique, bald head, and insanely malevolent eyes of Harry Erath.

• TEN •

Ghosts of Days to Come

FRANCESCO DROVE BACK to department headquarters, barely aware of the world beyond his truck's windshield.

He returned the truck to the fleet pool.

He wrote his report, estimating the *Saint Indianna* would be ready for her explosive mission to Kraken Island by winter. He recommended that department crews begin loading her with ammunition from other ships and the Yards in mid-October.

He dropped his report into Jenerette Seeling's inbox.

The whole time he went through these automaton-like motions, his mind obsessively picked at a single thought: *Everything I thought I knew about ghosts and creepers is wrong.*

Ghosts came from the *past*. Even the littlest children were taught that. But the ghost of Harry Erath hadn't come from the past. The ghost of Harry Erath had addressed Francesco by a name no one would address him by for weeks or months yet, not until after Eshrae's manhood ceremony.

The creeper women, both of them, had told him about events of the *future*. He'd shooed that untenable reality away like a bothersome fly, explaining away the women's words by telling himself they were mentally deranged. But the first creeper woman had correctly warned him of the earthquake. She'd known he would attempt to rescue endangered tourists. She'd correctly noted the earthquake's cause as the impact of Kraken Island, before anyone in New Shining Capital had been aware of the drifting island. And the second creeper woman … she had told him he didn't know her—"*not yet.*" Those had been her exact words. And she'd said her knowledge about him and his family had come from his own

mouth, yet the first time he'd ever spoken to her was that afternoon in Turtle Hill.

The ghost aboard the *Saint Indianna* had tried to kill him. But the Harry Erath Francesco had met at the Flag Day celebration had insisted he was Francesco's friend, his benefactor. He'd been aloof, evasive, irritatingly superior, but not malevolent. Unless he had been the Dire Wolf's master—the creature had run to Erath after being wounded, hadn't it?—and he had sent it to kill or frighten Eshrae.

He couldn't stop thinking about the various Harry Eraths. Could the first Erath he'd met, the one who'd killed the creeper woman, been a creeper himself? If so, another grubber could have eliminated him in time for the Erath creeper to be reconstituted as the Erath ghost Francesco had encountered on the *Saint Indianna*. But that didn't account for the fact that the Erath ghost had referred to him by his future name. The only conclusion Francesco could arrive at was that the Erath ghost, and perhaps the two women creepers, had come, not from the past, but the *future*.

He felt trapped in a mental vertigo. He was a heavy equipment operator, not a chrono-physicist. Who could he ask about this? He didn't know any scientists; Rumberto was an engineer by training, but Francesco didn't feel he could confide in his younger brother.

He returned home. The younger children welcomed him with ecstatic glee; the older children wanted to hear everything he had seen on Kraken Island. Upon any other return from a lengthy trip, Francesco's delight in the reunion would have matched his children's unalloyed excitement. But now his mind was too tied up in knots of paradox, too caught in clinging webs spun from ominous mystery for him to engage with his children the way he normally would.

Aleedia saw how absent and distracted he was. She motioned for the children to stop crowding their father and go to their rooms. "All of you, I know how much you've missed Daddy and how excited you are to see him. But he's exhausted from his trip. He'll tell you all about it once he's had a chance to rest."

Once freed from the small tornado of chattering children, Francesco expressed his relief at his safe return home and his need for his wife's

closeness by hugging her deliciously swollen body tightly to him with his one remaining tendarm. He thanked her for being so sensitive to his needs and for sustaining the household in his absence. He told her how much he'd missed her and craved her company. But even his embrace of Aleedia failed to elicit in him the overwhelming surge of groundedness and emotional refuge he'd anticipated.

His mind wouldn't let him slip away into sleep. What he wanted to do more than anything was to sit on the back stoop with Grandfather Paulo's voyage log on his lap, absorbing its revelations of the past in hopes this would help him decipher his increasingly alien and frightening present … and future. Yet he knew the log's pages would still be too doughy and insubstantial for him to pry apart without ruining them; mushrooms didn't solidify in a matter of mere hours.

He desperately wanted—no, *needed*—to read accounts of the hidden past, as many as he could get his hands on. Where could he find them? In Turtle Hill? Had he ever walked past anything like a library or a document repository on his hunts for mushroomed foods? He wished he'd paid more attention to the roles and functions of structures in the cordoned-off district, not focused exclusively on the likelihood that buildings might contain cans or jars of preserved foodstuffs that had manifested sufficiently to be eaten.

But perhaps Turtle Hill wasn't the most propitious locale for him to find the kinds of documents he was looking for. His own department's headquarters might contain riches of the past to outshine anything he could stumble across in Turtle Hill. He'd heard rumors of abandoned subbasements below the working levels he was familiar with. Even Laurent had obscurely referred to such subterranean nuisances once while speaking with Jenerette, a conversation Francesco had overheard from the hallway; his superior had lamented the fact that the department's own equipment and methodologies couldn't be effectively used to dispose of "problems beneath our own feet."

And there had been occasions when Francesco had seen unfamiliar men as bizarrely and grotesquely overmuscled as Harry Erath enter blocked-off stairwells in the headquarters' oldest wing, red steel canisters of CAHSPEI disrupter strapped to their backs, their belts burdened with

holsters cradling angular lumps of black steel. Grubbers with their implements of death. He'd listened from a doorway as they'd descended those forbidden stairwells, the clatter of their steel-toed boots on granite steps gradually fading.

They'd hunted creepers, of course. What else did grubbers ever do? They'd hunted creepers sheltering beneath the offices of the Department of Environmental Sanitation. The realization of this had made Francesco's mind swirl like water circling a drain; it had been as though he'd learned of cows hiding a secret bovine wine-tasting club beneath a slaughterhouse.

It was a reliable generalization that where creepers could be found, there would also be mushrooms. And what sort of mushrooms would likely be sprouting beneath the headquarters buildings of the Department of Environmental Sanitation, edifices replete with cubic acres' worth of filing cabinets all crammed with reports, studies, memoranda, and maps?

The question answered itself.

For the first time in a very long time, Francesco avidly anticipated arriving at his office in the morning.

Francesco arrived at work ninety minutes early. His abortive first descent into the subbasement below the floor where he and his colleagues worked revealed that the recent earthquake had partially flooded it, perhaps by rerouting the course of an underground stream. He returned wearing rubber waders and cautiously descended the stairs. The waders, which encased his lower body to his ribcage, squeaked as his thighs brushed against each other. He wondered anxiously how deep the water had gotten; he prayed the flood hadn't ruined the clues to the past he hoped to find.

His heart sank when he reached the bottom of the stairs and he waded through water that rose midway up his calves to push open the doors of the first room. His hard-hat-mounted light and the portable lantern in his hand revealed endless rows of metal filing cabinets, all disfigured with encrustations of rust. Curtains of multicolored mold on the walls made his stomach roil.

Still, perhaps not all of the files inside the drawers had been overgrown yet with mold. He shined his twin beams on the rows of filing cabinets that towered to the ceiling, straining to read the typed labels on their drawers.

Capital Equipment Purchases, 1/1/1987–12/31/1993

Mower Maintenance Receipts, 1/1/2005–12/31/2014

Reports on Cleared Districts, 1/1/1999–12/31/2007

Disposal Alternatives Trials, FYs 1985–1987

Competitive Trials of Remote-Controlled Barge Systems, FY 1990

Controlled Burn Trial: Port Washingmont, 6/12/1981–6/30/1981

Controlled Burn Trial: Iron Horse Town, 8/05/1981–8/22/1981

Epidemiological Studies, Effects of Rogue Chronome Dust Exposure on Vulnerable Subpopulations, FYs 1979–1995

Environmental Impacts of Rogue Chronome Exposure Upon Present-Day Flora and Fauna: Studies, FYs 1956–1978

Case Studies/Lessons Learned: Post-Deluge Disaster Recovery Efforts on the Eastern Seaboard, 1946–1955

One label in particular caught Francesco's attention, affixed to a drawer five feet above his head.

Constitutional Briefs (1951–1970): Legal Disposition of Time-Anomalous Persons During National Emergency: Integration/Citizenship v. Standard Incarceration v. Forced Separation/Relocation v. Elimination

The final word clanged in his head like a bell struck in mourning. *Elimination*. Francesco felt certain he was staring at a cabinet that contained

the bureaucratic and legal justification for the initiation of the grubbers program. He made a mental note to return to that drawer and see if its contents were in readable shape.

He slogged further on, questions flooding his mind.

What had caused the "National Emergency"? Had it been the emergence of mushrooms and creepers, the Great War, or something else? *Post-Deluge Disaster Recovery Efforts on the Eastern Seaboard.* Had a massive deluge of the entire coast of North Emericus been the emergency?

Most astounding to him, though, was his discovery that over a century ago courts and lawmakers had considered offering refuge—*and citizenship!*—to creepers.

He reached the far end of the subbasement. He discovered a set of double doors at floor level. He pushed one open, straining against the water's resistance and the hinges' rust. The doors led into a tunnel. The tunnel, fifteen feet wide, extended beyond the range of the beams of Francesco's two lanterns.

He propped the door open with a metal chair and then entered the tunnel. Sloshing through the nearly knee-deep water, he estimated he'd walked a distance of about half a city block when he came to another pair of double doors. He pushed them open and stepped through.

He found himself in a room that appeared to be the mirror image of the subbasement he'd recently left. Only this room, at initial glance, seemed easily twice the size of the large space on the far side of the tunnel. Similar rows of towering filing cabinets sat in the murky, black water. Interspersed with them were hulking mechanical devices Francesco didn't recognize. Even more startling and intriguing were models of engines, rockets, aeroplanes with convoluted fuselages and wings, and globular capsules carried aloft by hydrogen balloons.

He surmised that he had discovered a forgotten or mushroomed subbasement beneath the National Space Colonization Agency building. He might well be the only man alive, apart from grubbers, to have ever walked the underground tunnel between his department's headquarters and that of NSCA.

Wouldn't Leonardo be thrilled to be down here with me? To be able to see artifacts from his future Agency's history?

He directed his portable lantern's beam at a trio of filing cabinets before him. The models, some of them bigger than he was, were too cumbersome for him to take with him. But so long as he could find one not blackened with mold, he could pilfer some of the historical reports on the Agency's pioneering test pilots and the great minds behind the early engineering breakthroughs, both for his and Leonardo's education. He eagerly read the contents of the filing cabinets' drawers.

Post-Deluge Population Projections for North Emericus Under Various Hypothetical Scenarios: 2000; 2050; 2100; 2150

Statistical Relationships Between Present-Day Population Density and the Emergence of Time-Anomalous Phenomena: Correlation Studies and Experimental Trials, FY 1961–1973

Depopulation of an Urban Center & Effects on Incidence of Time-Anomalous Phenomena: Case Study, St. Indianna Metropolitan Region, FY 1967–1976

Studies of Alternative Population Density Reduction Strategies, FY 1973–1995

What is all this material doing here? he asked himself. These files shouldn't be in the archives of the National Space Colonization Agency; they rightfully belonged to the Department of Family Optimization. So why had the files mushroomed *here*? What did population-density reduction have to do with the colonization of other planets?

He continued reading the drawers' labels.

Population Projections Given Unrestricted Intrusion of Time-Anomalous Human-Seeming Invaders: Effects on Biosphere Given Alternative Base Scenarios

Comparative Case Studies in Three Urban Counties: Social Stigmatization of Child Raising in Purdue County v. Legal Suppression of Reproductive Activity in Holmes County v. Forced Sterilization in Susquehanna County, FY 1978–1994

Feasibility of the Penheimer Drug Regime for the Reduction of Post-Tendarm Aggressive Personality Shifts in Human Males: Clinical Trials, FY 1985–2000

Implications of Forced Sterilization Regime for Future National Intellectual Capital and Industrial Capacity; Impacts Upon NSCA Goals and Timelines: Statistical Projections, FY 1981–1984

Estimations of Heavy Lift Capacity Required Given Varying Population Projections and Different PROJECT EXODUS Target Dates—2025 / 2050 / 2076

Francesco leaned wearily against one of the cabinets. All traces of his delight and excitement at being surrounded by artifacts from the past had been extinguished; his hard hat and lantern suddenly felt heavy as concrete blocks.

Of all the multitudes of activities his government involved itself in, from dumping mushrooms off the edge of the continental shelf to defining and policing the maximum living space allotted families of varying sizes, he'd always believed the endeavors of the National Space Colonization Agency to be the most noble and unsullied. What could be more optimistic and forward-looking than a valiant effort to find a new home for humanity, one free of contamination by chronal anomalies? He'd truly believed the NSCA to be an atavistic survivor of an earlier, optimistic, even heroic period in his nation's history.

But these files … the policies they described, the motivations implicit in them, motivations he must now ascribe to the National Space Colonization Agency … the NSCA was no heroic and righteous outlier within the government. He felt sick. He felt sick to the very root of his soul.

This was the agency his eldest son was being invited to work for? If its roots were as poisoned as this, how could its flowers possibly be pure?

He heard whispers.

Or did he *sense* them? They were so faint they didn't seem like sounds at all, but more like stray thoughts, not his own, intruding on his interior monologue.

Yet they didn't emerge from nowhere—they had a physical origin, a direction. They came from somewhere ahead of him, deeper within this vast subbasement. He'd heard whisperings like these before, sonic shudders on the edge of inaudibility, aboard mushroomed warships in the Navy Yards or inside mushroomed department stores in the North Beverly and Green Bottom districts or while wandering through the bones of ancient automobile factories emerging from the soil of Packardville.

Ghost whisperings.

Yet again, he found himself in near proximity to ghosts or creepers. Before the earthquake, such eerie encounters had been separated for him by years. Now he seemed to stumble across those manifestations wherever he went.

He crept forward, trying to disturb the water as little as possible. He shuffled about fifty paces, following the faint vibrations of those whisperings, and turned left at the edge of a row of filing cabinets. He saw them standing near a doorway. Two of them, both hazy amalgamations of shimmering phosphors, barely recognizable as human. One of them was markedly older than the other, with a broad, barrel chest, a shock of white hair, and four tendarms. The other was on the cusp between youth and middle age, with jet-black hair and a full complement of five tendarms. The older figure held what appeared to be a handgun and pointed it at the second figure's chest; he held a sheath of papers in his other hand. Neither of the ghosts reacted in any way to Francesco's presence.

He listened as hard as he could. In the spaces between his intakes of breath and exhalations, he could barely make out some of their words.

"… read this document," the figure with the gun said. "… indictment of our Agency, from … of the founders. Then I want … Help me to

sabotage … chronome propulsion engines … or you'll force me to use this weapon …"

The second, younger figure's body stiffened with defiance. "Creeper *scum* …" it said. Its voice sounded bizarrely familiar; Francesco struggled to place it. Whoever's voice it resembled, it possessed a clarity the first figure's voice lacked. "… already very familiar with the contents of that mushroomed document. I rose much higher … uncle ever did. Only those of us at the very top … know … fullness of the Agency's origins … its actual purpose. The plans were set in motion … hundred years ago. Only a few of us … needed to know … generations-long strategy … play through to its end. You creepers … never succeed … we'll still heal the biosphere, no matter … bureaucrats you and your allies kill."

"… last chance," the first figure said. It pointed its gun emphatically at the other figure's chest. "I'm not a killer … but I will kill to avert … horror …"

"*Fuck you*," the threatened figure said clearly and piercingly. "Kill me … others … take my place … just one finger … press the button …"

A sudden burst emerged from the muzzle of the first figure's gun. An instant later Francesco heard a faint crack, and the younger figure fell forward.

Seconds later, a third figure entered the subbasement, emerging through the closed doors. At first, Francesco thought it was another ghost of Harry Erath. It had the same grossly exaggerated musculature, the same lack of tendarms, similar thin, white hair, missing teeth when it opened its mouth to shout, "*No!*" But its face was different; the nose was more prominent, the lips fuller.

It also carried a gun. It shot the first figure in the back, three times in quick succession. Then it ran to the crumpled second figure. It half sat, half fell into the pool of water, then gently pulled the murdered ghost's shimmering body onto its lap and cradled its head against its grotesquely muscled chest.

The murdered ghost still retained a flicker of its version of life. It looked up at its would-be rescuer. "… bad grubber," it said. "… too late …"

"… sorry," the third figure said. "… so, so sorry …" Its voice was as maddeningly familiar to Francesco as the second figure's had been.

"… never could … count on family," the dying figure gasped. "… horrible closeness … suffocating …"

Whose voice is that? Francesco asked himself. *Whose?*

"… tried … as best I could," the third figure pleaded. "What else … could I … done?"

"… tendarm … the ages …" *I* know *that voice! So close to remembering*— "… prime tendarm … should've … been mine … not … given … my little brother …"

With its last, fading gasps, the dying voice became perfectly and terribly clear to Francesco. Older, more mature, but unmistakable. Dreadfully unmistakable.

It was Leonardo's voice.

The third figure uttered a cry more piercing than the howl of a Dire Wolf, made all the more eerie by its relative quietude. It clawed at its face, then it buried that scarred visage in the dead ghost's chest.

When it raised its head again, its eyes were terrible to look at. He saw in those eyes decades' worth of despair and desolation, half a lifetime spent feeling one's soul cut away in chunks with a dull pair of scissors, until all that remained was a bloody stump.

The figure placed its gun in its mouth. It pulled the trigger with a sharp jerk of its finger.

Francesco felt the warm prickling of a spatter of blood and brain matter against his face, a haze of viscera which passed through him. The sensation of dampness evaporated quickly.

What would never evaporate, what would never fade was Francesco's certainty that he had stared into his own eyes before those ghost orbs had flown apart. The eyes of Frank Helios, grubber.

• ELEVEN •

The Diviner and the Divined

HE BANGED ON SIRENA'S DOOR until she pulled it open.

She looked up at him and smiled. "Mr. Helios," she said, "you come at an unexpected hour. Your need to talk must be very great, if you've braved the woken carnivores to come see me this long after dark. Come inside, please."

"I don't have any offerings for you," Francesco said bluntly.

"That can wait," she said, guiding him around piles of clutter to her parlor table. Francesco was accustomed to cramped living quarters, but this house encompassed as much space as all the apartments on his block. It didn't lack capacity; what made it cramped was being stuffed with a superabundance of objects, enough to make him wonder how Sirena managed to find space to breathe, much less walk from room to room. "You and your sons have been very generous to me over the years. Bring me some food when you are able, when your mind is more at ease. Your heart is sorely troubled, is it not? That much is obvious."

Francesco fell into the chair that Sirena offered. "They're pursuing me," he said. "Haunting me. They're trying to drive me insane, and I don't know *why*."

"Who, Mr. Helios?"

"Ghosts. Creepers. My own *son*—not Primo, not my dead son. It was *Leonardo*—Leonardo, who's still *alive*, who lives in my apartment, who *can't* be a ghost! I saw *myself*, Sirena—Frank Helios, a man without tendarms, twenty years older than I am now, changed into some overmuscled hulk of a human being, working as a *grubber*. I saw myself use a gun to shoot a creeper in the back three times. To murder him, after …

after he murdered Leonardo. You have to tell me, Sirena. You have to tell me truthfully. My change of life is almost upon me—are the chemical changes in my body affecting my mind, making me see things that can't possibly be real? Am I becoming insane?"

"I don't think there's anything wrong with your mind, Mr. Helios," she said. "Can I get you some tea? The residents of Turtle Hill from two centuries ago had very refined and exotic tastes in tea. It seems they brought in flavors and varieties from all over the world, from nations and continents you've never heard of. Would you like me to fix you a cup? Served hot, it's very soothing."

"I'd—I'd appreciate a cup, thank you."

"Good, good. I enjoy being a hostess." She busied herself with lighting her coal-fired stove and filling a kettle with water from a bucket. "Our diets are very similar, Mr. Helios. I expect that is one reason why the ghosts now demonstrate such an affinity for you. My abilities as a 'ghost talker' only manifested themselves after I had been eating a steady diet of mushroomed foods for decades. Like you, I saved my government rations for my children. I doubt you've been eating mushrooms for nearly as long as I have, but still, the ghosts take notice of you. They feel comfortable approaching you."

"What do they *want* of me?"

"Ghosts will generally steer clear of any present-day man they are capable of sensing, unless they want something very badly of him. Either you have something they want, Mr. Helios, some possession of yours, or they want you to do something. Or, possibly, they expect you will do something in the future they desperately wish to avert, and they will try to stop you or divert you."

"So some ghosts know the future?" Francesco stood and walked to the stove. "Do some ghosts *come* from the future?"

"Sit, *sit*!" Sirena said, pushing him back toward his chair. "Your tea will be ready in just a moment. Do some ghosts come to us from our future? Why not? Of course! Why shouldn't they?"

"But people have always said—"

“Then *people* are *wrong*, Mr. Helios! Where does all this supposedly ‘common sense’ knowledge come from?”

“People have just always known that ghosts spring from the past—”

“No, people *haven’t* always known. That so-called knowledge didn’t sprout from the ground along with the mushrooms. Scientists studied the mushrooms, ghosts, and creepers when they first began to appear. Scientists employed by the government. I’m sure of that. Didn’t every learning tape you ever listened to come from the government?”

“I suppose. But what possible reason would the government have to lie about all ghosts originating in the past?”

“What reason does the government have to lie about *anything*? That’s as big a mystery as the ghosts themselves! But lie they do! And obfuscate, and hide, and muddy the waters, and dispose of the evidence. Why do we know so little of the past when the past strives at every moment to rise from the earth around us? Why, when the past seems to *shout* its truths at us, does the government insist we cover our ears and cower? Why won’t the government allow us to learn from the mushroomed books and films and artifacts? Why won’t they let us speak with the creepers who would be *happy* to tell us their tales if only we would listen, instead of hunting them like disease-carrying rats?”

“You’re contradicting yourself,” Francesco said. “You’ve insisted that some ghosts originate in the future, but now you’re saying they all come from the past—”

“You misinterpret me. You asked me if some ghosts come to us from the future. I said yes to that. What I didn’t say is that ghosts *originate* in the future. All ghosts initially manifest from *a* past into *a* future. The past they originated in while they were normal, present-day people may actually be *our* future, but they initially manifest *forward*, so that when they first appear, they have come from that present day’s *past*. However—and this is a very *big* ‘however’—beyond that initial manifestation, they may bounce in either direction! Past to future, or future to past! So it is quite possible that a ghost who was once a present-day person in *our* past suffered a violent death in that past, initially manifested *beyond* our day, in *our* future,

only there to suffer a subsequent violent death and bounce back to *our* present from *our* future, even though it once originated in *our* past."

"Wait—you're talking too fast—are you saying that ghosts may manifest in *multiple* times and places—?"

"I don't expect you to immediately understand, Mr. Helios. It's all quite mind-bending. Not until you've become a ghost yourself, or, like me, an intimate of theirs, will you truly envision the whole picture. Much of what I say you will need to take on faith, at least for now. However, as I have little to do with my days other than rescue whatever mushroomed artifacts I find appealing and ponder the implications of all that I've told you, I may be able to help you pierce the mysteries. Allow me to indulge in what the ancient poets once called 'metaphor.' Tell me, are you familiar with the metaphor—oh, 'pictorial example,' don't look so *befuddled*—of *time* as a *river*?"

Francesco thought about that. "Uh, I think I've heard that. Or read it, maybe. Time is like a river, in that its 'waters' flow from the past through the present—which, I suppose, is the spot on the embankment where I happen to be standing—on beyond me to the future. Correct? Or am I in a boat on the river and getting carried along in the current from past to present to future? But that wouldn't make sense, either, because to *me*, *all* times are the *present*, isn't that right? You'll have to pardon me if I seem a little slow—"

"Don't get your mental feathers all ruffled, Mr. Helios. Never *mind* 'time as a river.' *Bad* metaphor, *thoroughly* bad, in that it implies that time's current flows in one direction only. Time, you see, isn't that *orderly*. Time may well *be* a river, but it's a river with all the unpredictable and dashedly complex flows of an *ocean*. Oh, I know that most people nowadays know very little about oceans—have *you* ever been to the ocean, by the way?—they know very little due to the government's insistence that the oceans are vast pools of deadly poison. I cannot boast of having taken any ocean voyages myself, but I have read a number of fascinating books on them. *And* a number of my ghostly intimates were once sailors on the great ships that harbored at the Navy Yards, men who navigated all the seas of the world.

“What I have learned is that, whereas oceans typically encompass regular currents that, like a river’s current, flow in one predictable direction, there are some years in which those flows may turn *backward*, or *sideways*, or even cease altogether. The oceans, you see, are greatly affected by both heat and cold, and thus by the clouds, which in turn are affected by the sun. The sun has *its* seasons, too. In recent centuries, the oceans’ currents have been diverted by the movements of our planet’s great continents and islands, now that they are all adrift, untethered from the sea floor. Time, in our present situation, given the prevalence and ubiquity of what you government boys call ‘rogue chronomes,’ acts more like an ocean than a river. Or, perhaps, like an ocean contained within a river’s banks.”

She poured boiling water into a cup over a wicker infuser ball stuffed with black tea leaves. After letting the leaves steep for a few seconds, she handed him the cup. “There you go. Bottoms up, Mr. Helios. But sip, sip—it’s scaldingly hot. Is it any good?”

Francesco allowed a few painfully hot droplets to linger on his tongue before swallowing. “It’s … interesting.” *As interesting as twigs boiled in vinegar*, he thought with an inward wince.

“I should hope *so*,” she said brightly. “According to the tin it came in, it’s from some mythical land called Indo-Cyprus. A place where dragons and unicorns frolic, perhaps. Tell me, did you find my use of metaphor at all helpful?”

“I’m afraid I’m just as confused as I was before,” he admitted.

She looked as though he had just dropped a layer cake she had slaved over, then smeared it into the tiles with his foot. “*Really?* It didn’t help at *all*—not even just a *little*? Truly a pity. Oh, well. I tried. I did my best, but sometimes one’s best clearly isn’t enough …”

Francesco grew agitated. He needed *help*, not just a cup of bitter tea and a load of metaphorical blather. “Is that the extent of your services? Are we *done*?”

She stared at him as though he’d changed into one of the unicorns or dragons she’d just mentioned. “*Done?*” she asked. “Why, my dear Mr. Helios, we haven’t yet *begun*. I was only prattling on a bit in order to let the water for your tea boil. We can begin now.”

“What do I have to do?”

“Nothing even so complicated as standing on one foot while reciting the Pledge of Devoted Allegiance backward.”

“‘Pledge of Devoted Allegiance’—?”

She tittered. “Oh, sorry—bad joke, based on a cultural-political reference you wouldn’t be familiar with, a bit of semi-poetical doggerel taught to school children when these mushroomed houses were first built. Never you mind. I’ll be plain about my methods. I’m sure you’ve noticed my home is stuffed to near bursting with the things I collect. I spend a good part of every day journeying to various mushroom districts around New Shining Capital—Packardville, Green Bottom, the Ironworks, Bridge Town, North Beverly, the Navy Yards. Oh, and Turtle Hill, of course, since it is right outside my door. Each day, I bring home with me various artifacts that seem to call to me in some way … things which look inexplicably mysterious, or which have an intriguing smell to them, or that I would simply like to run my fingers over and stare at as I lie in bed. Books? I look at their covers, their tables of contents. I read random pages. If they appeal to me in any way, I bring them home.

“Here is what I want you to do, Mr. Helios. I want you to wander through all the rooms of my house. Feel free to examine anything that interests you. Touch anything. Pick them up, fondle them. Browse the books, if you like. I will follow behind you and watch. I will allow you to take with you one item—only *one*. It will become yours to keep. You may take anything you find, large or small, but you must carefully select precisely the one thing you could least imagine leaving this house without.”

“That’s all I need to do?”

“Based upon the things you touch and the object you select, I will ask you a series of questions. If all goes well, your answers will help us understand what it is the ghosts may want of you. Equipped with that knowledge, depending on your further actions, both you and they may enjoy a peacefulness that has been denied you, a cessation of the tumult which brought you to my door.”

“May I begin?”

“Please do, Mr. Helios.”

There's so much to look at. This house is a museum of the random, the whimsical, and the peculiar. Wandering past stacks of books and monographs, boxes filled with bits of statuary and bric-a-brac, shelves sagging with the weight of curious tools, plus coatracks heaped with men's, women's, and children's clothing of dizzyingly divergent styles, he stopped himself from kneeling down and rummaging through the first box he'd seen. *I've only seen these two rooms thus far. I could spend hours poking around just in this parlor. But I don't have hours—Aleedia and the children expected me home thirty minutes ago. Best for me to quickly survey all the rooms of this huge house before deciding what to focus on.*

He began climbing the stairs to the second story. He stopped on an intermediate landing to pick up a toy, a brightly colored carousel with horses made in pressed tin. He'd seen a full-size version of a carousel much like it years ago in Green Bottom. The toy had a tin key sticking out of its side. He turned the key to see what would happen. A tiny motor inside sprang to life. The horses began rotating around a central spindle, and a tinny song unfamiliar to him began playing. What a marvelous feat of miniaturization, all in the service of entertaining some lucky child who had lived long, long ago.

He set the toy down and completed his ascension to the second story. One antechamber quickly captured his interest—it was filled entirely with chess sets. Some were conventional in design, with opposed armies of black and white knights, bishops, and pawns. Others were more unusual: sea animals versus land animals, or hawks versus eagles. The most striking set, however, was warships versus forts. It was a *gorgeous* set. His heart truly yearned to possess it, and he considered making it his "keeper." But it was too early to choose yet.

The next room was cluttered with cooking implements, cookbooks stacked on the floor, and various kinds of intricate machinery that Francesco had never seen before but that he presumed might be used for chopping, dicing, and mixing various fruits and vegetables.

The next room was filled with dead, stuffed animals and the weapons that may have been used to kill them. The animals were so well preserved they appeared to be still alive, just somehow frozen. He paused to look at

the guns. Rarely had he seen so many rifles and handguns gathered in one place. Gun shops, wherever they mushroomed, were at the top of the groundskeepers' list of priorities to pulverize and dump at sea.

He picked up one of the rifles and peered through its scope at one of the wall-mounted animal heads. The closeness of vision the scope provided startled him—he could count individual hairs poking from around the creature's snout. Should this rifle be his "keeper"?

He pictured his ghost self, as grotesquely overmuscled as Harry Erath, shooting a man in the back three times, and he felt sick in the base of his stomach.

He put the rifle down.

He walked to the next room, a nursery, the most elaborate and cossetting nursery he'd ever seen. Something grazed his head. He looked up. Half a dozen mobiles hung from the ceiling, suspended collections of plush animals or moons and clouds meant to fascinate babies lying on their backs and distract them from crying fits. *Such amazing luxuries the parents of long ago had available for their children*, Francesco thought. He had built a mobile for Primo out of leftover tin cans he'd painted.

In the corner of the room, near the widow, hung the most elaborate of the mobiles—a model of the solar system, with the sun at its center, the spaces between the planets filled with comets and colorful little rocket ships. Thinking of Leonardo, he reached for one of the rocket ships. His hand froze before he touched it—images of an adult Leonardo expiring in his arms, killed by a creeper who claimed to have been a fellow space engineer, made the toy rocket seem somehow obscene.

He hurried out of the nursery. He wasn't learning anything. The chess set had been the most appealing artifact he'd seen thus far. Maybe he should just collect it, make excuses to Sirena, and leave.

But out in the hallway, a peculiarly intriguing scent enveloped him: the pulpy, papery odor of hundreds of books. He couldn't leave until he'd at least had a look.

The room Sirena had selected to be her library was the largest he'd yet explored. It was jammed with paper from floor to ceiling—stacks of newspapers bound with twine, monographs, governmental memoranda and

reports, paintings in crumbling frames, shipping journals, and catalogs from stores Francesco had never seen. Frustratingly, Sirena hadn't organized any of her accumulations in any system he could decipher. Looking for something specific here would be like jumping into the ocean in search of a penny dropped from a passing ship.

Squeezing himself through narrow, twisting aisles, he found himself craning his neck at so many angles to read names and titles he became dizzy. Books about flowers, about medicinal remedies, about sailing, about religion and tribal deities … a monograph from the Emericun Academy of Obstetricians, stamp collections, phone books, a catalog devoted to hundreds of varieties of metal fasteners.

I'm drowning in words and paper, finding anything of value is impossible—

And then he saw a name familiar to him, one he'd heard in the newsreel he'd watched in the mushroomed cinema on Kraken Island: Dr. Bertolt Icarus Penheimer. The name was embossed on the leather cover of a monograph dated August 1961, more than a century old, published by an organization called The Institute for the Emericun Future.

On the Prevention of Human Aggression: A New Civilizational Framework to Ensure the Survival of Our Planet.

Francesco carefully picked it up. He felt sure this battered bundle of paper contained information essential for him to learn.

He sensed Sirena's presence in the doorway. "I've made my choice," he said.

"Very good. Follow me downstairs, then. Would you care for a second cup of tea?"

"Uh, no, thank you."

"Suit yourself. I believe *I'll* have one."

She led him back to the table in the parlor, then fixed herself a cup of the same tea she'd served Francesco earlier. "Now," she said, sitting with her cup, "we may get down to brass tacks … whatever that is supposed to mean. Do you have any idea? It's a very old saying."

"No."

“I’m glad you found something you consider to be of value. May I take a look at it?”

He handed her the monograph. She ran her fingers over its soot-marked cover. She skimmed the first paragraphs, then fanned the monograph’s pages beneath her face and breathed in deeply. She took a sip of tea and handed the monograph back to him. “All right,” she said. “Aggression. *Human* aggression. Have you ever had aspirations to join an army or become a navyman?”

“Those organizations don’t exist anymore.”

“We all sometimes wish for things we cannot have,” she said. “If you’d lived two hundred years ago and were on the cusp of your change of life, would you wish to become a soldier or a navyman?”

“It would be a better fate than having one’s self slowly dissolved away by the grayhead drugs.”

“I imagine so,” Sirena said. “You appear very drawn to engines and mechanical things. Correct?”

Francesco nodded. “Engines have fascinated me since I was a boy. The greatest happiness I’ve had on my job has been learning how to work the engines and steering systems of the mushroomed warships at the Navy Yards. I can almost sense my ancestors’ fingers within mine, guiding my hands.”

“Yes, warships. I observed how fascinated you were by that chess set. Chess is a beautiful game. Do you play?”

Francesco shook his head. “My grandfather Angelo knew how to play. At least he did before the grayhead drugs stole that part of his mind. He never had a chance to teach me.”

“I could teach you to play,” Sirena said. “Would you come visit me from time to time, play an occasional game with me? We could use that set you admire.”

“By the time you could teach me chess, the grayhead drugs would already have rendered me incapable of play.”

“We shall see.” She made a tent of her fingers and rested her chin on them. “We’ve spoken about things in my house to which you are drawn. What about something that repelled you? You reached for a child’s mobile

of the solar system. Just before you were about to touch it, you drew back your hand quite sharply. What prompted that response?"

Francesco shuddered. "I told you I saw a terrible thing this afternoon beneath the headquarters of the National Space Colonization Agency. My son's death. My own death."

"Terrible, certainly, but what does it have to do with the solar system?"

"Not the solar system. It was the rocket ships. My son Leonardo is about to begin an apprenticeship with his uncle, my brother, a high-ranking administrator with the National Space Colonization Agency. My brother and I don't see eye to eye on many things, and I have … concerns."

"Such as?"

"I'm afraid Rumberto will turn Leonardo against starting a family and fathering his full complement of sons. Rumberto's a bachelor. He's never approved of my family. That's bad enough. But what I saw this afternoon, that horrible glimpse into the future … to see my eldest son having become so *hard*, his words to that future me dripping with hatred, how he allowed himself to be shot rather than agree to sabotage one of his agency's projects …" Francesco felt himself on the verge of growing incoherent. "My son called me a grubber. And that's what that future me looked like—a copy of Harry Erath. Leonardo is on the verge of committing to a career as a rocket engineer. But if that means twenty years from now, he'll end up choking on his own blood, dying with his head on my lap, cursing me …"

"Remember what I said about the nature of time? It's not a river with a current that flows in one direction only. It's an *ocean*, with currents that turn back upon themselves. What you saw this afternoon may not ever come to pass."

"May God will it never does."

"I can speak with no certainty of the existence of a God. But then, I can speak with no certainty of most things. However, if a particular future is to be averted, it will take more than prayer; *that* much I know. My view is hazy and occluded, but a narrative forms in my mind. What do the ghosts want? I believe they want you to use your mechanical skills in some

decisive way. They want you to take up arms or convince others to do so. This involves the seas, perhaps those ancient warships you are so fascinated by. It involves the rocketry program. More than this I am unable to say."

"But the ghosts contradict one another! Some have tried to warn me. One tried to kill me. Others don't notice me and speak in mysteries. How can I take any guidance from this jumble?"

"Ghosts, Mr. Helios, are no more than the reflections of people who lived in other days. Just as present-day people are contentious and disagree, so it is with the ghosts. I mainly form my impressions from your interactions with the contents of my home. My mushrooms aren't inert, Mr. Helios, mere echoes of lifeless things. They have voices, voices which time has granted them. What I collect is never random. The mushrooms select *me*, always for a purpose."

"But what am I supposed to *do*?"

She laughed quietly and patted his hand. "Only time will tell, Mr. Helios. A hoary cliché, I know, but entirely appropriate in this case. Do you have any parting questions for me?"

"What did you mean the other day when you referred to me as 'Time Breaker'? A ghost has also called me that."

"I suppose it must've been something I overheard in the wind, some stray whisper."

"It's very important. I'm almost sure of that."

She frowned in thought. Then she reached up to a shelf above her stove, took down a clock carved in the shape of a birdhouse, and handed it to him. "Here. Drop this."

"*Drop* it?"

"Yes, yes, drop it. Onto the floor. Just *do* it, Mr. Helios!"

Exasperated, he raised it to chest level and let it drop. It split open on impact, spewing tiny gears and springs across floor tiles.

"*There*," she said. "Now you are officially a Time Breaker!"

Francesco's face reddened. He grabbed his monograph and headed for the door. "Thank you for the tea," he said, keeping his voice level only with great effort. "My sons will leave more food at your door to compensate you for your time and the monograph."

“Mr. Helios!” she called after him. “One more thing!”

He turned in the darkness toward the feeble interior light. “Yes? What?”

“You mentioned that your ghost son called you a grubber.”

“Yes. My ghost self certainly looked like one. What of it?”

“Mr. Helios, I gather you don’t give much credence to my reading. But if you believe only one statement from me, please, let it be this one: Don’t allow yourself to become a grubber. *Please*, Mr. Helios. Nothing makes my friends suffer more than the depredations of those savage men.”

• TWELVE •

Dr. Penheimer's Prescription

AS SOON AS HE LEFT Sirena's house with the monograph to walk home, Francesco found himself assailed with spells of dizziness and weakness. They descended suddenly on him like circling vultures, beaks ripping chunks from his stamina and strength.

The day's events had taken their toll on him. Particularly that ghoulish encounter with future ghost manifestations of himself and Leonardo. And the time he'd spent going around and around with Sirena had drained him as well.

Still, no bodily infirmity could keep him from delving into his prize before he rewarded himself with sleep. He briefly checked in with Aleedia and the children and told his wife he would eat his dinner later, after he had read some urgent material on the back stoop beneath the porch light. He said nothing about his stop in Turtle Hill.

Hungry as he was for dinner, he was hungrier for knowledge that might make some sense of his recent experiences. He sat on the stoop and eagerly opened Penheimer's leather-encased monograph, *On the Prevention of Human Aggression: A New Civilizational Framework to Ensure the Survival of Our Planet*. Having known Dr. Bertolt Penheimer only as a black-and-white moving image on a mushroomed cinema screen, Francesco experienced a thrill that made him shiver as he contemplated engaging with the once illustrious scientist's deepest thoughts and prognostications. In Francesco's imagination, reading Penheimer's book was just a small step away from hosting the man at his family's dining room table and peppering him with questions.

He opened the cardboard cover, soiled with soot from a past Angels' Night, and began reading.

Preface

We scientists have known sin.

Francesco experienced another quivering along his newly tender spine. That first line of the book was eerily similar to what he'd heard the Penheimer ghost utter twice in the ruins of the basalt dome in Space City.

There is no other way for me to state this. We have come perilously close to committing matricide, to fatally poisoning our Mother Earth, our Earth Nest. I say "we" because no scientific endeavor is the creation of a single man, certainly not one of the unprecedented magnitude of Project Bludgeoning Bison, the war-ending "mega blow" that deranged the very flow of time. Yet if one single man can be held responsible for all the dire consequences our world has suffered since October 1946, I am that man. The theories that undergirded the bomb sprang from my brow. I recruited the project's top civilians; the organizational drive that led to what we all considered success in the late summer of 1946 was due, in great part, to me.

Most damningly, the hubris that permitted the device's deployment following only partial testing, when models predicted potential outcomes ranging from a harmless fizzle to the combustion of our planet's entire atmosphere—that hubris was mine.

From whence did that hubris spring? I have asked myself that question without cessation from the moment the tsunamic wave, infused with rogue chronome particles, inundated the eastern third of North Emericus. Was I a uniquely malevolent creature, "blessed" by my Maker with a singular potency for destruction? Or did the qualities that damned me have their origins in characteristics common to much of the human race?

I have come to favor the latter explanation. Aggression is a basic, seemingly ineradicable characteristic of human beings. It is most obviously seen in males, but prominent also in the females of our species. The two aggressions, male and female, act in hidden concert. Despite outward appearances and longstanding assumptions regarding the weaker sex, the initial aggressive impulse, the one from which all else springs, is the female drive to reproduce humanity, a mother's urge to spread her inborn qualities far and wide.

The reproductive drive is commonly thought to be primarily a male impulse. I disagree, and strongly so. The female's drive must be far more deeply rooted, for it is sustained far longer and through the accumulating hardships of decades, in contrast to the male's drive, which can be satisfied and encapsulated in a matter of moments.

The female's reproductive drive is a fierce obsession indeed, an unshakable obsession with spreading the dominion of her womb. Her seemingly benign interest in nurturing and teaching her offspring, universally thought to be a "soft," "submissive," "feminine" inclination, is in actuality the steely determination of a commanding warlord, humanity's most primal wellspring of aggression against all competitors.

Proof of this assertion lies under our very noses, unseen because it is so obvious. When is the male of our species biologically "permitted" to indulge in the forms of aggression most readily identified with his gender—territorial expansion of his clan; extermination of competing carnivores; violent suppression of socially deviant individuals; and warfare, either savage and opportunistic or bureaucratically managed? He is allowed to engage in this only when he has finished servicing his female and his offspring, after he has surrendered his final tendarm to the inheritor generation. Therefore, I assert the male aggressive drive is subservient to, and supportive of, the female aggressive drive.

Francesco did not like where this preface seemed to be heading. With every subsequent line of text, Penheimer seemed less and less a benevolent guide to the past and more of a forbidding, even sinister scold. His queasiness worsened. The supposedly great man was deprecating the sacrifices made by men like Francesco's great-great-grandfather Paulo. He was twisting the heroism of their defense of country and family into something corrosive and evil. Worse, he made the virtues of mothers like Aleedia seem almost monstrous, perverted.

Although the night was comfortably cool, droplets of sweat poured from Francesco's forehead and neck, rolling down among the sparse forest of hair on his chest, paining him as their stinging salt touched the pulpy flesh on his back. But he continued to read.

> Such powerful aggressive drives were essential to our species' survival when we were frail, apelike creatures, lacking the talons and fangs and sinews of competing predators. Yet we have now long been the dominant species in our Earth Nest. No creature is capable of challenging us but ourselves. And that is the source of our tragedy, and the tragedy of our planet.
>
> For our innate natures compel us to continue those ancient conflicts, substituting other nations for the competitor carnivores with which we once contended for sources of meat and that sought to eat us as well. We blindly, dumbly continue that ancient competition. Our insistence on never ending it has made of us the enemy of our Earth Mother and all that live—the enemy of the seas and their fish, poisoned now by rogue chronomes; the enemy of the skies and their birds, pressed near to extinction by unrelenting chronal winds; the enemy of the land and all creeping and crawling things, who must fend off time-anomalous competitors on continental homes that have been set adrift by the consequences of our hubris.
>
> Can our innate natures be changed? Can the aggressive impulses that have driven our world to the verge of ruination be eradicated? I am not a biologist, nor a theologian. I am a theoretical physicist and a former inventor of evil implements of

mass destruction. Yet, as a man who has stood athwart History and driven it onto paths most dire, I have a responsibility to point us toward alternatives. Let men and women more knowledgeable than I of biology, chemistry, sociology, and anthropology judge whether my proposals have merit. Should they find the suggestions contained in this monograph worthy, it remains to them to decide how best to implement them. I am a blind seer, unable to draw a map or forge a path; I can merely point the way.

In the chapters that follow, I suggest general routes by which the human aggressive drive may be extirpated or greatly curtailed for both males and females. The male aggressive drive is likely more susceptible to curtailment through chemical means. The female aggressive drive, being so basic to our species' continuation, must be accorded greater deference and handled with more delicacy; social, political, or psychological interventions may be required. These should be instituted with maximal discretion and whatever level of subterfuge is deemed necessary to achieve maximal compliance with minimal resistance. Humanity needs trimming back, for the good of the Earth Nest. We have devolved from decent guests to a virulent infestation.

Virulent infestation.

The words seared and revulsed him. Francesco was certain the roots of the Department of Family Optimization and the Department of Neonatal Health and Child Development were to be found in those two disdainful, misanthropic words. For what should be done to combat a virulent infestation? Limit its growth, then excise it. Burn it to ashes, if necessary. Sear it to nothingness.

All those drawers full of documents he'd seen in the subbasements, with their coldly dispassionate scientific labels—*Depopulation of an Urban Center* and *Alternative Population Density Reduction Strategies*; *Social Stigmatization of Child Raising in Purdue County* and *Implications of Forced Sterilization Regime for Future National Intellectual Capital*—they

were all growths spawned from Penheimer's seed, those two hateful words, "virulent infestation."

He felt himself getting sicker by the second. The words in the monograph—what they implied about the government to which he'd given his lifelong loyalty and service—were making him ill. But he was almost done with the preface. Unable to turn away, he soldiered on.

Although not directly pertinent to the subject matter addressed in this monograph, I hope my readers will indulge me if I briefly comment on the controversy regarding the ultimate disposition of time-anomalous persons, both those currently held in detention and those who have managed to hide themselves among us. Our legal institutions have little wisdom and guidance to offer us here; in any case, legal niceties have been set aside for the nonce by the state of national emergency. Some prominent scientists fear that allowing these persons and related phenomena to dwell among us may lead to further derangements of time and eventually to additional chronal catastrophes. These potential dangers must be thoroughly investigated. However, I fear that the greatest danger posed by the steadily growing encroachment of time-anomalous persons on our war-weakened society is not physical, but social.

These are persons from the past, some of them from the distant past. Their patterns of thinking are archaic, the very mindsets that led to the Great War. Should we decide to allow these immigrants from the past to dwell among us, we must make a maximum effort to reform them. Given their tremendous rate of increase, should we fail to fundamentally alter their natures, we shall eventually find ourselves overwhelmed by the primitive aggressions that have led us to our current sorry state.

Sick in his soul but unable to cast the book onto the dirt, Francesco obsessively skimmed the following chapters. The body of the monograph was much more technical in nature than the preface; it engaged with biochemical and medical issues far in advance of what Francesco could easily absorb. Yet from the passages he could comprehend, what stood out

for him like embers in soot was how he'd been lied to, he and all the other fathers who'd gifted their final tendarms and been induced into taking the grayhead drugs.

It's all here, laid out like a map. The true rationale for what would someday be developed as the grayhead drugs. They always told us the drugs were meant to extend our lives. Designed to prevent the physical hypertropism that follows the loss of a man's final tendarm, hypertropism that inevitably leads to wasting and accelerated death. That's how they've convinced nearly all of us to be compliant.

But from the very start, the true purpose of the drugs had been to cauterize men's emergent aggression, to eliminate the emotional and physical changes that caused fathers who passed beyond their youngest son's manhood ceremony to transition into violent criminals … or to become soldiers and protectors.

He'd been raised in a fog of lies. He served a lying government. Very soon, his personality, the entirety of who he was, would be buried by an avalanche of lies.

The acid churning in his abdomen seemed to burn its way through his stomach lining and set his back ablaze. A fireball exploded near the center of his spine.

Unable to contain his reaction, Francesco cried out in pain and doubled over.

Clutching his knees, he heard the screen door bang open behind him when Aleedia, panicked, wheeled herself from the children's bedrooms to the rear stoop.

"Francesco, your back—your shirt, it's *soaked*, darling …"

He felt jellylike secretions drip from the portion of his back surrounding his tendarm into the top of his trousers. What a fool he'd been to ignore the signs! It's not as though this was his first time; he'd experienced all these symptoms four times before.

But because the calendar had told him the event was weeks away, and because subconsciously he'd wanted to push it off as long as he could, he'd denied what should have immediately been apparent. The stresses of the past few weeks—stresses Eshrae had been experiencing, too, he

realized, and which had likely affected the boy's hormonal output—had accelerated matters.

The life he'd known up till now was over.

• THIRTEEN •

The Gifting

FRANCESCO AND ALEEDIA sat close together on their pull-down bed, surrounded by the privacy curtain. Without being told to do so, Leonardo had sworn to keep his brothers and sisters in their own room throughout the night.

The inexorable transformation of the flesh and muscle surrounding his final tendarm into wet putty brought the reality of Francesco's situation crashing in upon him like a collapsing house. In hours—not months or weeks, but *hours*—his youth would be finished, utterly vanquished. His status as head of his household would gradually dribble away into mindless feebleness. His only consolation was that by the time he reached his awful nadir, he would have passed beyond any ability to recognize it.

After tomorrow, Francesco could no longer be a lover to his wife. From lover and provider, he would degenerate into dependency, then finally into loathsomeness. And tonight, his last opportunity to share physical love with Aleedia, he was frozen by fear, brittle as an icicle, almost unable to breathe.

What if I was terribly wrong to follow my heart's yearnings and have five sons? What if Rumberto and Jenerette have been right about everything?

He forced his panic surge to subside. He'd chosen his life's course long ago. The ghosts who pursued him wanted him to change the future? They'd chosen the wrong man. He was no more than a dust speck at the mercy of the slightest breeze. The only honorable path open to him was to stare down the hard days to come, ameliorate the consequences for his loved ones as best he could, and not pity himself.

Aleedia grasped his trembling shoulders. “Darling,” she whispered, “how can I help you?”

“We have to make love tonight,” he said. “And I’m not sure I can do it.”

“It doesn’t have to be tonight. You’re overwrought, exhausted. The ceremony doesn’t need to take place tomorrow.”

“I mustn’t deny Eshrae what is rightfully his. Let me clear my head. I can *do this*.”

“Don’t take this all on yourself.” She massaged his shoulders, her surprisingly strong hands breaking up the ice that had frozen his muscles. “Stop thinking. Let me do all the work.”

She kissed his back, even the semi-liquid skin surrounding his tendarm. Then she concentrated on the tendarm itself. It felt bruised and limp, but she was skillful, persistent. Most of all, she knew him, her fingers and lips and tongue knew him, had known him since the time he was nineteen, an age ago.

Her knowledge saved him. He performed a lover’s duty for the final time.

They wouldn’t carry out the ceremony in their pathetic little patch of yard—Francesco was firm on that. He had performed Leonardo’s, Adriano’s, Bertonio’s, and Victor’s manhood ceremonies within forest thickets or on farmland adjacent to their former neighborhoods. The manhood ceremony was linked to nature, a vital part of the natural world; it could only properly be performed outdoors, wreathed in the scents of wildflowers and pine needles. Just because Eshrae came last did not mean he should suffer for it. Francesco swore to give his youngest son an afternoon as bright in memory as the sun overhead, a memory to cherish throughout the disappointing or painfully sad times the boy would inevitably encounter in future days.

The two of them set out for Turtle Hill with Leonardo, Adriano, Bertonio, and Victor. Francesco had briefly flirted with inviting Rumberto, who, by tradition, should take an honored part in the ceremony. Also, Eshrae preferred that his uncle be present. But Francesco’s brother had

refused to attend any manhood ceremonies beyond Leonardo's, three years earlier, and Francesco didn't have the stomach for another repudiation. Malvechio, his youngest surviving brother, might have agreed to come if Francesco could have given him adequate notice. But he lived in an experimental biological station nearly a thousand miles to the west. Inviting him would have been pointless.

The six of them climbed through a broken part of the fence separating Wildwood Village from Turtle Hill. He removed his shirt and directed Eshrae to do the same. His youngest son's back had developed a soft, pulpy patch, yellowish-purple and crisscrossed with blood vessels, which mirrored the one on Francesco's own back. They both hung their shirts on the torn mesh fence. Then Francesco led his sons past Sirena's house, toward the bluff overlooking the Tomaic River.

They walked through a neighborhood of mushrooming mansions, houses that took up a quarter of their blocks. Some of the immense structures had fully emerged from the soil, their turrets and balconies shining with seemingly fresh coats of paint. Others had just begun their slow rise, only the tops of their peaked roofs poking through the ground; the dirt and grass surrounding them still showed scorch marks from fires set last Angels' Night, nine months earlier.

They passed the house marked with the Helios name. A few blocks on, Francesco led his sons into a small park he had seen from the Navy Yard. A gazebo and a covered bandstand sat near the edge of the bluff. He gestured for the boys to climb the bandstand's steps and take in the view.

"Wow," Bertonio said, staring at the wide river and the immensity of the Navy Yards. "We've never come all the way back here before."

"*You* haven't," Adriano said dismissively. "Leonardo and I have come here lots of times."

"Dad, those ships down there, are those the ones you go aboard?" Victor asked. "The ones you help sink way out at sea?"

"Yes," Francesco said. He took Eshrae's hand and led his youngest son to the bluff's edge. Eshrae hadn't yet said a word. He appeared awed by the panorama. "Look, Eshrae. That one's the *Saint Indianna*. Fourteen years ago, I helped steer her down the Tomaic into Chess Peak Bay."

“Why does the *Saint Indianna* look all burned?” Eshrae asked. “Did people set it on fire during Angels’ Night?”

“No. No one bothers with the Navy Yards on Angels’ Night. The *Saint Indianna* has manifested with her battle scars this time. Those holes in her deck and in her sides? They were caused by shells from another warship, or maybe by bombs dropped from attacking aeroplanes, back in the days when planes could still fly, before winds in the upper skies grew too turbulent. The destruction inside of the cruiser is even worse than what you can see. Her engines are still intact; they were protected by her armor decks. But parts of her starboard drive shaft, propeller, and rudder haven’t yet fully reconstituted, so she can’t be properly steered. Not yet, anyway.”

“Who were the people that attacked her?”

“I don’t know. But I do know the *Saint Indianna*’s navymen died trying to protect the old flag and the people and the nation it represented. When I give you my final tendarm today, Eshrae, I’ll become a little like they were, like the sailors we’ve read about in the Tom Quick books. They were all men without tendarms, men who’d raised families and then boarded warships or joined armies to protect those families.” *In the times before the grayhead drugs*, he wanted to say, but he refrained. This was the day of Eshrae’s joy, not a day for his father’s sadness and regret.

He thought about the logbook he’d taken from the *Tridentfish*. It might yield answers to Eshrae’s questions once it solidified enough for him to turn its pages. “You asked me about my great-great-grandfather Paulo’s medals, why he’d been given them. I haven’t learned that yet, but I found his submersible boat down there, the *Tridentfish*, the same one from the painting in the old Helios house. It’s docked in that big concrete building way over in the corner of the Yards.”

“You found it? I wish Grandpa Paulo could be here with me today. Or Grandpa Ekko, or Grandpa Angelo, or *your* father, Grandpa Thomaso.”

“I wish that, too. But in a way, son, they’re all here, and they’ll all remain with you now, until the day your youngest son reaches his own manhood ceremony. Each of the grandfathers you just named bore the tendarm I’m about to give to you, the tendarm of the ages. They’d be so proud to see this day. Soon they will be physically present in you. All their

heroism will be commemorated by you every time you perform deeds worthy of their memory."

Francesco noticed Leonardo's cheek twitch. He'd long anticipated how hard today's ceremony would be for his eldest surviving son.

I can't go back in time and undo what I've done, Leonardo, he thought. *Your future self revealed how much of his bitterness stems from being denied the family's prime tendarm, which by rights should have been yours.* He'd never been able to explain to Leonardo why he didn't gift him with it. How could he explain an impulse so irrational? Until the day of his eldest son's death, he had always assumed the ages-old tendarm would be Primo's. When Primo died, he knew Leonardo had every right to it, and had he followed tradition, he would have given it to him three years ago. *But I couldn't abide surrendering it then. It makes no sense, but I felt as though it was all I had left of my firstborn son. Now that Eshrae's ceremony has arrived, it is all I have left to give.*

Francesco realized he'd been staring into his oldest son's eyes for nearly a minute. What had Leonardo seen in his face? He forlornly wished Leonardo did not think his father had judged him unworthy of the tendarm of the ages. But he knew such a conclusion had been inescapable on Leonard's part.

He walked to his oldest son and kissed him on the forehead. "Leonardo, son, I have something important to ask you."

"Yes, Father?"

"You are Eshrae's eldest brother." *Please don't hate Eshrae because you can't bear hating your father.* "I would be very grateful if you would take him aside and explain to him what is about to happen to him. Tell him about the pain, how quickly relief will follow, and how his body will soon begin changing."

"But Father …" Leonardo looked confused. "Isn't it *your* place to explain all that? You did it for me and for all of my other brothers."

"True. But soon you'll be taking on greater responsibilities in the family; consider this part of that. Eshrae loves you deeply, and I trust you. I know you will set his fears at ease and give him the confidence he needs. Will you do this for us?"

“Of … of course, Father. I’ll do my best.”

Francesco smiled. “I’d expect nothing less of my eldest son.” He turned to his youngest boy. “Eshrae, please go with Leonardo. He will prepare you.”

He watched his oldest and youngest sons walk together to stand in the shelter of a grand oak tree. He hoped Leonardo recognized that this small but telling gesture was only the start of a larger recompense. Someday, he would at last feel capable of explaining why he had failed to grant Leonardo the prime tendarm.

Now was the time for Francesco to say goodbye to many things. He walked to the edge of the bluff, where he picked up a handful of stones.

He threw the first one all the way out into the river. *Goodbye, fertile manhood.*

The second stone clattered off a wharf before bouncing into the water. *Goodbye, nights of making love.*

He threw all the stones that remained in his hand. *Goodbye job, goodbye income, goodbye memories, goodbye mind, goodbye me.*

Francesco walked back to the bandstand. Leonardo returned with Eshrae. The younger boy looked pale but determined to stare down his fear. Francesco turned to his two oldest sons. “Leonardo and Adriano, you remember what to do?”

“Yes, Father,” they both said.

“Eshrae, are you ready?”

Eshrae, lips tightly compressed, nodded.

“Then let us begin.” Francesco recalled the words he had already recited during four sons’ manhood ceremonies, words identical to those his own father had spoken when his five sons had reached the ends of their childhoods. “My son, Eshrae Helios, has reached the time of his maturity. He is the flower of my body, the joy of my soul; yet he is incomplete. I willingly offer him the limb of my body, so that he may know completeness. God of our fathers, may he accept this limb, and may he use it with all the sweetness and tenderness of manhood. May its seed produce beloved children, and may its wielder be a gentle and wise shepherd of his family.”

He struggled to remember the additional words that accompanied the gifting of a prime tendarm, words that his father had recited over him. “God of our fathers, I gift this son with a tendarm of the ages, a limb that has been passed from father to son since the beginning of time, forever renewed, a physical reminder of the divine spark through which You created Man. In each generation, it has been renewed by the blood of the worthy, so that it is as young and potent today as the day You created it. May my son Eshrae be added to the rolls of the righteous and worthy who have wielded this limb. May it be Your Will that he, in turn, will gift this limb to a son equally as worthy.”

He lay facedown on the bandstand’s floor. He willed his tendarm to stiffen, to straighten, to become like a spear, knowing this was the last time it would ever obey his commands. “Bertonio, Victor,” he said, “hold down my arms.” He waited until his middle sons each secured an arm with their knees and palms. “Leonardo and Adriano, remove the limb, so that your brother may be made whole.”

He felt his two eldest sons grasp his tendarm. Each of them placed a foot upon his back so they would have the leverage they would need. He heard Leonardo quietly count to three. *Please, boys, do it in a single, swift yank, like I taught you—*

The pain was worse than he remembered. His body involuntarily spasmed against his sons’ holds. Agony made his vision turn blurry. This tendarm had been with him the longest—its root had spread across the substrata of his back and spine, providing shoots from which his four subsequent native tendarms had grown. Still, the hormones that had wafted from Eshrae’s body to his had done their work. He sensed the tendarm’s long, sharp root break off from its anchoring nerve and muscle clusters and slide out through the pit of jellied pus into which a portion of his back had devolved.

The fifth and final time he would feel the best pain he could ever feel.

Adriano and Bertonio helped him to his feet. He felt as though every bone he owned had turned to rope. Swarms of cascading colors like a flight of tiny, iridescent insects flitted past his eyes. His body responded to the

trauma, its glands releasing a surge of numbing chemicals that almost plunged him into sleep. Fighting off the embrace of slumber, he blinked rapidly to clear his vision. He saw Leonardo holding the freed tendarm. His eldest stared down at its sharp tip of cartilage and bone as though he grasped the stiff corpse of all his dreams.

"Give … give it to me," he told Leonardo. Although he'd performed this act four times before, the taking hold of what had once been a part of his body, a limb as integral to him as his eyes or his tongue, holding it in his hands as though it were a shaft of wood, felt like an inversion of reality, a bizarreness that screamed at him. It was still warm.

"Eshrae, son …" It was hard to shape his mouth around words. "Do you … do you willingly accept … this gift of a prime tendarm, a new limb?"

Eshrae, pale and trembling, nodded.

"I … I have to hear you say it, son. Don't be afraid …"

His son's high, sweet voice began the recitation, wavering only a little. Francesco knew this would be the last time Eshrae's voice would sound this childlike and pure. "I willingly accept your gift of a prime tendarm, a new limb. As I cross the threshold of manhood, I pledge myself to righteousness and a life of good deeds. I will strive to bring honor to my father, my mother, and my family. God of our fathers, may it be Your Will that I find a wife who will support me in all things, whom I will cherish, serve, and protect. May she bear us children who will reflect honor upon our family. May this tendarm I now receive be passed on to a worthy son."

"Very good, Eshrae," Francesco said, floating on a wave of pride and chemical balms. "Now … stand against that post there. Hug it tightly. If you need to yell, then yell. Don't try to hold it in. There is no shame in admitting your pain. Even Leonardo could not remain silent. Nor did I, when it was my time."

Eshrae hugged the post. Francesco cradled the tendarm as though it were a battering ram, sharp root pointed at Eshrae's back. He concentrated on the yellowish-purple oval just to the right of his son's spine, six inches below his shoulder blade. He felt his knees buckle. "Leonardo, Adriano," he said, "guide me …"

The false swarm of iridescent insects tried hijacking his vision, but he blinked them away, concentrating only on the oval on Eshrae's back. When he felt his two eldest sons grasp his shoulders, he rushed forward. The tendarm's bony root struck true.

Francesco heard an inrush of Eshrae's breath. His youngest son gurgled. But he managed to not scream.

Francesco leaned against the post, his arm around Eshrae's waist, supporting his son until their shared trembling subsided. Then they embraced each other with their arms—Eshrae, because he had not yet learned to embrace using his new tendarm; Francesco, because he had no other limbs with which to hug his child close.

• PART TWO •

GRUBBER

• FOURTEEN •

The Choice

FRANCESCO'S USE OF A SICK DAY to allow for Eshrae's manhood ceremony exhausted his allotment of leave for the quarter. So the next morning, he forced himself to drag his uncooperative and newly alien body to the office.

Everything felt different. Aleedia had wrapped a cloth bandage around his torso, covering the pit of jellied flesh on his back until it could scab over. Even so, pulling on his new shirt, the one without a gap for tendarms, had felt like rubbing his skin with sandpaper.

Brushing his teeth and gums had been an agony. He'd never experienced anything like this following previous surrenders of a tendarm. His taste buds were off, too; the half pot of coffee he'd downed had tasted sickly sweet, even though he hadn't stirred in a grain of sugar. Even the simple act of walking had become an ordeal. The soles of his feet felt as tender as the linings of his inner ears. Curbs he'd once surmounted with nary a thought tripped him up. Electric buses blaring their horns two blocks distant sounded as though they were on top of him, whereas a motor scooter that nearly ran him down buzzed more quietly than a gnat circling his head.

If this is what being without tendarms is like, he thought, *then maybe the grayhead drugs will seem a blessing.*

He reminded himself these disorienting symptoms couldn't be permanent. They had to be a transitional phase; otherwise, the sailors aboard the *Saint Indianna* never could have piloted her away from her dock, much less gone hunting across oceans in search of enemy warships.

He didn't expect to receive any pity from Jenerette Seeling. Yet although she refused to meet his eyes with her own, she complimented him on his Navy Yards survey report, then managed to squeeze out an insincere

few words of congratulations, pained and resentful, for Eshrae's manhood ceremony. Francesco thanked her. Obviously eager to have him leave her office, she told him he was freed from groundskeeping duties this week and next and that he should concentrate on drafting an operations manual for piloting the big warships down the Tomaic River into Chess Peak Bay.

In dismissing him she called him by his new name: *Frank*. So it was official. His name had been cut down, stripped of its most sonorous syllables, just as his body had been denuded of its most expressive feature. *Frank*. It sounded commonplace and rough, like a hunk of coal fallen out of a coal bin.

He'd learn to live with it, just as he would learn to live with everything it signified.

Writing that operations manual could wait. He seethed with resentment toward Jenerette due to her already having decided Francesco—Frank, rather—would not be granted a deferral from starting his regimen of grayhead drugs to allow him to pilot the *Saint Indianna* in the assault on Kraken Island this winter. He recognized how illogical his resentment was; given what he'd just learned, why should he *want* to help the department with its goal of driving the invasive island back into the open ocean? In fact, when he did write the manual, he would adulterate it with inaccuracies, he decided. They wanted to cast him aside like the rind of a succulent orange already squeezed for its juice? Then let them figure out for themselves how to work the steering and propulsion gear of a mushroomed armored cruiser battered in a long-forgotten battle.

Fuck the manual. He had goodbyes to make. Just not to any coworkers.

He found his former Mower, the one he'd consistently used for fifteen of his seventeen years with the department, in the main repair yard. No one was working on it. Perhaps the necessary repairs had already been made; apart from badly marred paint and a topography of dents, his old mechanical partner appeared functional, at least to a cursory inspection.

He felt a strong sentimental attachment to this machine. It almost seemed a member of his family … less so than an uncle or a grandfather, but as much so as a loyal pet dog, perhaps. He realized with an inward quiver of regret that he'd spent more time in the cab of this Mower than he had with any of his children; possibly more time than he'd spent with all his children in the aggregate. One more sacrifice he'd made as a father.

In a way, he loved this device, this mobile colossus of steel that had always obeyed his directives, although he no longer loved the work to which he had directed it. So much of what he'd shattered to pieces with the Mower's wrecking ball had been beautiful, edifices or objects that had inspired awe in Francesco's breast. Many were statues of soldiers and navymen. Francesco had always attempted to read the descriptions carved onto the statues' bases or the bronze plaques. How he'd wanted to learn the names of the subjects that had been commemorated in stone, to read their stories! But nearly always the carvings and plaques had not fully manifested when the time came for Francesco to destroy them, and so their names and stories could not be deciphered prior to their being pulverized.

The only mushroom he'd been pleased and relieved to destroy had been the black basalt dome in Space City. For reasons not apparent to him on those three occasions he'd been sent to demolish it, its presence, so vast, so overbearing, so dark and void of any humanizing ornamentation, had strummed a chord of horror in his soul.

He didn't know then the dome's connection to Dr. Bertolt Penheimer. When he'd encountered Penheimer's almost solidified ghost in the ruins, he hadn't known who he was. Had the basalt dome been the facility where Penheimer expanded on his theories regarding the regulation of human aggression, where he'd led a team of scientists in creating the grayhead drugs? Could *that* be why Francesco had always reacted the way he had—had he felt some intimation of the origin in that horrid building of an ongoing conspiracy that would consume his future?

Now that conspiracy of malefic forces was on the verge of snuffing out everything he was, everything he had been.

"Goodbye, loyal old tool," he said. He didn't feel vigorous enough to climb into its cab a final time. Instead, he gave the Mower's scarred fender

an affectionate pat. “I don’t expect I’ll see you again. And if I do, I likely won’t remember you.”

Frank slowly walked from his department’s repair yard to the Great Lawn, limping as he went. He had another farewell he needed to give, to an entity with which he felt an even stronger connection than he had with his Mower.

Only the pointed tip of the great obelisk Frank knew as the Washerman’s Monument had managed to bloom from the tortured earth of the Great Lawn since the day of the earthquake. Someone who had never seen the mushroom at its zenith would find its earliest sprouting unimpressive, simply a plain white pyramid no taller than an average man, useful perhaps as a traffic barrier. But Frank knew better. He knew what was gathering mass beneath the surface, full of expansive, eruptive force, the stubbornly persistent visitor from the past that would eventually pierce winter’s low-ranging clouds. After all, Leonardo had once been an infant smaller than an unripe watermelon; now he was a man taller than his father.

Frank reached out to touch the white pyramid. Although it appeared to the eye to be marble stone, his fingers sank into it with the lightest of pressure applied; its substance felt like soggy dough whose flour had been mixed with too much water. But when he withdrew his fingers from inside it, no residue remained on his skin, and the smooth surface of the pyramid was unmarred.

“How I’ve grappled with you,” he said. “So many times; this last time the most desperately. In each of our contests, I’ve managed to win. But which of us continues to rise, and which of us will soon be put down forever?”

He looked up at the clouds, imagining the monument’s full height years from now, a culmination he’d never see again. He imagined different sunsets turning the fully manifested obelisk various hues in the twilight. He pictured it the color of his own flesh. And then in a flash of realization that dizzied him, he knew what it must have been built to symbolize.

A tendarm.

A father's final tendarm, suspended in the moment between its removal from the patriarch's back and its insertion into that of his youngest son.

The people who had conceived and built this monument had meant to honor fathers. Perhaps one father in particular, the man of unknown name who had served as the father of this country. He must have gifted all of his tendarms to sons, just as Francesco had. Only rather than then being reduced to an imbecilic invalid by grayhead drugs, he had gone on to use his freshly strengthened limbs and heightened aggressive instincts to defend his land and people.

"Thinking about how you'll never get to knock that thing over again, Frank?" The voice addressed him from behind.

Frank knew who it was before he turned his head.

"Harry Erath. How did you know I'd come here?"

"I make it my business to know things. Especially about you." Erath grinned. Frank saw his gums had turned black.

"Why are you so interested in me?" Frank asked. "To everyone else, I've become a pariah."

"I happen to prefer pariahs," Erath said. "Way I figure it, anybody acclaimed in these parts is likely a bootlicker or a goat's asshole. Us outsiders are more honest."

"That doesn't answer my question."

"It doesn't? Well, okay, then. It so happens I knew your father, Thomaso. Course, by the time I met him, he called himself Tommy."

A surge of father-hunger shook Frank to his already unbalanced core. "How do I know you're not lying to me?"

Erath grinned again. "You don't, Frank. But play along with me, and in time you'll learn I'm speaking the truth. You don't know much about your father, do you? What became of him? I bet you'd like to know."

"What do you want of me? What are you trying to buy with these hints?"

"I'm not trying to buy nothing, Frank. I told you when we first properly met, I've got your best interests at heart; I really liked your old man. Tommy was a friend. And so I'd like to be your friend, as payback.

You've reached a juncture. Two possible roads ahead. Stay on the one you're currently walking, and in a week, as soon as your body's adjusted to its new surge of hormones and you aren't feeling like a sack full of dried manure anymore, a nice friendly welcome committee's going to show up at your house and start you on your daily doses of grayhead drugs. You know where that road takes you. You've seen your Grandpa Angelo hit that road's dead end."

"So where does the other road go?"

"I can't tell you where and how it ends. But I can tell you where it starts. It starts by your coming with me. Letting me train you."

"To be *what*?"

"A better version of what you already are. Nothing more terrible than that."

Frank remembered the first time he'd encountered Harry Erath. When Erath had garroted a creeper, the very image of the woman who'd warned Francesco of the earthquake. "You mean a grubber. Like you."

"That's one word for it."

"Did my father become a grubber? Is that how you knew him?"

Erath grinned slightly but said nothing.

"You murder people," Frank said. "I'd rather be reduced to a drooling heap than become a killer."

Erath's grin vanished. "Oh, come off your high horse! They're *not* people! They're not *alive*, not the way you and me are! They're just shadows that've put on some weight. What they *are* are locusts. Rats; ravenous. They'll eat every last bit of substance grown on this continent if we let them proliferate."

Now it was Frank's turn to say nothing.

"You want your family to live decent lives? That new baby about to be born? Give yourself over to me and I'll arrange it so that they won't be forced into a smaller home in a more dangerous neighborhood. Train with me and you'll continue receiving your salary and your family their current rations. I might even be able to swing a bonus for you."

"What guarantee do I have?"

“You don’t need one. I won’t take you with me until after Michael Laurent tells you you’ve been given a deferral from starting the grayhead drugs because you’re being sent on an extended special detail. He’ll have you sign papers certifying your family will stay in their present home with current benefits for the duration of your detail assignment.”

Frank’s determination to reject Erath’s “road” wavered. He saw the grubber staring into his face as though the man were studying a map of attack. Erath was a grubber, all right; he knew how to dig beneath Frank’s defenses and undermine them, all the while probing and pressuring Frank’s vulnerabilities.

“Don’t you want to know what it was like for your father and his father’s fathers after they celebrated their youngest sons’ manhoods? How strong they became? How courageous, how fearless? I know about that box of old military medals your family hides; Tommy told me. Don’t you want to know in your own flesh what it means to become the kind of man able to earn those medals?”

Sirena had warned Francesco not to become a grubber. But she’d also told him the ghosts that constantly harried him wanted something from him, very badly. She’d hinted it had something to do with that bizarre title the creeper woman had called him the day of the earthquake. *Time Breaker*. What did that mean? It somehow seemed essential, the key to every mystery bedeviling him.

Recently, he’d learned so much about the past, even though much of it did not make sense—*yet*. He needed more time. The log from the *Tridentfish* still wasn’t solidified enough for him to read. Unless he could push off the start of his mandatory drug regimen, the grayhead drugs would all too soon render him incapable of comprehending the knowledge that lay waiting for him in his great-great-grandfather’s slowly manifesting log.

“Still hesitating?” Erath said. “All right, I’ll sweeten my proposition. Go through the training with me. Try it out. If after a month or two you decide my kind of life doesn’t suit you, you can come back here and go on the grayhead drugs, just as though we’d never met. No permanent commitment. Back out, or wash out of my program, and the only change

from your current prospects would be that your family enjoyed a few months' reprieve from being relocated."

"Don't allow yourself to become a grubber. Please*, Mr. Helios."* Those had been among Sirena's last words to him. But he needed time. Time to figure out what he needed to do. Time to do it. In a week, the grayhead drugs would close off all possibilities for him. Time would lose all meaning. Only Harry Erath offered a reprieve.

But he remembered the crazed Erath ghost that had called him by a name he'd not yet been known by and attacked him aboard the *Saint Indianna*. With greater horror, he remembered the creeper version of himself, a solidified ghost of a grubber from the future, who cradled a dying Leonardo in his lap. Would his taking Erath's offer cement those phantasms as inevitable and awful realities? Or would going on the grayhead drugs avert this, but also ensure even worse outcomes when he failed to do what the other ghosts desired of him, the thing only he was capable of doing?

He couldn't know answers to any of this yet. The only certainty he had was that going on the grayhead drugs would rob him of any choice, any additional knowledge, any freedom of action.

"I'll go through your training," Frank said.

• FIFTEEN •

Boot Camp

"AGAIN, FRANK," Erath ordered. "My half-blind grannie could hit a target better than that. Remember, the rifle pulls to the left, but don't overcompensate. Take your time. I've never met a creeper who's shot back at me yet, so take all the time you need. One round, right through that sucker's head."

Frank was quickly learning to hate the sniper rifle. It was Harry Erath's cherished darling—that made it easier to despise. It was an ornery beast, apt to jerk to the left with cheekbone-fracturing force upon discharge; heavy and overbuilt, sturdy enough to bludgeon a bison and crack its massive skull. The gun had been made by Cramp & Sons of Buffalo City, a company and a place he'd never heard of, in the year 1887. A relic, or a mushroom? Mushrooms were to be eradicated—except when they weren't.

"Frank, I told you to take your time. I didn't tell you to take a nap on me."

He refocused on the tableau Erath had set up for him on the far side of the field, three hundred yards away. Staring through the rifle's telescopic sight, he viewed a dozen "people," each a paper target mounted on a wooden frame, bunched closely together as they crossed a pretend street. Which one was supposed to be the creeper again? It wasn't distinguished in any way from the other paper targets; but then, apart from anachronisms of dress (which a target could easily discard), creepers couldn't be visually distinguished from normals, either. Using a chronome detector was the only way to identify one with certainty. That, or tracking one continuously since its ghost stage.

Third from the left, that one peeking out from behind the Red Line bus. He centered his gunsight on the target's head and rubbed his right index finger against the rifle's cool steel trigger. A gnat buzzed his nose, but he didn't swat it away. *Pull the trigger smoothly, with steady pressure. Compensate for the jerk to the left, but don't* over*compensate …*

The sound of the muffled shot compressed his eardrum while the stock ground its polished wood into his jaw and shoulder.

Erath peered through his binoculars. "Not bad, Frank," he said. "At least you hit something this time. Wrong something, though. You just splattered the thorax of a mid-level bureaucrat from the National Renewal Agency across half of M Street.

"Again, Frank. And try to leave the bureaucrats unscathed this time, no matter what you might think of those ass-hats."

They ate alone in a mess hall designed to accommodate five hundred men. Nearly alone; they did have one nonhuman companion, Tommy, the semi-domesticated Dire Wolf Erath kept as a pet. "Raised him from a cub," Erath had said. "His parents were both CAMPAs, but Tommy here was present-born. Named him after your father." Erath occasionally dropped additional details, nothing significant, about his relationship with Thomaso Helios. Frank understood that learning more about his father's final years was a reward being dangled above his head, an incentive for applying himself to his training and fully accepting his new role. The promise of a brief furlough to visit his family was another.

Tommy nuzzled his leg and looked up expectantly. The spot next to its ear where Frank had struck the wolf with a wine bottle at Fort Wayne had healed as a hairless, shiny scar the size of a silver dollar. Despite their earlier altercation, the wolf seemed to bear him no ill will; perhaps following his change of life, Frank's scent had changed so much that Tommy did not recognize him as a former antagonist. Frank had come to regard the creature's wordless companionship as distinctly preferable to Harry Erath's endless stream of advice, philosophy, and stories of his more

difficult or unusual exterminations. He reached down and scratched behind Tommy's ears, then tossed him a bit of meat from his plate.

Erath looked on approvingly. "Glad to see you're making a new friend," he said. "A little domestication's done all right by Tommy. But not too much. If he ever loses *all* his wildness, he'll be worse than useless, both to me and himself." He eyed Frank appraisingly. "Still not fully with the program, huh? You don't understand or appreciate it yet, but I'm giving you a *gift*, Frank. You feel trapped, huh? You're more of a free man today than you've *ever* been. How free were you the day before you met me? One bureaucracy told you where to live. Another told you how much food you could buy each month. Still another was about to force you onto the grayhead drugs. You had to kiss your bosses' asses to get your measly ticket punched. And all those kids, and your wife? Every one of them was your boss, too. 'Love me.' 'Feed me.' 'Wipe my ass.'

"But now? You're a free man. Stick with me, and you don't have to worry about ensuring your family's survival anymore; it'll all be taken care of. All those fucking paperpushers you used to toady for? You're cleared off their slates, you've escaped their cages. You want to read mushroomed books? Read a whole library's worth—nobody's stopping you. Indulge any desire. In my world, *our* world, there are no censors, no regulations, no judges, no bureaucrats.

"The only boss you still need to satisfy? That would be me."

A milestone arrived that night after a long day's training on the gun range, a development Frank had been eagerly anticipating for weeks. His great-great-grandfather Paulo's logbook had at last sufficiently solidified for him to begin reading it.

N.E.N.S. Tridentfish Mission Log
Lieutenant Commander Second Class Paulo Helios, Recording Officer
August 15, 1945 to _____

08/15/45: Never thought I'd find myself longing for the desperate days hunting Goethan submarines beneath the islands of Caesareem, that tough summer two years ago, followed by the furtive evacuations of top brass the following spring. At least then, we were fighting on the enemy's turf. Now, we're fighting a defensive war in the seas of our own backyard. Since the Anglish surrender in 1942 and the loss of much of our fleet during two failed Yurrethian invasions, the Carrib sea has been a Teutonic lake. They've been using the surrendered Anglish island possessions as forward bases for the Teutonic High Seas Fleet, now twice the size it was before it absorbed the surviving units of the Anglish Royal Navy. The only factor that's been keeping us alive has to be that the Goethan sailors aren't yet up to speed utilizing the Anglish ships. Once their learning period is over, we're in for a much rougher time. Still, the men's morale remains high amidst reports of the damage the Goethan bombers flying off ex-Anglish carriers have been inflicting up the eastern seaboard, and they're eager to get some return licks in. Nothing sighted today but clear seas.

08/16/45: Seas empty of the enemy. Rendezvoused with the submersible fuel tanker Northern Lights; "milked" her of 1,000 gallons fuel oil.

08/17/45: No sightings of enemy shipping. Received scrambled friendly radio transmission reporting air raid on South York Naval Air Station. Softening us up for the rumored invasion? Raid was carried out by medium bombers, at least thirty, with escort of about twenty fighters; must have come from task force of two or three Goethan aeroplane carriers. We are now on course to intercept enemy task force, assuming

withdrawal to Burmadia, largest enemy-held harbor within a thousand nautical miles of South York.

08/18/45: En route to anticipated intercept zone. No sightings of enemy vessels.

08/19/45: No sightings of enemy. Plan to initiate search-and-destroy combat patrol as of 07:00 hours tomorrow morning.

08/20/45: Anticipating hostile aeroplane screen, took boat down to periscope depth, reduced cruising speed to underwater maximum of 9 knots. Sighted Goethan float plane bearing south-southeast at 15:22 hours, about 12 nautical miles distant, "Sea-Wulf" type. Altered course to take boat into middle of projected patrol radius of float plane.

08/21/45: Sighted funnel smoke on eastern horizon at 18:47 hours. Could be from one of the captured Anglish aeroplane carriers. Adjusted course to pursue. After sundown at 10:15 hours, ordered boat to surface and increase speed to maximum of 21 knots in order not to lose contact with enemy. If possible, plan to engage with torpedoes at first light.

Frank reached a page in the logbook beyond which he couldn't read; the subsequent pages remained stuck together, too fragile for him to yet pull apart. Disappointed as this left him, he still felt elated by what he'd been able to discern. It was almost as though his great-great-grandfather Paulo, a man almost completely hidden by the shrouds of time and the abrogation of history and remembrance, were sitting in the bunk house with him, telling him stories of how he'd earned his medals.

What men they'd been, those navymen manning the *Tridentfish*! Forced to retreat to home waters, alone against an entire enemy fleet, yet with spirits undiminished; despite the high likelihood of sacrificing their

lives in their task of protecting their homeland, still eagerly anticipating the next morning's battle.

Frank basked with pride at the thought that the prime tendarm that once had been part of Paulo's body had until recently been part of his, and now had been passed on to Eshrae. Generation to generation, the lineage unbroken.

The days melted into each other. The routine changed as little as the daily sunrise. Erath woke Frank an hour before dawn. They went running. Initially five miles at a stretch, then ten, later fifteen. Then Frank had an hour on the firing range with a variety of silenced pistols. Then he spent ninety minutes in the base's weight training room, using clever resistance machines to hone the growing muscles his unleashed hormones augmented. Then it was back to the firing range to practice with a standard rifle. Then lunch.

"I've heard congratulations are in order, Daddy," Erath said at the mess table.

Frank didn't take the bait. "Oh?" he said. Starved as he was for any word of his family, he refused to reveal his desperation. At least he'd been promised Aleedia had been told he'd been given a last special assignment, one that granted the family a reprieve from yet another move into tinier housing. Forcing himself to remain expressionless, he leaned down and scratched behind Tommy's ears.

"Not interested, huh? I hear your wife's come up with a name for your baby girl."

Pulse racing, Frank managed to keep himself under control. "A girl …"

Erath laughed. "Okay, Poker Face, I'll give you this one for free. Your little girl's named Flora. Guess your wife wanted to name her after you, but 'Frankette' didn't appeal to her."

Flora, Frank thought. *When will I see her? Will she ever get a chance to know me? Or will I be even more of a phantom to her than my father has become for me?*

While they ate their lunches, Erath gave a lecture on tactics.

"Most creepers you run into," he said, "you won't need to waste a bullet on. They'll kill themselves and save you the trouble."

"They commit suicide?"

"Nope. They just fail to survive the transition from ghost to near-creeper to creeper. Animals do it a lot better. While they're making their transitions through phases, they don't panic. They catch the scent of whatever food source is appropriate, first mushrooming grass, then later present-born grass. They just eat and don't worry themselves about it. Human beings, though, think too much, and they've learned to use civilization as a crutch. If they aren't lucky enough to ghost into a mushroom district that's in perfect phase with them, they turn hysterical as soon as they become near-creepers. If they find themselves in an early-stage mushroom field, the ghosts around them can't see them or hear them, and any food they find is like mist to them. On the other hand, if they manifest in a normal neighborhood, they find themselves sinking through solid floors, incapable of touching anything, unable to drink so much as a drop of water. Instead of husbanding their internal resources until they complete the transition, they go wild with panic, exhaust themselves, then end up under the wheels of a bus, having turned just solid enough to be crushed.

"And it's a damn good thing most of them can't adapt. If they could, we'd be overrun with them. There aren't many men like you and me. It takes a lot of time and resources to train a decent grubber, and there's only a tiny pool of raw recruits to choose from. We can only take out so many creepers in a day's work. So never waste your energy on a creeper who's set on wasting himself. Track him, yeah, but radio in his coordinates to a clean-up crew and let those jobbers clear away the eventual mess."

Unlike much of what Erath pontificated about, Frank found this line of discussion interesting. "Why do some of the near-creepers make it all the way to solidity, when so many fail?"

Erath snorted. "You might as well ask why there are winners and losers in this world. Chalk it up to luck. Chalk it up to savvy. Chalk it up to innate toughness. The creepers who make it through due to luck? Those are

the easy ones for us. It's the ones in those second two categories … *they're* the challenges I'm training you to handle."

"Why handle them at all?" Frank stared at his minder with a level gaze. He'd never dared ask this most basic question before. Maybe recent successes with his training had him feeling cocky. Or perhaps his post-tendarms changes in personality were coming to a head. He recalled the mushroomed files he'd seen in the subbasement beneath his department describing an ancient policy debate over granting creepers citizenship. "If the creepers who manage to survive the transition are the especially resourceful and cunning, wouldn't they make valuable citizens? Maybe we should be *welcoming* them, not killing them. Why not live and let live?"

Erath had been mildly encouraging of Frank's recent expressions of independence and minor challenges to his authority. But his hard frown indicated that his protégé had crossed a red line.

Erath gripped the edge of the table tightly enough to turn his knuckles white. "They don't belong here," he said. "They're *invaders*. Hungry vermin. They made a wreck of their own world and time, and now they want to steal *ours*. If they hadn't fucked up the past, we wouldn't have all these mushrooms and creepers to cut down. You think you're compassionate, that you're a better man than me? I know how you look at me. Like *I'm* the sociopath. But if you're a creeper lover, it's *you* who's got the seriously twisted outlook. *You're* the death worshiper, not me. I may enjoy dealing death, sure—but I do it in the service of *the living*."

Erath was unusually quiet during their afternoon run. He didn't even banter with Tommy. Afterward, he led Frank into a room of the gym that had been emptied of equipment, then handed Frank a pair of boxing gloves. "Put these on. Forget about the heavy bag and the speed bag today. You're stepping into the painted box with me."

"So you think I'm ready?" Frank asked.

"Ready for *me*?" Erath laughed. "Hell, no. But you've got to start sometime. Might as well be today. Your father, he *loved* boxing, by the way.

Taught himself from mushroomed books and sports newsreels he found. Then he taught me."

Frank let his newly gloved hands fall to his sides. "My father *trained* you?"

"Yeah. He was my minder after I first got recruited. We worked together about four months before he certified me as fit for independent operations. He helped make me the man I am today. I owe him a hell of a lot."

"Do you know what happened to him?" Frank immediately chastised himself for allowing the question to slip out; revealing his emotional hunger only granted Erath more control.

"I know some of it," Erath said. "Tell you what. I'll make you a deal. The day you manage to knock me on my ass, I'll tell you. Now step into the square."

Frank crouched with his gloved fists guarding his chin, as he'd been taught. Erath circled around him, probing his defense with a series of light jabs. "You ever figure out why the government's so keen on limiting couples to one or no children?" Erath asked between feints.

Frank parried. "Fewer mouths to feed?"

"Nope. Try again."

"Not enough jobs to go around?"

"Heck no. Bureaucrats can always invent new jobs; that's one of their few core competencies. The reason? They want to shrink the population small enough that everybody'll fit into the lifeboats."

"Lifeboats?" Frank dodged a jab, then tried to counter with an overhand right. Erath deflected the blow easily.

"Too slow. And you telegraphed it." He gored an uppercut into Frank's stomach. "Oh, don't forget to protect your midsection."

The blow forced the air from Frank's lungs. He doubled over. Erath followed up with a right uppercut to Frank's mouth. The punch, although perfectly aimed, landed with merely a fraction of its potential force. "That's just a love tap to show you how quickly an opponent can demolish you if you ever let him knock the wind out of you. One of the first things your father ever taught me. Straighten up and try to knock me on my ass."

Frank sucked down fresh air and backed away to a corner of the box, striving to protect his midsection with his elbows. “You didn’t—explain about the—lifeboats,” he gasped.

Erath didn’t pursue him. He waited for Frank to return to the box’s middle. “You know how the summers get a little shorter every cycle? The winter storms more severe? We’re slowly drifting toward the North Pole. The whole continent. Fifty or sixty years from now, the Tomaic River’ll be icebound year-round. The fields where we grow our crops will be covered with glaciers. The space colonization program your son’s going to work for? It’s not about exploration. It’s about *survival*. They’re drawing up plans in Space City to build a space elevator, hooked up to a cable tethered to a satellite orbiting the Earth. They’re going to build the sleeper ships up there, in orbit. The ships are too big to build down here; it would take too much power to launch them. But no matter how big they build them, there’s still a limit on how many people they can carry. Five hundred apiece? A thousand? How many people live in New Shining Capital today? More than *two hundred* thousand. And that’s just one city out of nearly a dozen. So you see the problem, right?”

He gestured for Frank to come closer. “That’s enough rest,” he said. “Show me some fire, or you’ll put me to sleep.”

Frank reluctantly complied. He came in close and aimed a series of quick rabbit punches at Erath’s kidneys. Erath blocked some with his elbows and sidestepped the others, causing Frank’s fists to skid off his ribs.

Frank feinted with his right, then jabbed with his left. Part of his glove connected with Erath’s right cheek and ear. Encouraged, he unloaded a roundhouse right with all his strength, aiming it at Erath’s chin.

Erath’s grin turned to a blur as he dodged to the right and Frank overextended himself. Frank felt something—his opponent’s foot?—sweep his legs out from under him. He stumbled forward. Before he could regain his balance, Erath, his fists pumping faster than the beats of a hummingbird’s wings, smashed him in the face three times with a lightning-quick combination.

Frank went down. One second, he watched the ceiling careen wildly as his body went limp. The next second—or the next instant he was

consciously aware of—he found himself sprawled face down on the floor, arms sprawled at his sides, aspirating blood from a dark red pool engulfing his nose.

Choking and sputtering, he tried rising to his feet. Failing, he rolled onto his back. “You—you *cheated*,” he gasped. “Tripped me … that’s … against the rules …”

Erath glowered over him like a titan ready to eat its young. “*Rules?* You think any goddamn creeper’s gonna worry about *rules*? You think there’s gonna be a *referee* on station with you, blowing his goddamn whistle? Every tussle you get into is gonna be a fight to the death. How can I get that through your tender skull? You want some creeper and his family to take your family’s place on that sleeper ship out of here? I’ve got a family, too! And I’ll be *fucked up my asshole* before I’ll let any creeper steal a berth from *my* genetic heritage. My legacy is going to outlive me, Frank. They’re going up on that space elevator, they’re getting aboard a sleeper ship, and they’re gonna land on some virgin world free of creepers, where they’re gonna screw like rabbits and repopulate the human race.”

He tossed a dirty towel onto Frank’s chest. “Here. Clean yourself up. And if I *ever* catch you talking sweet talk about creepers ever again, today’s little beatdown will seem like a pleasant daydream.”

Erath had bruised Frank’s pride as much as he’d bruised and bloodied Frank’s body. This sort of humiliation was new to him. His masculinity had been insulted. An even more aggressive male had shamed him.

Frank realized that when he’d still possessed at least one tendarm, he couldn’t have experienced these emotions. Oh, he’d been humiliated frequently, by male and female superiors alike, but his reaction to those indignities had never been like this, this inward howl of wounded maleness.

He’d skipped dinner after tending to his injuries, not wanting to endure Erath’s gloating, whether voiced or silent. The best balm he could think of would be to read more of his great-great-grandfather Paulo’s mission log. He could bask in his ancestor’s long-ago glory and imagine how Paulo might’ve handled Erath in a boxing square.

Eagerly, he reached for the logbook on his nightstand, hoping he would find more pages now accessible to him. The mushroom obliged him. He returned, mentally, at least, to Paulo's fraught adventures in the Great War.

08/22/45: 06:00 hours—Pulled ahead of the enemy squadron in the night. Ordered boat back down to periscope depth before first light. Enemy squadron composed of one aeroplane carrier, one scout cruiser, and three torpedo boat destroyers. Identified aeroplane carrier as ex-R.A.N.S. Royal Eagle, now renamed G.N.S. Scharnhorst; scout cruiser as either G.N.S. Koeinegsburg or Karlschure. Our present location is 25 nautical miles east-southeast of the small island of Sannata Maria. Endeavoring to put us in optimal targeting position.

07:15 hours—Launched "fish" from all four forward torpedo tubes at Scharnhorst. Detected two definite hits, plus a possible third. Directed boat to be turned stern-to-target while bow torpedo tubes are being reloaded, so that two stern tubes could be used. Two torpedo boat destroyers headed at us remained behind to guard damaged carrier and scout cruiser. Destroyers are of older vintage, maximum speed 22-23 knots; still much faster than we are submerged, and armed with several depth charge projectors apiece. Launched one tube at the first destroyer and missed. Launched the second stern "fish" at the second destroyer —blew her bows off. Second destroyer seen to sink rapidly before we lowered periscope and submerged to 150 feet. Ordered engines to full halt in order to impede depth charge targeting. Survived four depth charge launch runs. Third set of depth charges exploded close enough to spring leaks in our forward quarter. Port bow torpedo tube room sealed off to prevent flooding.

08:55 hours—One hour following final depth charge attack, ordered engines restarted and returned to periscope depth. Listening devices detect no engines apart from our own. Surface is littered with considerable debris and at least two dozen

lifeboats and rafts. Does this mean the Scharnhorst has sunk? Ordered helmsman to head for the shelter of Sannata Maria Island at best submerged speed.

14:30 hours—Reached Sannata Maria Island. Air and battery reserves will allow us to hide among the island's roots until nightfall. Crew is very familiar with subterranean operations of this kind from the Caesareem campaign, "cat and mouse" with enemy submarines beneath the islands of the archipelago.Goethans have concentrated their subs near approaches to our major eastern seaboard ports, so none are likely to hunt for us. Depth-charge-carrying aeroplanes remain our greatest danger.

> *08/23/45: At 00:30 hours, directed helmsman to take us out from beneath Sannata Maria Island. Stayed at periscope depth until we determined sea surface to be clear. Surfaced and headed due west toward approaches of Chess Peak Bay at 15 knots.*
>
> *08/24/45: Reached southernmost passage between outer banks of Chess Peak Bay at 18:00 hours. Opted to maintain position in outer reaches of estuary throughout night due to strong currents, unknown shoals, and lack of pilot boat to guide us to Port Washingmont Navy Yards.*
>
> *08/25/45: Signaled soldiers in outpost ashore to send for local pilot boat. Joined by tugboat at mouth of Tomaic River. Docked at Navy Yards at 19:15 hours.*
>
> *08/26/45: Debriefing with senior Navy Yards staff. Learned our "fish" did their jobs good and proper on the Scharnhorst—scratch one "Kraut" carrier. One of our torpedoes hit scout cruiser Karlschure and disabled her rudders; bombers from the Port*

Washingmont Army Air Station located her and sank her.

08/27/45–09/30/45: Tridentfish under repair at Port Washingmont Navy Yards. Also scheduled to receive structural modifications, details of which yet undisclosed. Crew granted extended home visits for remainder of September. Rear Admiral David Farmingham awarded decorations to officers and crew for sinking of carrier Scharnhorst and destroyer Honnikker and crippling of scout cruiser Karlschure. Rear Admiral Farmingham reintroduced me to old boyhood friend from school days, Bertolt Icarus Penheimer, now scientific director of Project Bludgeoning Bison, located in top secret facilities to the north and west. Dr. Penheimer has insisted I serve as the project's "delivery boy," won't entrust his "baby" to anyone else. Will spend next few weeks finding out what new mission entails. Experience of myself and crew in the Caesareem campaign is said to be crucial.

Frank lost all awareness of his body's soreness; his thoughts spun fiercely as a maelstrom. *Grandfather Paulo and Dr. Penheimer, school friends! He knew my great-great-grandfather!*

This wasn't so outlandish a coincidence as it first seemed. Frank remembered the newsreel he'd seen in the mushroomed cinema on Kraken Island. Penheimer had grown up in Turtle Hill, just as Paulo had. The two did not seem very much alike, but that did not put friendship out of bounds, particularly during childhood.

What an opportunity for Frank to learn about Penheimer's role in the Great War! Perhaps at last those cryptic words spoken in the ruins of the black dome, *We physicists have known sin*, would make sense to him.

But when he tried turning to the following page, the logbook's still-incomplete solidification stymied him.

One moonless night, Erath invited him outside into the pine woods that surrounded the camp. His minder carried no weapons, only a thin piece of cord about a yard long. “We’ve got to work on your stealth, Frank,” he said. “You clod around like you’re wearing size fifty clown shoes.”

“I’m still not used to this extra weight and bulk I’m carrying,” Frank said.

“Well, get used to it. Even puppies grow into their feet, given a few months. You’ll never get within ten yards of a creeper if you’re constantly banging into stuff.”

“I’ll hang back and use the sniper rifle.”

“Not always an option. Sometimes the best method is to get up close and personal.”

They paused in a clearing about ten yards square. Frank could barely see Erath from five feet away; in the dim starlight, his minder could easily be mistaken for the stump of a toppled tree.

“Here’s what we’re going to do,” Erath said. “I’m going to stand here in the middle of the clearing. You’re going to strip down to your undershirt and shorts. Take those boots off. You’re going to take this piece of cord. All you have to do is get close enough to wrap it around my neck, like you’re going to cut off my windpipe. I’ll make it easier on you. I’ll keep talking the whole time, so my voice will help cover the sounds of your movements. You start from the edge of the woods. Once you manage to wrap it around my neck once, we’ll call it a night. Until then, you keep trying.”

Frank took the cord. He went to the edge of the grove and undressed. The late summer night was cool, but not nearly as cold as it would get just a month hence. The forest floor was covered with pine needles. They felt brittle and scratchy against the soles of his calloused feet.

“I’ll make it even easier on you,” Erath called to him. “Toss me your overshirt. I’ll wrap it around my eyes like a blindfold.”

Frank threw the shirt in the direction of Erath’s voice. “All right,” Erath said. “Ready when you are. Circle around the clearing. Come at me from a direction I don’t expect.”

Like hell I will, Frank thought. *He wants me to stumble through these trees so he can get a bead on me. I’ll do what he* doesn’t *expect—come at*

him straight from where I am.

Erath stood only fifteen feet away. Four strides. Four running strides, and he'd have that rope around his neck—

The edge of Erath's hand hit his throat like a shovel blade, hurling him backward. "Charging me like some crazed buffalo won't cut it," Erath said. "We're here to work on your *stealth*. I would've heard you coming even if I had a candle factory's output of wax in each ear."

Once he managed to stop coughing, Frank slunk off to the edge of the forest again. This time he'd go in as slowly as he could, pausing thirty seconds or more between each step, listening closely to Erath's patter to determine if and when his minder detected him.

"You know what your father really liked to eat?" Erath asked from the darkness. "Wild pig. He'd catch wild pigs for me to practice my knife skills on, just like I've been doing for you. He'd run them down and snatch them with his bare hands—he was *fast*."

Frank concentrated on being *slow*. He waited for the wind to rustle through the tree branches before taking a step.

"After I sliced the pig's throat," Erath said, "we'd stick a pole through it, mouth to asshole, and roast it over an open fire. I tell you, *nothing* smells quite as good as a roasting pig marinating in smoke made sweet with its own fat."

Frank was only about five feet away now. Nothing he heard in Erath's voice indicated Erath realized Frank was this close. He fought back a cough from the brutal blow his throat had suffered. He had to make his move *now*—

At the apex of Frank's leap, Erath's boot struck him square in the stomach. Frank felt his stomach implode, then sensed himself flying backward. He landed on his left shoulder and the side of his head, his hip smashing into the exposed roots of a fallen tree.

He barely had time to clear his head or recover his breath before his partially digested dinner erupted. He vomited soggy wads of bread and chunks of chewed cheese. It didn't smell as good as a roasting pig. It didn't smell good at all.

Four tries later, Frank found himself bruised, bleeding, and exhausted. Still, he refused to give Erath the satisfaction of admitting defeat.

The wind had died down. Frank knelt, his bruised and exhausted thighs trembling beneath him, and began sweeping the ground with his fingertips, searching for pinecones. After a few minutes, he'd managed to gather an armful.

"What are you doing out there, Frank? Waiting for me to doze off?"

I won't be rushed, Frank thought. *Not this time.* He picked up four pinecones, two in each hand. He tossed the first two behind Erath, one to his left, then one to his right. Erath continued talking, but Frank heard his words slow as he tried to figure out what Frank was planning. Frank grabbed another four pinecones and threw them in a different pattern, varying the times between throws. One skittered off a series of branches. Another thunked solidly against a trunk.

"Gee, am I about to be ambushed by a pack of *squirrels*?" Erath said, laughing.

Frank gathered the remaining pinecones in his arms. He continued throwing them in ones and twos; between throws, he bowled cones across the bed of pine needles, taking advantage of their skittering to step closer to Erath.

His minder wasn't talking anymore. Frank could barely see him by the starlight—Erath had assumed a defensive stance, his arms probingly outstretched, ready to deliver another devastating blow.

Frank hardly dared to breathe. Erath's left hand hovered two feet from Frank's chest.

He threw a pinecone over Erath's head, intending for it to bounce off a hanging branch and strike him from the opposite side. He heard it thwack against the tree. Then it struck metal—Erath's canteen or ammunition belt. The hand blocking his path whipped to the right. Frank immediately reached out and looped the cord around Erath's neck.

Hands seized his wrists. Erath crouched low and yanked. Frank felt himself go airborne. He landed on his back, bounced, then rolled against the tree he'd used as his missile's springboard.

“Not bad, Frank,” Erath said from the darkness. “You’ve earned yourself a night’s sleep. Maybe we should forego you hunting creepers with a sniper rifle. You’re a terror with pinecones.”

Go ahead and mock me, Frank thought, slowly picking himself up. *I’m getting better at this. Eventually, I’ll get good enough to break loose from you. Once I’m free, I’ll hunt information, not creepers. And I’ll learn what I need to do to “break Time.”*

• SIXTEEN •

A Test

WEEKS PASSED. Frank's skill with the sniper rifle improved; the fact that he was regaining fine motor control over his newly augmented musculature helped. He easily kept up with Erath and Tommy on their twice-daily runs now. Every third session of weight training he raised the resistance machines' limits, until he was pushing, pulling, and lifting weights he would have thought incredible a few months earlier.

His wait for the *Tridentfish*'s mission log to finish solidifying proved nearly as maddening as his many weeks away from his family and knowing Aleedia had given birth without him there to support her. At last, the night arrived when he was able to fan the log's pages, front to back, with no stickiness binding pages together. He began reading his ancestor's entries with avidity, hungrier for knowledge than he was for meat after a day's exhausting training.

> *12/13/45: Arrived at Research Center 1A of Project Bludgeoning Bison, located on the outskirts of a fine old railroad town now taken over by the government for the duration. Town, surrounding hills, even the awe- inspiring junction of three rivers are all dwarfed by what's termed the "particle collider building," a gargantuan black dome the locals call "Bertolt's Toadstool." The whole thing's made of reinforced basalt, only building material dense enough to contain any stray radiation. Got my first look at a full-scale mockup of what everyone around here refers to as*

"Giant Squid." It's a giant, all right. The science boys at bases out west stopped working on miniaturizing the "squid's" components a year ago, when it became clear the device would not be delivered by air. Instead, they concentrated on making it rugged, able to withstand enormous stresses and pressures. Bertolt mentioned the "squid" will have to be divided into four pieces, then reassembled on site. Even split into four units, it will still be tremendously cumbersome. None of the pieces would fit through a standard loading hatch. Now I know what the structural modifications to the Tridentfish are for.

Frank experienced a shock of recognition. "Bertolt's Toadstool" had to be the ominous black mushroom he'd demolished three times outside Space City. The "fine old railroad town" had to refer to the mushroom district Frank knew as Iron Horse. Paulo mentioned the place he'd been taken to visit sat by the junction of three rivers. So did Space City; it was situated near where the Allagenny River met the Delwaney River and the two merged into the Tomaic River.

For the past fifteen years, he'd been unknowingly mowing down a structure that had been key to the development of a major Emericun weapon of the Great War.

03/22/46: Good to see the majority of the crew gathered back together again. After months of having to perform their diving training in swimming pools sheltered from the winter ice, the weather mellowed enough to permit us to begin practicing with full-scale model components in a lake, far more relevant to our eventual site of operations. The men are really eager to get to it. So am I.

05/22/46: Tomorrow we finally head back south to rejoin our old friend Tridentfish and begin mastering

her new hatches, compartments, and equipment. We already know the "squid" better than we know our own wives and children.

07/30/46: We're dying to start our mission already. We've been on complete lockdown since we rejoined the Tridentfish two months ago, unable to exchange letters with our families. We're ready. We've been ready for weeks. According to Rear Admiral Farmingham, it's the squid that's not ready. It's maddening—every day brings new rumors of the Goethan invasion fleet massed in the harbors of Western Franzois. Spies launched from subs have confirmed the enemy has constructed enough troop transport ships to embark a quarter of a million men—that's twice as many as we managed to land in either Caesareem or Southern Franzois—and an armada of warships to protect the transports. We've got virtually nothing to stop them. Not enough ships, hardly any heavy bombers. All we have is the damned squid. And the squid isn't cooperating. Morale has been sinking into a ripe honey pot, despite my best efforts. As soon as Bertolt's science boys deliver a working squid, we can set sail within twelve hours. If we don't head out soon, either we'll meet the Goethans coming the opposite way on the Tomaic River, or we'll go stark raving NUTS.

The next page was empty. The rest of the logbook was just as blank.

There has to be more, Frank thought, panicked. *There* has *to be—I can't be left hanging this way!*

Yet he had reached his great-great-grandfather's final entry, at least the last entry in this version of the logbook. Would a different mushroomed *Tridentfish* logbook, one materializing from a later date in the past, contain more entries? Had there been more, in a version of the logbook from a later date? If Frank returned to his ancestor's quarters aboard the mushroomed

submarine in the concrete pens at the Navy Yards, would a more complete version be there waiting for him?

Or had *NUTS* been the last word Lieutenant Commander Paulo Helios logged before his death?

Fall came on quickly. The evergreen pines dotting the old base did not change color or drop their leafage, but the new chill in the evening air made the transition in seasons unmistakable.

On a night set aside for R&R, Frank pulled one of the mess hall's benches in front of the fireplace and settled in to read a book on army infantry tactics he'd found in one of the officer's quarters. Tommy lay at his feet, sandwiching himself between the heat of the fire and the warmth of Frank's skin. Frank patted the animal's head and rubbed behind his ears, appreciating the wolf's obvious pleasure.

Erath entered the mess hall. "We need to talk," he said. "Put the book away."

Erath's voice didn't sound right. Either he was putting on one of his acts, or something had seriously discomfited him. "What's this about?" Frank said.

"You know how closely I've been observing you the past seven weeks. I've kept track of your progress in strength, speed, dexterity, and accuracy. I've also kept track of your attitude." He paced in front of the fire. Tommy, his furry ears raised, watched him move back and forth. "I've given this a huge amount of thought. I'm washing you out, Frank. I'm ending your training as of tonight."

Frank's stomach plunged. He was shocked by how severely he took the news. "*Why?*"

"Lack of a killer instinct. Your physical skills aren't bad. I've trained better, *much* better, but I've also had to push along worse. However, I've never graduated anyone whose instincts have caused me such serious doubts."

"Is this about what I said about creepers that day you first boxed with me?"

“Not just that. Oh, that little speech you made was a pretty strong giveaway, sure; but there was also a chance you were just sassing me, which was actually a good thing. No, it’s been your responses when we’ve been working on the close-in stuff, the hand-to-hand. Every so often, I’ve given you openings, clear shots at me, and you haven’t taken them. Or you haven’t taken them nearly fast enough. You hesitate, Frank. You think too much. I don’t know if you’re thinking about your kids all the time, or if you just have a basic aversion to violence. I’ve got a gut feeling about who can do this work and who can’t. And it’s proven pretty damn accurate.”

“What does ‘washing me out’ mean?”

“It means I send you back to your old unit in the Department of Environmental Sanitation. They get full jurisdiction over you again.”

“I’ll get put on the grayhead drugs?”

“Yeah. In fact, they’ll be putting you on an accelerated dosage, considering what you’ll walk back in there looking like. Forget about a gradual slide into senility. They’re gonna launch you on a rocket.”

Frank’s fears of several months ago reawakened with fresh vehemence. “What about the promises made to me concerning my family’s treatment? Doesn’t my volunteering for this training count for *anything*?”

Erath shrugged. “Maybe to me it would … but once you’re back in Michael Laurent’s hands, I might as well not exist. The department’ll want your family’s apartment for some working stiff they can still squeeze a little more juice from. It’s not a pretty situation, Frank. You can’t put lipstick on this pig. But I’ve made my decision. And now you’re out of my hands.”

“This isn’t *fair*!” Unable to squelch his emotions any longer, Frank sprang to his feet; the bench crashed to the floor behind him, startling Tommy. He glared directly into Erath’s face. “After all I’ve been through, I’m going to be thrown back into the same pit I was trapped in before, only now it’s going to be *worse*?”

Erath’s expression subtly changed. “How badly do you want to stick with my program?” Under Erath’s hard gaze, Frank felt like a laboratory specimen again, a rodent whose reflexes were being measured. Erath unholstered his pistol and tossed it to Frank. Frank caught it.

His minder jutted his chin at the wolf standing between them. “I lied about Tommy,” he said. “I didn’t raise him from a cub. He’s a creeper.”

Frank understood immediately.

He couldn’t allow his mind to be stolen from him. Not now, not when he was learning so much about the past, deciphering what it meant for how he needed to affect the future.

He’d mourn the animal later, when he had time and privacy. He concentrated on how the Dire Wolf had nearly torn out Eshrae’s throat. He leveled the pistol at the hairless spot on Tommy’s head and pulled the trigger.

The wolf’s blood spattered his pants and shirt. The sound of the muffled shot, followed shortly thereafter by the thud of a lifeless body hitting the floor, presaged a new chapter in Frank’s life, his new life as a killer. As much as he loathed this latest transition, he intimated and prayed that killing a handful would somehow lead to the salvation of millions.

Erath retrieved his pistol from Frank’s hand. “Good job,” he said. “Take the body outside and burn it. Then get some sleep. You’ll be shipping out first thing tomorrow morning.”

“Not back to my department?”

“Not back to your department. I’m sending you out west, to Latosaka Territory. Your cover is that you’ve been detailed to the Environmental Reclamation Department. Supposedly, your assignment will be to ascertain the viability of continued support of Buffalo Herd Latosaka-One. Whether the herd should continue as is, be culled by fifty percent, or be exterminated. Your actual assignment is to investigate reports of creeper infiltration in the territory.”

“But my cover doesn’t make any sense,” Frank said. “I’m not a biologist—I probably couldn’t tell you the difference between a buffalo and a dairy cow. My *brother’s* the biologist in the family. My youngest brother, Malvechio.”

“I know. Malvechio’s the reason you’re being sent.”

“What are you talking about?”

“Malvechio Helios is the chrono-biologist manning Buffalo Station Latosaka-One. Apparently, your brother’s gotten very attached to his

buffalo. So much so that he's run previous auditors off the station because he's afraid they'll decide to shut him down and kill the herd. If I have someone else sent, your brother won't grant him access to the grounds, and my guy would have to force his way in to look for creepers. Your brother could get hurt that way. So I'm doing this for you as a favor. Sending you reduces the chance Malvechio will resort to violence pretty close to zero. I assume you feel that's a good thing."

"What am I supposed to say to him? 'Hello, little brother! Haven't seen you in nine years, so I thought I'd drop by and have a look at your herd!' Like I said, I don't know the first thing about buffalo."

Erath handed him a thick folder. "Everything you need to know is in here. You'll have plenty of time to read it on the train. Don't worry about packing equipment; everything you'll need will be loaded for you. The chronome detector you'll use is a more sophisticated model than you're used to, but its controls are pretty similar to what you've seen before. That folder includes an operating manual. Shouldn't take you more than twenty minutes to get the hang of it."

This benevolence seemed strange, coming from Harry Erath. "Why are you doing this for me? Giving me an opportunity to protect my brother?"

"It's not love of *you*, Frank, that's for sure. I told you, I owe a debt to your father. Malvechio's his kid just as much as you are. Have a good reunion. You'll have plenty of time to thank me later."

• SEVENTEEN •

The Buffalo Station

"SO ENVIRONMENTAL SANITATION DECIDED to send *you*," Malvechio said, his arms crossed tightly. "They figure I'll accept an ill-informed, wasteful decision better if it comes from my oldest brother?"

They stood on the desolate road that led from the tiny Latosaka train depot to Buffalo Station Latosaka-One. Frank sized up his youngest surviving brother. He hadn't seen him in nine years. The intervening years hadn't put much weight on Malvechio; he'd retained the lankiness of his teen days. But the prairie sun had turned his face brown as dirt and etched furrows across his brow and at the corners of his permanently squinting eyes. He stood at the entrance to the station's access road—little more than a dirt path scratched from the prairie—with feet planted wide, ready, it seemed, to bar all comers from his workplace and home.

Despite the wary hostility his brother radiated, Frank found himself overcome with joy. Harry Erath had granted him a boon, indeed. "Let's not talk about work, Malvechio," he said, "not yet! Come here, little brother, and let me get my tend—let me get my *arms* around you! You're the best thing I've seen since I left home!"

Frank sensed his brother's five tendarms hesitantly return the embrace. He felt them searching his back for what was no longer there.

"You've put on a lot of muscle—you're solid as a bison," Malvechio said. "So, your fifth son has reached maturity. Francesco … what should I call you now?"

"My *sixth* son, actually. I gifted Eshrae three months ago. As for what to call me, people call me Frank now."

"*Frank* …" Malvechio made a sour face. "It doesn't sound right. Doesn't suit you. Would you mind if I continued calling you Francesco?"

"Call me anything you want. Except 'Harry Erath.'"

"Who's that?"

Frank looked over his shoulder at the road that led back to the train depot. "Someone I hope you never meet."

Malvechio followed his gaze. "I assume you brought equipment with you?"

Frank nodded. "It's at the depot. I figured it didn't make sense to drag it with me until I'd learned whether you'd speak with me or not."

"Wait here, and I'll get my truck and we'll pick up your things."

"So you don't have a problem with my doing my evaluation?"

"I didn't say that. But you're my brother, and my guest."

Malvechio's Mudder looked similar to the one Frank had driven on Kraken Island, only older and more worn, with a banged-in grill and a tailgate that bore the marks of repeated collisions with fence posts. Frank tried opening the passenger door, but not even his augmented muscle power could force the heavily dented door to budge.

"It doesn't open," Malvechio said. "I got too close to one of the herd's dominant bulls six months ago, and he showed me who was boss. Toss your equipment in back, then climb in on my side."

Frank placed his bag and the case holding his chronome detector in the Mudder's rear compartment. "You've got the roof down. I think I can jump in without a problem." He hoisted himself onto the front fender, then, holding onto the windshield, hurdled the bent door frame with an ease that surprised even himself.

Malvechio pulled himself up into the driver's seat and surveyed his brother with a raised eyebrow. "Have they started you on the drugs yet?"

"No." He felt uneasy lying to his brother, but he didn't see any way to avoid it. "I expect they will once I return home."

Malvechio drove toward the train depot. "Do you have any plans? What you and the family will do, once …?"

"Once I no longer have my proper mind?"

Malvechio was silent for a moment. “I wasn’t going to put it in such stark terms. But yes.”

“Leonardo has been offered a very good internship with the National Space Colonization Agency. Rumberto is taking him under his wing.”

“*Rumberto?* Really? The last I heard, which I admit was a very long time ago, the two of you weren’t on speaking terms.”

“Up until earlier this year, you would’ve been right. But Rumberto came through for us during the earthquake. I was stuck on cleanup detail for nearly a week, with no way to find out what had happened at home or to let my family know I was alive. Rumberto went to support Aleedia and the children, and he used his contacts to find out where I was and set Aleedia’s mind at ease.”

“He’s changed a lot, then?”

“Not just him. I think we both have. Age and experience have conspired to make both of us a little less rigid. Plus, not having a wife or children of his own, I think he’s starting to realize the value of having nephews and nieces and a sister-in-law close by. Wealthy as he is, he’s still susceptible to loneliness.”

“I can understand that,” Malvechio said, staring at the vast emptiness of the plains.

“Has he been in touch with you?” Frank asked.

“Just the usual birthday telegrams. He mentions his latest promotion or newest apartment, nothing more personal than that. Honestly, I can’t say I’ve made that great an effort to reach out to him. How he’s treated you since … since Father disappeared … it left a bitter taste in my mouth. By the way, did you know your voice has changed since the last time we talked? If I close my eyes, I could almost swear Father’s sitting here in the truck next to me.”

“No,” Frank said, “I … I didn’t realize that. It’s probably only happened in the last couple of months. The hormones. They’ve been changing me.”

“Yes. Now that you’ve put on more muscle, you look like him, too. I don’t have that many memories of him, not like you must. I mainly

remember his absence, and those brief, strained visits he would make to the house before he disappeared."

"I know it was difficult for you, adjusting to maturity without our father there to guide you. I tried to be a substitute parent. But I couldn't take his place. Not for you, nor for Rumberto."

"You tried, Francesco. You tried hard." Malvechio lightly touched Frank's knee with one of his tendarms. "I know I didn't always give you credit for that. The weight of the responsibility you tried to shoulder, I can't imagine it. When it comes to family, I've been as much an avoider as Rumberto. I—I hope you can forgive me. I'm sorry I haven't always answered your letters, or the children's letters. I went through a long stretch when I just wanted to pretend I'd never *had* a family."

"I'm sorry, too. Sorry it's taken me this long to visit you out here. And I had to wait for my department to send me."

"Don't be ridiculous, Francesco. You've had your children to raise. It's not like you've ever had the money or travel credits to drag yourself and the family out here to Native Sixer country. *I'm* the one who should've come to visit *you*. I've never even met your daughters. They must be lovely."

"They are. They all favor Aleedia. I have four daughters now. Aleedia recently gave birth to another baby. You have a new niece, Malvechio."

"How wonderful!"

"I haven't seen her yet myself. I've been on a kind of extended special assignment for several months now."

"Your employer didn't have the decency to grant you leave to see your new daughter?" Malvechio's fists tightened around the steering wheel. "Considering what they're about to do to you, those *drugs* …" His voice cracked. "How did it *happen*, brother? How did life turn so *cruel*? When did following the dictates of natural biological urges—of being a *human animal*—become a crime?"

His brother trembled. Frank grasped his shoulder to steady him. "Malvechio, please don't feel sorry for me. Everything I've done, I've done knowing what lay ahead. I'm not being used up and discarded without my

consent. Having my family—raising the children—it's all been worth it, you see. A father is *meant* to be ground down and used up."

"No." Malvechio shook his head vigorously. Frank could see he was crying. His brother pulled off the road and braked abruptly to a halt. "No, no—I *refuse* to believe it *has* to be like that. Why do you think I had to get away, Francesco? I *knew* what was going to happen to you. Even as a teenager, I knew. And I didn't want to be around to watch it happen. Not like I saw it happen to Father. He *had* to be the patriarch, just like his father before him. Just like you. And they destroyed him for it.

"But things weren't always that way. That's why I study the buffalo. They're from a different age, an age before we overthought everything. Before we decided we were the Devil and so tasked ourselves with being God, too, with taking on God's powers and responsibilities to correct our own mistakes. A new daughter …" He stared at Frank with tear-blinded eyes. "I've *got* to come see her. I've got to come see you *all*, before … before we lose you." His jaw trembled. "I want—I want to bring—good heavens, they'll be virtually the *same age*. Things are so horribly *fucked up*, Francesco! How did we let everything decent and normal—the simplest natural desires—twist around our necks like rope to hang us?"

Frank knew the answers to some of his brother's questions. He wondered whether sharing what he'd learned from Dr. Penheimer's ancient monograph would help, or just make Malvechio more miserable. He massaged Malvechio's shoulders, a plaintive echo of his long-ago efforts to soothe his little brother's post-maturity growing pains.

After a moment, Malvechio regained his composure. He restarted the Mudder's engine. "I'm sorry, Francesco."

"Don't be."

"No. I truly apologize. That was very self-indulgent of me. You shouldn't be burdened with my feelings, especially not now. Unfortunately, I'm a very selfish man."

"I'll believe that when I believe islands don't float," Frank said.

"I'm going to take you to see the herd," Malvechio said, pulling back onto the road. "I want you to see what you're rendering judgment upon, before you start snooping around with that chronome detector."

They drove north. When they'd traveled a mile past Buffalo Station Latosaka-One, the road vanished beneath prairie grass, and Malvechio engaged the truck's low-gear four-wheel drive. Despite the terrain's apparent flatness, the engine's whine indicated they were scaling a gradual but persistent rise. The rise evolved into prominent hills, mounds of tall yellow grass that swayed with the winds. Malvechio turned sharply to the left, and they climbed the tallest of the hills. He steered the Mudder onto a well-worn two-track path that led to the top. Then he killed the engine and invited Frank to get out.

"There they are," Malvechio said. "My buffalo."

The grazing herd stretched from the base of the hills to the far northern horizon, filling a broad plateau. Frank had never seen anything remotely like it. Each animal, he estimated, must have weighed in excess of a thousand pounds. Its hindquarters did little more than hold the tail end of the animal off the ground, for the bulk of that weight was concentrated in the beast's massive head and shoulders, covered with a coat of curly brown wool, crowned with a pair of curved gray horns.

They're built like bulldozers, Frank thought, *and I'll bet they're just as efficient at grinding down anything that gets in their way.*

"How many of them are there?" he asked.

"The last time I counted, about four months ago, the herd numbered eighty-two hundred and sixty-three. A number of the cows have calved since then, though."

"They're all CAMPAs?"

"Far fewer than you'd think. The ratio of chronologically anomalous animals to those present-born gets smaller every year. Oh, I can't tell you with any exactitude how many buffalo are CAMPAs and how many aren't. I'd need to spend weeks with your chronome detector to give a good estimate. But in the eight years I've been at the station, I've kept a good count of the calves birthed. Those animals make up nearly forty percent of the herd. Even assuming that three-quarters of the buffalo here eight years ago were chronologically anomalous, that would mean that well over half of the current herd are present-born."

The wind shifted to the south. Frank was nearly overwhelmed by a cloud of dust, musky sweat, and particles of dung. “Where, uh, where are the nearest cities or towns?”

“The town of Wyonna used to be about forty miles east of here, and Placid Hill was seventy miles to the northwest. At their biggest, I’d say each was no larger than twelve to fifteen thousand people. By the time I got out here, both towns had shrunken to fewer than two hundred residents. They’re all gone now, moved east to the coast. See that area where the herd’s grazing? That was once the site of a large wartime research and development complex. From the Great War, I’m pretty sure. I’ve managed to collect a few mushroomed artifacts over the years, during times when the herd is churning up some other quadrant of the landscape.”

Frank stared at the area Malvechio pointed to. “I don’t see any mushrooms. Not a one.”

“You can thank the buffalo for that. One of the reasons Environmental Sanitation agreed to fund my study of this test herd was to see how effective a mass of these animals could be at disrupting mushroom formation. That department’s administrators figured it might be far less costly to let a herd ‘trample the weeds,’ so to speak, out here in the remote West than it would be to hire a large staff of groundskeepers and sanitation engineers, people they’d have to house and feed. The Department of Environmental Reclamation, on the other hand, wanted to learn whether buffalo could be safely reintroduced to North Emericus. So the two departments’ interests coincided. At least until now.”

Frank scanned the grass-covered plain. “I’d say your buffalo are extremely effective groundskeepers. Do they *eat* the mushrooms?”

“No. But their constant foraging and movement seem to make it impossible for mushrooms to develop any rootage in the soil. Anything that becomes even partially solid and hasn’t yet emerged more than three feet tall or so gets trampled. The herd would steer clear of a completely manifested town or city, but I honestly don’t think the buffalo even see or sense the mushrooming buildings and vehicles they unwittingly destroy.”

“Do you observe many ghost buffalo emerge?”

“Not nearly as many as I used to. When I first got here, I’d often see groups of translucent buffalo off by themselves, grazing patches of mushroomed prairie grass, sometimes wandering through—and I mean literally *through*—the herd’s solid animals. More recently, though, I don’t see more than one or two a month. Sometimes a whole season will go by without my seeing a single one. That research complex from the Great War I mentioned doesn’t sprout as quickly as it used to, either. It used to be that as soon as the herd plowed those wood-frame buildings under, they’d immediately start sprouting again. It’s tapered off, though, almost in lockstep with the mushroomings of archaic buffalo. It’s as if the high concentration of rogue chronomes responsible for this area being a hotspot for mushrooms has been disrupted or gradually dispersed.”

“The hooves of your buffalo herd might have something to do with that,” Frank said.

“Yes. I’ve thought that myself.”

“Have there been predators that mushroomed along with the buffalo?”

Malvechio nodded. “Bigger versions of the Catamounts and Dire Wolves you’d be familiar with. Even these big carnivores are only capable of taking down young calves or older, diseased buffalo. By themselves, Catamounts and Dire Wolves don’t kill nearly enough prey to significantly slow the growth of the herd. The most successful predator of the buffalo, of course, has been and remains man.”

His brother’s veiled implication made Frank think buffalo and Dire Wolves weren’t the only creepers that manifested here. He remembered his true mission. “Are you talking about technicians and scientists from the Great War era? It’s hard for me to picture them hunting buffalo. But Native Sixer creepers … in the old days, when they were human, they survived off buffalo, didn’t they?”

Malvechio’s expression turned wary. “I’d rather not talk about it.” He stalked off to the edge of a ridge and stared at a section of prairie to the northwest, which the herd avoided. Frank saw that a vast circle of prairie grass had been burned to the bare soil, leaving only charred stalks behind.

He heard his brother say with bitterness as black as the charred grass, “Those bastards …”

“Who, Malvechio?” Although he already knew the answer.

“They come once or twice a year,” Malvechio said. “Grubbers. Probably sent by Environmental Sanitation, or maybe emerged from the depths of hell.”

Frank decided it was best to play dumb. “Grubbers?”

“Grubbers, shadow men, assassins … I don’t know what they’re formally called. I have my own names for them. One afternoon, there’ll be a thriving village out on the prairie—men, women, and children, living in booths made from buffalo hide. Arisen from hundreds of years ago, I suppose. The next morning? Only smoldering cinders. The grubbers don’t leave the bodies behind for me to bury; they take them back east, to dump at sea, I suppose. They used to come more frequently, when the ghosts were rising more often and manifesting as creepers faster. Like I said, this district has been a hot spot for rogue chronomes as long as I can remember. But the buffalo seem to be gradually making it less so.”

Malvechio turned to his brother, his face wavering between determination and fearful uncertainty. Frank saw his eyes imbued with plaintive longing. “Francesco … there’s … there’s something I want very much to share with you. But you have to swear never to reveal it to anyone else. Particularly to no one you work with. Your family is sacred to you, isn’t it? More precious than anything in the world?”

“Of course,” Frank said. “They’re my whole reason for living.”

“Then I want you to swear on the souls of your family that what I reveal to you will remain a secret between us. Will you do that?”

“Yes, brother. But I have no tendarms to swear with.”

“Give me your right arm, then.” Frank held out his right arm. Malvechio wrapped two of his tendarms around it, braiding them in a crossing pattern that reached to Frank’s shoulder. “Go ahead. Swear.”

“I swear on the souls of my family, of my wife Aleedia, my six sons, and my four daughters, that what you reveal to me will remain a secret between us brothers forever.”

“Good.” Malvechio released Frank’s arm. “Let’s go back to the house. There’s someone I want very much for you to meet.”

“I thought you worked alone …?”

“I do. But that doesn’t mean I have to *be* alone.”

They drove back to the research station, a two-story dwelling and a single-story lab, both made of humble cinderblock. Malvechio refused to answer any more of Frank’s questions. At the research station, Frank was amazed by Malvechio’s excitement and impatience; as soon as Frank exited the Mudder, his brother pulled him up the living quarter’s porch steps and through the front door. “Francesco,” he said, “you don’t know how long I’ve waited to share this with someone I trust. The fact that it’s *you*, my eldest brother—well, that just puts the shine on the apple!” He dashed to the foot of a set of stairs and called to someone on the second floor. “Waning Moon! Come down! There’s someone I want you to meet!”

No one answered from above.

“She’s afraid,” Malvechio told his brother, “and with good reason.” He called upstairs again. “Waning Moon, it’s all right—it’s my brother, Francesco, whom I’ve told you about! The man with eight children—no, make that *nine*! He’s come all the way from New Shining Capital. Come down and meet your brother-in-law!”

Frank heard a door unlatch. A few seconds later, a young woman, belly round as an apple, began descending the stairs. She wore her black hair long and straight; her downcast eyes were the shape of almonds.

Astonishment drenched Frank like a sudden downpour. She was the same woman—perhaps a decade younger—as the Native Sixer creeper woman who had spoken with him in the cinema theater on Kraken Island. Who had been killed by Harry Erath in Turtle Hill. Who had died in the earthquake.

“Francesco,” Malvechio said, “I’d like to introduce you to my wife, Waning Moon Helios. Your sister-in-law. And, my dear older brother, for the first time ever, *you* are about to become an uncle! Our baby and your new daughter will be almost the same age! Isn’t that just a *miracle*?”

Waning Moon reached the bottom of the stairs. She raised her eyes to meet Frank’s. “Hello, Mr. Francesco,” she said shyly. “I am very happy to

meet new family."

She didn't know him. He could tell her unfamiliarity wasn't feigned.

His pulse thudded inside his skull. He backed away from her, remembering the act her other self on Kraken Island had accused him of, a horrible murder he hadn't yet committed.

Pieces tumbled into place. Erath's sending him out here hadn't been a kindness, a favor. Frank was being set up. He'd assumed his killing Tommy the wolf had been his graduation test. But that had only been a pretest for something far more damning.

"Francesco," Malvechio said, "your face—what in God's name is *wrong*?"

"Malvechio," Frank said, "take your wife and your child as far away as you can. *Now*. And never agree to see me again. You hear me, brother? *Never!*"

"Francesco, you're talking *craziness*! I thought you might react a little badly, but not like this! Yes, Waning Moon is time-displaced; I hid her before the grubbers could wipe out her village. But brother, you've always shown an affinity for things from the past. It's one of the traits I've always admired about you. And family is *family*, damn it!"

"Malvechio, I can't explain. It would take too long. Every minute the three of you stay in my presence, you put yourselves in deadly jeopardy." He'd been all alone on his trip west, hadn't he? The train cars had been empty apart from Frank, the engineer, and his assistant. But Harry Erath could hide himself behind a blade of grass. "Take only what you absolutely need. Do you have a gun?"

"A rifle, yes. In case any of the bolder predators come too close to the station. But I barely know how to use it."

"Take it. And Malvechio, once you leave this house, if you *ever* catch sight of me again, I want you to use that rifle on me. Don't wait for me to explain myself. Shoot me on sight."

"Oh Lord …" Malvechio reached for him with two tendarms, his face stricken. "Your life change, dearest brother, I think it's affecting your mind. I wish you could hear yourself—you're talking like a deranged man. You must go upstairs and rest."

“I’m leaving.” Frank pulled away from the tendarms and headed for the door. “Heading back east. I’ll walk the tracks until the train comes again. If you love your wife and your future child, you’ll leave right after I do. You’ll take them any direction *but* east—”

The front door swung open before Frank could touch the doorknob.

“Hello, Frank,” Harry Erath said. “Enjoying your family reunion? I wouldn’t be so quick to leave the scene of a capital crime, if I were you. Just a bit of friendly advice.”

“Francesco, who *is* this?” Malvechio said.

Too late, Frank thought. He considered rushing Harry Erath, knocking him down so Malvechio and his wife could flee. But Erath held a gun.

“Do anything dumb, Frank,” Erath said, “and both that little creeper girl and her obscene growth get drilled through the middle. But I’d rather not do that myself. It’s not *my* job. It’s yours.”

Don’t allow yourself to become a grubber, Sirena had begged him.

“I won’t do it.”

“You won’t? Let me lay out the situation for you. Your brother is guilty of a capital crime against the State—harboring a creeper. *Two* capital crimes, actually, since he went ahead and knocked her up, too. Sad to say, Frank, you’re also guilty of a capital crime, covering up your brother’s misdeeds, instead of immediately informing your superiors of the presence of a creeper. Your brother’s staring down the death penalty or life in prison. You, Frank, can look forward to a long retirement in a five-by-five room, with your family stripped of any pension and housing benefits. I hope Aleedia knows how to pitch a tent. Oh, and your eldest son’s fancy internship? You just flushed that.

“However—and you knew there *had* to be a ‘however,’ right?—I happen to have the authority to make all those bad things go away. I can make your and your brother’s criminal records white as the fur on a bunny’s tummy. All you have to do—and it’s not so much to ask, not from a man who’s been stomping mushrooms his whole adult life—is take this gun and drill a hole through that creeper girl.”

Waning Moon sobbed.

“You said I had a choice!” Frank shouted. “I’m choosing now! Wash me out! Send me back to my department! Have them hammer me into senility with grayhead drugs! Just don’t make me do *this*, for the love of God!”

Erath snickered. “Gosh, I *did* say I’d give you a choice, didn’t I? Problem is, you already made your choice when you killed Tommy. There’s no backing out. You’re committed to your new career.”

“You can’t force me to do this!”

“Like hell I can’t.” Erath pulled a long knife from his belt, then, in one cobralike movement, twisted Malvechio’s arms behind his back and held the blade beneath his throat. “You like *choices*, do you? I’ll be a sport and give you another one. You can take the gun and do what I told you, and three out of the four of us walk out of here on good legs. Or you can be a stubborn son of a bitch, and I’ll slice your brother’s head off, dump said head and body at sea, kill the creeper myself, and maybe, just *maybe*, kill you, too. Fuck, I know which choice *I’d* make, and no one’s ever accused me of being a rocket scientist.”

Waning Moon screamed. She ran toward the door. Erath let her pass, making no move to stop her.

“Now where the heck does she think she can hide?” he asked as she bolted out of the house. “There’s nothing but grass for fifty miles all around. And even if you aren’t as fast as me yet, Frank, you’re one hell of a lot faster than she is. So, what’ll it be?”

Frank didn’t move. He couldn’t think.

Erath carved a thin red line across Malvechio’s throat. Frank heard his brother hiss with pain. “You’ve seen my knife work, Frank,” Erath said. “You know I’m a self-taught surgeon. I can make your brother here last for *hours* before he’d pass out from shock and blood loss. I think I’ll start with one of his tendarms. Heck, it’s not as if he’s going to have anybody to use them on or give them to. They’re just dead weight, huh, Malvechio?”

With a flick of the knife, he severed one of the tendons that connected Malvechio’s rightmost upper tendarm to its anchor on his rib cage. The tendarm, which had been waving stiffly with fear, drooped instantly to the floor. Malvechio howled.

Frank snatched the gun from Erath's hand. He pointed it at his tormentor and pulled the trigger.

The trigger didn't budge.

Erath clucked his tongue. "Thought you might try that. That's why I left the safety engaged. I've taught you a lot about firearms, but I never taught you how to work the safety on this particular model. It'll take you a lot longer to figure out how to work it than it will for me to gut you throat to navel, so try not to have any more bright ideas, okay? You want to try out that gun? There's the door, lad. Go get her."

Frank was paralyzed. Time Breaker? Time was disintegrating all around him, along with every other aspect of the universe, leaving only a blank abyss. He stared at the pistol in his hand, the weapon Erath hadn't even needed to give him.

"*No* …" he groaned.

"Believe me, Frank, I've got no problem at all with your stretching this out. I'm a man who enjoys his work." He sliced through another of Malvechio's back tendons. Malvechio screamed. Blood and a second tendarm hit the floor simultaneously.

"Three more to go, Frank, before I start in on his primary limbs. So do I go to work on tendarm number three, or do you start doing your fucking job?"

She's already dead. Frank felt his resistance crumble. Apparently Waning Moon's creeper had been wrong; the story couldn't be changed. Either he or Erath would kill her. The only difference would be how much would remain of Malvechio.

He walked to the open door.

"Francesco, *no*!" Malvechio screamed.

"Don't waste your breath, creeper-fucker," Erath said. "Your brother's seen the light of good sense, and good for him. Hey, Frank? The safety's got three buttons, one on the left of the handle, one on the right, and one on the bottom. To disengage it, press bottom, then right, then left, wait one full second, and the gun's ready to pop."

Frank stepped out onto the porch and saw her out in the grass, running north. She hadn't tried hiding in any of the outbuildings. She might

be fleeing toward a remembered village that no longer existed, or toward the musky shelter of the buffalo herd. Hindered by her late-term pregnancy, she wasn't running very quickly. He saw her grasp her stomach. Caught in the bowels of a nightmare, as murky-brained as a sleeper unable to wake, he wondered whether her panic and exertion had brought on early labor.

Hating himself, hating the world, hating whatever omnipotent Power that had set the Earth on its course and kept it from plunging into the sun, he set off after her. She glanced back at him and gasped. Then she stumbled. He watched her fall and roll.

She didn't try to get up. She lay face down on the grass, moaning, waiting for him.

He slowed to a walk. Why didn't she continue running? Had she given up, like he had? Had labor pains made it impossible for her to rise?

He stood over her. She was very quiet now. He heard her breathing, shallow, rapid, birdlike. "I have to save my brother," he said. "Your husband. Forgive me. Please, forgive me."

She'll come back. I've already seen it. So am I really committing a murder? Or is this only an interruption?

He released the safety. "This isn't your end," he said. "It might be the end of me, but not of you. As a human being, I'm ruined. But you'll return. Actually, you already have."

He aimed the gun at her back and closed his eyes tightly. He waited far longer than the one second Erath had specified. Then he pulled the trigger. This time, it surrendered to his finger's pressure.

The gun kicked in his hand, a cruel echo of a baby's kick. The bang was weirdly muffled. It wasn't a bang at all, more like the *chuff* of a locomotive's pistons when the engineer first releases the brakes.

He forced himself to open his eyes. The bullet had made a hole in the middle of her lower back about the size of a coin. A small puddle of blood pooled in the concavity of her lower back but had not yet spilled onto the ground. The grass surrounding her stomach, however, lay matted in a spreading pool of muddy red, evidence of an exit wound he couldn't see.

The story didn't change. You lied.

His stomach churned. Staring across the plain, his field of vision obscured by a swirling corona of glowing dots, he thought he saw shimmery, translucent reflections of himself head away from him, some walking, some running. The best parts of him, now fleeing in revulsion? Versions of Frank Helios who had conceived some way of avoiding what he had just done? Possible futures made impossible, lost to him now?

He envied them and hated them, whatever they were.

The blood reached his shoes. The wind shifted. He smelled iron and shit. He pitched forward and vomited.

He retched until he felt a strong hand on his shoulder.

"There, there," Harry Erath said. "First time's always the worst. It'll get easier. Every time you do it, it'll get easier and easier, until you hardly think about it at all."

• EIGHTEEN •

Welcome to Space City, Home of Tomorrow

ERATH DIDN'T LET FRANK STEW in his grief and self-hatred for more than a day. While they were both aboard the eastbound train, he provided photo proof that Malvechio had been taken to a mobile clinic for treatment and remained alive. Then he told Frank they wouldn't be returning to New Shining Capital immediately. The two of them had a mission to perform along the route.

"We're stopping off in Space City before we go south. There's been a resurgence of creeper activity there since the earthquake. They've been snuffing out some of our space scientists as ruthlessly as we've been snuffing out creepers, almost as if they've learned dealing out death from us. Actually, I *like* the fact the creepers are getting aggressive. Makes them much more challenging targets. Life can get boring after you've been doing this kind of thing for twenty years. You'll see. Every little bit of variety helps."

The pall of self-recrimination did not lift from Frank's downtrodden spirit. But Erath's mentioning they were headed for Space City at least renewed Frank's sense of purpose. Sirena had noted Francesco's aversion to the child's mobile of the solar system. Earlier that same day, Francesco had experienced that terrible encounter with ghosts of his future self and an older, bitter Leonardo, who had accepted a fatal bullet rather than turn against a suspicious project overseen by his employer, the National Space Colonization Agency. Francesco had seen Dr. Penheimer's ghost curse itself in the rubble of the mushroomed black basalt dome outside the Space City complex. Having read his great-great-grandfather Paulo's logbook, Frank knew that black dome had played a key role in the design and construction

of the most powerful weapon in the arsenal of North Emericus during the Great War. From what he'd read in the logbook and then heard from Malvechio, the buffalo station had once been the site of another node of that weapon's fabrication, a secret government installation in Dr. Penheimer's constellation. And since then, it had been a hotspot of rogue chronomes, so much so that mushrooms of the Great War's secret weaponry base multiplied as quickly as archaic buffalo and the habitations of ancient Native Sixers.

Particles were coming together to form a mass. The mass remained shapeless and gray for now. But Frank felt certain if he continued pressing on, the mass would become something recognizable to him. The greater part of that congealing into sensibility, he felt, must occur in Space City.

"I'm not taking your training wheels off," Erath said, "not all the way, not yet. I'll be watching everything you do. But you'll have your own weapons, your own chronome detector. Until I say otherwise, you'll retain freedom of pursuit and action. Consider it phase two of your training."

Good, Frank thought. He listened to the earthquake-like rumble of the distant buffalo herd as the sun began its decline. *I'll take all the schooling and training I can get from you. I can't do whatever it is the ghosts need me to do while I remain under your thumb. I know we have a confrontation ahead of us someday aboard the Saint Indianna. And if I'm going to stand any chance of walking away from that alive, I have to become the stone-cold assassin you say my father was.*

A day and a half later, they arrived in Space City's central rail terminal, a dizzying jumble of architectural motifs meant to evoke travel through the cosmos.Space City preferred to pretend it had no past, that it was all about the future. But Frank knew better. He knew about the great black basalt dome and the man at its center.

Following his minder's instructions, Frank checked into the Constellation Hotel. His lodging was a modest four-story brick walk-up on the southeastern edge of downtown. It sat in the middle of a triangle whose corners were comprised of the geometric forms of the National Space

Colonization Agency's research complex; the Experimental Propulsion Reservation's concrete gantries and towers, rivaling in height the Washerman's Monument in its fullest manifestation; and, more distant, the area's largest mushroom district, Iron Horse, once a regional railroad junction and textiles center.

The reservations clerk at the front desk wore a space helmet. At least that's what Frank assumed it was. The rest of his attire was unremarkable: dark blue suit, white shirt, blue-and-yellow-striped tie, dark blue knitted comfort sleeves on his tendarms—which made the ensemble seem all the more outlandish. Following Erath's instructions, Frank requested one of the cheap rooms facing the alleyway. He was assigned a room on the third floor with an interior sink and a shared bathroom in the hall. Heading for the stairs with his luggage, he passed the small lobby's centerpiece, a glass-enclosed table-top diorama of a colony on the red sandy surface of Mars. One of his artificial tendarms banged against the glass as Frank walked by. Careless of him; he hoped the clerk hadn't noticed.

His room, spartan by, say, Rumberto's standards, seemed to Frank spacious, uncluttered, and well appointed. Thin brown curtains billowed inward as a breeze entered through the open window. Frank pulled the curtains aside and stared out into the alleyway. He saw the primary reason Erath had directed him to request this room—a metal fire escape that would allow unobserved exits and entries.

He took only the bare minimum of what he figured he would need for the remainder of the morning and afternoon: his portable chronome detector, his two-way radio, the smallest of his three pistols, and a knife with a six-inch serrated blade. He hid his rifle, the remaining two handguns, and the other knives between the bed's mattress and box springs. He wished he could leave his mechanical tendarms behind as well—they were clumsy and their straps chafed him—but he knew he'd have to wait until after he'd entered the Iron Horse district to put them aside. It was unlikely the creepers who'd performed the industrial sabotage and murders had originated in Iron Horse; the ghosts of Iron Horse would be poorly educated mill workers or railroad laborers. The saboteurs could easily have traveled from the far larger, more diverse mushroom districts of York to the

northeast or New Shining Capital to the south. But Erath wanted him to spend some time in Iron Horse, both to calibrate his chronome detector and to "limber up" with a few easy exterminations.

He enclosed his chronome detector in its long leather case, slung it over his shoulder, and descended the fire escape. It terminated nine feet above the alleyway. He could unfold a set of collapsing stairs that would reach the ground, but he decided that would be far too noisy, so he lowered the chronome detector by its straps, then jumped down after it. Looking up, he reassured himself that he'd be able to access the fire escape upon his return. The leap might be outside the range of a man with tendarms, but it wouldn't tax him.

The alleyway led him to a block of small storefronts; they included a cigar store, a facility that leased and repaired electronic calculating equipment, a pre-worn clothing exchange and tailor's shop, and a modest restaurant across from a truck mustering yard. Desiring breakfast, Frank entered the Lunar Diner. A haze of cigar smoke mingled with steam from the open grill and shrouded the restaurant's top third. A double horseshoe counter provided the only seating. Eyes smarting from the commingled grease and cigar fumes, Frank noticed the long, curving countertop had been modeled to look like the surface of the Moon, each stool having a corresponding countertop "crater" in which to put a plate and another one, smaller and deeper, to hold a coffee cup. Hungry, he ordered double portions of eggs, sausage, bacon, waffles, and fried potatoes, plus a "bottomless" cup of coffee.

His fellow patrons were all older men, some in their seventies or eighties, dressed in unfashionable suits and faded ties. Frank's chronome detector didn't stand out; many customers had set large carrying cases next to their stools, containing portable adding machines or leased electronic calculators. They were probably itinerant contract engineers, hired temporarily by the National Space Colonization Agency to support the test build of a new engine prototype. Frank wished there were some way to inconspicuously assemble his chronome detector and sweep the room. Any of these men might be a creeper. Getting hired on as a contract engineer would be an ideal way for a creeper to infiltrate the NSCA; not even that

well-funded agency could afford to screen access to all its facilities with expensive chronome detectors. Perhaps tomorrow morning, when he returned for breakfast, he could figure out a way—

He sensed a pair of eyes weighing on him from the far side of the room. Before he could completely turn his head, a waitress darted from behind the counter into a rear storeroom. He'd only seen her from the corner of his eye, and his view had been obscured by haze, tendarms, and menus being waved by impatient engineers. But he thought she'd borne an uncanny resemblance to Malvechio's wife.

This could be his mind playing grief recrimination tricks on him. He reminded himself that many Native Sixer women shared Waning Moon's features. But his restless psychic antennae, attuned now to intimations of the uncanny, would not settle down before he saw and spoke to the woman.

He called over his waitress, a middle-aged woman who appeared to have liberally dined on the diner's greasy food for numerous years. "Excuse me, miss. Could you please tell me the name of the waitress who just went into the storeroom?"

"What does she look like?"

"Petite, about five feet, three inches tall, with long, straight black hair and almond-shaped eyes."

"That would be Wilheimina," the waitress said, turning to look at the storeroom door. "She's married, mind you."

"So am I. And happily so. I may know Wilheimina from another town. I'd be curious to speak with her. Would you please mention to her that Francesco Helios would like to say hello?"

"I suppose there wouldn't be any harm in that," the waitress said. She entered the storeroom, then returned to the dining room a moment later, alone. "The boss says she went home sick," she said.

"How long has she worked here?"

"Not long. Two, three weeks."

"Do you know where she lives?"

"I don't," the waitress said. "And if I did, it wouldn't be very proper for me to be divulging that information to *you*, sir." She poured him another

cup of coffee without his having asked, then went to help one of the impatient old men.

After breakfast, Frank walked a mile and a half to Iron Horse. No buses ran there, of course. From what Erath had told him, the town had been founded due to the presence of the Delwaney River and the motivation its current had granted to primitive waterwheels, powering mills. With three rivers converging nearby, it had also served as an early port. Later, when the railroads began to spread, the town had supplied rail ferries to shuttle locomotives and their cars across the river. Later still, a train bridge replaced the ferries. Portions of that old train bridge mushroomed from the northern and southern shores of the Delwaney, and a pair of archaic iron support trestles sprouted from the middle of the river. The new bridge, which serviced trains, electric buses, and automobiles, had been built a mile to the west, at a somewhat wider section of the river. Judging from the town's stage of eruption from the soil—single-story buildings had emerged only to the tops of their windows, and double-story buildings to the roofs of their porches—Frank estimated it had last been razed about six months ago. Iron Horse was mowed down regularly; Space City was too important to have an overgrown mushroom district on its flank, providing harborage for all manner of CAMPAs and other vermin.

He paused in the shadow of the pitched roof of a blacksmith's shop to assemble his chronome detector. It gave him the option of two modes, either floor sweeper or handheld. He chose the former, inserting the ends of three two-foot-long hollow tubes together to form a sweeping pole. He waited while the machine's "brain" performed its internal diagnostics tests. After three minutes, the indicator light turned green. Now he needed to calibrate the unit so that it would only react to the proximity of CAMPUs, CAMPAs, CAHSPEIs, or CAHSPAMs, not to the surrounding mushroomed buildings. Absent calibration, it would buzz and click unceasingly so long as he remained within the confines of Iron Horse. He turned the responsiveness knob to its highest setting. As expected, the machine produced a nervous racket of clicks and oscillating tones. He gradually

turned the responsiveness knob counterclockwise, lessening the unit's sensitivity until the clicks and tones faded almost entirely away. Then, sweeping the unit from side to side in front of him, he began walking the streets of Iron Horse.

Was he actually accomplishing anything here, beyond calibrating his equipment? Wouldn't he do better to spend his time searching for the woman who might be a resurrected creeper of Waning Moon Helios?

Probably not, he told himself. Chances were minute that she would return to the Lunar Diner today, and he had no other leads on her. Early tomorrow morning, before the place opened, he could stake out the diner's entrance from his fire escape and get a better look at her, assuming she returned to work.

What if he did find her and she proved to be a facsimile of Waning Moon? What then? Would he question her and let her go—if so, what would he ask? And would he dare let her go, given the possibility (make that *probability*) he would be under Erath's surveillance?

Could he bear to kill her again?

Maybe his best course of action would be to steer clear of her.

He traversed the orderly grid of streets, listening for any change in the chronome detector's barely audible clicking. Several times over the next hour, his heart raced when the clicking grew suddenly louder and more intense. But all he discovered were the ghosts of two mill workers, dragging themselves and their phantom lunch pails either to their mushrooming factory or home to their mushrooming railroad flats. They weren't nearly solid enough to dispatch with any of his weapons, so he noted their locations and told himself he'd return with a canister of CAHSPEI disrupter. He also wasted twenty minutes tracking what turned out to be a near-creeper stray dog.

He felt foolish, wandering aimlessly through this deserted backwater. Erath had said the creepers had taken up sabotage and murder since the earthquake. So shouldn't he go stake out their likeliest targets? That way, creepers would come to him.

He headed for the Experimental Propulsion Reservation, a vast industrial testing site situated two miles south of Space City's residential

limits, cordoned off from inhabited areas by a border zone of empty land. The Reservation had been tucked into the confluence of the Delwaney, Allagenny, and Tomaic Rivers. Despite its distance from downtown, its towers, gantries, and test stands dominated Space City's skyline.

Once he returned on foot from Iron Horse to the neighborhood of his hotel, he was able to board a bus to the Experimental Propulsion Reservation. Night had hidden much of that massive complex the evening before, when Frank's train had pulled into the Space City station. Now Frank got his first good look at it on this visit.

One change from his last stay here stood out. The new addition stunned him.

Workmen and their cranes were constructing a large dome, now partly skinned with thick black slabs of basalt. When complete, it would be about half the size of the gargantuan mushroom Francesco had demolished three times; aside from the size difference, it would duplicate that persistent relic of the Great War.

Why would they be recreating such a thing?

He reviewed everything he knew about the original black dome. He could understand why the government wouldn't just allow the original to fully manifest and make use of that—it would violate official policy. And even if it didn't, no one would want to work inside a mushroom. *All that aside,* he thought, *what possible use could the National Space Colonization Agency have for what my ancestor called a "particle accelerator"? It isn't in their remit to build weapons. But if not another weapon like the one from the Great War, then what can it be for?*

His impulse to scout the Experimental Propulsion Reservation in search of creeper saboteurs gained new salience. Every fresh discovery he made regarding his brother Rumberto's department, the organization that would soon add Frank's son Leonardo to its ranks, made the National Space Colonization Agency seem less benign and idealistic, rather more mysterious and sinister.

He found gaining access to the facility to be surprisingly easy. The Reservation was cordoned off by a ring of tall fences, including its river-facing side, but all Frank had to do to pass through a gate was show a single

bored-looking guard the NSCA identification badge Erath had supplied. The guard didn't give the bag holding the chronome detector more than a cursory glance.

Apart from "Bertolt's Toadstool," Frank had never encountered anything on the scale of the Reservation's installations. The test stands with their giant pyramids of concrete that buttressed thirty stories of steel armature and scaffolding made the office towers of downtown New Shining Capital seem as puny as Iron Horse's semi-mushroomed railroad flats.

He removed his chronome detector from its case and walked toward the largest of the test stands. The air, rippled by breezes coming off the Delwaney and Allagenny Rivers, smelled of ozone, petrol, and heavy metals. Apart from construction activity taking place on the black dome, the complex seemed nearly deserted; Frank assumed no engine tests were currently underway or being prepared for.

He walked past a tracked transporter vehicle at least half as big again as his old Mower. Strapped to its eighty-foot-long bed was what he assumed must be a rocket engine, a gigantic cube of metal encased in an intricate jacket of pipes, valves, and reinforcing buttresses. Its exhaust cone, large enough to encase the bus he had recently ridden, was charred and blackened. It reminded him of the fire-ravaged upper decks of the *Saint Indianna*. Having never witnessed a rocket engine test, he couldn't tell whether the charring was the normal aftermath of a routine test firing or if the engine had suffered damage from some sort of a misfire.

Acting on a hunch, he climbed aboard the transporter and swept one side of the engine with his chronome detector. The closer he came to the exhaust cone, the louder his detector protested. Frank checked the unit to make sure it wasn't reacting to non-rogue chronomes; Rumberto had once mentioned that NSCA engineers were experimenting with new propulsion fuels, including ores that emitted naturally occurring chronomes. But given his machine's current low responsiveness setting and the vehemence of its clicks and tones, he was certain he wasn't picking up a false positive.

A creeper or creepers had been in close proximity to this engine, within the last several days.

Had they left behind some kind of explosive device? He wished he knew what to look for. The engine's design and construction were as alien to him as some creature from the bottom of the ocean; conceivably, he could be staring directly at a bomb set within the maze of pipes and not realize it. The chronome detector might give him some warning—since any bomb would have been assembled by creepers, it would logically be more contaminated by rogue chronomes than the engine itself.

He spent close to a half hour sweeping the engine. Had he not become significantly tanned during his weeks of training, the afternoon sun, reflecting fiercely off the engine's metal components, would have burned him severely. He found nothing.

He walked to the tallest of the test stands. A plaque bolted to its foundation read:

TEST STAND A-3 PROMETHEUS
BUILT 2011-18
INITIAL TEST: ROCKET THOR-TIKI SIX, 6-22-2018

A sweep of the test stand's perimeter and access pathways indicated that creepers had recently visited here, too. Why were they so intensely interested in the activities of the NSCA? What reason could they have to sabotage a space exploration program, or an exodus of present-day persons from Earth? Would creepers be hurt somehow by an absence of normal people? Wouldn't they *prefer* to exclusively occupy the Earth? There would be no grubbers to hunt them down. By that logic, they should be *building* rocket ships, not trying to destroy them.

He decided to keep the area under surveillance. The best place to combine good lines of sight with concealment looked to be the cab of the transporter. He climbed the ladder that led to the cab, found its door unlocked, and slipped inside. Its utilitarian ambiance, even the smell of its worn cowhide seats, reminded him strongly of his old Mower. He freed himself of his artificial tendarms, glad to be temporarily rid of their chafing straps. Then he settled himself in to wait and to watch.

He maintained his vigil until half past midnight. Then, dazed with sleepiness and remembering he needed to rise before dawn in order to stake out the Lunar Diner, he decided to head back to his hotel. The guard at the gate, a different man from the one he'd met earlier, was surprised to see him. Frank asked whether any other NSCA employees had come or gone on the guard's shift. The man replied that only three maintenance engineers had passed through, and they had departed in time to catch the final bus into town, the ten-fifteen. Frank asked when the buses would start up again. The guard said the next one would arrive at six in the morning. Frank stared across the expanse of dark emptiness at the distant lights of downtown. He said he would walk.

The in-town buses ran later than the ones on the Experimental Propulsion Reservation route. One let him off two blocks from the Constellation Hotel. He was surprised to find the truck mustering yard far busier than it had been midmorning. The rumblings and groanings of heavy engines echoed down the street, mingling with the shouted instructions of traffic routers. He assumed the noise played a big part in the Constellation Hotel's lodging rates being so reasonable.

Approaching his hotel, he spotted a forest green panel-delivery truck branded with Department of Environmental Sanitation logos parked adjacent to the alleyway Frank had emerged from that morning. A man in a dark green jumpsuit opened the truck's rear doors. Two more men, identically dressed, emerged from the alleyway carrying a stretcher between them. It was loaded with a body. The body had been covered with a blanket, but its hair cascaded from one end of the stretcher. Long, straight, black hair. The men loaded the stretcher into the truck and secured the doors. The truck pulled away before Frank was able to flag the men down.

He entered the alleyway. The fire escape's bottommost set of steps had been lowered to the ground. Several feet away from the lowest of the metal steps, the alleyway's floor was stained with a splattered pool of blood, as though someone had fallen off the fire escape and burst like a bag filled with tomato paste.

He climbed the steps. The metal mesh of the second-floor landing was dotted with congealing red droplets. He saw that the blood had dripped from the third-floor landing's grating, near his room's window.

He found the third-floor landing far gorier than the lower one. The window of his room remained closed. One of the bricks below the window frame had been heavily gouged, likely by a bullet. He probed the gouge with his index finger. Judging from the mark's depth and angle, the bullet had been fired from above, probably from the roof of the four-story building on the opposite side of the alleyway.

The alleyway suddenly flooded with light. A garbage truck, headlights banishing darkness, exited the mustering yard and rumbled onto the street. Frank saw what the dimness had hidden before—amidst splattered flecks of red, a word, or part of a word, had been painted onto the glass pane of his window:

GENOCI

The final "I" ended in a smear dragged diagonally to the bottom corner of the window glass. The paint was dabbed with fingerprints. It wasn't "paint" at all. It was dried blood. He stared at the letters as the truck pulled away and the light faded. *Genoci ...* Was that a name, a place, or part of a longer word?

Genocide?

The word made him think of Penheimer's gargantuan black toadstool and its smaller duplicate under construction. His palms felt clammy.

He saw something else before the light vanished entirely. A folded card had been shoved into the tight space between the window's panel and frame. A business card.

He pulled it out and unfolded it. It was stained with bloody fingerprints. The light was too dim for him to read the tiny print.

He pulled the window open and entered his room. He lit a table lamp, realizing too late that this might make him an easy target for any assassins in the vicinity. He turned it off, but not before seeing that nothing appeared to have been disturbed within his room.

He stepped into the third floor's interior hallway to access its overhead light and read the card.

Bradford Candlepost, Senior Propulsion Engineer
Advanced Propulsion Concepts Department
Chronome Propellants Unit—Heavy Lift Project
173-F-24 East Asteroid Avenue, Building 11-A, Room 630
Northeast District, Space City
Telephonic: ##-18-DOC-29875-FLY

Wary of how vulnerable the light made him, he stepped back inside his dark room. The men he'd seen removing the body outside had been a cleanup crew. Either Erath or another grubber had called them in. Which meant it was reasonably likely that Erath or some other grubber had fired the bullet that had killed the dead woman whose hair had looked like Waning Moon Helios's, or like that of the waitress who had fled the Lunar Diner. Unless Erath, looking to check up on him, had come across the body on the floor of the alleyway and had radioed for it to be picked up. But why hadn't Erath radioed Frank to alert him a creeper woman had sought access to his room?

Frank pulled out his radio and pushed the transmit button. "Seeking Grayhawk. Seeking Grayhawk. This is Fledgling. Over."

He released the button and waited.

The radio squawked. "Fledgling, this is Grayhawk. Have you run into pushback? Over."

"When I returned from the Experimental Propulsion Reservation a few minutes ago, I found a cleanup crew pulling away from my hotel. There was a bloody mess in the alleyway beneath my room. Also on the fire escape next to my window. Do you know anything about this? Over."

"I sure do. I nailed a creeper trying to get into your room. He had a gun. I was about to contact you. Over."

He? Frank thought. "Can you describe the creeper? Over."

"Male, average height, with brown hair and three tendarms. Why? He won't be bothering you anymore. Over."

"I tailed a creeper at the Propulsion Reservation this afternoon," Frank lied, "but I lost track of him. I wanted to know if this was him. It's

not. The guy I followed had just one tendarm. Over."

"Do you want me to move you to another hotel? Over."

"I'd rather stay where I'm at. I'm alerted now. If they know I'm here and want to come after me, so much the better. It'll save me the trouble of finding them. Over."

"That's the spirit. I'll check in with you first thing in the morning. Over and out."

More lies …

Frank kept his clothes on and lay down on top of the bed covers. Had Erath recognized the creeper as a duplicate of Waning Moon? Had she actually carried a gun? If so, had she intended to kill him or merely talk with him?

What about the business card? It was marked with her bloody fingerprints; what he assumed were her bloody fingerprints. She'd intended to give it to him. But what if the fingerprints were actually Erath's? What if Erath had left him the card as yet another test?

The only way to answer any of those questions, he knew, would be to look up the engineer listed on the card. Either the creeper or Erath meant for Frank to contact him.

Frank had long ago grown sick of being manipulated. The business card was an obvious manipulation. Maybe his dreams would provide a better path forward than his doing the obvious next thing, seeking Bradford Candlepost. But he doubted they would.

• NINETEEN •

Conspiracy of Whisperers

FRANK ATE BREAKFAST at the Lunar Diner. The waitress named Wilheimina hadn't shown up for her shift. Nor, he learned, had she called in sick.

He went to NSCA Building 11-A on East Asteroid Boulevard, toting the same equipment he had the day before. His destination was an impressive brick edifice, six stories tall, that occupied a full city block. The guard was little more than a greeter, a bored, friendly functionary who couldn't wait for his eight-hour shift of staring at badges to end. Once again, Frank's badge got him past the security station.

The ease of this astounded him yet again. Were men with tendarms *capable* of responding to new threats with the resolve and seriousness they demanded? He'd just walked into one of the NSCA's most crucial buildings, a stranger armed with an assassin's knife and an automatic pistol. He hadn't been asked to open his chronome detector case. He hadn't been searched. True, he'd displayed his badge, but badges could be faked. Were these people unwilling to take the creeper threat seriously? Or did their isolation from aggression render them insensate to those who wished to do them harm?

He stared at himself in the mirrored panels behind the reception desk. He'd changed greatly in the past three months. Not merely his physique; his face had altered, the cast of his eyes, his default expression. Staring back at him was the face of a wary man, a man suspicious of those around him, one who continuously sized up their threat potential. It hadn't been the training alone that had begot this transformation. The alteration in his body's chemistry had sculpted him into a throwback, a man of sharp and sudden whims, a danger to gentle society.

“May I direct you somewhere, sir?” a woman behind the reception desk asked.

“I need to see one of the engineers assigned to the Heavy Lift Project,” Frank said. “Bradford Candlepost. He works in room six-thirty.”

The woman’s eyes widened slightly at the mention of the engineer’s name. “What is your name, sir?”

Frank showed her his badge. “Francesco Helios. I’m visiting from the main office in New Shining Capital.”

“Let me have someone come down from that unit to talk with you.” She skimmed the pages of a directory, then dialed a number on her telephone. “Hello, Mr. Ackerman? This is Rebekka Stantos at the main reception desk. I have a gentleman here, a Mr. Helios from Headquarters, who says he needs to speak with Bradford Candlepost. Could you come down to see him? Yes? Thank you very much. I’ll tell him.”

She hung up her phone. “Mr. Ackerman will be down in just a moment. You may wait for him at that bench over there, near the elevators.”

Frank went where he was directed. Shortly thereafter, a tall man in his mid-fifties, wearing a much more stylish and neatly pressed version of the suits and tendarm sleeves the elderly engineers at the Lunar Diner had sported, exited an elevator and approached him. “Are you Mr. Helios?” the man asked.

“I am,” Frank said. “You’re Mr. Ackerman?”

“Yes.” Ackerman tapped one of his tendarms against one of Frank’s artificial ones in the standard greeting. “I’m told you want to speak with Bradford Candlepost?”

“That’s right. Is there a problem?”

Ackerman eyed him dubiously. “You say you’re from Headquarters?”

“Yes. From the Chronome Safety Division.”

“And you aren’t aware of the situation with Candlepost?”

“No, Mr. Ackerman. Headquarters is a big place. News doesn’t always travel as fast as it should. Is he … has something happened to him?”

“In a manner of speaking,” Ackerman said. “I was forced to terminate his employment a little more than three weeks ago. A damn

shame, really. He'd been with Advanced Propulsion Concepts for decades. Always a sterling employee. Until the earthquake. He found … well, if you aren't already aware of what he found, then I'm not at liberty to discuss it. In any case, given his obstinate insistence on promulgating the contents of certain classified historical documents, I had no choice but to separate him and terminate all his privileges."

"I see. Would you be able to put me in contact with him?"

"No. He's no longer at his former address. We canceled his lease. I have no idea whether he still resides in Space City. Is there anyone else with the Heavy Lift Project who could assist you?"

"I'm afraid not. My business is with Mr. Candlepost specifically. Unless … did he have any friends in his work unit who might know his current whereabouts?"

Ackerman frowned. "He had friends, certainly. But they're all aware that having any contact with him is a termination offense. So unless there's some fool up on the sixth floor who wants to put a fifty-year career at risk, the answer to your question is no."

Frank forced himself to smile. "Understandable," he said. "I'll just note in my report that Mr. Candlepost could not be contacted. Thank you very much for your time."

Frank bought an envelope and a postage stamp at a sundries store. Then he looked up Bradford Candlepost's former address in a telephonic directory, wrote it on the envelope, and took a bus to Space City's main post office, a reflection of the train station in its liberal use of gaudy outer-space motifs, including a bas relief of a shower of comets streaking past the Moon.

Using the inscription tools Erath had given him, he altered his counterfeit identification badge from "NSCA HQ—Chronome Safety" to "Postal Inspector." Inside the Post Office, he followed a pair of employees to the break room. He waited until the break room was empty and locked the door. Then he opened lockers until he found a postal uniform close to his size. He put it on and stashed his chronome detector in an empty locker.

He exited into the central routing room, a warehouse-sized space within which dozens of employees sorted thousands of pieces of mail, shoving letters into hundreds of stacked wooden boxes, each labeled with a different combination of city name, district code, and neighborhood subcode. Smiling and tipping his cap to every employee he came across, complimenting those who appeared to perform their work with extra hustle, he asked where the address forwarding station was located. An attractive young woman not much older than Prima led him to the appropriate corner of the routing room.

Frank continued his genial fake inspection until he located the desk where the "Forwarding Address Needed" stamps were stored. As soon as the nearby employees busied themselves elsewhere—his chosen false identity elicited much busyness—he removed his envelope from his jacket pocket, inked one of the stamps, and pressed it down on his envelope's upper-right corner. Then he carried the envelope to a neighboring set of desks reserved for the clerks who performed change-of-address file searches and, when none of them were watching, placed it on top of the "Pending Research" stack.

He waited for a female clerk to retrieve it, then followed her to a long row of filing cabinets and observed her look up Bradford Candlepost's current mailing address. He complimented her on her efficiency as she crossed out the envelope's obsolete address and wrote the new one underneath. Then he followed her to a wheeled canvas bin marked "Outgoing Mail." She dropped the envelope inside. As soon as she returned to her station, he scooped the envelope out of the bin and hid it in his jacket pocket.

No sense in wasting the postage stamp.

Bradford Candlepost's current residence made the Constellation Hotel look like a ten-star luxury resort. The Craters Extended Residence Lodge, a three-story brick pile devoid of ornamentation, stood beneath the raised southern approaches to the bridge over the Delwaney River. A wet, biting breeze skimmed off the darkening river to greet Frank's late-afternoon

arrival. Fall was in the midst of its annual murder of summer, a bit earlier this year than last. The days were shortening, rapidly so. The lodge's neighbors were all light industrial businesses: vehicle and motor repair shops, a bus maintenance facility, a welding shop, an engine oil recycling works, and a fish cannery. Frank imagined the down-on-their-luck residents of the Craters blessing each and every breeze to blow off the Delwaney; absent cleansing winds, the petroleum-tinged air, additionally adulterated with the stench of discarded fish parts, would be virtually unbreathable for anyone not thoroughly acclimated to it.

He made a full circuit of the lodge's exterior. Most of its rooms' lights were unlit. Too early for occupants to turn in for the night; most probably were seeking their dinners in less desolate neighborhoods. Having struck up an innocuous conversation with the guard at NSCA Building 11-A, he had a rough idea what Candlepost looked like—a squat, wide-chested man in his seventies with four tendarms and a full head of unruly white hair. He didn't have Candlepost's room number; maybe he'd get lucky and catch him returning from dinner. The less Frank interacted with the front desk manager, the better.

He decided to case the lobby. It was a dingy, ill-lit space occupied by a scattering of couches and easy chairs, all with torn, cigarette-burned upholstery. The ashtrays had not been emptied recently. The manager, encased in a plastic-and-steel cage with a letter-sized opening to permit exchanges of money and keys, would be easy to avoid; the disheveled man distracted himself by listening to a baseball game on his radio, turned up to blaring.

A pair of men entered the lobby from outside. Frank backed into the shadows. They were both older men, each with five tendarms, dressed much the same as Mr. Ackerman at NSCA had been, in conservative dark blue suits. Neither matched the physical description of Bradford Candlepost. They didn't stop at the manager's cage for keys. They were visitors, not residents.

As they passed him on their way to the stairs, Frank's chronome detector clattered inside its case. Luckily, the clamor was masked by a surge of cheering from the radio. Frank opened the case and turned the detector's

speakers off, leaving only the indicator gauges active. He stared at the men climbing the steps to the second floor. *Creepers?*

He followed them at a distance up the stairs, taking care to keep out of sight. They exited on the second floor and turned right, then followed the corridor all the way to its end. They knocked on the last door on the left and were admitted.

After a moment, he followed them to the doorway. He removed his chronome detector from its case. Its gauges swung all the way to their maximums, giving an even stronger reading than before. He listened intently to voices from inside the room. The lodge's cheap construction, its interior walls made of drywall hardly thicker than cardboard, made the conversation easily audible to a listener with his ear placed against the hallway wall.

"… thank you all for taking the risk of coming here. I know it wasn't an easy decision, especially after what was done to me."

Frank recognized the voice. From where, he couldn't remember.

"We all regret that, Brad," a second man said. "But those allegations you raised …"

"Yes, those allegations." *A third voice.* "They're beyond incredible. You *must* realize this. You want us to accept we've all dedicated our entire careers to a lie? And not just *any* lie, but to a conspiracy so, so horrible as to be almost *unthinkable*? You want us to think Abe Ackerman, who we've all known for years, is a monster, and everybody up the chain of command are monsters—"

"Jonathan, Charles, give Brad a chance to show you what he uncovered." A fourth voice—there were at least four of them in the room. "I reacted exactly the same way when he first showed me the documents. You're right. It *is* unthinkable. I spent weeks trying to wrap my head around it. But for the sake of the entire future, you've got to try to accept matters that seem unthinkable. They can silence Brad Candlepost. They can silence me; we both can be replaced without too much trouble. But if enough of us refuse to do the work … we can't *all* be replaced. There just aren't enough trained cosmo-engineers out there. If enough of us act in concert, we've got

a chance to set this program right, to make it the real space colonization effort we've dedicated our lives to."

"Thank you, Dan." The first speaker again—Candlepost. *Damn it, where have I heard that voice before?* "First off, let me say I don't consider Abe Ackerman a monster. I think he's a basically decent person, that he was raised to love this planet, the only planet we are currently aware of that is capable of sustaining life. He was taught, like nearly all of us were taught, that our world, the ecosystem which nurtures us and all other living things, is *holy*, sacred. I suspect he was also taught that humanity is a kind of cancer running rampant in the vital organs of the world. None of us know for certain why the oceans are infested with rogue chronomes, although we all have our theories. We do know our ecosystem is under constant assault by various time-displaced phenomena. Why have we blotted out our society's history and react with instinctive horror when it rises around us from the ground? This can only be due to old societal trauma, to our ancestors' *shame* and indignation at themselves. The documents I uncovered reveal NSCA's founding engineers considered their predecessors, the scientists of the Great War era, to be the enemies of all living things. They considered even *themselves* suspect. What was their mission? We take it on faith they launched their generations-long project to benefit humanity by finding a new home for mankind in the stars, a home free from chronal anomalies. That may have been what they propagandized to the public. But the documents in my possession show that wasn't their intention at all. They intended to facilitate the Earth healing itself from the terrible wounds scientists and soldiers had inflicted. And their method would be to remove humanity entirely from the planet—"

"What you're asserting makes our careers and lives a travesty," one of the two most recent arrivals said. "Such incredible accusations require unimpeachable proof."

"I will show you the proof. That's why I invited you here. We've all taken the official story on faith. I can't expect you to accept this overturning merely on faith in my veracity."

"Tell us how you came to possess these documents," a different voice asked.

“During the earthquake, I was on a detail assignment at headquarters in New Shining Capital. While assisting with the cleanup, I wandered where I shouldn’t have and discovered portions of a forgotten subbasement level, newly revealed by the earthquake. I found thousands of files, many of them dating back to the Agency’s inception a hundred and seven years ago.”

The subbasement beneath the NSCA Building, Frank thought. Had it been there he’d first heard Candlepost’s voice?

“I don’t care *what* the founders of the NSCA originally intended,” either Charles or Jonathan said. “The *real* scandal is that over a hundred years have passed and we *still* haven’t managed to successfully orbit a cosmosnaut and bring him back alive.”

“That failure has been intentional,” Candlepost said. “It’s not so much a failure as a *delay*, you see. Our agency could not allow its work of sending cosmosnauts beyond Earth’s gravitational field to come to fruition prior to the needed reduction in population size. According to these century-old documents, the population of North Emericus, even after the mass casualties suffered during the Great War, numbered nearly ninety million persons at the time of the Agency’s founding. Sending that many people into space was obviously an impossibility. Those numbers would have to be reduced by an order of magnitude, at least, but in such a way that technical expertise and talent could be preserved over multiple generations of attrition.”

Frank’s mind hurt. All the suffering his family and thousands of other families had endured … it had all been due to the self-loathing and misanthropy of a handful of scientists and administrators, men like Bertolt Penheimer. *A forced reduction of population from ninety million souls to under four million in just a hundred years, all to achieve a dream of blasting the entirety of humanity into deep space. But what about the populations of other countries? If they stayed behind, the project would remain incomplete.*

“Let’s see what you have,” Jonathan or Charles said. “It’s time to look the devil in the eye.”

“Of course,” Candlepost said. “This is a photostatic duplicate that I made of a carbon copy. Unfortunately, the quality is very poor. Abe Ackerman destroyed the originals. I hid carbon copies of key documents in Building 11-A, also in New Shining Capital.”

Frank heard the lodge’s front entrance slam open downstairs. A boisterous group entered the lobby, singing drinking songs. The cheap hotel was beginning to fill up after the dinner hour. If he intended to break into Candlepost’s room, he’d have to do it now, before any new arrivals made their way up to the second floor.

The door was cheap plywood. He removed his gun from its hidden holster, then kicked the door just beneath its knob. It flew open and smashed against the interior wall. He closed the splintered door behind him, then brandished his silenced pistol at the four men.

One of them he’d seen before. The one sitting at the desk. Candlepost.

My God—he’s the creeper who shot Leonardo in the back. That’s where I know his voice from.

“Everyone stay exactly where they are,” Frank said. “Keep your hands where I can see them. I’m going to scan each of you.”

“Who the *hell* are *you*?” Dan said.

“Shut your fucking trap,” Frank said.

“Did—did Abe Ackerman send you?” Charles or Jonathan asked.

“I don’t work for Ackerman,” Frank said. He switched on his chronome detector’s speakers. Immediately, the device began clicking and clacking.

“That’s a chronome detector,” Candlepost said.

“You recognize it?”

“Of—of course,” he said meekly. “We work with them every day. I mean, I *used* to, before I was fired.”

“Then you know what it’s used for,” Frank said. He swept the device’s wand close to Candlepost’s torso. The machine’s clicking and clacking accelerated and grew louder. Then he swept the other three men. The detector responded the same way to each.

“Creepers,” Frank said. “You’re *all* creepers. And *you*, Candlepost—you’re the piece of shit creeper who killed my son.”

“I’m afraid you’re, ah, you’re *horribly* mistaken,” Candlepost said with a quaking voice. Seated at a small desk, he maintained a trembling smile. His jacket was slung over his chair, and his fingers, slightly palsied, clutched at the tie hanging loose around his neck. “I’ve lived in the present … well, my entire life. I’ve never hurt a single creature, beyond a gnat, perhaps.”

“This machine doesn’t lie,” Frank said. “You’re a creeper. You’ve come to Space City to sabotage the space colonization project. In the future, you’ll kill my son Leonardo when he refuses to help you. What I want to know is *why*. Why wouldn’t creepers want humanity to abandon the planet and leave it to them?”

Candlepost stared at the chronome detector, which continued emitting a steady racket. “Ah … is that … is that a Westerfeld Model 2045-B Convertible? Not the most up-to-date unit, but a good, reliable machine, in my experience. Very rugged. If, if I might offer a suggestion. Are you familiar at all with the work we do? That I, ah, used to do, until very recently?”

“Supposedly you’re all engineers with the Heavy Lift Project.”

Candlepost’s face brightened. “Yes, yes, exactly. Our mission is to work on alternatives to the space elevator, should that effort to transport men and materials into orbital space prove unfeasible. I don’t know how aware you are of the massive, *massive* amounts of energy required to propel an object beyond the bounds of Earth’s gravity. Conventional fuels and propellants have the enormous disadvantages of being heavy, bulky, and quite unstable. We’ve been working on an alternative—unlocking the virtually limitless energy which lies in the heart of the chronome particle, but in a controlled manner.”

Why does he say this as though it’s a new initiative? “So you’re repeating the work Dr. Bertolt Penheimer did before the Great War?”

Candlepost looked confused. “Who? I’m sorry, I don’t recognize that name.”

He doesn't know Dr. Penheimer's work. Drawing energy from chronome particles ... they all think this is fresh science. Apparently chronome science was like a pirate's treasure chest that had been abandoned and forgotten about, covered over by drifting sands, and then dug up and discovered anew. *But can they really be completely unaware of what that giant black mushroom rising between their complex and Iron Horse once was, while they're building a smaller version of it? Wouldn't scientist creepers who bounce back and forth through time know better?*

"The reason I bring this all up," Candlepost hurriedly continued, "is that the three men with me are regularly exposed to chronome particles in their work, as was I until three weeks ago. At the end of each workday, we go through a series of disinfectant showers and chemical baths. However, some residue typically remains, and it aggregates over time. This is not believed to be harmful, for we work only with standard chronome particles, not the malignant variety. I do believe, sir, that your Westerfeld Model 2045-B is reacting to the standard chronome particles embedded in our skin."

"*Wrong*, creeper," Frank said. "I calibrated this unit just yesterday. I adjusted it specifically to react only to high concentrations of *rogue* chronomes."

"Might I take a look at it?" Candlepost reached for the detector's wand. Frank pulled it away and aimed the gun at his chest. The old man blanched. "Oh … please pardon me … I didn't intend to act in a … a *provocative* manner. I only wanted to examine your instrument, to make certain it is in proper working order. Given the circumstances, the seriousness of your charges, is that such an unreasonable request? Might I have a look?"

Frank said nothing. He concentrated on the other three men, watching to see if any of them would try to take advantage of Candlepost's attempted distraction to bolt. He thought about Candlepost's business card, left on the bloody windowsill for him to find. *What if Erath left that card there to lead me to Candlepost? What if he* did *tamper with the detector, to frame Candlepost as a creeper?* Staring into the face of the man or creeper

who would shoot an older Leonardo to death made it hard for Frank to raise his logic above his emotions.

"I promise not to damage it," Candlepost continued. "I merely want to have a look inside its casing. I—I've heard stories of what happens to CAHSPAMs. This truly is a matter of life or death, isn't it?" He looked beseechingly at Frank, his tired old eyes electric with pleading. "If you have even a shred of fairness in your heart, won't you allow me to at least *try* to prove our innocence?"

Frank stared at the four terrorized old men. Not a one of them looked as though he could pose a threat, even to Eshrae. He lowered the chronome detector to the floor and pushed it with his foot across the dirty carpet to Bradford Candlepost.

Candlepost slowly knelt and picked it up. He placed it on the desk, then opened the main unit's access plate. He pulled the weak table lamp closer and used a magnification glass to get a better look at the unit's innards. After a moment, he looked up at Frank, a dazed but hopeful expression on his face. "Ah, I cannot in all honesty state that I am a, well, an *expert* on the internal schematics of these machines, although I have many years of familiarity. However, it does appear to me that this particular unit has been, ah, tampered with." He looked to one of his companions. "Charles, you perform maintenance and minor repairs on the project's chronome detectors, don't you?"

"*Yes*, yes I do!" Charles responded, wiping sweat from his palms. "I maintain our full line of Westerfeld detection equipment. I'm factory certified."

"So you would be better qualified than I am to evaluate this unit's wiring." Candlepost looked to Frank again. "Would it be possible for him to come here and have a look for himself?"

Frank slowly nodded his head.

Charles joined Candlepost at the desk. "Look at this particular wire here," Candlepost said. "It's kinked, and the soldering doesn't look quite right."

"Oh, *yes*!" Charles said. "Those two wires have been snipped, wound together, and then resoldered to the wiring board. There's no doubt! The

resoldering job is very crude. I can't see how it was performed by a trained technician. This unit has *definitely* been tampered with!" He looked up at Frank. "Come, come see for yourself. It's glaringly obvious. Even a first-week electronics student could tell!"

Frank walked to the desk and stared down at the internals of his chronome detector. It looked like a wad of tangled spaghetti, each noodle dyed a different color. Charles pointed at the wires he insisted had been tampered with. His fingers shook, and Frank could hardly tell one wire or lump of solder from another. He felt furious at his chronome detector—it should give him unarguable evidence of these men's assertions, one way or another, and yet it refused to. "I can't see it," he said.

"But, but, it's *obvious*—!" Charles stuttered.

"That's exactly what I'd expect you to say if you were a creeper," Frank said. "Get back there with your two friends until I decide what to do with you."

Shoot first. Figure it all out later. That's what Erath had drummed into his head regarding creepers. But he wouldn't let himself be Harry Erath's puppet. He turned to Candlepost. "I came in late to your story about what's supposedly in those mushroomed documents. So the NSCA plans to shoot the entire population up into deep space. No surprise there; that's what they're funded to do. What's made you creepers so afraid? You should *want* humanity to leave Earth—no one would be left to hunt you."

"Brad, be careful," Dan quietly warned.

"*He* deserves to know, too," Candlepost said. "Especially someone like him." His face brightened with relief. He turned eagerly to Frank. "Something you just said—it *proves* we aren't creepers! If we were, of *course* we would want the NSCA to succeed in its mission. But we're all fully human. All subject to what our agency intends will happen to the people it sends into space. Read it yourself. It's all here, in this photostatic copy." He handed the copy to Frank. "Whether by way of a space elevator or transports powered by our chronome engines, great ships will be loaded with hundreds or even thousands of sleepers, people told they are being sent to a new home. After the vessel travels beyond Earth's gravitational field, the ship is primed to automatically explode. They're all incinerated, their

ashes floating in the vacuum of space. Oh, the NSCA will make sure to feed false reports to those who remained behind, saying that all is well with the travelers. But over time, the whole population of North Emericus will be exterminated in deep space. Surviving populations on other continents will be invited to join the exodus. At some point, Earth will be cleansed of humanity. No bodies, or even particles of bodies, will remain behind. That way the slain will never rise as ghosts that become creepers; or at least that is the theory. The last cosmosnauts to be launched and exploded are the conspirators themselves, who will die knowing they have succeeded in cleansing the stricken earth of humanity."

Genocide, scrawled in blood on my window …

"That's a lie," Frank said. "That's a *filthy* lie. You're trying to convince me you're human." He thought about the middle-aged Leonardo, talking defiantly to the muzzle of a gun about a plan that could never be derailed, not even with his death. "My son would never agree to be a part of that. *Never!*"

"I'm afraid it is the truth," Candlepost said. "The outline of the plan is here. Many details of its implementation can be found in the other documents I've hidden."

"But if they wanted to kill everyone, why wouldn't they round up their enemies and shoot them, like the Goethans did in the Great War? It's cheaper and faster than a fake *space program*! Why not just *sterilize* everyone? Then we'd all be gone within a couple of generations!"

"I gave you the answer," Candlepost said. "They considered all that, a hundred and twenty years ago. But the problem was the CAHSPAMs, the creepers. If they conducted the genocide on Earth's surface, or if they forcibly sterilized the entire childbearing cohort and waited for the current generation to die of natural causes, they could not be certain the deceased would not at some point return as creepers. And then the whole project would have been for nought. You see, the prevailing theory is that *we*, the living, are the ones who attract the creepers. Conventional methods of killing or mass sterilization could not be guaranteed to be one hundred percent effective; there would almost certainly be some survivors. So the creepers would continue to manifest and, eventually, to breed. But

exterminating the populace in deep space, where particles of the bodies would never reenter the Earth's ecosphere, would ensure, so it was thought, that creepers would stop manifesting. Sterilization was considered as a method to shrink the population to a number small enough to launch into deep space. But no one knew how many generations it would take to master the technical complexities of space flight. Forced sterilization risked cutting off the supply of workers too early. So voluntary family-size reduction was strongly encouraged, with the knowledge that small groups, either for cultural or religious reasons, would continue to breed, and future scientists and engineers could continue to be trained—"

"Like my son? Like Leonardo? You're telling me he's going to be indoctrinated to participate in *the complete genocide of all humanity*? And he's going to go along with it? Commit to it so strongly he'll submit to you *murdering* him rather than betray his agency?"

The weight of it crushed his heart.

"I—I have no idea why you continue to insist I have killed your son, when I've never even touched a weapon. Yet what I've said is true. It's why I've been shunned and silenced, why just by speaking with me, my friends put their careers at risk."

"I'm going to shut your mouth, Candlepost. I'm going to break your fingers so you'll never pick up a gun, *never* aim it at Leonardo."

"Brad, for pity's sake, *please* stop talking," Dan said, panicked. "You're infuriating him. Look at his face—"

The men who'd been reciting drinking songs in the lobby stumbled into the second-floor corridor, still raucously singing. Jonathan bolted toward the door. "Help, *help*!" he shouted. "We're about to be *killed*!"

"Fucking *hell*!" Frank said. He whipped his silenced pistol around and shot Jonathan in the back. Dan and Charles also ran for the door. He shot them, too. Mechanically, methodically, according to his training—one bullet in the back, a second in the back of the head.

No thinking. His body acted autonomously, as Erath intended it to. Bradford Candlepost clutched his document to his chest. Frank shot him through the heart, the bullet first passing through the sheath of papers. Pages of photostatic copy scattered throughout the small room. Candlepost

tumbled off his chair. Frank emptied the remainder of his gun's magazine into the old man's body. His feet hummed with vibrations as the slugs embedded themselves in the floor.

Only then was he able to think. An awful thought arose. He'd just made Leonardo's murder a certainty.

I—I've set it all up, haven't I? With my own gun, I gave Candlepost a violent death ... and made it a sure thing he'll eventually return as a creeper. To murder Leonardo.

He heard the room's sole window slide open. Before he looked up, he thought, *Erath, I hope you're damn well satisfied now, you fucking bastard.*

But it wasn't Harry Erath who entered the room from the fire escape.

It was Waning Moon.

An older Waning Moon than the one he'd killed at the buffalo station, older than the one he'd briefly seen in the Lunar Diner, about the same age as the one he'd met on Kraken Island. Dressed in a formfitting black jumpsuit and a red scarf, this Waning Moon held a knife with a long blade.

"Oh, Frank," she said sadly, glancing at the collection of dead old men on the carpet. "You unfortunate man. There's going to come a time when you'll terribly regret killing those four engineers. Especially Bradford Candlepost."

• TWENTY •

Seeing Double

“WHEN WILL YOU STOP *haunting me?*” Frank shouted. He rushed her to knock the knife from her hand.

She parried his lunge, as if she knew exactly what he’d been about to do. “When you do what you’re capable of doing,” she said. “When you free me and others like me from endless loops of death and resurrection.”

Wisps of other women, dressed the same as this Waning Moon, floated through the window and strobed across the room. The flickering ghosts shadowed her moves, darting either just behind or just ahead of her.

What—?

She took advantage of Frank’s distraction to slash the fingers of his right hand. She struck his bleeding hand with her fist and knocked the gun out of his loosened grasp. It skittered across the carpet.

He leaped for the gun. Its magazine was empty, but he had a spare clip in his belt. The ghosts reached for it, too, homing in on it like a wheeling flock of black swans, superimposing themselves on each other until they looked almost solid. The fully manifested Waning Moon reached the weapon first, as though she’d known exactly where its ricocheting path would take it.

“It’s getting crowded in here,” she said. “Too many of me. All trying to reach you, all of us too late.” She darted to the open window and threw the pistol across the alley. It landed on the roof of the engine oil recycling plant next door. Then she slipped out onto the fire escape. “Come and get me, Frank,” she said. “Let’s see how fast you’ve gotten.”

He unsheathed his own knife and slipped free of the encumbering harness of his artificial tendarms. Then he chased her through the window.

Rather than descend the metal stairs, she'd slid down a rope attached to the railing. Already, she'd nearly exited the alleyway. His injured hand, slick with blood, prevented him from using the rope himself. Instead, he placed his knife between his teeth and jumped from the third-story landing, trusting in his training and his newly augmented leg muscles to cushion his landing.

He landed well, avoiding twisting an ankle or knee. But he caught himself with his hands, and the impact with the pavement split the gashes on his right hand wider, making them bleed more profusely. He was forced to hold his knife in his left hand, a hand he'd practiced little with.

He ran to the mouth of the alleyway. *Glad for this*, he thought. Adrenaline amplified his anger so that he quivered like a struck gong. *Don't have to think about Leonardo. Don't have to think about genocide. Just have to hunt.*

He spotted her half a block to the left. She fled past a bus repair depot, heading for the river. She had a decent lead on him, but he knew he was faster. Was this the same Waning Moon from Kraken Island? She looked the same; the same wisp of silver ran through her long black hair. He'd ask her once he'd trapped and disarmed her. He'd question her about those phantoms up in Candlepost's room, too. He'd beat the information out of her, if necessary. And why not—hadn't he just done far worse? Murdered four unarmed old men? Set his own eldest son's future death in motion? Was he even still Frank Helios? Or had he become Frank Hel, a robot made of razor blades?

He pursued. The heaving of his lungs combined with the pain of his right hand emptied his mind, at least for the moment.

She darted left, vanishing around the corner of the fish processing plant, heading for the piers fronting the river. He would cut her off—she'd have steps to climb, landings to mount, whereas he had a level street to run, and he was faster, besides. He'd trap her between the plant and the river.

He heard a sound to his right. Heels clicking against paving stones. He glanced right, down a side street. He saw Waning Moon cross the side street in parallel with him, a block to the south. How had she managed to circle around behind him?

She can't *be that fast—even Erath isn't that fast.*

It wasn't one of her ghosts wearing that red scarf—the sounds her boots made indicated full solidity. She made that point emphatic by halting and *whistling* at him, as though he were a dog she feared might otherwise lose the scent.

Part of him warned that this was a trick, told him he should continue circling toward the river. But if he did that, and his instinct proved faulty, he'd lose her entirely. Not that she seemed to want him to drop her trail—she lingered at the corner, waiting to see which direction he'd head in. He turned south, and she began running again.

He put on a burst of speed. The distance between them narrowed to half a block, then a third of a block, then a quarter. Then he was nearly on top of her. Her scarf billowed behind her. That red scarf. He reached for it. He'd reel her in like a time-lost fish—

His feet got tangled in a mass of ropes slung across the sidewalk. He heard a scraping sound from the roof above. Metal screeched as a gutter tore loose. Then something smashed the back of his head. Pieces of broken packing crate rained around him as he pitched forward. The blows nearly battered him into senselessness. But he managed to avoid landing face-first on the paving stones. Sagging heavily on his knees and palms, he shook his head to dispel the flashing turbidity. He probed the back of his head. His hair was damp and sticky. The ropes had been tied to a crate on the roof. *Twice* she'd managed to bloody him, and he hadn't yet laid a finger on her.

He forced himself to his feet. It wasn't until he'd pursued her nearly another block that he realized he'd left his knife behind. It was too late to go back for it. He'd have to rely on the strength of his one remaining good hand.

She led him on a course paralleling the river, east toward the mushrooming peaked roofs of Iron Horse protruding from the marshy earth. Frank found it increasingly difficult to run. Maybe it was the blows the deadfall trap had brought down on his head—he felt lethargic, almost sleepy, as though he'd suffered a concussion. His legs grew heavier. He pushed himself harder, knowing Erath might be out there somewhere in the

darkness, watching. What would be the price of Frank's failure? More reductions in his family's rations? Threats against his children?

Streetlamps grew increasingly scarce the closer he came to the edge of Space City. More than once he had his elusive quarry almost within his hands, only to see her slip inside a storefront or factory side entrance that had been left unlocked. Then she'd reappear, seconds later, behind him, to shatter a board across the back of his neck or bludgeon the wound on his scalp with the shaft of her knife. She was like a jack-in-the-box, springing forth from whatever direction he wasn't looking. It was as though she could become a ghost at will, able to walk through walls to avoid him, then transform back into a creeper in time to land a painfully solid blow. Yet despite multiple opportunities, she never sank her blade into the back of his heart. She only frustrated him, hurt him, slowed him down, then invited him to give chase again.

By the time he reached the barren field that separated the grimy industrial outskirts of Space City from Iron Horse, his breath came in ragged gasps. His feet felt as though they were encased in iron blocks. He shouldn't be this exhausted, not after months of running twenty miles a day; whatever affected him was more than a mere concussion. He stumbled after her in the moonlight. The orb's illumination appeared then disappeared, masked or unmasked by swiftly moving clouds. Sometimes he saw one red scarf bobbing across the field. Sometimes he saw two. One, two, fifty, a hundred Waning Moons—she had to be approaching exhaustion, too, and if he could just keep moving, eventually he would catch one of her.

She reached Iron Horse just ahead of him. A river fog covered the ground. It made it impossible for him to see his feet or his burning legs. Waning Moon headed for one of the pitched roofs protruding from the ground. She threw open a small attic door and vanished inside, quick as a rabbit finding its hole.

Fuzzy-headed as he was, Frank knew better than to run straight in after her. Instead, he found a utility cart that had almost entirely emerged from the soil, rocked its wheels loose from the mud, and dragged the cart against the attic door, wedging it beneath the sloped eaves so that it would

be impossible for Waning Moon to open the door from the inside. Then he circled the partially emerged house, searching for a second entrance.

He found a small ventilation window, just big enough for him to wiggle through. He worked a brick loose from the edge of a neighboring roof's chimney and gripped it with his injured hand, then wrapped his jacket around his right arm, armoring it to use as a parrying club against knife thrusts. He removed his flashlight from its belt harness, although he didn't click it on yet.

He quietly removed the window's screen mesh panel. Then he went in boots-first. He dropped about three feet. He clicked on his flashlight as soon as he landed. He saw her crouching in the corner farthest away from the window. Why didn't she immediately attack? But she only stared at him, an expectant look on her face. It wasn't, he realized, the same face he'd seen in Candlepost's room. Not quite. This was a younger Waning Moon, with a scarred mouth and a broken nose that had healed badly.

He heard a slight scraping sound behind him. He whirled about just in time to see a second Waning Moon—the older one—drop to the floor from the window. He raised his brick to strike her, but she headbutted him in the solar plexus, pushing him backward. Offbalance, flailing, he saw the younger woman unwind a rope that had been tied to a wall hook. Frank felt a rush of displaced air as something fell toward him. Instinctively, he covered his wounded head with his arms, but nothing bludgeoned him, not this time. Instead, an unfolding metal cage clattered down around him. Its falling edge hit his left hand and knocked the flashlight loose. In its careening beam, he saw the two Waning Moons rush to hook the cage's bottom edge to the floor.

The one with the streak of silver in her hair lit a lantern. Frank could see details of the room that had been previously hidden in darkness, such as a wooden rolltop desk and wallpaper decorated with a pattern of primitive locomotives and carriages.

"Now we can talk," the woman who'd lit the lantern said, "in the little time we have left. Poor Mr. Candlepost and his friends told you some of what you'll need to know. We'll fill in more. I hope you're able to take this in. I apologize for the dose of animal tranquilizer you absorbed when I

cut your hand. It lowers your mental acuteness, unfortunately. But it was necessary—experience has shown we never get you this far without using the tranquilizer. Either you kill us, or we're forced to injure you so severely you're unable to listen at all."

"How … how are there *two* of you?"

"There are many more than just two of us. In fact, that is becoming a problem. Every time I return to this date and place, I find myself more crowded by me-sisters. So far, it has worked to our advantage, but I fear we'll soon start tripping over each other's feet."

"Maybe we'll have to begin working in shifts," the younger Waning Moon said. Her voice was slightly slurred by her scarred mouth. "Like working at the Lunar Diner."

"The diner?" Frank directed his muffled attention to her. "Are you the waitress who ran away when I came in for breakfast yesterday? You weren't scarred then, and your nose wasn't broken. Did you climb the fire escape to the window of my hotel room and get shot?"

"Yes to both questions," she said. "Although what was 'yesterday' to you feels like several lifetimes ago to me."

He felt as though he were swishing around in a whirlpool of molasses syrup. "I don't *understand* … it takes days, sometimes *weeks* for a ghost to transition into a creeper. You wouldn't—you wouldn't have had *time* to return after Erath killed you."

"Time is all we have," the scarred young woman said. "Too *much* time. Endless time." She touched her bent nose, which curved grotesquely to the left. "This is from September third, 2074, compliments of a rifle butt wielded by a future compatriot of yours, a man who hasn't yet begun his training." She ran her fingertips across her mouth. "Your friend Harry Erath will slash my face on March twenty-first, 2065, just prior to puncturing my right lung." She unwound her scarf, revealing pink scars across her carotid artery. "Slit throat—once in 2051, again in 1987." Then she unzipped the rear of her jumpsuit to show Frank her shoulders and upper back. In the lantern light, he saw two healed ballistic entry wounds, one between her shoulder blades, the other just beneath her heart. "And these are from what

you think of as last night, October eleventh, 2054. Two thirty-caliber bullets from Harry Erath's sniper rifle."

"You—you still—"

"I still haven't answered your question? How was I able to return so quickly? I didn't. After being murdered in your yesterday, I first returned in 2056. Next I returned in 2061. Then I manifested in 2076, the year everyone dies. That's when radiation poisoning will kill the entire remaining population. Hitting that wall, I 'bounced' backward. First to 2069. Then to 2054 for the second time I landed in this year, six deaths after fleeing you when you entered the Lunar Diner. On to 2002, where my throat was first slashed. Then to 1987, where it got slashed again. To 1962, when my windpipe got crushed. Then, still falling backward, I hit the wall in 1946, like we all do eventually following a series of violent deaths. And then I 'bounced' forward again, a prisoner of time's rubber room. More deaths propelled me forward. Now? Now I find myself in 2054 for a third time."

Frank's mind reeled. He felt sick, either from this vertiginous revelation or the animal tranquilizer. Likely both. Desperate to stop his interior whirling, he clung to the image of a young, enormously pregnant Waning Moon descending the stairs of Malvechio's home at the buffalo station. "What about my brother? You haven't said anything … about Malvechio, and Malvechio's baby."

"*I* never fell in love with Malvechio Helios," she said. "That was another of my me-sisters. I ran away from my village when the grubbers came to annihilate it, but I didn't seek refuge in Buffalo Station Latosaka-One."

Frank said nothing for a few seconds. His mind continued woozily pinwheeling. "The business card?" he said at last. "Did you leave me the card with … with Candlestick's address?"

"The card was from me," she said. "I didn't tamper with your chronome detector, though. That must've been Harry Erath's doing."

Frank thought about the oceanic currents of time that Sirena had described. He felt himself adrift in a cold ocean, surrounded by circling sharks.

“I’ll have you know, Frank,” the older Waning Moon said, “it’s a precarious balancing act we perform. Walking a line between telling you too little and telling you too much. Too little, and you won’t make the extraordinary efforts you’ll need to in order to break the banks of time’s river. Too much, though, and we risk making you overly cautious, too quick to second-guess your every choice. Already, we may have acted too late in this rendition. Those four engineers you killed, their deaths will likely be blamed on creeper saboteurs. The incident may prompt the national government to institute truly effective security measures in Space City. And that may prove just enough to reinforce the banks of the timestream, preventing any lasting change from occurring. In some versions I’ve witnessed of the years ahead, you implement those heightened security measures yourself.”

“‘Time’s river,’” Frank mumbled, “‘banks of the timestream’ … You said similar things before, when you came to me in the cinema theater on Kraken Island. That *was* you, wasn’t it?”

The older Waning Moon shook her head. “I don’t know where Kraken Island is,” she said. “In all my incarnations, I’ve never traveled to an island. It must be another me-sister you met. But let me try to make things clearer for you. Imagine the segment of time between 1946 and 2076 as an enormous rubber room. Do you know what a rubber room is?”

Frank nodded. He’d heard them use the term before, as far back as the day of the earthquake. “Slang term … isn’t it? For a padded cell in an insane asylum?”

“Yes. Thanks to two worldwide rogue chronome infestations, one in 1946 and the other in 2076, a one-hundred-and-thirty-year-long segment of time becomes a vast padded cell in an insane asylum. Its inmates number thousands, then hundreds of thousands, and finally millions of souls. What do you think happens to a creeper when you kill her?”

He tried to remember what Sirena had told him, but clear memories eluded him. “Always thought … she stays dead … until she manifests from the past again, like … like a mushroom that won’t stop growing, no matter how many times you … kick it off your lawn …”

“When you kill a creeper, she is bounced into the future. When a creeper manifests in your present, she has been bounced forward from some date in your past when she died violently. Violent death sparks resurrections which flow from past to present, from present to future, until a creeper finally reaches the year 2076, the year the entire remaining population of our planet dies from radiation poisoning. That year acts as one of the walls of the chronal rubber room. The direction of the bouncing then changes—future to present, present to past, unless the impact with 2076 is so powerful that the creeper bounces all the way back to 1946, the end of the Great War, the year when the oceans first became infested with rogue chronomes. No creeper bounces back earlier than that barrier year. When she strikes that wall, she rebounds back into the future from whence she came. Sometimes she is bounced thirty years, sometimes fifty, sometimes a hundred and thirty, until she hits 2076 again, and then she begins her return to 1946, making a new bounce backward with each new murder or violent death.”

Frank desperately flailed for mental focus. “What … what will happen in 2076?”

“By that year, the concept of the space elevator will have been abandoned as a failure. The National Space Colonization Agency will attempt to launch its first load of citizen-cosmosnauts into deep space from a surface launch pad, inside a ship powered by a chronome generator.”

“What Candlepost and the others were working on,” Frank said with difficulty, “chronome engines to power genocide ships …”

“Yes. In most renditions, it is the intention of the Agency to dispose of this first load of passengers beyond Earth’s gravitational field. Although in some renditions I’ve witnessed, NSCA has abandoned the goal of genocide and truly intends to colonize other worlds. Their intentions don’t matter, though. Intentions make absolutely no difference, for the outcome remains the same. The ship’s giant engines suffer a catastrophic failure less than three minutes after launch. The ship explodes with the brightness of a hundred suns. The entire continent is bathed in a shower of rogue chronomes. Everyone who had been waiting for passage on one of the other ships dies, either immediately from blast, within hours from burns, weeks later from radiation poisoning, or months later from fast-acting cancers.

And they are all bounced into the past. To meet those of us who were sucked through the one-way membrane of 1946, to join us in the endless cycle of violent death, ghostly manifestation, struggle, violent death, and increasingly hated rebirth."

Frank, unable to stand any longer, crumbled to the floor. The older Waning Moon sat on the floor next to his cage. "I have cycled from 2076 to 1946 eight times," she said. "Within those eight cycles, I have experienced forty-two rebirths, thirty-seven murders, two accidental violent deaths, and two deaths by my own hand to prevent a more grisly fate at the hands of a grubber. I could show you my scars, but it would be redundant, and we haven't much more time. My me-sisters and I were born in the year 1808, one hundred and thirty-eight years earlier than the enclosed chronal segment, in the region you know as the Latosaka District, which we called L'Stawka. The 1946 wall is permeable from one side only. Once you are drawn through it, it is impossible to pass through again, to go earlier than 1946. My cycles of rebirth would be almost acceptable if I could look forward to returns to my village and my family; but I can't. There is no escaping from the rubber room once you are inside it. The bouncing … it never ends."

Frank fought to knit together the fraying edges of his consciousness. "Why tell me … all this? Do you still consider me … Time Breaker? If you've been around the circuit as many times as you say … doesn't that mean the future—the future *can't be changed*?" Hadn't he killed Bradford Candlepost? Hadn't he killed his son's future murderer and ensured Candlepost would return as a creeper to kill Leonardo? Didn't that mean Frank was as trapped as any of them? "What do you expect me to *do*?"

"Have faith that the future *can* be changed," she said. "Time's flows and eddies change constantly. You cannot see it, because you are fully embedded within the flow. *I* can see it—I *have* seen it. In some renditions, you continue on as a grubber. In others, you become the head of security for all of Space City. In still others, you leave this continent for the Island of Angland. But the banks of time's river are resilient and strong. New eddies in the flow are canceled by counter-eddies, by other new events which ensure that the main flow will continue on as it always has, as it seemingly

always will. We can only hope that the pressures we exert through repeated strivings are forming cracks in the river's banks—fissures that we cannot see and will not see until that blessed rendition when the scattered cracks marry one another and the fissure becomes a breach, and the unyielding pressure of time's flow at last becomes our ally as the river jumps from its old bed to one new and unforeseen. Only then will the second chronome disaster, the cataclysm of a hundred suns, finally never come to pass. And the wall of 2076 will vanish like a slug buried in salt. And we will be freed."

The lantern seemed like a lazy firefly, too forgetful or tired to keep itself continuously lit. "What can *I* do?" Frank asked. "I'm just one man … and I've already fucked things up …"

The younger Waning Moon approached the cage. "You can go to the island!" she said. "You can gather the good men there. And the ships—"

"*Silence yourself!*" the older woman cried. "Remember what I said earlier!" She turned back to Frank. "Guiding you is like threading a needle by starlight. A twitch of the fingers, and the opening is missed. By a foot or a hair's breadth, it doesn't matter. But remember this—you have knowledge and skills that other men do not, and you have ties to the past beyond the rubber room that are unique in all the world. This is what grants you special power to strike the banks of time's river, to enlarge the fissures. But we have only a moment left. Sister, give me the hypodermic injector. Quickly, before the grubber comes."

The younger woman placed something in the senior Waning Moon's hand. The older woman pulled Frank's left arm through the bars of the cage. A second later, he felt a jab in his biceps, followed by a burning stinging that spread quickly through the muscle. "Wha … *what* …?"

"A mushroomed virus," the older Waning Moon said. "During the time of the Great War, this area was used for military weapons research. One weapon your forefathers planned to use against the Goethan invasion fleet was a mutated flu virus. Extremely virulent and fast-acting. You will suffer severe weakness, terrible aches of the body, and continual vomiting and diarrhea. Your high level of physical conditioning should ensure your eventual recovery. We do this because you must be sent home. There is no

chance of your winning out against Harry Erath if you both remain here. He is too strong, too skilled, and he knows Space City far better than you do. You must go home, back to your place of special knowledge."

Frank heard faint scraping sounds that seemed to echo from miles away. He realized it was the sound of the cart being pulled away from the attic door.

"He's here," the younger Waning Moon said. She looked stricken. "I've been in this place such a short time."

"The briefer manifestations are the easier ones," the older woman said. "Good luck in your next incarnation, sister, should you have one."

"I pray neither of us do."

A powerful kick dislodged the small attic door from its hinges. Harry Erath burst inside, a pistol in each hand. Four shots later, the two Waning Moons had both been dispatched to an earlier time. Their fleeing spirits left behind corpses scarred with wounds both old and fresh.

Erath jauntily strode to the cage. He cast a wry frown upon his student, who was now barely conscious. "Lousy marks all around, Frank. You left a real mess at the Craters Lodge, and you didn't even call in a cleanup crew. And now …" He whistled. "Bad enough you let yourself get caught in a cage like some brainless turkey. But to let yourself be beat up by a pair of *girls*? Pitiful."

Frank experienced a brief feeling of gratitude as the animal tranquilizer finally snuffed out his senses and pulled the plug on Harry Erath's laughter.

• TWENTY-ONE •

Family Reunion

"HOW ARE YOU FEELING, Frank?" Harry Erath asked.

Like shit on toast.

"Guess you're feeling better, then," Erath said.

Where am I?

"Don't you recognize your own living room? You're home, in New Shining Capital. You've been home from the hospital four days. It was a close thing."

I'm home ... Where is my family?

"Out."

Have you done anything to them?

"No. Any reason I should?"

Did you tamper with my chronome detector so that Bradford Candlepost and the others would register as creepers?

"Candlepost was a traitor. He needed killing. The others? If they were willing to listen to him, I guess they needed killing, too. It all got blamed on creeper saboteurs, anyway."

Did you read the document Candlepost salvaged?

"Didn't need to. I already knew what was in it."

But—but you said the reason you hate the creepers is that they want to take your children's and grandchildren's spots on the colonization ships. If you know the ships will be wired to explode in space, then how could you —

"It's called *lying*, Frank. It's something we adults have to do now and then. If a little playacting on my part is what it takes to get you to do what I need you to do, then so be it."

I thought you loved your children and grandchildren? You convinced me there was at least that much decent about you.

"I *do* love them. Who said I don't? My children and grandchildren will be dead by the time those ships finally go up. My grandkids won't have children of their own. As for me, I'll be burned out and buried decades before the NSCA manages to get anything serious off the ground."

So the extinction of the human race doesn't disturb you?

"Not especially, no."

"Frank, you need to get better. Your department needs you to pull through this."

Jenerette?

"Yes."

Am I being put on the grayhead drugs?

"Not if you die, you won't. Sorry. If you pull through, you'll be given a last assignment before the drugs."

Kraken Island? The Saint Indianna? Is she ready?

"That old tub's loaded with every bit of explosives we could stuff in her. All she's waiting for is her pilot."

His head was clogged with syrup. His stomach overflowed with bile that tasted of vinegar. The syrup dripped down his throat into the pool of vinegar, and his dry heaves started again.

Had his conversations with Erath and Jenerette been real, or a fever dream? Frank couldn't be certain.

But then he fell into a dream that he was sure was a dream, in which he was aware of being a dreamer. Then he forgot he was dreaming, but then remembered both the knowledge and the forgetting, without an ability to awaken, trapped in the hold of the fever.

He was hot. Then he was terribly cold. Shaking so hard he feared his teeth would vibrate loose from his jaws and tumble out his mouth. *If I die*, he wondered, *will this count as being murdered? Will I go forward in time and be resurrected?*

In his dream, he died. But he went backward rather than forward in time.

Going back in time was like sitting in a cinema theater while the projectionist ran the film in reverse at rapid speed. It felt like walking the bottom of a swimming pool weighted down by his father's boots, watching the sun pulse and shimmer like a luminescent jellyfish overhead.

He came back on the final day of Primo's illness. The day his oldest son's weakened lungs would at last stop pumping, and Primo would depart the earth, never gaining a tendarm of his own, leaving only a hole behind in the lives of Francesco and his family. A hole, Frank realized, that could never be filled, no matter if he and Aleedia had twenty more sons. Not even little Eshrae, precious as he was, could fill that boy-shaped void.

The room smelled of illness, of old, sour phlegm. He saw Aleedia and himself sitting beside the bed, each holding one of Primo's hands. Could they see their visitor? Had Frank become a creeper yet, or was he still a ghost? Oddly enough, they were the translucent ones, not he. He and the dying boy were the solid figures in the room.

He had to have Primo again. He couldn't bear another day alive without his firstborn son. And now, thanks to the Waning Moons, he was cursed to live endless lives knowing Primo was dead, every eighth or tenth resurrection ending up back here, forced to watch his son slowly asphyxiate. Even Harry Erath couldn't have designed a more perfect hell.

He felt himself grow solid. A large man entered the room. He was as overmuscled as Harry Erath. Frank recognized his face instantly. His heart swelled.

Dad, it's so good to see you. I can't tell you how much I've missed you.

Tommy Helios shot Frank Helios through the forehead.

Frank bounced all the way back to the year 1946. He stood on the bank of the Tomaic River and a wave as tall as the Washerman's Monument roared in from the east and swept him away.

He bounced forward to the year 2076. Standing by the mushroomed basalt dome between Space City and Iron Horse, he and the mushroom were vaporized when the chronome engines of the initial transport rocket

carrying eight hundred sleeping passengers catastrophically exploded in the upper atmosphere.

He bounced back to 1946 and drowned when the hull of his submarine the *Tridentfish* was crushed by an underwater shockwave.

He bounced forward to 2076 and died of radiation poisoning.

And he bounced and he bounced and he bounced.

* * *

"Francesco, you've *got* to drink something. Just a little broth. I know your throat is stripped raw, and you won't hold most of it down. But *some* of it will stay down. You'll die without it."

Frank opened his eyes. He was on the pull-down bed in his living room. He dimly saw Aleedia and Leonardo hovering over him.

"Leonardo," Aleedia said, "force your father's mouth open. Adriano, hold down his legs."

"Nuh—*no*," Frank managed to gasp. "I—I'll drink some. Don't force it on me."

Aleedia stared closely into his face. She removed a damp cloth from his forehead and felt his head with her palm. "Fever's broken, thank God," she said. She looked considerably older than the last time he'd seen her. "Francesco, do you know who's here with you?"

"My—my wife. My family …"

"Not Primo? Not your father? Not Harry Erath, whoever that is?"

"No. You're my wife. Aleedia. And I see Leonardo. And Adriano." He struggled to raise his head so that he could look around the room. "I see … I see Prima. And Victor and Bertonio. Where … where are the others …?"

"The littler ones are staying with neighbors until you get well."

"Is Eshrae all right?"

"He's fine."

"And … and the baby …?"

“She’s fine, too. A little colicky, but healthy, otherwise. Prima brings her to me when I need to feed her. You’ll see her later, when you’re stronger.”

“I think—I think I’ll drink a little of that broth now.”

She lifted a cup to his lips. The broth was lukewarm and salty. He swallowed a tiny sip. It burned the back of his mouth and his throat on its trickling descent. He waited for it to reach his stomach. Its arrival induced a small spasm, but the muscular contraction did not proliferate. The sip stayed down, and he realized how ravenous he was.

“More,” he said.

“Francesco, would you like to hold your youngest daughter?”

He’d been staring at Flora as she’d sucked at her mother’s breast, marveling at her perfect, tiny features. Those fingernails, so minute, as polished as shrunken pearls. Her lips, seemingly more fragile than rose pedals, yet strong enough to suck pints of milk from deep within Aleedia’s breast. Her thin legs, just beginning to develop a trace of welcome chubbiness. Her eyes, which should be empty of knowledge, but which seemed to brim with the wisdom of a grandmother.

“Francesco, did you hear what I said? It’s okay to hold her, even without any protective gloves. She hasn’t gone for her operation yet. That won’t be until next month, or whenever she reaches fifteen pounds.” Aleedia rose from her chair and approached the fold-down bed where her husband lay. “Here, darling. I know you must be eager to hold her. The visiting nurse said you haven’t been contagious for a while now, so you don’t pose any danger to her.”

Danger? He stared down at his hands. The hands of a killer. He couldn’t picture those hands holding his infant child. “I can’t,” he said. “I shouldn’t.” *I no longer have the right to hold a child.*

“I won’t let you drop her. I’ll be right here.”

“Aleedia …” As he stared into his wife’s eyes, a sob caught in his throat. “I … I’ve *changed*. I’m not the person you married. I’m not the man

who conceived this little girl with you. They've made me into … something else."

"You're still my husband, Francesco."

"I'm a killer. A murderer."

"I don't care what they've done to you or forced you to do. I *know* you, Francesco. I love you. The children love you. You must hold your baby so Flora will learn to love you, too."

"Aleedia, I don't know how to *do* human things anymore. Only *inhuman* things."

"Don't be ridiculous, Francesco." Aleedia forced Flora against Frank's chest. The baby squalled. "Now hold her, or she'll get upset and spit up my milk all over you."

Aleedia's milk was far too precious to waste. Frank cradled the baby. *His* baby. Her skin felt incredibly soft and smooth against his bare, scarred chest. Instinctively, he reached out to her with phantom tendarms, then remembered his mundane arms would have to do. His final child, the last one he and Aleedia would ever have. She squirmed and threw her head back, almost sliding off his chest. He steadied her. Slowly, slowly, his arms and hands recalled old muscle memories of parental ploys and calming caresses—the whole magician's cabinet of baby-quieting tricks he'd learned from the early days of Sophia and Arista, Prima and Eshrae, Victor and Bertonio, Adriano and Leonardo, and, yes, Primo, too.

After a few moments, Flora fell peacefully asleep on his chest.

"Dad, can I talk with you some?"

Frank stirred himself from perseverating on his fever nightmare of bouncing through time. "Of course, Eshrae. What's on your mind?"

Eshrae furtively glanced at his siblings and mother, who filled the small living room and kitchen. "No, I mean in private," he whispered.

"Privacy is a hard thing to come by around here."

"Don't I know it," Eshrae said under his breath. "Look, I know you still aren't feeling well, but could we maybe go out back in the yard? Just for a couple of minutes?"

“This is important?”

“Uh, yeah. To me, it is.”

“Bring me my robe and my boots, and we’ll go outside.”

The first snowfall of the season was two days old. A light snowfall, it sat half melted on the kitchen stoop’s steps and carpeted the bare dirt of the tiny yard they shared with the occupants of the two apartments above them. Frank watched his breath congeal, waver, and vanish like the battalions of phantasms he’d encountered within Kraken Island’s mushroomed cities. This was the first time he’d stepped outside since his return home.

“Eshrae, I shouldn’t stay outside more than a few minutes. I’d rather not get sick all over again.” Or would he? A relapse might suffice to keep him out of Harry Erath’s clutches another several weeks. In his current state, he was no match for even the feeblest of creepers.

“Okay, Dad.” Eshrae’s primary tendarm fidgeted. His self-generated tendarms, still hardly more than stubs, pressed against his back as though they wanted to burrow back inside him. “What I need to talk to you about … it’s, uh … it’s about girls.”

“Oh? Have you met one?”

“No,” Eshrae said quickly. “But … but I *think* about them all the time.”

“That’s perfectly normal, son.”

“No, Dad. I mean *all* the time. Like, I can’t think of anything else. Is *that* normal?”

“Have you spoken about this with your brothers?”

Eshrae made a sour face. “Leonardo’s always busy with Uncle Rumberto. He doesn’t have time for me. Bertonio and Victor would just laugh if I tried asking them stuff. They’re jerks.”

“What about Adriano? He’s more mature than Bertonio and Victor.”

“I’m not sure about Adriano. He might laugh, too. Some of what I’ve been feeling and seeing … it’s pretty weird.”

Frank cast his memory way back to his own twelfth year, to the weeks following his own gifting, and hooked long dormant images—bizarre, overwhelming, and, in some cases, repulsive. “You’ve been having

dreams and sudden memory flashes of women you've never met? Women who you seem to be having sex with?"

"*Yeah!*" Eshrae regarded him with awe, as though he were a mind reader. "How—how did you know?"

"Remember, son, I was given the prime, the tendarm of the ages, before you were. It has its own memories, and they span millennia."

"It's so *real*!" Eshrae exclaimed. "All those memories—they feel like they're *my* memories, memories of things I've done—"

"In a very real way, they *are* your memories now. They're the memories of a part of your body."

"Dad, how did you ever get anything *done*? I mean, how did you concentrate on your learning tapes? How did you learn to be a groundskeeper? All I can think about—is *girls*! I can't get them out of my head! I think about their mouths, and their breasts and hips, and—and—y'know, the place where you stick a tendarm—and I've never even *seen* a naked woman, but I know what they look like, and what they feel like, and even what they *smell* like and *taste* like—"

"It'll become less intense over time," Frank said, knowing this was small comfort. "The first few months after the gifting are the worst." He felt terribly guilty about not having properly prepared Eshrae for what the boy would experience. "Eventually, your own personal experiences with girls and women will override all but the most potent of the prime's memories. The need for this to happen … well, that's a big reason why possessors of a prime tendarm tend to marry young. I met your mother when I was seventeen and she was fourteen, and we married a little more than a year later. The years between twelve and seventeen were very hard for me."

"I, uh, I *know* … all about you and Mom." Eshrae seemed to turn a pale shade of green. "Ugh. That's … part of what the tendarm's shown me."

"Right … poor lad. It's not easy, to suddenly have memories of your parents' lovemaking. I went through it myself."

Eshrae's laugh was high and off pitch. "Yeah … I've seen *Grandma* naked, too. And ladies who I guess were my great-grandmother and great-great-grandmother. It's the images and sensations from long ago that are the *strangest*. The weird, heavy clothes women wore back then, with, like,

dozens of layers. And the perfumes … In some of the dreams, the women, they don't look all the way human. I mean, their faces are kind of smushed and squat, with big, flat noses, and they had lots more hair on their arms and legs, and their bodies were shaped differently than women's are today."

"The prime goes back farther than we can imagine. I remember those dreams, too. They could be frightening."

"I'd like to tell Leonardo … tell him he shouldn't feel bad about your not gifting him with the prime. Everybody acted like it was a big blessing for me. So far, it *hasn't* been. But I'm afraid he'd think I'm just making all this up, to try and get on his good side."

"Have the two of you been quarreling?"

"No. Like I said before, he's been too busy to pay me much mind at all."

"Eshrae …" He gingerly made his way down the stoop's steps and embraced his son. "I'm sorry it's been hard for you. I'm especially sorry I couldn't be there for you in the weeks after your manhood ceremony. I know … how it feels, to need a father who can't be there."

"Well, y'know, it hasn't been *all* bad." Eshrae squirmed out of the embrace, then traced a figure eight in the snow with his shoe. "Some of what the tendarm shows me—actually, a *lot* of what the tendarm shows me, so long as it's not about Mom—it's pretty, um, *interesting*. And, y'know, kind of, well … *exciting*. I can tell Mom's upset with me for skipping out on a lot of my chores. But she doesn't say anything; I guess she must understand what I'm going through. There's absolutely *no* privacy around *here*, so I've been spending a lot of my time at the big old house in Turtle Hill, the old Helios house, remember?"

"You go there alone? Eshrae, that's not safe."

"Oh, I'm not alone there. That's another thing I want to tell you. There are people living there now, and they let me use an upstairs room any time I want, for, y'know, privacy. And wait till you hear who they are, Dad! Grandpa Paulo and his pal Bertolt! You've got to come see them!"

"Oh, Eshrae! You've befriended *creepers*?"

Eshrae looked abashed. "Uh, yeah … but it's *Grandpa Paulo*, Dad! He's the greatest!"

"His friend—is his name Bertolt *Penheimer*?"

"The old guy? Yeah, I think that's his name. He's not real easy to be around. He babbles a lot—*nonstop*—about a bunch of stuff I don't understand. Science and particles and stuff, and how he's ruined the world but he's going to make it all better.

"But that doesn't really matter, because Grandpa Paulo's a super guy. I haven't known him long, but he's already my best friend—except for you, of course. He tells me stories about the war. And he gave me this book to look at, this *wonderful* book with lots of pictures of naked women. There's one girl in there—she's *beautiful*—and I've kind of fallen in love with her. I think about her and how she looks whenever the tendarm shows me stuff I don't want to see—like Mom—"

"Eshrae, stop. How often do you go to the house in Turtle Hill?"

"Every day. Sometimes two or three times. Like I told you, there's no *privacy* around here—"

"Have you ever seen a man following you in Turtle Hill? A man with large muscles like I have now, but older than me, with thin, silver hair and missing some of his teeth?"

"Uh, no …"

"I don't want you to go see Grandpa Paulo anymore."

"But *Dad*—"

"Eshrae, *listen* to me! I won't have you putting yourself in danger. Consorting with creepers is *extremely* dangerous! Every time you set foot in that old house, you risk getting yourself killed."

"No *way*! I mean, *how*? Paulo's my best friend, and Bertolt may be *weird*, but he's not dangerous—"

"Don't *argue* with me, Eshrae! I'm not saying the creepers would harm you. It's the men who *hunt* the creepers. They use knives and guns, and … and they aren't as careful as they should be to avoid hurting innocents. If you ever, *ever* see that man I described to you, I want you to run and hide. Do *not* talk to him. Don't let him get anywhere near you."

"Uh, sure, Dad, sure."

"And Eshrae, you have to promise me you'll stop going to the old house in Turtle Hill. Do you understand? *Never again*. I want to hear you

promise."

Eshrae stared up at him beseechingly. "But Dad, I'll go *crazy* if I can't, you know—if I can't get some *privacy*. What am I going to *do*?"

"I'll speak to the neighbors. Your mother told me the Rickendorfs' eldest two sons recently moved out. I'll see if I can barter something they need for a few sessions of 'privacy' each day for you in their spare bedroom."

"The *Rickendorfs*?" Eshrae made a sour face. "That's *creepy*. I'd feel like a *freak* walking in there to use their place for my business. Couldn't I just pick another abandoned house in Turtle Hill, one without any creepers living in it?"

"No. I forbid it. Angels' Night is only a few days away. In less than a week, most houses in Turtle Hill will be reduced to piles of ashes and smoldering bricks. Forget about Turtle Hill."

"What about the book? The one Paulo lets me look at? Do I have to let *that* burn up, too? The girl, I can't *stand* thinking I'll never see her again. I *love* her, Dad."

The snow's coldness had begun creeping through the thin hide of his boots, burning his toes before turning them numb. Standing on his chilled, weak legs while enduring the wind and arguing with Eshrae had taken a toll on him. "If I retrieve the book for you, will you promise to keep away from Turtle Hill?"

"You'd do that?"

"Give me a couple of days to get my strength back, and I'll go collect it. You can hide it in the same place we keep the box of medals. Will that suffice?"

Eshrae nodded, then gripped his father's free arm to support him. "Yeah, Dad. That'd be good."

"Wonderful. Now let's get back inside before you end up with an icicle for a father."

* * *

“Francesco, the little ones want to know if they can stay up late tonight and watch the fires from the stoop.”

Frank rose from the bed and stretched. Since that morning, he’d been feeling stronger. “I suppose it’s all right,” he said to Aleedia. “It’s certainly better than them getting dressed up in fright costumes and running through Turtle Hill with torches. You’ll wrap them up in blankets?”

“Of course,” she said. “I don’t know if he mentioned it to you … but Leonardo plans to join his Uncle Rumberto tonight in Packardville. I imagine they’ll be setting fires with a group of Rumberto’s work friends.”

Frank feigned nonchalance. “Leonardo’s nearly an independent adult now,” he said. “If he wants to play at being an arsonist … well, I suppose it’s no worse than the work I did for twenty years. I just used a wrecking ball instead of a torch.” *And now I use a gun.*

His wife smoothed strands of hair from his forehead. “You’ve got more color in your face. Are you feeling better?”

“Much better, yes.” He began pulling on a set of outside clothes. “My body aches are all gone.”

She ran her hands over his torso as he was pulling on his shirt. “It feels like you’ve put back on some of the weight you lost.”

“Being able to keep a meal down helps. As does your good cooking.”

She stared at him putting on heavy socks and boots. “Are you planning on going somewhere?”

“I promised Eshrae I’d do something for him. It shouldn’t take much more than an hour and a half.”

“It can’t wait until tomorrow? It’s cold outside. I’d rather you wait another day before doing anything strenuous.”

“Tomorrow will be too late,” he said. “Have you seen Eshrae? I want to tell him I’m holding up my end of our bargain.”

“I haven’t seen him for an hour or so,” Aleedia said. “He keeps to himself as much as he can.”

Frank stuck his head into the children’s bedroom. He found Prima, Arista, and Sophia playing with dolls on their bed. “Girls,” Frank asked, “have any of you seen Eshrae recently?”

“Nope,” Arista said.

“No Ash-Ray,” Sophia said.

“I saw him a while back,” Prima said. “He was digging around for something in the back of the boys’ closet.”

“Oh?”

“But he’s been gone for a while.”

Frank peered into the boys’ closet, which Eshrae had left open. The panel near the bottom of the closet’s back wall had been left open. The hidden storage area was empty.

Eshrae had taken the box of medals.

“Damn that boy’s stubbornness,” he whispered to himself as he hurried out of the children’s bedroom to the apartment’s front door. “He’s gone to show Paulo the medals and warn them about Angels’ Night. *Damn* it,” he whispered again as he pulled on his heavy coat.

“Francesco,” Aleedia said, “what’s gotten you so upset?”

“Eshrae.” Frank pulled the flaps of a woolen hat over his ears. “I’ve got to go retrieve our idiot son before he gets himself burnt to a cinder.” *Or something worse.*

• TWENTY-TWO •

The Adventures of Lieutenant Commander Paulo Helios in the Great War

FRANK HEADED FOR THE OLD HELIOS HOUSE in Turtle Hill. Even if he didn't know the way, he could have followed Eshrae's trail easily enough. A light cover of fresh snow preserved each of the boy's footprints.

A thin stream of black smoke rose from the tallest of the house's five chimneys, a faint foreshadowing of infernos soon to come. They'd lit a fire to warm up the great room, he supposed. An easy and obvious "tell" for grubbers to pick up on in a neighborhood like this. Following Angels' Night, as of tomorrow morning, the smoldering start of November, that chimney might be the last structural element of the house left standing.

Frank stomped up the wide steps to the wraparound porch, giving free rein to his irritation, also meaning to give Eshrae notice he was here, in case the boy was indisposed in one of the upstairs rooms. What would be a suitable punishment for disobeying him in such a flagrant fashion? He supposed the loss of the boy's friends and refuge would feel like punishment enough; Angels' Night would do his sternest work for him.

The front door was unlocked. He found the three of them sitting in overstuffed armchairs in front of the fire. Eshrae had his beloved book of photographs, an oversized leatherbound tome, on his lap. He'd arranged the medals on a coffee table and now hurriedly gathered them up, stuffing them back in their wooden box.

Frank cleared his throat. "Eshrae, I'm extremely disappointed in you. Take the box of medals and your book and go home immediately."

Eshrae glanced at the younger of his two companions before looking to his father. “But Dad, he’s not just any old creeper. I told you, it’s Great-Great-Great Grandfather Paulo, it really *is*.”

“I know,” Frank said. “It doesn’t excuse your coming out here after you promised me you wouldn’t. Head home. Your mother is waiting for you.”

Eshrae picked up his belongings and walked to the door. Before exiting, he paused to wave goodbye to his great-great-great grandfather.

“Don’t be too hard on him,” Paulo Helios said after the door closed. “He’s a good kid. His heart’s in the right place.”

The voice was startlingly familiar. So much like Frank’s father’s voice. “He put himself in danger by coming here to see you,” Frank said. “Do you realize that?”

Paulo nodded. “I do now. It’s a pretty crazy system you all have going here, from what I’ve been told.” He struck his chest with his thumb. “So I’m a marked man, just for *existing*? Sounds to me like what the Goethans did to the Sixers. It sure as hell isn’t Emericun. Is *this* what my whole crew and I sacrificed our lives for?”

Frank felt Bertolt Penheimer’s eyes, strangely intense eyes, possibly mad eyes, strip away his jacket and shirt and contemplate the enhanced musculature beneath. This was an older Dr. Penheimer than the ones Frank had seen in the newsreel or standing in the ruins of the black basalt dome. From his balding head to his long, almost skeletal fingers, he looked like the repository of several lifetimes’ worth of dreadful knowledge, knowledge that could rot a soul.

“This is the boy’s father?” Penheimer asked Paulo. “He looks like a soldier or navyman of our day. I thought all men who surrendered five tendarms in this era are pacified with the drug regimen I recommended.”

“You damned old fool,” Frank said. The intensity of his bitterness shocked him. “I read your goddamn monograph. ‘*On the Prevention of Human Aggression*.’ The beginning of a century of persecution of fathers like me and their families. Did you also advocate for all humanity to be murdered in deep space?”

Penheimer looked flustered. He compulsively flexed his cadaverous fingers. “I—I have no idea what you are referring to.”

“It’s Francesco, right?” Paulo said. His face told Frank he wanted to head off an altercation. “You’re my great-great-grandson?”

“I am,” Frank said. He thought he’d been prepared, but the bizarre reality of speaking with his great-great-grandfather hit him like the wave that had inundated much of Kraken Island. “Grandpa Paulo, I saw you as a ghost aboard your mushroomed submarine, the *Tridentfish*. I took your mission log. I read it. It ended before you and your crew sailed for the port where the Goethans were assembling their invasion fleet. You were still awaiting the delivery of Penheimer’s weapon.”

He stared into his ancestor’s open, guileless face. This was the man who had written those entries Frank had pored over! The man who had borne the Helios prime tendarm four generations before Francesco Helios had! And now they were together in one room! “One of my fondest hopes,” he added, his voice softening almost to a whisper, “has been to read the rest of your log.”

“I can’t read it to you,” Paulo said. “But I can tell it to you.”

“Before you do that,” Frank said, “I want to hear from Dr. Penheimer what sort of weapon he built for you to launch from the *Tridentfish*. How did you die, Penheimer? It must’ve been a violent death. Otherwise, you wouldn’t be sitting here as a creeper.”

“Your two questions are connected, you know,” Penheimer said with a tragic smile. “My death was indeed a violent one. I died from the delayed effects of the weapon whose creation was the pinnacle of my scientific career. My killer, you see, was a creature akin to that which Paulo and I now find ourselves. What your son Eshrae calls a ‘creeper.’ The creeper who hunted me down was very angry with me. Now that I have experienced what he experienced, I find his anger entirely justified.”

Frank thought of the assassinations of scientists and engineers in Space City. “You were a famous man, weren’t you? The whole world knew your face. I saw you in a newsreel in a mushroomed cinema on an island that collided with this continent, an island that must be Angland.”

“Poor Angland,” Penheimer said. “First brutally subjugated by the Goethans. Then, instead of being liberated by the Emericun Armed Forces, the Anglanders were inundated and destroyed by our quixotic effort to prevent the Goethans from invading our own country. You want to know about my wonder weapon? My comrades and I succeeded in unleashing the limitless energy contained within the core of the chronome particle. Our goal was beating the Goethans, of course. Preserving Democracy, Decency, and the Emericun Way of Life …”

“Bertolt, don’t sneer when you say that,” Paulo said, flashing some of the same anger Frank had earlier shown. “Hundreds of thousands of us died for those values. You’re a good bit older than the Bertolt Penheimer I knew as a friend. The younger you wouldn’t have sneered. He recognized and accepted the price we would all have to pay to stop the Teutonic brutalization of the world.”

“So in order to halt their brutalization of the world, we made pikers of them by way of comparison?” Penheimer smiled a deathly smile. “As the widely acknowledged Father of the Chronome Bomb, I reserve the right to ‘sneer.’”

“And as the man who had the honor of delivering and firing that bomb, and apparently ending the war, I reserve the right to tell you how wrong you are. *You* gave me that honor, Bertolt. The younger you did. Dozens of submarine commanders would have traded a leg for that mission. But you insisted that I get it.”

“And I sent you to your death, didn’t I? My childhood friend …”

“It was the greatest honor of my career. I’d do it again, a hundred times. A hundred times!”

He approached Frank with open arms, his expression silently asking permission to embrace him. Frank nodded and was instantly compressed by a powerful, passionate hug. “This is why!” Paulo said, voice choked with emotion. “*This!* This is my great-great-grandson, God bless him, who’s given me a great-great-great-grandson! *Five* of them, from the look of him! Eshrae has the prime tendarm that was passed down to me, that *I* passed down. My flesh abides! The flesh of my ancestors abides!”

“Finish the log for me, Grandpa,” Frank said, his own voice thick with emotion.

“Of course, Grandson. Of course.” He sat back on the sofa and gestured for Frank to do the same. “By the spring of 1946, we had pretty much lost the war. The Goethans had overrun Angland. We tried getting back into the fight by invading what we figured was the ‘soft underbelly’ of Yurreth, the Caesareem peninsula. But instead of a soft underbelly, the peninsula was a boot that kicked us in the face, hard. We tried a second invasion, of Franzois, but it turned out just as disastrously. The last pockets of Emericun resistance were slaughtered in the winter of 1945, the survivors shipped to prison camps in Angland. The Goethans started using the Anglish aeroplane carrier ships they’d captured against our East Coast cities. My sub, the *Tridentfish*, managed to sink one of them, but that barely put a dent in their bombing campaign. While they were harrying our eastern seaboard, they were building a gigantic invasion fleet in conquered Franzois. If that invasion fleet had ever sailed, we wouldn’t have had the navy to stop it, and we wouldn’t have had enough tanks or aeroplanes to equip a new army to defend ourselves after they landed. The only thing we had—and the Krauts were working on it, too—was the chronome bomb.

“It had to be delivered by submarine. No Emericun aeroplane could get within a hundred miles of the Franzian coast. Besides, an air burst, according to the brain boys, would only destroy two, at most three major ports and shipyards. But a subterranean, underwater detonation would cause earthquakes throughout Western Franzois. We’d smash not only ports and shipyards, but also inland supply depots, military bases, and armaments factories.

“I’d have to maneuver the *Tridentfish* thirty miles inland beneath the Franzian coast, avoiding webs of gigantic anchoring tendrils in conditions of total darkness. One of the reasons the *Tridentfish* and I were picked was that, during the Caesareemian campaign, my crew and I had gained months of experience playing ‘cat and mouse’ with Goethan submarines around and between the tendrils of the Caesareemian islands. We set out with Bertolt’s bomb in October of 1946. Our only escorts on the voyage east were two tanker subs to refuel us. We had to stay submerged during daylight. That

slowed us down a lot, but we made up some time on moonless or overcast nights, when we could steam at full speed on the surface. The bomb was so big, in order to get it in and out of the *Tridentfish*'s hatches, it had to be separated into four subunits, each with its own air bladders and undersea motors.

"The *Tridentfish* reached the southwestern coast of Franzois the night of October twenty-sixth. Brave men on other subs had mapped out the subterranean web of tendrils for us, so we didn't go in entirely blind. We were stretching the limits of our batteries and air supply—if our first attempt at assembling and mounting the bomb didn't succeed, and we had to do a repeat, we wouldn't have enough power or air to get us back to the open water.

"Our lights only projected out about a hundred yards. Everything beyond that was pitch darkness. Our sonar kit helped some, but not as much as we would've liked. We reached the detonation point, an intersection of three cross-tendrils, only thirty-five minutes behind schedule. The *Tridentfish* had been modified with a loading bay aft of her conning tower that could be pumped dry after use, a space just big enough for one of the bomb components and two sailors in diving costumes. My partner and I were the first to suit up and join our bomb component in the loading bay. I wasn't going to send any of my men on a job I wouldn't do myself.

"The hatch opened. The *Tridentfish* maintained a position roughly a hundred yards starboard of the targeted tendrils. The bomb component, close to two thousand pounds, felt virtually weightless in the open water, buoyed by its air bladders. We swam to the target point, towing the component, and wedged it into a nook between two intersecting tendrils. Then we waited for the other three teams to emerge from the *Tridentfish* and follow our lights.

"The team transporting the second component rendezvoused with us. Connecting the two pieces wasn't complicated—it was just a matter of aligning four pipes, screwing their ends together, and affixing eight clamps. But the thick gloves we wore made our hands clumsy, and the great pressure slowed us up. The only other obstacle we ran across came courtesy of a giant octopus. You'd be amazed how fast those big blobs can move! It

slithered part of its body in between the third and fourth bomb components before the team could link them. Looking for a fresh hiding place to wait for fish, I guess. We had to poke and prod it a good three minutes before it would fully retreat. Still, it was a strangely beautiful creature. I almost wish I could see one again.

"We set the timer, then swam like a pack of scalded rats back to the sub. It was going to be a close thing. Either we could motor out faster than we'd come in and risk draining our batteries before reaching the outer ledge, or we could baby the batteries and risk running out of air. As captain, I chose the former course, confident in my helmsman's ability to avoid a collision.

"As things turned out, it didn't matter which choice I made. The *Tridentfish* could've sliced like a rocket through the water instead of creeping at eight knots, and we still were a tin can full of dead men."

"Did dying hurt?" Frank asked.

"I didn't feel it," Paulo said, an amazed look on his face. "We reached the outer ledge with just thirty minutes' worth of canned air remaining and a smidgeon of battery power. We ascended to a depth of twenty feet so we could deploy our snorkel. I'd say we'd reached maybe five miles offshore when the bomb went off. One second, I was standing at the periscope, and I felt something jolt the sub's stern, like a whale giving us a headbutt. Then … nothingness. It was … like being asleep without dreams.

"The next thing I knew, I had flashes of disembarking the *Tridentfish* and walking through the Port Washingmont Navy Yards. Then I was standing in the basement of this house, the house I'd grown up in, and I couldn't touch a damn thing. Bertolt found me. He led me to other houses, places just as insubstantial as I was, where I could eat the food and drink the water. Not long after that, I met your son, Eshrae."

"I can tell you what happened after my bomb went off," Penheimer said. "Yes, it did what it was intended to do. It sank the Goethan invasion fleet and destroyed their shipbuilding yards and armaments factories and military bases. But it did so much more … so much. It sank *half of Yurreth*! Plunged it to the bottom of the ocean! Oh, I can't say that for *certain*. The

surveillance planes we sent weren't able to see much of anything at all for months afterward. It's quite possible that, in that portion of the world, time regressed at the instant of the bomb's explosion to a period when the southern and western parts of Yurreth did not yet exist, had not yet risen from the seabed. In either case, the resultant tidal waves swept over all of the Isle of Angland. They even reached the eastern coast of our own continent. This neighborhood in which we now sit was swept away. I saw the aftermath. Millions of our people were killed, along with possibly the entire population of Yurreth and most of the inhabitants of Angland. I wasn't among that number on that day. I'd had the good fortune, I suppose, to have been stationed hundreds of miles inland, in a military-scientific compound in the Latosaka Territory, where the bomb's components had been built."

"But Bertolt," Paulo said, "the Goethans didn't win the war. Maybe we didn't, either. Seems like nobody won. But absent the weapon you built and I delivered, the Goethans would have done the same to us Emericuns as they did to the Anglish and the peoples of Yurreth. The Krauts were working on their own chronome bombs, you know that—"

"What I *know* is that my creation poisoned the oceans and set our own continent adrift. Within a generation, these lands will reach such northernmost latitudes that our surviving countrymen will live in permanent deep winter. Knowing all this now, my dear old friend, would you still consider your mission to deliver my bomb an *honor*?"

Frank focused on something he'd noticed only subliminally before. Old Man Penheimer still retained all five of his tendarms. "You never bothered having any children, did you?"

"That's a non sequitur, young man," Penheimer said, clearly irritated. "What does my choice to not produce offspring have to do with what I've been saying?"

"You don't get to shame my great-great-grandfather and sully his glory, because you have no stake in the future! Humanity's just an *abstraction* to you, isn't it? You never cared about eradicating human aggression and making a better world. You just wanted a way to relieve yourself of guilt for having been wrong in your calculations and projections

about the bomb. You wanted to refashion yourself as a saint in your own mind. I've *seen* the world your sanctimony has made. I've *lived* in it, and so has my family! It's no better than the world the Goethans would've inflicted on us! Only the methods are different! Your intellectual offspring plan a genocide to 'cleanse' the Earth of humanity. Their plan won't work as envisioned, but they end up accomplishing their goal anyway. *Everyone dies*."

"What is the source of this outrageous claim? Some street-corner prophet half out of his mind?"

"It's no claim. Die a few more violent deaths, Doctor, and you'll experience it yourself. We're trapped in a partition in time spanning the years 1946 to 2076, from one chronome catastrophe to its counterpart. The two chronomic disasters form the walls of a rubber room. As a creeper, you'll bounce from one wall to the other, skidding off all the decades between. I've met creepers who've made the circuit eight times. The wall we're heading toward in 2076? Your acolytes mean to put an end to humanity in the vacuum of deep space, but they fuck it up and kill everyone on our planet's surface instead."

"Francesco," Paulo said, "is this all on the level? 2076? The year of the Tricentennial? It sounds too horrible to be real. But then again, I'm back from the dead and sitting on my living room sofa with my great-great-grandson, so what do I know …?"

"'Tricentennial'?" Frank said. "Grandfather, what do you mean?"

"The three-hundredth anniversary of the founding of our country. Didn't you learn that in school?"

Frank saw through the windows the sun setting. Soon, bonfires would turn the clouds of the evening sky garish orange. He'd let his emotions and his desire to hear the rest of his great-great-grandfather Paulo's story make him forget the precariousness of their situation. "Grandpa, we'll talk about this later. We need to get out of Turtle Hill. This whole district is about to go up in flames. Did Eshrae tell you about Angels' Night?"

"Some kind of festival of pyromaniacs?"

“Right. I don’t dare take you two back to my home. But in the mountains thirty miles west of the city, there are mushroomed army camps. Most of the year, they’re left empty. There are supplies there, and stocks of food. You two can hide there until Turtle Hill mushrooms again.”

“It’s unexpectedly considerate of you to include me, young man,” Penheimer said, “since you seem to think me such a villain—”

His balding head exploded, splattering the draperies and dark wooden furniture with chronome-infested blood and chunks of brain.

Paulo yelled and clutched his thigh as blood spurted from his leg.

The mushroomed house shook with muffled thunder.

“Can’t keep yourself away from trouble, can you, Frank?” Harry Erath asked from the doorway.

• TWENTY-THREE •

Angels' Night

WITH A WORDLESS CRY OF OUTRAGE, Frank rushed Erath. His minder had ample time to shoot him. But instead, Erath allowed himself to be rammed to the ground. Frank didn't pause to ponder Erath's forbearance. He began pummeling his minder's face, punching his nose until it broke and the nostrils spurted blood. He struck those baleful, mocking, yet oddly indulgent eyes, knocking more teeth loose from shriveled, black gums, punching and punching until the blood of his knuckles mingled freely with the blood of Erath's battered grin.

Then Erath's eyes hardened and his muscles tensed. As he had so often during his training, Frank felt himself go airborne as his minder slipped his legs beneath Frank's chest and sent him somersaulting into a wall. Frank crashed headfirst through a coffee table and rolled partially into the fireplace. His boots scattered embers across the rug.

Erath rose to his feet. He spat out a mouthful of blood and teeth. "*Ppahh*. Guh … good, Frank. Good start. I want you to be an animal tonight. A Dire Wolf. This is your final exam, boy. Your graduation exercise. You and me. I grade on a curve, so I let you have ten points to start, especially since you're just getting over the flu." He tossed his gun to Paulo. "Here, Gramps. Hold onto that for me. You might get some use out of it if you manage to drag yourself outside before the mob gets here. Oh, don't bother pointing it at me. I locked it. But a big military hero like you should be able to figure the lock out before the pyros set your creeper ass on fire."

He strode to where Frank lay stunned. "I'm doing this fair, Frank. You don't have a gun, so I won't use mine. But any weapons we happen to

find for ourselves are fair game. It's *mano a mano*, you and me, until one of us can't get up no more. And I'm gonna give you all the incentive in the world, family man. Your littlest son, so eager to play with that spanking new tendarm of his? Guilty of harboring, aiding, and abetting. Spunky little guy—I'll bet when I go to drag his skinny butt to detention, he'll give me a fight. Resisting arrest … Well, you know as well as me what's liable to happen in a situation like *that*. So tell me, whose neck should I break first—little Eshrae's, or Gramps the Gimp's here?"

The rug had begun burning. Frank seized it and hurled it over Erath's head, then knocked his legs out from under him with a sweeping kick. He grabbed a plank from the table he'd demolished and beat the momentarily blinded figure on the head and chest. His third blow shattered the plank. When Frank reached for a replacement, Erath grabbed his ankle and pulled him off his feet. Faster than Frank could react, the larger man shrugged off the burning rug and shoved Frank's face into the blazing fibers. Then he lifted Frank over his head and hurled him through the parlor's sitting window.

Frank bounded off the edge of the porch onto the street. He felt a sharp pain in his ribs upon impact. Before he could rise, his minder leaped off the porch and landed beside him. Erath's kick caught him where his jaw met his throat, reducing him to retching and coughing, robbing him of all ability to speak.

"No calling for help," Erath said. "Not that anybody you'll see tonight would give it." He shoved Frank onto his back with his foot. "Give me a fight, Frank. Don't just lie down and die. I want a *challenge*. You're washed up as a grubber. Far as I'm concerned, you've gone rogue, and I've given you as much rope as I care to. If you don't put me down, your life is over, and your family can look forward to eking out an existence on the streets. I invested a lot of time and effort in you, Frank. Don't make me think I flushed it all down the goddamn toilet. Get off your ass and give me a *fight*, you lazy sonofabitch."

Frank managed to stop coughing. He looked up at his tormentor. Erath's left shoulder jerked forward. Frank heard a muffled crack. Blood spurted from the shoulder and bathed Frank's face.

Frank scrambled to his knees. He saw that Paulo had managed to crawl out onto the porch; he held Erath's pistol in his wavering hand.

"Another Helios heard from," Erath muttered as he turned back to the house. "Well, Gramps, looks like you helped me decide which family member gets his neck broken first."

Bobbing and weaving, he ran toward the porch. Paulo, unable to rise from a crouch, tossed the gun as best he could. "Here, Frank!"

The throw went awry. The gun landed in the dirt a dozen feet to Frank's right. It skidded beneath the wooden wheels of a parked vintage steam car. Frank scrambled toward the vehicle. Erath halted his run toward the porch. "Looks like I'm monkey in the middle," he said when he saw where the gun had come to rest. "Gun's back in play, Frank. Hope I don't reach it first. I want this to *last*."

A trio of lanky teens turned the corner, gleefully running with torches and cans of petrol. The tallest boy's eyes grew wide with excitement when he saw the antique steam car, exotic as a giant beetle. Before Frank could scramble for the gun, the kid splashed petrol on the steam car's wooden wheels, and one of his companions set the wheels afire before the trio raced up the block.

Frank stared desperately at the gun, now surrounded on three sides by flames. "Easy come, easy go," Erath said. "Don't worry. You'll find other stuff to kill me with." To punctuate his point, Erath clotheslined another teen running past waving a machete in the air. His blow sent the boy crashing into the street headfirst. Erath plucked the machete from his limp fist. Grinning at Frank, he said, "Always preferred one of these to a gun, anyway. Need a haircut?"

What Frank needed was a second to think, to plan. He heard a hissing come from the copper water tank mounted behind the steam car's passenger cab, directly above the burning wheels. Could the old tub have built up a bit of steam? He wasn't in any shape to outrun Erath. Frank gambled on the steam car's moving—it was parked on a slight incline, parallel to the curb, so gravity would help get it rolling once he released the brake.

Erath advanced slowly on him, watching to see what he would do next. Frank jumped into the cab, found the simple friction brake, and disengaged it. The car began rolling. He stared at the antique metal dashboard with its steam pressure gauges and tried to puzzle out how to engage the engine. Already, he could feel the heat of the burning undercarriage through the seat and against his back. He grabbed a red lever and shoved it upward. The vehicle shuddered as steam expanded into piston chambers and began turning the front wheels, not yet ablaze.

The cab rocked sharply to the right. Frank looked right just in time to jerk away from the machete's edge, which sliced through the seat's wool padding. Before Erath, balancing on the opposite riding board, could pull the weapon back, Frank compressed the machete against the seat with his hip. He began to wrench Erath's fingers from the blade's handle, but had to let go to keep the lumbering vehicle from crashing into a storefront. The car steamed along at barely ten miles per hour, its solid axles reacting to each rut in the road like a team of startled horses. Hoping for more speed, Frank guessed at the gear shifter's operation, depressed the clutch, and jammed the shifter forward. He heard an ominous clanking and metallic whining, experienced a disorienting lurch, and then the car obliged him with about an additional five miles per hour of propulsion.

Erath took advantage of Frank's being distracted to yank the machete free. Before he could swing it again, Frank muscled the wheel sharply to the right, steering toward a row of parked automobiles. He intended to crush Erath against the fenders of a Packard. But the steam car moved lamentably slowly and handled like a sled. By the time he managed to scrape its side against the other cars, Erath had scrambled onto the roof.

A *canvas* roof—Erath's machete punctured the convertible top like a needle through silk.

Frank fumbled with his left foot for where a brake pedal should be. His toes failed to find one. There was just the primitive friction brake, which probably wouldn't halt the vehicle nearly abruptly enough to throw Erath onto the street.

The machete sliced through the roof again, this time closer to Frank's head. Erath began sawing a hole in the canvas. Ahead of them, commercial

buildings torched by marauders blazed on both sides of the road, creating a fierce convection draft. Frank realized his only chance was to use his superior knowledge of the lay of the land to outsmart his stronger antagonist. He knew this district. He'd combed the neighborhood dozens of times over the years, searching for mushroomed tins of food. If he could find a dead-end alleyway, he might be able to pin Erath before his minder amputated his limbs.

The hole in the roof was nearly big enough now for Erath to slip through. Frank had only seconds to act. *There*, just beyond the dry goods store, alongside the bank building—there was the service alleyway he'd been hoping for. Black smoke poured from the alley; kids had set bins of rubbish ablaze. All the better—Erath might not see the dead-end wall before he was crushed against it.

Frank swerved into the alleyway just as the machete stabbed through the seatback cushion inches from his neck. The narrow passage, choked with thick, black smoke, was barely wider than the steam car. The car's hood rammed into unseen garbage pails. Frank braced himself for what he knew would be a far greater impact—when the vehicle ran headlong into a brick wall.

Even at barely fifteen miles per hour, the collision almost propelled Frank through the windshield. The car's oversized steering wheel bludgeoned his chest. Still, the sharp pain was worth the reward of hearing Erath smack against the wall, bound onto the car's hood, and roll off onto the ground.

Trying not to let the smoke overcome him, Frank fumbled with the gear shift and clutch, blindly groping for reverse gear. After a few interminable seconds, he felt it engage. The steam car's crumpled front end pulled back from the wall, dropping various pieces of twisted sheet metal onto the alley's cobblestones. When he'd reversed six or seven feet, he threw the transmission back into first gear and turned the steering wheel sharply to the right, estimating that was where Erath had landed. The car's burning wheels thudded over something large and bulky.

As soon as the car ground against the corner of the alley, he kicked his door open and wiggled out into the narrow space between the vehicle

and the wall. He had to scurry crablike, face against the bricks, to work his way free. Fire scorched his lower back and the backs of his legs. The air, superheated and saturated with smoke, was unbreathable. As soon as he was past the car, he ducked low and ran, ignoring screaming lungs.

He stumbled over a tipped trash can and fell into a pile of burning rubbish. It ignited his clothes and hair. Disoriented, frantic, blind, he tucked his head and arms into his torso and rolled across cobblestones, praying he headed toward the alley's mouth.

He felt snow against his burned skin. Suddenly, he was able to breathe and see again. He was back out on the avenue. He flailed his arms and legs through melting snow, then buried the top of his head in a snowbank, exulting in temporary relief from his burns. He rose slowly to his feet and looked back at the alleyway. The smoke made it impossible to see more than a yard or two inside. He didn't have to actually see Erath's crushed body—either his minder would emerge from the mouth of the alley or he would succumb to asphyxiation.

He thought he saw something move through the smoke drifting over the roof of the bank building. A trick of his rheumy eyes? No … a figure moved on the sloped roof. Erath had found a ladder; or he'd scaled the brick wall like a human spider.

The man is unkillable.

Frank pushed the despairing thought from his mind. Erath waved at him with the machete, its tip broken, an ironic salute.

What could Frank try now? He scanned the avenue for a possible refuge, a place to think. The dry goods store had caught fire. A row of mansions beyond the commercial strip was fully ablaze. With each passing minute, his choice of hiding places shrank. Soon, he might find himself boxed in by the fires. Were there any gun shops in Turtle Hill? Sirena's house—that had contained a room stocked with guns. But he saw that her house was on fire, too.

The burning mansions lit everything around them as though the night were an overcast afternoon. Beyond them, Frank saw twin rows of oak trees —the entrance to a park. *I've been there, haven't I?* It was the park where

he'd performed Eshrae's manhood ceremony. It extended to the edge of a bluff. And the bluff overlooked the Navy Yards.

The fleet! Each of the bigger mushroomed warships contained an armory of small arms—rifles, pistols, bayonets, knives—meant to equip its contingent of Marines. And if there was one set of spaces he knew even better than the streets of Turtle Hill, it was the decks of the *Saint Indianna*.

He began running toward the park. His bruised ribs throbbed against his lungs. The intense heat as he passed between rows of burning mansions quickly dried his wet clothes and hair. Erath would follow. His minder had gotten a taste of a good fight, but just an appetizer so far. Having been bloodied by his student, Erath's pride wouldn't let him stop pursuing and battering his foe until he'd see the final lights go out in Frank's eyes.

Frank entered the park, half running, half stumbling toward the gazebo and bandstand. Looking back between the oaks, he saw he'd left a trail of distinct footprints in the snow. *Good.* He reached the railing that separated the back of the bandstand from the bluff's edge and climbed over it.

The bluff was steep and covered with snow. At its base lay machine shops, foundries, supply depots, petrol tanks, and administrative buildings, all illuminated by the fires spreading rapidly through Turtle Hill. Closer to the Tomaic River's edge sat the Yards' giant derricks and dry docks, then the piers that led to the ships of the fleet, all in varying states of resurrection. Tied up at Pier Four floated his destination, the vessel he'd chosen for his final confrontation with Harry Erath—the E.N.S. *Saint Indianna*.

He began making his way down the treacherous bluff, grabbing hold of any outcropping of clay or rock he could reach. He made it two-thirds of the way down without major mishap. But then his toe got ensnared by a root hidden in the snow. He pitched forward and tumbled the remaining fifty feet. His uncontrollable bouncing plunge only halted when he struck the fence surrounding the Yards' facilities.

Shooting pains from his left side told him he might've cracked a rib this time. He clambered over the mesh fence, wincing with each intake of

breath. Time Breaker? If he succumbed to Erath now, *he'd* be the broken one, not Time.

He paused to stare back up at the top of the bluff. He didn't see Erath, but he knew his minder couldn't be far behind. He could only hope his antagonist had taken an equivalent beating thus far. Yet Erath seemed almost supernaturally oblivious to pain and injury. He'd absorbed the bullet wound to his shoulder as though it were no more than a mosquito bite. The wound hadn't slowed him down at all.

But even Erath's body must have its upper limits of endurance. Frank was certain the *Saint Indianna*'s armory could provide him the implements needed to exceed those limits.

He reached the foot of Pier Four. The *Saint Indianna*'s graceful clipper bow towered thirty feet above him, marred by rust stains and splinter holes. Frank found the rope ladder where he'd left it in midsummer, its top tied to the cruiser's starboard forecastle railing, its bottom wound around one of the pier's stanchions. He gave it a good yank before climbing onto its lower rungs, remembering the short but heart-wrenching drop he'd experienced when the ladder had briefly slipped its mooring back in July. This time it was secure.

Climbing, he remembered something else, something far more disturbing. During his brief plunge, he'd fallen through what had seemed to be the ascending ghost of himself, not long before he'd encountered Erath's phantom on the lower decks. Did that mean both he and Erath would die violently aboard the *Saint Indianna*? Would the trap he planned to set for his minder ensnare the trapster as well? Or would he become a ghost following his suicide twenty years in the future, then be bounced back to July of 2054? Or would the words of Kraken Island's Waning Moon—*"The story keeps changing"*—prevail?

When he'd climbed to within ten feet of the foredeck, the exact spot where he remembered sharing space with his ghostly doppelganger, he glanced back at the bluff. He saw Erath descending the bluff's snowy slope. He paused long enough to ensure that Erath saw him. Then he completed his climb to the *Saint Indianna*'s deck.

A terrifying thought struck him: *I don't have a probing pole with me.* But he'd already surveyed the *Saint Indianna* in July, and he carried the map of that survey in his memory. The ship would not have developed new soft spots and dead zones during the intervening four months. The cruiser would have become more solid, not less; phantom holes would have filled in as the ship continued accruing substantiality. All he needed to do to ensure his safety, as best it *could* be assured, would be to retrace his earlier steps.

A layer of snow covered the foredeck, its anchor chains, its anti-aeroplane guns, and the tops of the giant cannons that protruded from the cruiser's forward main turret. The white powder, undisturbed save for the dainty tracks of seagulls, hid the worst evidence of the shell and bomb damage this part of the ship had suffered. He found the hatch, just forward of the bridge, that he'd left open almost four months ago. He climbed down its steel rungs, knowing his footprints in the snow would lead Erath to follow.

Portholes in the ship's sides and shell holes in the deck above admitted flickering illumination from the fires high above in Turtle Hill. Frank knew, however, that once he descended another two decks and entered the ship's armored citadel, he'd be unable to rely upon any outside light. He'd need to locate a lantern or candle. He hurried down another set of steps to the devastated crew quarters and mess halls, then made his way to one of the galleys. The galley was crowded with piles of shells of all sizes, as though it had become a haphazard annex of the ammunition magazines. Frank realized all the spaces he'd traversed had been much more cluttered than they'd been the last time he'd surveyed this ship. His discussion with Jenerette Seeling hadn't been a fever dream, then. His department had already stuffed the *Saint Indianna* full of high explosives from other ships and warehouses in the Navy Yards to ready her to serve as a floating bomb against Kraken Island.

His thigh brushed against an oven, a massive cast-iron affair, lying on its side. In the near total darkness, the toppled oven looked like a black dome. *A gigantic black basalt dome …*

Like chronome particles fusing in the explosive heart of Penheimer's bomb, it all came together in Frank's head—knowledge he'd sought, knowledge he'd stumbled upon, and knowledge that had been thrust on him. He knew how he could break Time. His hammer extended all around him. *This ship.* This ship only he was capable of piloting.

But in order to break Time, he'd first have to survive this death struggle with Harry Erath.

Frank ran his fingers along the cold iron of the toppled oven. Finding what he'd searched for, he pulled open an accessory drawer located underneath the baking compartment. As he'd hoped, he found a box of foot-long matches inside. Even if he failed to locate a lantern or candle, these would help him greatly.

He followed his old path through burned debris to the rear of the ship. Just as he remembered, the stoutly armored barbette tube had sheltered a quadrant of this deck from bomb and shell damage. He found an undamaged battery-powered lantern hanging from the barbette wall. He clicked it on. Its bulb emitted a weak, wavering light; its lead-acid battery must've retained only a trickle of juice. He clicked it off, wanting to conserve its power for a more crucial time. He counted the matches in his box. Eleven. They would have to do for now.

He stared down the open hatch into the black spaces below. The ship's citadel held its machinery and propulsion plant. It also held stocks of weapons for the cruiser's complement of Marines, as well as the ammunition magazines, stores of shells ranging in magnitude from the hand-sized fragmentation shells used by the anti-aeroplane guns to the ten-inch-diameter cannon shells fired by the main armament, armor-piercing or high-explosive projectiles that stood taller than he did and that could be fired at targets up to twenty miles away.

He lit one of the long matches and quickly descended the steep ladder to the deck fifteen feet below. The deck's flooring looked unbroken, solid, just as it had four months ago. Despite his need for haste, he probed with his foot for the edges of the large dead spot he remembered. About a dozen feet aft of the steel ladder he'd descended, the toe of his boot met air, even though his eyes denied the fact. In July, the hole had been roughly

oval in shape, about six feet wide by ten feet long. He measured its remaining extent with his foot. It had shrunken some since then, but not by much; now it was a circular hole about five feet in diameter. He pulled a coin from his pocket and dropped it through. As best he could judge from the distant clatter, the hole's depth remained undiminished.

His match burned down to his fingers. He blew it out and lit another one, then headed forward to the storage compartments where he'd mapped the cruiser's stores of small arms and anti-aeroplane gun ammunition. The latter, highly fragmentary in nature, would serve as his primary weapon; Frank trusted neither gun nor bayonet alone to properly do the job on Erath.

On his way forward, he scouted out the best possible location for his ambush. He'd have to deploy himself in line of sight with the ammunition he planned to explode, but close enough to a doorway or another solid obstruction he could shelter behind quickly enough to avoid being skewered by shrapnel. He found a heavy steel table and laid it on its side across the bottom half of an open doorway abutting a corridor. Not perfect, but it would have to suffice.

He hurried to the magazine that held the anti-aeroplane ammunition. He dragged two crates of ammo, each the size of a large footlocker, to a spot in the corridor about thirty feet aft of the doorway where he planned to take shelter. He broke open one of the wooden crates, pulled out a pair of shells, and set them on top of the box after examining their percussion firing caps. The caps had a slightly spongy texture, as though their metal tips were covered by a layer of rubber … He didn't know whether this was part of their design or an indication that the shells hadn't fully manifested yet. Those caps would make a tiny target, even at a distance of only thirty feet.

And even if his marksmanship was flawless, he knew he stood a chance of setting off a chain reaction in the ammunition stowed throughout the ship's decks, blowing himself, Erath, the Navy Yards, and a portion of Turtle Hill into fragments that would rain down into the Tomaic River. *That* would certainly be a change in the story … but not the change he prayed for.

Frank heard distant metallic footfalls from far forward—Erath descending the metal steps from the foredeck to the topmost enclosed deck. Frank yanked on the door handle to the small-arms storeroom. It was locked. He lit another match and desperately scanned the walls for a firefighting axe. He found one on the wall of an intersecting corridor. He grabbed it and hurried back to the small-arms storeroom. The padlock hanging from the door was less well manifested than the axe's edge; the hasp snapped after three blows.

The storeroom was much smaller than Frank had hoped, barely bigger than a closet. No grenades or sidearms—only bolt-action rifles, bayonet attachments, and boxes of cartridges. He ran his fingers over the rifles, needing to avoid selecting one with any disabling soft spots. They all felt solid enough. He grabbed one from the center of the rack, along with a box of cartridges. Before shutting the door, he snatched one of the bayonets, too, in case his trap failed and Erath managed to get within grappling distance.

Rifle slung over his shoulder, box of cartridges and the bayonet cradled against his chest, he ran back to where he'd left the lantern. He heard another set of echoing metallic footfalls, closer now; Erath had descended to the deck just above. Frank scurried with the lantern to a spot midway between his ambush position and the small-arms storeroom. He turned it on and positioned it on a small table he pulled into the center of the corridor. Its weak light would be about a dozen feet behind him—still close enough to the boxes of anti-aeroplane ammunition to illuminate the firing caps, his targets, but far enough away, he hoped, to distract Erath's attention from Frank's true position until too late.

He stepped over the table he'd overturned and crouched down into his firing position. He placed the box of matches and the bayonet near his right boot, then opened the box of cartridges. He discarded the first one, his fingers noting the same rubberized texture on its casing as he'd felt on the two shells' firing caps. To his dismay, he discovered that all the cartridges in the box exhibited, to a greater or lesser extent, the same softened surface.

He heard footsteps directly above his head. Erath was heading straight for the aft turret's barbette and its adjacent open hatch. He quickly

selected what he judged to be the four firmest cartridges and loaded the first into the rifle's chamber, then slid the bolt forward and rested the gun's stock on his shoulder. Steadying the barrel atop the edge of the steel table, he peered through the weapon's primitive sight and mentally locked in on his target—the firing cap atop the lefthand shell.

Rifle practice was my best event in grubber training, he told himself. He began counting his minder's footsteps to the hatch. The lantern's light faltered, then came back on—should it go out for good, Frank would be reduced to shooting at the sound of Erath's footsteps, unless he took the risk of lighting a match and revealing his position. His surging adrenaline made it hard for him to breathe. Even assuming the lantern cooperated, he might prove unable to make his shot.

The footsteps above him stopped. Frank had counted twenty-nine footfalls since Erath had been directly overhead. Now he heard his minder coming down the hatch. He estimated that, if Erath immediately headed forward toward the light, his antagonist would be ten to twelve feet away from the boxes of ammunition after eighteen strides. Even if Frank's first shot missed and he had to reload and fire again, Erath shouldn't be able to evade the explosions following a successful second shot, given how narrow the corridor was.

Frank began counting Erath's steps. His minder's even stride betrayed no special caution. *That arrogant confidence, so sure he's better than me …*

He lined his eye up perfectly with the shell's firing cap and tightened his pressure on the trigger.

Fifteen, sixteen, seventeen—

He pulled the trigger. His bullet decapitated the lefthand shell and bounced the munition off the far wall. The bullet pierced the wall; the severed firing cap rebounded off the ceiling. The shell failed to explode.

Frank already had a second cartridge loaded in the rifle's chamber when his lantern faltered. He aimed in the dark, praying the device would favor him with just a halfsecond of renewed light. It did. He corrected his aim and fired. He missed.

The lantern went out. This time for good.

Frank pulled a third cartridge from his jacket pocket. He heard Erath scurrying forward in the dark. Familiar enough now with the rifle to load it by touch, he stuffed the cartridge into the chamber and jerked the bolt forward, noting extra friction this time. He groped for the bayonet and held it between clenched teeth.

A wind fanned his face as the edge of a machete came within a quarter inch of slicing off his ear. Frank swiveled the rifle toward where he guessed Erath to be and pulled the trigger. The rifle jammed, gummed up by a bad bullet.

He tried wielding the otherwise useless weapon as a club, swinging it by its hot barrel. The rifle's stock glanced off what might have been Erath's shoulder, then smashed into the table's metal edge. The impact jarred the gun from his hands. Before Frank could grab the bayonet from between his teeth, Erath kicked the table separating them. The table flipped upright and then over, striking Frank in the chest, knocking him backward into the pitch-black room. His bayonet skittered across the floor as the table landed on him.

Erath leaped onto the table. The force of his two-hundred-plus pounds crushed Frank's midsection. Only reserve strength born of animal terror enabled Frank to roll free. He couldn't *breathe*—his ribs were on fire …

Again, he heard the whistling sound of the machete cutting through cold air. He instinctively ducked and stumbled away. The blade caught him across his right calf. He felt it slice through his hamstring—the searing wound marking the exact spot where he'd been bruised by the phantom machete back in July. He fell to his knees. His hands splayed forward to keep his face from smashing into the floor. His right fingers felt something sharp. The bayonet.

Behind him, he heard a high-pitched nasal whine—air inhaled through a badly broken nose. He spun around on his knees with the bayonet in his fist and thrust upward. His blind thrust carved a furrow across the taut muscles of Erath's stomach. He was rewarded with Erath's enraged bellow and a fine spray of his minder's blood across his face.

Any satisfaction was short-lived. Erath forced him to drop the bayonet, then kneed him in the face.

Frank tumbled backward. The top of his head struck the base of the table.

Can't do this, he thought. *I can't fight him hand to hand …*

Head spinning, he tensed for the next assault. Surprisingly, his minder did not immediately pounce on him. The breathing he heard from the opposite corner sounded more labored than it had before. Could he have hurt Erath worse than he'd thought?

Frank's left palm strayed across a jumble of long sticks. The matches —they'd fallen out of their box. What good were they? A blazing torch would help him, maybe. But a match? All it could possibly do would be to draw his faster and stronger antagonist straight to him—

And in a flash of inspiration, akin to the striking of a match in utter darkness, Frank realized how he could beat Harry Erath.

He snatched a pair of the matches and stumbled over the table, through the doorway and out into the corridor. It would be six paces from the doorway to the ammunition boxes he'd so futilely shot at. Then another twenty-three paces aft to the steel steps that ascended to the hatchway. Twenty-nine steps, and then another five or six after that, directly aft of the stairs …

Frank heard a gurgling laugh trail after him. "Leaving … so *soon*, Frank? You picked a good playground. I'll give you points for that. I'm glad you're still on your feet. It's been … a *joy*, so far. I'd rather we not end it … not yet. So you stay on your feet, Frank. I'll be right behind you."

Five steps. His sliced right leg was nearly useless; he had to hop with his left just to slide the other forward, then press down on his right knee to keep it from buckling. Six steps, seven, now. His left leg thudded into the upper of the two stacked ammunition boxes, knocking it to the floor.

"Keep going, Frank. Stay on your feet. Don't disappoint the old man."

He limped over scattered bunches of anti-aeroplane shells.

If only they'd exploded …

“I’m going to let you reach the light,” Erath said. “I want to see your face, Frank. I want to see it at the very end. It’s no fun for me without that.”

Keep stalking me, Frank thought. *Fourteen steps … fifteen …*

“Give us a show, kid. Show me why you’re worthy of being Tommy Helios’s eldest son.”

Frank’s wounded right leg crumbled beneath him. He managed to hop to the corridor’s wall and catch himself. He continued hopping aft—the lives of four million fellow Emericuns and untold millions of time-displaced persons rode on his one good leg.

“Sounds to me like you’re playing hopscotch, Frank. Remembering times you’ve spent with your kids? I’ll bet you’ve been a good father. Savor those memories a minute longer.”

He reached the end of the corridor. *Twenty-five steps so far … Just four more to go before the ladder to the hatchway …*

Two weak hops beyond the corridor’s walls, caught in vertiginous black space, he lost his balance. He fell to the metal floor. Despite agony from his broken ribs, he managed to hold onto his two matches. He’d crawl the rest of the way. *Just a few more feet …*

At last, his fingers found the hole in the deck. It had a smooth, irregularly shaped rim, as though it had been created by fast-acting acid. He crawled around to its far side. He positioned himself so that his good leg, from mid-calf on down, projected over the dead zone, his heel seeming to rest on solid decking. Only then did he strike one of the matches.

Erath followed twenty yards behind. His face, savaged both by Frank’s fists and by the alley wall in Turtle Hill, had the same bloodied, bruised-grape aspect that the phantom Harry Erath had worn in July. His shirt was matted with gore from both the bullet wound to his shoulder and the bayonet slash across his stomach. He still held the broken machete.

He stared at Frank lying on the deck and frowned.

“Is this surrender, then?” Erath asked. “You disappoint me, Frank. Yeah, I wanted to see your face at the end. But I wanted to see the face of a cornered animal. Not of a man who’s given up, who just wants it all to be over. I’ve seen *that* too many times.” He tossed aside his machete. “I don’t need a blade for you. I’ll finish you with my bare hands.”

He flexed those hands, as if readying to wring a goose's neck. Then he stepped onto the dead zone. His feet, legs, and waist vanished so quickly that he didn't have time to flail for an edge. Seeing the expression of absolute shock just before Erath's head fell through the invisible hole nearly muted Frank's pain.

Erath fell for two and a half seconds until Frank heard his body strike the next solid deck down. Frank waited for a scream. What he heard instead was a deep groan. This was followed by laughter so ragged and broken it was difficult to believe it issued from a human throat.

"You … you *did* it, Frank!" Erath's voice sounded like it came from the bottom of a mine shaft. "You fantastic son of a bitch! You *knocked me down!*" Frank forced himself into a sitting position so he could hear better. "I can't move my legs, kid. I think you broke my back. I think I'm dead from the chest down. Come down and kill the rest of me, you hear? Finish me off. You owe me that."

Seconds passed. Frank tested his voice. Only a jagged gurgle spilled out of his bruised lips. He couldn't answer Erath if he wanted to.

"You don't believe me?" Erath said. "You think this is another trick? Stick that match through the hole I fell into and take a look at me. I'm not shitting you, kid. I'm done. Hell, I'd be done as a two-minute egg on a three-minute skillet within a year, anyway. These freak muscles I've got, the speed, the strength? That's my end-of-life efflorescence, kid. The male body's last hurrah before the heart says it won't pump no more. My teeth falling out of my head? That's a sign, too. The gums are the first part to burn out. Just so you'll know. When your time comes.

"Still quiet up there, huh? Maybe you're waiting for me to make good on my promise? I wouldn't stiff you, kid. I'm proud of you. *Damn* proud. You knocked me down, so I'll tell you about your father. About old Tommy. I loved him, Frank. He was like the greatest older brother you could ever want. He taught me all the things my own weak old man never could. I guess the worst night of my life was the night they told me Tommy'd gone rogue. My second worst night was when they assigned me to his liquidation team. Didn't want to do it, not at first. But then I came to see it as a privilege, a blessing. He must've known they'd catch up to him

eventually. And who would he want to be the one that puts his lights out? Some snot-nose he'd never trained? Or *me*?

"I made sure I was the one to catch up with him first. I shoved my two partners off the trail with faked leads. Nobody was going to put Tommy down but me—the best grubber he'd ever trained. And when I was done, I made myself a promise, Frank. I told myself I'd make it up to him; I'd repay all that time and sweat he'd invested in me. I wouldn't let his eldest son, the kid who'd been gifted with his prime tendarm, get eaten alive by the grayhead drugs. I'd do whatever I had to do to make sure Tommy's eldest son got the same chance as I'd gotten—the chance to grow *magnificent* in my old age. To be a *wolf*, not a sheep. To live in perfect freedom. I told you I was giving you a gift, didn't I? *Didn't I?* Show your face, damn it! I'm talking to you!"

Frank lit a match. He inserted it and his face through the invisible hole. The diaphanous substance of the dead zone felt like cold water vapor against the seared skin of his cheeks and neck. The little flame's illumination didn't reach very far. All he could see of Erath, twenty feet below, was his nearly hairless skull. And his eyes, charged as ever with the electricity of madness.

"Are you coming down here?" Erath screamed up at him. "Finish me off, Frank! Don't leave me only *half* dead! Finish what you started! You *owe* me that!"

What I owe myself, Frank thought, *and what I owe my family is to* not *kill you. 'The story keeps changing,' Waning Moon said. If she's right, and the elements and hunger kill you, not me, there's a chance you won't return as a creeper.*

He dropped the match before it could scorch his fingers. He watched it flitter down toward Erath's broken body, then burn itself out.

"Frank! You ungrateful bastard! Get your ass down here and finish me! Don't leave me down here to rot! *Frank!*"

Feeling his way carefully around the dead zone, he dragged himself to the bottom of the steps. It would be a long crawl back up to the foredeck.

"You fucking son of a *whore*! Your father died like a *dog*, did you know that? He cried like a woman, then shit and pissed himself before I slit

his coward throat! *FRANK!* Don't *leave* me down here!"

Ascending the steps felt like climbing a dark mountain while waiting for the sun to surmount its peak. If the fires of Angels' Night no longer lit the deck above, he still had one match left. And the light of Aleedia's face, and of Eshrae's and Flora's faces, and those of multitudes of children who would never be born if he failed to break Time.

• PART THREE •

TIME BREAKER

• TWENTY-FOUR •

The Plot to Breach Time's Wall

"I SHOULD BE AWARDED a degree in advanced nursing," Aleedia complained, "after the work I've done patching you two up. Francesco, you and Paulo gave me the fright of my life when you two dragged yourselves through my doorway, both of you looking like rag dolls a pack of wild dogs had gotten hold of."

She sighed as she glanced around her living room. "Giving up virtually everything again … furniture, friends, all sense of normalcy. I know we would've been shunted off to a smaller apartment in a worse neighborhood anyway, now that Flora's been born. But this … this is so different from anything we've ever gone through before."

Although he wished he could forever banish it from his mind, Aleedia's words painfully reminded him of the estrangement that had separated Leonardo from his family earlier that evening like a guillotine severs a head from its body. "'Normalcy,' if we ever had it, my love, is a thing of the past, I'm afraid," he said.

"We've been looked down on ever since we had Leonardo, but we'll be *fugitives* this time. And I'm still not sure I understand what you intend to accomplish by exploding that ship next to Space City."

Paulo laughed. "You and me *both*, Aleedia! But I've learned to take a lot on faith. Especially when it comes to my great-great-grandson."

"Believe me, I wish I could do this on my own, or just with Grandpa Paulo," Frank said. "But I can't. For one thing, I'll need the older boys to help raise steam and monitor the engines. More importantly, I don't dare leave you and the others here. I have no idea who Erath's superiors are, or if he even *has* superiors. If he does, they must've noted by now that he hasn't

checked in. And they'll send other 'minders' looking for me, the same as they did with my father. All of us need to be out of here and aboard the *Saint Indianna* before first light."

"But what about Leonardo?" Aleedia said. "Are we just going to abandon him?"

He abandoned us, Frank thought. All the crushing weight of the mushroomed black basalt dome sat on his heart as he recalled what could end up being his final conversation with his oldest son.

He'd just explained as simply as he could to his family everything he had learned. The reason why there were creepers and mushrooms. The ghastly time trap, the "rubber room," that endlessly tortured the creepers. The government's hundred-year conspiracy to eradicate humanity, a plan that had extended so long he wasn't sure that anyone in government remembered its original purpose. And his most difficult explanation of all, given Leonardo's conflicted loyalties—why the National Space Colonization Agency's rocket engine development facility had to be destroyed, again and again if need be, so the genocidal catastrophe of the Tricentennial year 2076 would never take place.

Leonardo had absorbed this with stony-faced disbelief. "I'm not going with you," he had said.

Aleedia had looked aghast. "*Leonardo—!* How could you even *think* of abandoning your family? Especially now?"

Leonardo's abrupt declaration didn't surprise Frank. He'd been dreading this moment ever since he'd conceived his plan in the wake of his battle with Harry Erath, two days earlier. "Leonardo," he said, "I need you to carefully think this through."

"What's there to *think* about? You've gone crazy! Your whole story—it's plain *nuts*! How could anybody in their right mind think Uncle Rumberto would have anything to do with some insane scheme to murder everybody alive? Dad, don't take this as an insult, but the grayhead fury, it's obviously affected your *mind.*"

Paulo awkwardly rose from the couch, the effort clearly taxing him. "Don't you *dare* talk to your father that way, boy!" he growled. "You don't know the first damn thing about a man's natural maturity—"

Frank pulled him back down onto the sofa. “Grandfather, stay out of this, please. Leonardo isn’t a child anymore. He makes his own decisions.” He stared up into his son’s face. “The conspiracy is real, son. I’ve read documents that prove it, and I’ve seen hundreds of others in a forgotten archive beneath the NSCA headquarters building. As for your uncle, he may not be aware of what his department is planning; maybe he’s not high enough in the hierarchy to be privy to what is happening. Maybe no one knows anymore; maybe it’s all proceeding on autopilot, like a robot tug whose operators are long dead.”

Leonardo shook his head. “Just when I’m about to be a success—the *first real success* our family’s had for generations—you have to go and do *this*? I don’t want to help you carry out some crazy plan to blow up Space City! I just want to live a happy, successful, *normal* life, like Uncle Rumberto’s. Why do you have to *ruin* this for me?”

Frank felt a lance pierce his heart. “Leonardo, no bout of grayhead fury could’ve made me hallucinate that horrible scene in the subbasement of the NSCA I just described to you. You *die in my arms*, son! That’s what I’m trying to prevent. That, and an eternity of suffering for creepers—for *men and women* like your Grandfather Paulo. If I can make it impossible for the 2076 catastrophe to occur, I’ll breach the rubber wall on that end. I can’t be sure, but I think that will free them from continuously bouncing between future and past. Or at least let them continue on into the future, to a time when they’ll no longer be hunted and can live out ordinary lives. If nothing else, destroying our government’s ability to build a chronome engine will avert that holocaust Malvechio’s wife told me about—the deaths of millions through incineration, radiation poisoning, and rampant cancers.”

“It’s—it’s still *insane*. I refuse to believe it. I *won’t*.” Leonardo backed away from his father. “I’m packing my things. I’m going to join Uncle Rumberto. I’m going to tell him how crazy you’ve become. And nobody better try stopping me.”

This break in family unity had occurred only hours ago. Aleedia had wept bitterly. Grandpa Paulo had threatened to beat Leonardo’s hide to shiny leather before his descendant could make it out the door, but Frank

had convinced him to stand down. He'd watched his eldest son storm silently out of the house, bags in hand, absconding with chunks of both his parents' hearts.

Would Leonardo actually betray his father to Rumberto? Would Rumberto then run to Jenerette Seeling and Michael Laurent, and would they send police or grubbers to try to stop him?

One more reason to hasten his family's evacuation aboard the *Saint Indianna*.

The first hint of sunrise crept above the bluffs overlooking the Navy Yards. It was hard to discern the sun's tentative light from the garish glow of the still-smoldering Angels' Night fires that had reduced Turtle Hill's mushrooms to blackened stubble. Smoke darkened the sky, and the clouds had manifested a darkness of their own, possibly presaging another snowfall.

Frank stood on the open navigation bridge of the *Saint Indianna*, his hands resting on the spokes of a huge helming wheel, an exquisitely crafted wooden circle whose handles had been worn smooth by the hands of dozens of brave navymen. Grandpa Paulo had been wise to seek comrades of his from the *Tridentfish* who had solidified sufficiently to be helpful; those men knew nautical engines, and they could raise steam in the armored cruiser's boilers far faster than Frank's sons could have under Paulo's and Frank's guidance.

The newcomers' skills would be invaluable. Not just for this one mission; Frank knew this initial demolition of the experimental propulsion laboratories and fabrication and test sites in Space City was only the beginning of what promised to be a long campaign, one that could extend through the rest of his life. He and Paulo would need to recruit other men of the past. More navymen from the mushrooming ships in the Navy Yards, and soldiers from the old army camps in the mountains. Even Anglish warriors from Kraken Island, if possible, if they could be freed from the Goethan prison camps or coaxed out of their guerilla redoubts in the hills.

Frank felt the *Saint Indianna* tremble to life beneath his feet. The deck of the open navigation bridge vibrated with the force of tons of water heating to steam within the cruiser's immense network of water tube boilers, nestled deep within the engineering decks just above the ship's keel. He resisted his impulse to holler into the speaking tube that extended down to the engine room, to ask when steam levels would be adequate to drive the engines' giant pistons and turn the cruiser's four propellor shafts. Paulo's men would let him know when steam had been raised.

Would it happen quickly enough? Once the *Saint Indianna* was underway and had entered the Tomaic River for her journey north, there would be little the government could do to stop her. They couldn't give chase in other warships; no one else apart from him knew how to pilot such a ship, even if any of the mushrooms in the Navy Yard had solidified enough to set sail. Frank knew that interior coastal fortifications had been built along the Tomaic River during the Great War years or earlier, army forts armed with large cannons and torpedo launchers meant to prevent an invasion of New Shining Capital and key military bases to the north. But those were all mushrooms now, and there hadn't ever been reason to check their condition or usability. Even if they were a hundred percent solid, not a soul in the Department of Environmental Sanitation or any other department or agency was capable of loading and firing a coast-defense cannon or launching a torpedo.

But if Jenerette and Michael managed to organize an assault before the *Saint Indianna* managed to get underway? That was a different kettle of fish. Their assault force might manage to board the cruiser. Paulo's men were occupied raising steam; none of Frank's sons knew how to handle a firearm. Apart from Paulo, Frank was the only trained marksman in the Helios family. It would be up to him to single-handedly repel an assault with the rifles he'd taken from the cruiser's armory. The government men could also try to trap the *Saint Indianna* within the Navy Yards' harbor—they wouldn't be able to propel any of the other warships into the *Saint Indianna*'s path, but if they worked fast enough, they could cast off the moorings of all the vessels docked in the Yards and let the current clog the exit to the Tomaic River with other mushroomed ships.

Despite his family's wish to be close by him, Frank had insisted that Aleedia and the younger children shelter inside the heavily armored conning tower, the best-protected citadel on the ship, located beneath the open navigation bridge; he'd demanded they stay there at least until the *Saint Indianna* had maneuvered out of the harbor into the Tomaic River and steamed north of New Shining Capital. The older boys were down on the engineering deck, offering whatever help they could while learning basic nautical propulsion skills from the well-trained navymen. Apart from the conning tower and the ship's magazines and main turrets, the engineering deck, located in the cruiser's bowels, was the best-protected location aboard the *Saint Indianna*. That provided Frank some welcome reassurance.

But any sense of reassurance was short-lived. New glows appeared atop the bluff. The headlights of government vehicles, coming for him.

His heart sank to the bottom of the harbor. Leonardo had betrayed his father.

• TWENTY-FIVE •

Battle in the Navy Yards

THE OMINOUS GLOWS headed for the road that led from Turtle Hill down to the Navy Yards, headlights of Mudders or similar utility vehicles. A convoy was on its way to the pier where the *Saint Indianna* was docked, likely manned by heavily armed grubbers. They were the nearest equivalent to a company of army troops the government could muster.

Frank knew he could hold them off for a time. He and Paulo's men had raised all gangways and ladders as soon as they'd come aboard with Frank's family. So the grubbers would need to figure out jury-rigged methods of reaching the cruiser's upper deck twenty feet above the pier. Frank had stashed multiple rifles and boxes of ammunition in the fighting platform halfway up the *Saint Indianna*'s thick military mast. That platform, shielded on all sides with half-inch-thick steel pierced with firing slits, made for an ideal sniper's nest. Frank would be able to pick off grubbers one by one while they scrambled for some way to scale the *Saint Indianna*'s sheer sides.

Unless they'd brought a mushroomed howitzer with them from an army base in the mountains. Bullets would ricochet off the fighting platform's shields, but a lucky shot of a high-explosive shell could crumple the platform like a tin can, or even possibly topple the top half of the military mast into the harbor.

Then Frank saw the approach of something even more worrisome than a mushroomed howitzer.

Silhouetted by the rays of the rising sun, crawling slowly along the edge of the bluff toward the access road down to the Navy Yards, lumbered a Mower. Its wrecking arm, positioned vertically, towered as high as the

uppermost signaling platform atop the *Saint Indianna*'s mainmast. Hanging from that wrecking arm on a thick steel cable, Frank knew, was a tempered steel demolition ball weighing twelve tons.

If the *Saint Indianna* had her full complement of navymen aboard, her gunners would blast the Mower off the top of the bluff before the ungainly vehicle could get within a hundred yards of the sloping access road. Even if the cruiser's main turrets, damaged in battle, no longer traversed, her smaller secondary cannons, mounted in the hull, could do the job. But barely more than a dozen *Tridentfish* navymen had manifested enough to answer Paulo's call, and they couldn't be called away from the engineering deck if Frank hoped to escape the harbor.

He yelled into the speaking tube connected with the boiler room. "Emergency! A hostile force is on its way, including a wrecking machine that poses a real threat to our vessel. When will steam pressure be adequate to get those propellers turning?"

Paulo's voice came through the speaking pipe a few seconds later. "We're close, Francesco! How much speed do you need?"

"Barely any—just enough to back us away from this pier into the center of the harbor, then nudge us into the river. If we stay where we are more than another seven or eight minutes, a Mower like the one I used to drive will start smashing our sides and superstructure with a twelve-ton wrecking ball. Or the operator could use the machine to push other ships into our path to the river, boxing us in here in the harbor."

"My men are doing their best—these boilers were dead cold—"

"I know. But please press them to ready us to move as quickly as they can. Are my sons being helpful?"

"As much as can be hoped for, Grandson. You raised them good."

And what of Leonardo? Frank thought plaintively. But he pushed the thought aside. It was an anchor tugging his soul to the depths, and he dare not indulge any private sorrows, not now.

How could he best defend the *Saint Indianna* against the Mower? His former bosses wouldn't have had time to fortify the driver's compartment. If Frank could take out the operator with a well-placed shot, the Mower would cease to be a concern. Yet despite its lack of armor, the

Mower's driver's compartment was still surrounded by a lot of metal, and its glass windows were triple-thick, strengthened against falling debris, possibly capable of deflecting bullets. Its doors were only halfheight, allowing for cross ventilation in the cabin, but Frank couldn't count on having a clear line of sight through the cabin's sides, except for fleeting moments when the Mower would traverse curves in the access road or make sharp turns within the Navy Yard.

If he could climb up into the fighting platform on the military mast, he'd be sited well above the Mower's cabin and could try disabling the driver by shooting through the cabin's roof. But then he recalled the thick steel of a Mower's roof, also meant to protect the operator from falling debris. A high-powered rifle like the ones he'd taken from the *Saint Indianna*'s armory might be able to pierce the roof. But the idea was moot in any case, because Frank couldn't leave the vicinity of the speaking tubes, not if he wanted to hear the alert that the *Saint Indianna* was ready to answer her helm. Climbing to and from the fighting platform would take too much time, time he couldn't spare away from the wheel and throttle.

One by one, the Mudders pulled up to the edge of the pier. Frank crouched behind the navigation bridge's splinter shields. He counted eleven vehicles. Each held between two and four grubbers and their guns. He wondered whether there had ever been a time when so many grubbers had assembled in a single place; normally they operated as single assassins, or in pairs, as he and Erath briefly had. Most of them looked much like Erath had; balding, grotesquely overmuscled, their limbs crisscrossed with bulging veins, in the late stages of the hypertropism that would eventually kill them like a cancer. They spread out along the pier with their rifles, searching the port flank of the *Saint Indianna* for any access points. Failing to find any, they retreated from the pier and fanned out into the Navy Yards' maintenance, fabrication, and storage buildings, searching for anything that would enable them to board the armored cruiser.

Frank reached for one of the pair of rifles he'd positioned on the navigation platform. Would it do him any good to pick off the grubbers as they returned to the pier with ladders, ropes, and grappling hooks? Shooting at them would reveal his position; then they would pin him down with

return fire. His most important task was to halt the progress of that Mower. Best he should accomplish that when the grubbers were inside the buildings. They'd hear his shots, but they wouldn't see his muzzle flashes. That might buy him a minute or two of concealment before they ran outside and pinpointed his position.

The Mower rumbled down the slanted access road, its demolition ball hanging forward, seeming to drag the rest of the giant vehicle toward its intended victim with childlike impatience. The rising sun's glare glinted fiercely off the cabin's front glass, making it impossible for Frank to see the operator. He waited until the Mower reached a bend in the access road and turned to its right, showing Frank the left side of its cabin. Now he could see the driver strapped into his chair. He aimed his rifle at the open space above the half doorway. It wasn't a dramatically long shot, or at least it wouldn't be with one of the sniper rifles he'd trained with; but this archaic long gun only had primitive iron sights, no scope. He pulled the trigger with an even, slow pressure, then immediately wished he'd had time to fire a few practice rounds, because the recoil jerked him harshly backward. His shot went wide, pinging off the Mower's left fender. He quickly chambered another round, but by the time he re-shouldered his rifle and lined up the sights, the Mower had turned enough that he no longer had a clear shot at the interior of the cabin. Firing at the thick glass would be useless at this distance; all that would accomplish would be to alert the grubbers to his presence a little quicker.

If only he'd learned to load, aim, and fire one of the medium-caliber cannons mounted in the hull! Given a few hours to examine one of those weapons, he could probably figure out its breach mechanism and its training and elevation apparatus, assuming he could put hands on an appropriate shell and powder bag. But he didn't have a few hours … a few minutes, maybe. His inability to do anything but wait for the Mower to get closer made the muscles of his arms and legs twitch with unbearable anxiety. He watched the main body of the machine disappear between two- and three-story red-brick buildings as the Mower turned onto the Navy Yards' street grid, only its towering wrecking arm and that ominous steel ball visible above the rooftops.

Three grubbers emerged from a warehouse carrying a long ladder. They were a good bit closer to his position than the driver of the Mower had been. Part of him warned himself not to reveal his position this soon, not until he had a chance to take several shots at the Mower's cabin at short range. Another part told him caution served no purpose, since if he could disable those men now, while they were encumbered with the ladder, he'd have fewer enemies shooting back at him while he was aiming for the driver.

He went with the latter of his interior voices. Mindful of his rifle's powerful kick, he braced himself against a railing and aimed for the lead grubber. His bullet ripped into the man's chest, immediately dropping him. The now unbalanced weight of the long ladder felled the other two men, landing on top of one of them. Frank took advantage of the trapped grubber's helplessness to reload and get off a second shot, hitting him in the lower gut. The third man scurried back toward the shelter of the warehouse. Frank shot at him but only managed to graze his shoulder.

The sounds of gunfire brought the rest of the grubbers pouring out of the buildings they'd been searching. The lightly wounded man pointed to the *Saint Indianna*'s navigation bridge. Frank watched the twenty or so unhurt grubbers spread out along the docks and seek sheltered vantage points from which they could return fire. A few seconds later, the first bullet aimed in his direction pinged off one of the navigation bridge's splinter shields.

The Mower slowly crawled closer on its wide rubber tracks. It turned onto the waterfront road abutting the docks and piers, the clamor of its approach nearly obscuring the cracks of gunfire aimed at Frank's position. He waited until the instant after a fusillade of bullets had clanged off the splinter shields and popped up over the railing to get off a shot at the Mower's front glass. He didn't dare linger to see whether his shot had penetrated the reinforced glass; he ducked behind cover just before a round of fire from the grubbers would have drilled gory holes through him.

The Mower came to a halt on the concrete shelf adjacent to the *Saint Indianna*'s wooden pier. Its gunmetal gray wrecking arm towered above Frank's position like the punishing forearm of a vengeful god poised to

painfully excise each of his sins. He watched that arm swing away from him, the cable holding the demolition ball reluctantly following behind. In all his years being associated with a Mower, he'd never before been on the receiving end of its obliterating might. Despite the plethora of sensory inputs assaulting him—the acrid smell of burnt gunpowder; clamor of grinding gears as the Mower maneuvered its arm; the icy coldness of the splinter shield against the bare skin of his arm; the taste of blood from when he'd bit his tongue in reaction to nearly being shot—all screaming the deadly reality of what was happening to him, this tableau felt like a dream of shame, his subconscious reacting to his abiding guilt at having mowed down so many beautiful mushrooms and having killed Waning Moon and the scientists. Now *he* was the toadstool about to be kicked off the lawn.

He watched the demolition ball grow smaller in the sky as it swung to the far extreme of its pendulum path, a retreating black sun. Then the Mower's gears shrieked as the operator shifted them into reverse and the wrecking arm swung toward the *Saint Indianna*.

Frank braced himself for the coming impact. He lay flat on the deck of the navigation bridge and covered his head.

The demolition ball obliterated the center section of the pier, peppering the *Saint Indianna*'s port side with fragments. While shards bounced off the navigation bridge's splinter shields, the ball, robbed of the majority of its momentum by its collision with the pier, struck the lower side of the cruiser near her waterline, booming against the main armor belt, six inches of tempered steel.

The navigation bridge vibrated violently enough to cause Frank's prone body to slide several feet across its deck. He knew the next hit, absent the pier to slow the ball down, would be far more violent.

The Mower's operator reversed gears again and began swinging the wrecking arm in the opposite direction. Frank grabbed his rifle and stood at the railing. The Mower's bulk came between him and nearly all the grubbers arrayed with their guns. He fired at the cabin's glass. Although a direct hit, the impact of his bullet created a disappointingly small crack in the protective windshield. He reloaded and fired again, aiming for the same spot, hoping to punch through. But the turning of the Mower's cabin and

wrecking arm spoiled his aim so that his bullet hit a different section of glass.

He reloaded yet again. The demolition ball was already receding in the brightening sky; very soon he'd need to take cover or its impact would send him flying off the bridge and into the harbor. But the turning of the Mower's cabin had exposed the open area above the half-height door. Frank could clearly see the operator; this was the best chance he'd have to put him down.

With an inward clutch, Frank recognized the driver. Josepho Tadmus. Francesco had trained him eight years earlier. Then Josepho had been father to two children. His one remaining tendarm showed his family had grown since.

I don't want to kill a father.

Frank's hesitation lasted less than a second. But by then the Mower's cabin had turned sufficiently that his perfect shot was partially spoiled. Angry with himself, he managed to land a shot inside the cabin but couldn't see whether it disabled Josepho or stunned him upon ricocheting.

The demolition ball swung through the empty space formerly occupied by the pier. It hit the *Saint Indianna*'s main armor belt near the waterline with the force of an exploding torpedo, knocking the huge ship to starboard. The railing Frank had been leaning against crashed into his chest like a full-body tackle from Harry Erath, knocking the wind from him and nearly flipping him over the railing and dropping him to the forecastle deck far below. The blow dislodged the rifle from his hands. It flew on a wide arc and landed in the water amidst the wreckage of a portion of the pier.

Frank struggled to recover his senses. The clash of the demolition ball against a wall of steel armor plating six inches thick had been the loudest sound ever inflicted on his eardrums. His ears rang as though tiny sirens had been activated inside his ear canals. He thought he heard a faint voice from somewhere. Instinctively he looked around him.

The speaking tubes …

Dazed, he stumbled to the tubes and yelled into the one that led to the engineering deck—"Paulo? Is that you?" He could barely hear his own voice.

“What the hell just hit us? Get us out of here! We’ve got adequate steam raised!”

Frank grabbed the throttle lever and pulled it into reverse, then positioned his hands on the conning wheel. The deck beneath his feet shuddered and vibrated as deep in the bowels of the cruiser the engines’ great pistons started their rotations and slowly, agonizingly slowly, the *Saint Indianna* began backing her way into the harbor.

Frank glanced to his left—the demolition ball was about a hundred feet away, approaching fast on its inward arc. Josepho had reeled in the cable so that the ball would strike the unarmored upper part of the ship.

The slowness of the *Saint Indianna*’s retreat into the harbor was maddening. *Come on, come on …!* A couple dozen yards more and the ball would miss the cruiser’s relatively fragile superstructure, striking the heavily armored fore turret instead …

The ball crashed into the boat deck aft of the conning tower, smashing steam launches and longboats into jagged matchsticks. Its momentum carried it into the superstructure’s interior, where it demolished map rooms and officers’ berths and mess rooms. The *Saint Indianna*’s backward movement snagged the ball, trapping it between interior bulkheads.

Amazingly, the force of the cruiser’s backward course, slow as it was, yanked the Mower sideways along the concrete pad it rested upon.

It’s like the day of the earthquake, Frank thought, *when my Mower’s ball tether wrapped itself around the Washerman’s Monument, binding machine and mushroom together until both collapsed into a chasm.*

Frank watched his former coworker try every possible stratagem to prevent being pulled into the harbor. He tried backing away from the piers, but the traction of the Mower’s rubber treads was overwhelmed by the torque of the *Saint Indianna*’s propellers. He swung the wrecking arm back and forth, struggling to dislodge the demolition ball from the cruiser’s interior. But the ball remained snagged.

Slowly, inexorably, the Mower was dragged onto the damaged pier. The unstable wooden structure groaned and shuddered beneath the tremendous machine’s weight. Frank watched Josepho frantically unstrap

himself and jump from the cabin onto the soon-to-collapse pier. The driver ran landward as the pier began collapsing. The Mower fell into the harbor like an obese diver slipping off a diving board. The sudden change in the angle of tension on the steel cable, combined with the pull of the sinking Mower, yanked the ball free from the *Saint Indianna*'s superstructure. The huge orb plunged toward the harbor bottom with the speed of a meteor.

The cruiser had escaped the trap. The way to Space City, a hundred and sixty nautical miles to the northwest, now seemed clear.

• TWENTY-SIX •

Laurent's Ultimatum

FORTY MILES NORTH of New Shining Capital, Frank was startled by the staticky squawk of a two-way radio coming to life near his feet.

He braced a leg against the conning wheel and leaned beneath a shelf bolted to the splinter screen, searching for it. He found it in an open metal box. A standard-issue Department of Environmental Sanitation radio, undoubtedly left there for him to use on his anticipated voyage to Kraken Island.

He picked it up as a familiar voice issued from its speaker.

"Calling Frank Helios. Calling Frank Helios. This is Michael Laurent. Come in, Helios!"

Frank pressed the Speak button. "Laurent, this is Helios. What do you want?"

"That should be *obvious*, you grayheaded traitor! I want my goddamn mushroom back! I order you to turn that ship around and return to New Shining Capital. Do this and I promise nothing bad will be done to your family."

"That's an empty offer, Laurent. My family are with me. They're beyond your threats."

"You're mistaken. I hold their lives and yours right here on my desk."

"What the hell do you mean? None of your robot tugs stand a chance of stopping the *Saint Indianna* now that she's underway. They can't even slow her down."

"I'm not talking about robot tugs," Laurent said. "That floating mushroom you commandeered like some storybook pirate is crammed full

of hundreds of tons of high explosives. Have you forgotten about the remote detonator needed to safely ignite all that material?"

Frank hadn't forgotten. But in the headlong rush of events, he'd had no time to locate where the workmen who'd loaded the *Saint Indianna* with extra ammunition had placed the device.

"I shouldn't have to remind you that the detonator can be used in one of two ways," Laurent said. "Either manually by someone with a clear sight line to the vessel to be detonated, or more distantly by way of radio transmission. I have the transmitter sitting here on my desk. If my agents ashore tell me you have failed to turn that mushroom around within the next thirty minutes, I will turn this dial. Seconds later, your stolen ship will explode like a titan's fireworks display, showering bits of mushroom and Helioses across four counties."

Frank had to bargain for time. Enough time for him to locate the detonator and destroy it.

"Turning around a ship of this size takes a lot more than a half hour," Frank said. "This section of the river's too narrow to attempt a turn. An armored cruiser's not a Mower; it can't simply swivel in place." He decided to press his luck. "There may not be a part of the Tomaic wide enough to turn the *Saint Indianna* around anywhere south of Three Rivers Junction."

"Do you take me for an idiot? In what dark corner of your demented grayhead imagination do you think I'd grant you permission to steam to the proximity of your goal, Space City?"

So Leonardo had revealed everything. Frank had put too much trust in what he'd considered to be his eldest son's honor. He felt anew the searing pain in his back he'd suffered when he'd gifted his first tendarm to Leonardo. The phantom pain, once the price he'd happily paid to usher his eldest son into adulthood, now seared him in a far more baleful way. But this was no time to allow himself to be overcome with emotional turmoil. "Laurent, be reasonable. I know this ship is valuable to you. At least allow me a couple of hours to hopefully find a wider section of the Tomaic."

"I'll give you one hour. If by that time you still aren't in a section of the river wide enough to permit a turn, you are to run that mushroom

aground on a riverbank, and I will have tugs drag it back to where it came from."

"But grounding the *Saint Indianna* risks tearing her bottom out—"

"It's either that or detonation. Your choice. We'll speak again in an hour. Or, depending on what my agents ashore tell me, I may choose to use my *other* radio, the one that transmits signals, not words."

The radio went silent.

"Paulo!" Frank yelled into the speaking tube that connected him with the engineering deck. "I need you to come to the navigation bridge immediately and take my place at the wheel!"

Only Frank knew what the remote detonator looked like, and only he had at least a rough idea of where it might be stored.

Paulo answered Frank's directive and arrived on the navigation bridge fewer than ten minutes later. Frank explained the situation in as few words as he could; he had barely fifty minutes left to find a metal box the size of a pack of playing cards somewhere within one of three magazine chambers, two sitting beneath the two main turrets and the third beneath the secondary guns deck. Each ammunition hold was nearly as vast as an auditorium.

"If I don't return within forty minutes," Frank told Paulo, "I need to have you order your men to drop anchor and bring us to a complete halt. I don't want to give Laurent any excuse to blow us up."

"Understood," Paulo said. "Here, take my lantern. I don't need it here at the wheel. Good luck, Grandson! May your feet have wings!"

Frank dashed for the series of ladders and tubes that would allow him to descend to the magazines. Having to unscrew a series of armored hatches installed to prevent the spread of battle fires slowed his descent.

If I were one of the workmen assigned to stock this cruiser with extra ammunition, where would I have left the detonator?

It wouldn't have been hidden; although Frank's arrival aboard had been expected, his acting as an enemy hadn't been. In all likelihood, the workmen would have stashed the detonator for him near where they placed the explosive charge meant to set off ammunition. So where was the most efficacious spot for the workmen to position the explosive charge?

They'd want to ensure Kraken Island would be hit with the greatest expulsive force achievable, he thought, climbing through yet another armored hatch. *That would mean making sure all of the ammunition, or most of it, ignites, rather than having masses of unexploded shells uselessly scattered into the ocean. So they wouldn't arrange for the most powerful shells to explode first. That eliminates the magazines below the two main turrets. They'd want to set off the smaller caliber ammunition first, counting on that explosion to ignite the bigger shells in the two primary magazines.*

Assuming the workmen followed this same logic, the remote detonator must be waiting for him somewhere in the smaller caliber magazine room below the secondary gun deck. Frank finished his descent and began hurrying aft, unscrewing flash-proof hatchway doors through reinforced bulkheads.

At last, he stepped through the hatchway that led into the smaller caliber magazine. A swing of his lantern revealed rows upon rows of neatly arranged shells for the six-inch caliber cannons and boxes of smaller shells stocked for rapid-fire guns of lesser caliber, those meant to repel torpedo boats or aircraft. He saw the four shell hoists, speedy elevators that ascended through armored tubes to deliver ammunition to gunners on the decks above.

There had to be a gunner's mate station somewhere, the command post for this magazine. That would be the obvious place for the workmen to have stashed the detonator—

A voice from his most nightmarish dreams and memories croaked behind him.

"Looking for *this*, Frank?"

• TWENTY-SEVEN •

Release

"**HOW**—how are you still *alive*?" Frank said.

"I'm not," Harry Erath said. He held the detonator in his left hand, a crowbar in his right. "You killed me. I died on that lower deck where you left me."

"How are you walking? You said the fall broke your back …"

"Funny thing, that," Erath said. "First half dozen times I came back as a ghost, I was paralyzed from the chest down. Made me easy pickings for any grubber who came across me. One quick squirt of CAHSPEI disrupter foam, and I was sent on to my next manifestation. But all those dispersals and re-manifestations, going from nothing to ghost to creeper, being taken apart and put back together, it ended up reconnecting my severed spinal cord. Not perfectly; I'm a fucking gimp now. But good enough for me to walk."

Frank stared at the detonator box Erath held in his right fist. "So this is your revenge?" Despair wrestled with the adrenaline of desperation. "You're going to blow us all up? Make me and my family ghosts or creepers like you, bounce us with you between the rubber walls of the time prison?"

"I guess I'd be within my rights to do that, wouldn't I?"

Frank tensed, readying himself to lunge for the box Erath clutched in his left hand.

"But I won't," Erath said.

He confirmed this by using the crowbar to pry the detonator open, revealing its network of wires and popping off its activator button. He put

the device on the floor and stomped on it. For good measure, he then beat it with the crowbar until its pieces scattered across the room.

As astonished as this made Frank, what Erath did next astounded him even more. His former minder limped over to him, then fell to his knees and embraced Frank's legs, burying his face between Frank's knees.

"Ah, my boy, my boy, what a *jackass* I've been!" he said, voice choked with emotion. "Waning Moon was right about *everything*, and so were you. I've made the circuit, Frank. The whole fucking circuit—forward to 2076 when everyone dies, then back to 1946 when your great-great-grandpa sinks half of Yurreth, then forward again in spurts until I'm back here in 2054. I've done the circuit *twice*. Seen that hellish year 2076 twice. Have you learned the big joke yet? Why the space agency pushes so hard to schedule their first mission launch for that year? It's their way of celebrating the Tricentennial, the big anniversary. Why settle for just fireworks when you can blow up the whole population in space?

"I've been here on board this cruiser before, in this same section of the river. But I was a ghost then, barely materialized. I didn't find the detonator that time, and neither did you, and so no one could stop Laurent when he exploded the ship with your family on it a hundred miles south of Space City. I've seen your father, Frank. I've seen good old Tommy, and plenty of other people I'd killed. I'm bound to them, and them to me, as we all bounce through this goddamned prison."

He looked up into Frank's face. "Hey, help an old gimp up, would you? My knees aren't what they used to be."

Frank did as he asked.

"Let's go set us all free," Erath said.

It took longer to ascend to the navigation bridge than it had to descend to the ammunition magazine. Harry Erath wasn't nearly as spry as Frank, and Frank had to assist him with climbing through the tight armored doors and hatchways. As Frank stepped onto the deck of the navigation bridge, he heard Paulo ordering a contingent of his men to drop anchor.

“Belay that order,” Frank said. “The detonator’s been located and destroyed.”

Paulo looked behind him. He nearly lost control of the wheel when he saw who had accompanied his grandson. “What the fuck’s *he* doing here? I owe that bastard a bullet—”

“He’s not our enemy anymore, Grandpa. Erath’s the one who destroyed the detonator.”

“Hey, Gramps,” Erath said, “stop gaping and cancel that order, or you’ll need to have those men turn around and crank those anchor chains back up. We’re on a nonstop passage to Space City.”

Paulo did as Frank had asked, then handed the helm to his descendant. Paulo took the opportunity to hurl the Department of Environmental Sanitation radio into the Tomaic. He continued eyeing Harry Erath with suspicion.

“You can stop giving me the goon-eye, Gramps,” Erath said. “I’m a creeper just like you, and I’m on your side. Sorry about blowing a chunk out of your shoulder a while back. For me, that happened a long, *long* while back. I’ve bounced around time a good bit more than you have. Seen all the sights, including the aftermath of what you and your men pulled off in 1946. Seen what’s coming in 2076. Death of the whole world. That sort of thing tends to change a man.”

“Are we doing the right thing?” Frank said, staring at the river ahead. “Will blowing up the *Saint Indianna* at Space City avert the catastrophe of 2076?”

“Damned if *I* know,” Erath said. “I’ll bet even Waning Moon doesn’t know for sure, or that crazy lady who read your fortune in Turtle Hill. Only one way for us to find out.”

They steamed north in silence for a few moments, the *Saint Indianna* cutting a path through the chill river with her sharp prow, leaving a foaming wake behind her.

“With the detonator destroyed,” Paulo said, “someone’s going to have to manually set off the explosive charge in the magazine after everyone else has abandoned ship. I’ve died for my country before. I’ll do it again, gladly.”

Frank felt a lump in his throat. “I don’t want to lose you, Grandpa. The family and I need you.”

“You won’t have to lose him, Frank,” Erath said. “I still owe Tommy. I’ll be the one to blow this floating toadstool to the moon.”

Paulo scowled at his former antagonist. “Hungry for glory?”

“No more than you are,” Erath retorted. “Look, way I see it, me taking a quick dirt nap by exploding this old tub is an easy way out. It’s you two and your family that’re gonna have the hard end of things. You’re gonna need to organize a small army to prevent the government from rebuilding Space City and resuming work on their chronome engine. You’ll need to find more creepers, army soldiers and navymen, and maybe creepers that’ve been hiding out as normals, convince them to join you, train them as a rebel force. Everything that we knock down is gonna sprout again as mushrooms. Maybe the National Space Colonization Agency will shy away from making use of mushrooms. Maybe they won’t. But if you only delay them this once and let them get back to work later, my knocking the shit out of Space City a few hours from now won’t mean a thing.”

“You’re talking the work of generations,” Frank said.

“It took generations for us to work our way into this mess,” Erath said. “Stands to reason it’ll take generations to work our way out.”

The *Saint Indianna* reached Three Rivers Junction early the next morning. Frank and Paulo had traded off three-hour shifts at the wheel throughout the night. Frank’s sons had manned the cruiser’s powerful searchlights, scanning the river ahead for obstructions, islands, and mudbanks.

Paulo directed his men to drop anchor when the cruiser was fifty yards east of the docks at the southeastern edge of Space City, where the Delwaney River flowed into the Tomaic. Frank had decided to be cautious. The streets of Space City stood empty, and he could detect no signs of activity in any of its buildings, which indicated Michael Laurent had alerted their occupants to evacuate. The partially completed black basalt dome, meant for the development and testing of a prototype chronome engine, sat

like the abandoned nest of a giant roc, a legendary monster bird described in a mushroomed book of fairy tales Frank had once read to his children.

But the city might not be as empty as it seemed. In case a force of grubbers sheltered in any of those buildings, waiting with guns for the *Saint Indianna*'s arrival, Frank decided against docking the cruiser at any of the piers. Dropping anchor out in the river would lessen somewhat the destruction the explosion would wreak on Space City, but that was preferable to the *Saint Indianna* being forcibly boarded.

Paulo and his men checked the cruiser's remaining auxiliary boats for seaworthiness. They found one steam launch and two longboats stored on the ship's starboard side that were undamaged. They used the *Saint Indianna*'s boat cranes and hoists to lower the three boats into the river. Frank's family would occupy the steam launch, with Frank manning the tiller. Paulo and the navymen would follow in the two longboats, rowing them to the Delwaney's eastern shore, far enough away to avoid the explosion's fireball and shock wave.

One of Paulo's men lowered Aleedia's wheelchair into the steam launch with a rope while Frank assisted his wife in climbing down the rope ladder. As soon as he ensured she was comfortably ensconced aboard the launch, he climbed back up to the *Saint Indianna*'s main deck where Harry Erath stood.

"I didn't thank you before," Frank said to him. "I'll thank you now."

"At the risk of repeating myself—"

"I know. You're not doing this for me. You're doing it for my father. Thank you anyway."

"Well … you weren't half bad as a student," Erath said. He laughed. "You weren't half *good*, either."

"Give us enough time to make it ashore and climb one of those hills."

"Sure. It's not like I'm in any big hurry to blow myself to kingdom come."

Frank stared at the partially completed black dome, then glanced north at its larger mushrooming twin. "I wish I could know for sure this will work. That we'll succeed in breaking Time."

“I’ll tell you what, sport,” Erath said. “If it *doesn’t* work, I’ll keep bouncing between the rubber walls, won’t I? In that case, I promise I’ll see you again at some point, and I’ll pass along the bad news. If you never see me again …? That’ll mean the wall of 2076 has been knocked down. If there are still grubbers where I land in the future, they’ll keep killing me, I guess, until I bounce forward to a time when there are no grubbers. And then I’ll live out whatever’s left of my natural lifespan, which can’t be too long at this point. Maybe I’ll die in bed, real peaceful-like. Never to bounce again, secure and cozy in a pine box under good soil.”

“I hope that’s what’s in store for you,” Frank said. “If you should see my father on your journeys—”

“I’ll pass along your salutations to old Tommy. And I’ll tell him he raised you good. Even though you can’t handle a knife any better than an arthritic old woman.”

It didn’t feel appropriate to hug Harry Erath. Instead, Frank saluted him the way he’d seen the ghost soldiers salute their mushroomed flag during Flag Day.

“I pray this is the last time I’ll see you,” Frank said.

Ten minutes after Frank signaled Harry Erath by firing a rifle from the top of a bluff overlooking the junction of the Delwaney and Tomaic Rivers, he saw the midsection of the *Saint Indianna* shudder as though the cruiser suffered a bout of violent indigestion. Explosion followed explosion, each more destructive than the last, toppling the masts and smokestacks. Then the two main magazines, twin volcanoes, erupted simultaneously. The *Saint Indianna* vanished inside a rapidly expanding ball of fire.

Far away as he was, Frank felt a wave of heat sear his face. Everyone covered their ears as the overwhelming climactic boom slammed into them. A massive mushroom-shaped cloud of black smoke rose from the section of the Delwaney where the cruiser had been anchored. Frank saw the warship’s two main gun turrets burst through the column of smoke like huge steel birds soaring high above the river. Each landed nearly a mile away with splashes that would have seemed gargantuan in isolation but that

were dwarfed by the waves that battered the eastern shores of the Delwaney and Tomaic Rivers.

When the smoke over the water dissipated, no sign of the *Saint Indianna* remained save a scattering of floating wooden debris, mere crumbs of the once mighty warship. Fresh columns of smoke, black and various shades of gray, rose from Space City, its ruins crowned by widespread fires. Only the giant concrete launch gantry stood relatively intact, although scorched and heavily scarred and cracked. The engineering buildings had been leveled by the blast or the pounding wave that followed. Frank was tremendously relieved to see the chronome engine dome had been reduced to piles of black stone and twisted girders. Even its mushroomed twin in the field between Space City and Iron Horse had been cut down as thoroughly as Frank could have managed with his Mower.

Although he told himself not to expect any such thing, part of him hoped for a sign in the heavens, a pearly light breaking forth from the highest clouds or a kaleidoscope of colors stretching from horizon to horizon, a rainbow to fill the whole sky. What did breaking Time look like? Probably like nothing at all. There wasn't even a sound of distant trumpets or the grateful hosannas of millions of released ghosts and creepers, just the crackling of fires and crashes of collapsing ruins on the opposite shore.

The wave of heat quickly faded, replaced by cold winds that dislodged remaining bits of snow from the pine trees and swirled flakes around the onlookers. He felt Aleedia's touch on his arm. "Francesco, have we really changed the future?"

He kissed the top of her head. "We won't know until the future gets here."

"What if Space City grows back? Like the Washerman's Monument and the houses in Turtle Hill?"

"Then we'll have to knock it down again. And maybe again after that." An appealing idea occurred to him. "Or we could import a herd of my brother Malvechio's buffalo. The crush of their hooves prevents mushrooms from taking root in the soil."

"But won't the government try to stop you?"

“They will. Erath said Paulo and I will need to gather an army of creepers to guard what we’ve done here. Maybe the best place to recruit them is those mushroomed prisoner of war camps on Kraken Island, the camps where the Goethans imprisoned captured Emericun and Anglish soldiers.”

“Wouldn’t you have to fight the Goethans, then? I mean, Goethan creepers?”

“I suppose we would.” He considered this some more. “The work of generations …”

“Must our sons be soldiers? Can’t they be fathers?”

“They can be both, in time. They *should* be both. They’re the ones who will see farther into the future than we will.”

“Oh, Francesco … will our lives be beastly from now on? Nothing but struggle and fighting?”

“We’ve been struggling and fighting all along,” he said. “At least now we’ll do it as free people, working to free others.”

Eshrae had been listening. “I want to be a navyman like Grandpa Paulo!” he announced. “I want him and Dad to teach me how to drive a big ship and shoot the guns. Then I want to take the *New Leviathan* out of the Navy Yards and steam it next to downtown New Shining Capital. So I can blast the *hell* out of the headquarters of Dad’s old department and the National Space Colonization Agency! But first I want to capture Uncle Rumberto and Leonardo and tell them what butt-wipes they’ve both been. And then I want to sail over to Kraken Island and blast the hell out of some Goethans!”

“You mustn’t hate your brother, Eshrae,” Frank said, gripping his son’s newly broadened shoulders. “Or your uncle.”

“Who says I *hate* them? I just think they’re great big butt-wipes, is all.”

Fissures had divided his family as surely as fissures had carved up the Great Lawn on the day of the earthquake. After what he’d done today, Frank might find it impossible to ever mend his relationships with Leonardo and Rumberto. But other relationships could perhaps be repaired. Once he’d settled his family in a secure refuge, he would find Malvechio. He would

tell his brother that Waning Moon waited for him on Kraken Island. He would tell Malvechio everything. And then they would be brothers again. His family, partially broken by Leonardo's defection and betrayal, would be made a little bit more whole.

"If only we could know for certain what we're doing will change the future," Aleedia said. She soothed her baby, who had begun wailing at the first explosion and hadn't yet stopped. Once little Flora settled down, Aleedia's gaze drifted to the burning remains of Space City. "'If' …" she murmured more quietly. "Such a tiny word … yet so *big*. Big as the universe; big as all of time …"

Frank watched fires continue to rage within Space City, consuming the dangerous stores of knowledge buried in the rubble of the engineering buildings. *"The story keeps changing*—you *can change it!"* That had been Waning Moon's charge to him. Harry Erath had proven it could be done; on his first ghost pass through this date, Erath had watched the *Saint Indianna* be remotely exploded with Frank and his family aboard, but on his second pass, Erath managed to avert that tragedy, finding the detonator in time.

Snowflakes landed on Frank's nose and eyelashes. He watched the last vestiges of the malevolent half-formed black dome crumble like burnt-up charcoal. He relished the sight. The work of generations had gotten off to a promising start this morning. Now he had to push on, making sure the work never faltered, for the sake of his father, his family, millions of creepers, and untold millions of children yet to be born.

It was cold up on the bluff. He rearranged Aleedia's shawl around her shoulders and the now nearly asleep Flora, drowsily sucking at her mother's breast. The morning sky had turned dim as dusk due to the smoke from the burning city and storm clouds blowing in from the north. He looked into the faces of his family, the people who meant more to him than his own life. So resilient, thank God. Blessed with the ability to persevere and even thrive in cold, damp, dark, and unwelcoming places.

Like mushrooms.

• ABOUT THE AUTHOR •

ANDREW FOX is the author of several works of speculative fiction, among them *Fat White Vampire Blues*, *Bride of the Fat White Vampire*, and *The Good Humor Man*. His work has been recognized with the Lord Ruthven Award, and *The Good Humor Man* was named one of Booklist's Ten Best SF/Fantasy Novels of the Year. Born in Miami Beach, Fox lived for more than two decades in New Orleans and now resides in Northern Virginia with his wife and three sons.

Ghostlands, winner of the Ark Prize for the theme "America 2076," is his latest novel.

•ABOUT THE ARK PRIZE•

THE ARK PRIZE is Ark Press's award for a distinguished novel-length work of speculative fiction. Its inaugural theme, America 2076, invited writers to imagine the nation's future in bold and unexpected ways. Chosen from more than one hundred submissions, Andrew Fox's *Ghostlands* was the first Ark Prize winner.

"*Ghostlands* has the same sort of wild, anything-goes imaginative freedom that first drew me to the SF genre through the works of R. A. Lafferty, of PKD, of Neal Barrett Jr. It has been years since I've encountered anything remotely like Andrew Fox's new novel."

—Gordon Van Gelder, Hugo Award–winning editor at large of *The Magazine of Fantasy and Science Fiction*