

# Ashes of Exploding Suns, Monuments to Dust

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*when skies are hanged  
and oceans drowned,  
the single secret will still be man  
—e.e. cummings*

## **Extinction +15,000 years**

Scientists say you do not dream during cryosleep. This is untrue. If you enter the state intending to kill billions, the subconscious mind punishes. Cryosleep dreams move slowly, the way glaciers take thousands of years grinding a civilization to gravel. Violence acting almost imperceptibly over protracted time still leaves enduring scars, like aging.

Warming away the residue of hibernation, the sleep capsule lit my nerves on fire. The all-consuming pain of being resurrected is difficult to convey. A facsimile of your own blood displaces hibernation fluid. Senses scatter and conflate. Skin crackles and muscles creak as the nano-bath electrifies. To activate switched-off nerves, embeds twitch one's body in disconcerting jolts. Teeth rattle. Images from dream and memory overwhelm the casket's synesthetic reality. Nightmares fade and rise again. No matter how tranquil one's normal state, panic grips the throat.

This phase lasts longer than the corporeal shock of waking. Not forever, though the hind-brain panics. After enough practice, discipline helps dissociate from the sensations. This suffering will end, like all things. If you fail to revive, you die before this liminal state, blissfully unaware. Those waking from cryo often envy those who remain forever asleep.

What does it mean to live? An accurate measure is awareness of pain.

As I surfaced toward consciousness, the reason for retreating into hibernation all those centuries ago crashed through me, like meltwater rushing beneath ice. Lights winking out. Our homeworld shrouded in the fog of vaporized buildings.

I began to laugh. This noise emerged from the darkest part of my soul, the part about to pull the trigger to destroy worlds.

If there were tears, they were only natural.

Something that felt like whalesong pummeled my ears. A stabbing sensation in my eyes lessened as I relaxed my fierce squint. The pain resolved into a light flashing very near my face, red-blue-red, red-blue-red; the whalesong resolved into an audible alarm.

As I focused on the muffled sound and meaning of the light, it was as if I rose from drowning. *Intruder alert. Intruder alert. Intruder alert.*

My heart stuttered. My mind clawed up to the surface of consciousness enough to check the virtual clock in my head. Some emergency had awoken me almost three hundred years too soon.

I mentally ordered the alert off. The intruding silence howled like a distant storm siren. It took several attempts to get my voice to work well enough to speak:

“How many intruders?”

“One,” replied the Security AI. “An Original Man.”

My heart pounded so hard the arteries in my neck ached. Security’s smooth and confident voice added, “It has been secured.”

My eardrums fluttered. It took me a few seconds to collect my thoughts enough to ask, “Is the enemy’s ship within sensor range?”

“No,” replied Tactics. “No vessels have moved under power in Karalang System for more than nine thousand years.”

So much time . . . the weight of loss crushed the air from my lungs.

Green ready lights shone through my closed eyelids. I waved them off and drew a shaky breath.

“You may exit capsule when ready,” Medical said gently, aware of my fragile condition.

I popped the casket hatch. Ancient gaskets cracked and peeled. Preservative gas dusty with inactive nanos hissed out of my pod into the cruiser’s echoing hibernation garrison. For the first time in millennia, I inhaled. The sharp tang of ozone and oxidized metals triggered a coughing fit, loosening phlegm that had formed during the last days of my people. It felt like only yesterday when our branch of the human species was snipped from the family tree.

Liquid running from my eyes cooled my cheeks. I blinked against the pale yellow lighting. I creaked to my feet and stretched to regain mobility, joints popping.

The garrison’s controls glowed to life around me. I cancelled the display. No need to put the ship’s other 91 crewmembers through the pain of waking just to deal with a single, secured intruder. I could be merciful at the same time I was ruthless. This, perhaps, has always been my trademark.

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### **Extinction +97 days (15,000 years ago)**

The real nightmare started long ago.

“Captain,” my comms officer said, stiff and unblinking in the bright passageway. Several soldiers stood behind her, likewise rigid. One bore red eyes and salt-streaked cheeks, though he kept his face calm. They had woken our first from hibernation, a small scout team.

“It’s ready.” She gestured to the tactical-display room beyond their blue uniforms. The hatch stood open. All studiously looked away.

I nodded and stepped into the room’s frozen holo. A sphere of stars and planets surrounded

me.

“Play,” I said. I violently rubbed sleep from my eyes. The sphere dimmed to black then brightened with data.

*Point of view:* Tactical satellite array in high orbit around Karalang, our homeworld. The next planet out from the sun, Tapil, glowed like a blue-green microdot pinned to black fabric. Stars sparsely populated the sky except along the galactic plane—what Original Man calls the Milky Way or Silver River—where they shone as thick as streetlights in fog. Our moons, brown Frouros and grey Acaung, stood watch side-by-side at crescent phase: the month of the night-fish.

The sun appeared ghostly and wavering, like a sunken ship’s lights shining from beneath murky water. The reactor had been set to high drain for powering our defenses. Tuning the percentage of photons absorbed varied the strength of the array and management field. A slight charge dimmed the sunlight a negligible amount; at max drain, almost nothing escaped except beams of conditioned, usable energy. A muted sun attested to the hard winter Karalang would soon endure.

Normally we used it to prevent solar flares from causing havoc and to capture the energy needed for feeding the hunger of advanced technology. Like other civilizations who built their own Dyson collectors, we wanted for nothing.

I’m no engineer, but like every Karalang citizen of my era, I learned the system’s basics. A vast array of orbiting AI statites framed the reactor, shaping an artificial magnetosphere that enveloped the sun along the slippery three-dimensional edges of a multidimensional Calabi-Yau manifold, functionally creating a low-mass Dyson sphere.

Hundreds of generations ago, Control came up with a plan to stave off the sun’s eventual Red Giant phase by starlifting excess fusion byproducts. But what to do with so much star-waste? We were a frugal people.

Thus was born the Jet, a spear of fire that extended halfway across the sky.

Control created this wonder by turning the reactor inward, inducing the field-current to capture and deflect the lifted material in addition to the sun’s naturally cast-off matter. Rivers of plasma flowed along these fields, accelerating along the bubble’s electromagnetic scaffolding, weaving complex coils that converged at a two-stage reaction chamber that looked like a star beside our sun. It was so fiercely bright I had to blot it out with a thumb to scan the tactical situation. Here in the reactor, the matter component of the flow was coerced into induced-annihilation while falling through manipulated space. As the collected energy returned to classical space, a magnetic manifold-nozzle similar to our shields collimated the system’s output with collected radiated energies, generating thrust by emitting a coherent beam whose mass was accelerated to near-light-speed as it fell back into our dimension of timespace.

By harnessing enough energy to power a million Type I civilizations, we transformed our star into a Class D stellar engine.

This Rao-Chang drive propelled our sun across the immensity of space, altering its normal orbit around the Galaxy. Gravity held our system’s worlds in regular orbit, the acceleration too slight to shake loose any but the least-associated objects. Every few thousand years, Control manifested and fired the Jet for century- or millennia-long intervals to adjust our system’s orbital speed and trajectory. This enabled us to explore distant places without having to leave home for longer than short-term missions.

Other civilizations built fleets of starships—a complicated strategy, yet far more efficient than ours. Why did we go to so much trouble? Those in charge made many reasonable arguments—our star did require intervention to remain stable—but most important was that doing this kept us together as a people. Our way conferred identity. Rather than sending small teams to flit about the stars on independent missions from which they might never return, we all moved together. On our journey toward wherever we visited next, we brought along all our resources, our homes, our AI servants, our organizations, our entire civilization. Such missions required tens or hundreds of generations to fulfill, but we were in no hurry.

Karalang erected Humankind’s most magnificent feat of engineering to share pride of

accomplishment. Though some mocked us, every human civilization across the Galaxy knew us for this achievement. We might have been the only people to create such in all the Universe. It was the foundation and product of what we called *fidalgua*, the framework of attitudes at the core of our culture.

Thousands of years before I was born, Control configured the Jet to adjust our orbit for a near flyby of Sol System, home of Original Man. Thus setting in motion the mechanism of our downfall.

At the time of the attack, we had been orbiting the Galaxy faster than any other natural object held here. Sustained in a single configuration for a few tens of thousands years more, the Jet could have eventually freed us from these fractious stars. I still dream of how things might have been if our forebears had made the decision to visit the Andromeda Galaxy rather than remain here. Many generations to come would still be transiting across the vast emptiness of intergalactic space.

We used to say, “Karalang persons live long lives, but Karalang *as a people* will outlive the stars themselves.”

Long ago, someone observed that such human narratives boil down to “hubris clobbered by nemesis.”

Those sayings come from thousands of years ago. Ancient history, forgotten by most, certainly by Original Man—that part was vital to my strategy. After all, I survived to share this tale.

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Forgive an old person’s ruminations. Back to that moment, ninety-seven days after Original Man’s attack, as I witnessed the death of our people:

Into the serene beauty and magnificence of Karalang peacetime, bright-grey blotches erupted across the sky. Glimpses of our fleet, shifting through Hilbert space on intercept jump-trajectories. Fuzzy blotches in timespace resolved into Earth vessels. Not just cruisers and swarm-fighters this time. Now they arrived in skeletal carriers shedding great clouds of nano-dispersing drones, war-stations the size of small asteroids, and a handful of vessels that were little more than gun-barrels, a few as long as continents dwarfing the control pods budding from their hulls. By comparison, our defenses appeared modest. Our ships were partially obscured by shielding—synthetic Calabi-Yau manifolds generated by equipment that could fit in your pocket. Original Man’s vessels were designed as much to induce terror as to perform their brutal duty, ancient weapons that hadn’t been employed since the Empire Wars. Original Man’s corollary to our reactor, I suppose.

Perhaps a people are best characterized by where they expend their greatest effort and how they spend their resources.

The enemy fleet appeared in the vibration of an electron, simultaneously, so many that they outnumbered the visible stars beyond.

When their weapons came alight, it was as if the Universe exploded, as if the Big Bang resumed in our little corner of the Galaxy.

Karalang’s sky began to glow yellow. Soon it blazed so bright the tactical display dimmed the rest of the Universe to black, as if our homeworld transformed into a star. The only thing that prevented me from looking away was my responsibility to our people. My *fidalgua*.

Some desperate reactor Control chief manifested the reaction chamber above a point of the sun facing one of the planet-busters. The rivers of energy roiled, then snapped into the new magnetic field-lines and fired the full force of the Jet at the invader. Had the blast hit the enemy vessel, no shields could have prevented its incineration. But at several light-minutes distant, the planet-buster’s nav had plenty of time to shift out of harm’s way. It reappeared several million kilometers away and—before the Jet even reached the vessel’s prior coordinates—fired at the reactor’s primary control station, blasting it to plasma.

The reactor’s statite swarm shut down. The containment fields dissipated, and the plasmas that had been streaming along their pathways flared free in a short-lived nebula. The sun grew to full brightness shrouded in glowing plasma. The Jet slowly faded to something no more dangerous than a comet’s tail, heading off into interstellar space.

The enemy's planet-busters fired again. And again. And again. Eventually they no longer needed their main weapons and sent them away.

Of our multitude of ground bases, only one still transmitted. Its AI reported that the facility's shields were lost and its force-hardened walls physically breached. All personnel lost.

Karalang's sky faded to ashen brown. As the moons reemerged from the glare, they now appeared smooth, gleaming with a much higher albedo than before.

The stars began to reappear.

Soon, even the AI transmissions faded.

I could not breathe. I, who had witnessed so much death, who had executed my own father to save what little of him remained, could not move without shaking. If I breathed, I was certain I would vomit.

The end of all life as we knew it. All that remained of home was memory in the minds of we few aboard this small vessel.

I held my breath until my lungs burned and head throbbed.

Anxiety has always ruled my life. And what is anxiety but constant, low-level fear? Original Man uses psychological therapy to deal with emotional troubles, something the Karalang eschew but for principles such as desensitization. If we were not strong enough to overcome mental illness ourselves, why should society tolerate such a drain? To attain what I have, I had to still any display of weakness. I grew impervious to fear. But that statement is no truer than to say that the land grows impervious to erosion as rains and waves lash it and tear through its flesh, seeping down to join groundwaters that dissolve the stone beneath.

Our moons now wore cloaks of vaporized metal and rock. I didn't need to check stats to know that the stations and colonies there were lost. Even so, the enemy's small vessels and drone clouds swept through, completing cleanup. Soon the last orbiting satellites ceased transmission. The report holo froze.

I gestured out of the dead display to another recording, one assembled from the admiral's encrypted personal stream. The room spun for a moment as systems reoriented. This tactical holo was more diagrammatic than the assembled land-based transmissions.

Thousands of stars winked out all around—each point of blue light ours, each red an enemy unit. There was so much red that one could hardly pick out the blue without changing the comparative brightness gradation.

Stats kept a running tally along the bottom of the display. In the early stages of the invasion, losses were 1:7, ours to the enemy's. But when the enemy's big war stations turned their attention from our worlds and bases to our capital ships, that ratio reversed and began to grow. Long the pride of our engineers, our multidimensional forcefields—miniature versions of the tech that enabled us to channel the sun's million-degree flesh into power and propulsion—were too weak to divert such energies. The enemy's overt consumption of power was appalling. Each blast from the big gunships could have powered all of Karalang for years.

If it had lived.

In the passageway beyond, my crew shifted positions but otherwise remained silent. Death-watch.

The icon representing the last of our vessels flickered out. I checked the clock. Just over eighteen minutes had elapsed since the battle began. Our captains were honorable fools. I couldn't decide whether to damn or bless their souls for racing to certain death, dragging their crews with them.

The admiral's flagship pounded enemy vessels until the end. I guess their commanders hadn't guessed that such an unassuming cruiser—albeit one protected by specially tuned, overlapping forcefields capable of handling vast energies—housed our greatest battle captain. But that didn't matter: Its primary mission executed, an enemy planet-buster turned its barrel toward the camera's point-of-view. Nav shifted the flagship out of harm's way, but then another obscene gun joined the battle. Soon all four of them began to fire at points in space where their AIs must have calculated the admiral would reappear. They wove a basket of sizzling plasma everywhere the flagship was or might be. Eventually they guessed right.

Even the miracles of subatomic forces and quantum fields are no match for so much focused energy, a pulse that might as well have been as powerful as the Jet. A flash of light, a burst of static, then nothing.

Comms played several earlier transmissions, points of view from various drones, fighters, and cruisers, but these only retold the murder of our people from more intimate perspectives. We lost every one of our vessels in that singular battle. As I had predicted. All but ours.

I found little satisfaction in being right.

The room lights came up as the last recording faded. I opened my mouth and finally drew shuddering breath. It felt as if smashed glass coursed through the veins in my temples. I gathered the strength to face the crew.

Everyone was still, silent. Our entire race was silenced, had been for a long time before we'd awoken from hib. The loneliness of the Universe grew deafening.

I looked away. I could not face the crew without revealing more than I cared to. What is honor? My people worshipped the concept, yet we were just as ignorant of what it meant as was the rest of Humankind that had cast itself across the Galaxy.

"Has the enemy made a full withdrawal?" It sounded a bit like a croak.

"Yes, Captain," said Strategy. "As instructed, hibernation ended after the ship sensed no evidence of the enemy for one hundred hours." We would have remained nearly undetectable in that asteroid while primary systems were powered down.

"How long since . . . this?" I asked, gesturing at the frozen holo.

"Ninety-seven days," she said.

Other officers reported no-doubt important information. To go on, one must feel as if one's life matters. I recall nothing of their reports. I felt nothing for a long while. Did they care about their work? How could they? What was left to care about? What was left to feel except for pain, humiliation, loss? And what of the *fidalgua* of those who fought for our ridiculous honor? If nobility among peers was once the center of our lives, what remained to motivate us after everyone else was gone? If the beast of existential dread lurks at the heart of all fear, what happens when its prison is shattered?

I was struck with a vision of incinerated bodies. They haunted the memory of every place I knew. Mountains of civilians drifted like desert sand around the golden towers of our cities. Vaporized blood stained the sky sunset-red. The stench of flesh and ozone and fire. Lakes and rivers and seas blasted to hydrogen and oxygen and then recombined in flames that encircled the globe. Such a waste. So much loss, all for nothing—not even for the victors, because what utility could an empire make of scorched worlds? What use are the dead?

We had failed our people like all the others who had perished in their attempt to protect them. What purpose do ghosts serve? We were even less substantial, because our uniforms still stank of something akin to life. We could still taste stale sleep on the tongue, feel tightness in the neck, sickness in the gut. Sense the silence of lifeless space stretching endlessly around us like soil insulating a casket.

Most household dust is dead skin cells or the nanos that consume contaminants. If no one beyond the crew aboard this ship had survived, we were ignominious, dead like all those we had been tasked with protecting. Motes of graveyard dust in the dark.

One report seeped into my awareness.

"The reactor is down," Marcol, the science officer, reported. "When Primary Control's integrity was compromised, its fields failed, and the statite cloud went inert."

Somehow, this final humiliation stirred me to decision where the deaths of billions had not—those were too much to bear, but the loss of our greatest achievement, our central metaphor, the symbol of our pride . . . that was a thing I could rage against.

The answer to why we were still alive, our purpose, came to me then. *Inert*. At that moment, when all was lost, after witnessing the extinction of our species, I could only see red. Red dots, red haze, red blood.

I faced the crew. This mask of hatred and cunning, I could let them see.

"Did the control stations survive?"

“No one survived, Captain. Human or AI.”

I exhaled. The release made me feel free, almost giddy. Most of my crew were relatively young—the oldest but for me had not yet celebrated entering their fourth century. Our line of Humankind usually grows stronger, healthier, and smarter until our ninth. We are capable of surviving for a thousand years or longer, barring accident or disease—practical immortality—but as a rule we seek euthanasia when our mental faculties degrade to whatever degree we cannot abide. Eventually, even the best-programmed nanos and viral treatments can't clear and repair all the accumulating errors and damage. Barring serious incident, some of the other Human-descended species linger for a million years or longer—the Undying—isolated in maintenance baths or uploading facsimiles of who they were into robotic bodies or computer memory, passing virtual lives or reliving fictions of the past. Wallowing in stagnation.

Perhaps the foremost danger of living so long is that one's fears, the drive for security, resistance to change, and unwillingness to adapt take ever more control of one's mind the older one becomes.

So our people cherished *fidalgua* above all else. It is mutual respect, appreciation, a spirit of purpose and unity, trustworthiness. It's strength under adversity, dignity, nobility, stoicism. Many people mistake it for *honor*. Though the concepts run parallel, they head in opposite directions. Honor often expresses as selfishness, pride. *Fidalgua* is other-focused, motivated by perceived greater good.

Our founders decided long ago that the only way to avoid the mental disorders of advanced age in a long-lived people was to enshrine the lubricative force of *fidalgua*—ultimately, to maintain one's respectability so that others can bear your presence for a thousand or more years. We lived a Spartan mental life, lest the disease of decaying minds spread, rotting society as a whole. *Fidalgua*, my father taught me, is all that sustains the Karalang people. We believed we could not survive without it. Living for centuries in its absence would be hell. He proved that.

But it is also a potent force for stasis.

Remember being a child, confused and disgusted by how adults wasted energy on banal and vain concerns? The drive to survive abstracts into rules and laws, ethics, morals. These cultural tropes develop into systems of behavior. Rituals arise to support established customs and conventions, and these evolve into ever more complicated abstractions. Soon people expend all their creative powers on maintaining institutions whose sole purpose is to perpetuate arbitrary systems that exist only to sustain obsolete thought-memes far removed from their original, practical purpose.

Something goes wrong with the human brain when it absorbs this kind of thinking. It's so susceptible to deformation. The longer it steps in the stagnant bog of adulthood, the more our worst attributes dominate.

The mind-virus of *fidalgua* sealed our doom long before we encountered Original Man's sense of honor. Immovable object, irresistible force. . . .

Back to the moment.

“I mean the reactor itself,” I said. “The infrastructure. Can we restart the statite cloud?”

Marcol frowned. “If the stations are destroyed—which is likely—our ship carries enough general-purpose nanos to reconstruct the damaged reactor controls using the mass already in orbit. Our greatest hurdle would be reprogramming—”

Shauna interrupted. My security officer's *fidalgua* demanded she perform her job, however distasteful she perceived such service. We all make sacrifices to the gods of duty, else we sacrifice our spirit.

“Captain,” Shauna said. “What does it matter? Why restart the reactor? Do you think Original Man will allow us to rebuild Karalang society? And where would we do so—on scorched worlds?” She gestured wildly.

“How many survived? Only us,” she answered herself, “on this one ship. Without the capabilities of a planetwide biotech industry, that's not enough diversity to regenerate a species. I don't intend to raise children aboard a battle cruiser. No offense intended, but I'm certain you

don't either."

She briefly closed her eyes in an obvious attempt to restrain the reserve of hatred that flared through the flushed creases and capillaries of her face.

"Every world," she said, enunciating very clearly, "every moon, every vessel, every inhabitable station is destroyed. Every water reserve on every world was consumed in the fires those beasts started." She threw up her hands. The medals pinned to her uniform clinked. Her sweat reeked of sour anger.

"You'd have our people rut in floating wrecks? Among the ruptured bodies of comrades who chose to fight and die honorably rather than cower in asteroids?"

I smiled. Scowled, maybe. My face hurt and my eyes burned.

"Not at all," I said. "We're already headed for a near flyby of Sol, Original Man's home system. This made them feel threatened. That's why they came here. We will grow a new reactor, set it to full power, and calculate a trajectory for the Jet to take us straight through their system. If it operates long enough, they won't be able to stop us."

Some muttering among the crew.

"Begging pardon, Captain," Shauna said, hard face betraying no honest desire for forgiveness, "what would that accomplish, besides disturbing the orbits of their worlds? Assuming they don't just return in force to wreck the reactor again? It's difficult enough to calculate the system's trajectory to navigate gravity wells. Calculating a direct hit must be nearly impossible."

I smiled hard, teeth tight, and stepped into the hallway. I put my hand on her shoulder and squeezed. Every fiber of my body sang like bridge cables. Suspending the weight of billions of ghosts, trembling.

"Shauna, ask Physics what would happen if the Jet were turned inward upon the sun at a strategic moment. Say, just before we enter another star system."

I waited long enough to let understanding sink in, then addressed everyone.

"They think us dead. They won't be looking for us. If they do, they won't be able to detect us in usual wavelengths, because we will set the reactor to maximum absorption, hiding the sun's emissions. We will configure the Jet on the sun's far side from their perspective, hidden from all but wide parallax view." They still looked skeptical. I continued:

"We will ask the other Descendant Species to distract Original Man, making them too busy to pay attention to a dead enemy. If they detect us after we've adjusted course, there'll be nothing they can do to stop us. A fast-moving star's momentum is incomprehensibly huge."

I took a moment to look into the eyes of each of the skeleton crew. Flickers of anger, fear, hope.

"I promised you that, if we held back from fighting alongside our doomed comrades, if we could survive until the enemy retreated, I would lead us to avenge our people. I had intended guerrilla actions on their outposts, inflicting pain to remind them of Original Man's atrocity. I intended to encourage an uprising among the Descendent Species.

"Now I see a grander vision. We will restore *fidalgua* to Karalang. We will forever cripple Original Man's ambitions for renewed empire. The other Descendant Species will remember us as the people who poisoned the roots of our mutual oppressor so that they may rip that weed from the soil.

"Koralang lost, but we will ensure that Original Man cannot win!"

Marcol started laughing. He stumbled back against the bulkhead, put his hands over his face, and wept. Others took this as permission to let crack their long-polished masks. Mad expressions, terrifying laughter.

Murder, extinction, and revenge evoke primal emotions against which living things have little defense.

What is honor? Sometimes it requires such magnitude of evil that it is indiscernible from good.

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So we rebuilt the reactor and set it to max drain so the sun grew darker than space itself, and ignited the Jet. Then we went to sleep.

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**Extinction +15,000 years**

I climbed out of my hib capsule, stumbling as I tried to stand, naked and cold in the sleep garrison. Even the feeble gravity of the asteroid strained my stiff and weakened body. I pulled on a robe. The fabric crackled with age. I slid my feet into the dusty deck shoes resting beside my capsule. Their traction provided some stability as I staggered to the refresher. I would at least die cleansed.

Halfway through the room, I was compelled to stop. My crew still slept in long rows of clear-lidded capsules, expecting to sleep until the time came to witness our race's knockout blow to Original Man. The hib garrison was cool, as disinfectant-fresh as a war cruiser always smells upon reanimation, though Medical had only activated atmospheric controls hours ago upon sensing my wake sequence. Besides a whisper of air and the faint hum of electronics, total silence. My heartbeat, startled awake by the capsule's systems, pounded in my skull. The breeze grew louder, harder, until my eyelids had to fight to stay open. This moment, only days from when I would nova our sun in Original Man's solar system, held such gravity. Too much for one person who had just risen from fifteen thousand years of nightmare.

A *mélange* of emotion racked me, stretching back to the joys of childhood, the pain of youth, the unbearable weight of the future. I leaned against a crewmate's capsule to keep from falling to my knees. I gasped air down a burning throat into aching lungs. I shook and openly wept.

After a time, I regained control.

"*Honor Karalang.*" Father's voice seemed to groan from my mouth. Of all people, my father was the one who gave me the strength to continue. As always, I suppose.

I stood and resumed moving.

\* \* \*

**Extinction -521 years**

Honorable death. That was the ultimate goal of everyone from Karalang. I first contemplated arranging my father's death shortly after being expelled from university. I was still young and ir-resolute then. I had been studying ancient archaeology, our roots in Original Man's Earth. I would wake full of excitement, looking forward to each new class and each new insight from the texts. I lived for this, and Humankind was rife with such surprises.

The study gained in popularity as our solar system glided closer to what was still called Earth Empire. Some senile old fools had thought it would be educational to swing past our ancestors all these millennia after our people broke away and formed our own species. Had they forgotten the Empire Wars that still cowed most other Descendant Species? These elder statespeople sealed our fate. If they had had children like me . . . but would they even have listened? I had been expelled from university even in our supposedly more-progressive time.

I stepped through the membrane of our house, defeated, as stripped of hope as my clothes were stripped of microbes.

"Welcome home," my father said.

Only people from honorable families were allowed to attend university. This supposedly maintained social order, preventing radicals from attaining levels of power from which they could alter fundamental aspects of who we were. I held no such ambitions. All I had ever wanted to do, all I had planned and trained for since childhood, was to become an archaeologist. We would never again pass close enough to Sol System to communicate in near-realtime, to study our root culture firsthand, to learn how Original Man had changed since Karalang was settled. I would be part of an historic time.

But my family's *fidalgua* fell below the university's acceptable threshold. I would never complete my studies, never visit our ancestors' homeworlds or interview the short-lived people from the trunk of our family tree.

I had nothing to say to Father.

Mother's absence created a tightness in my chest. Her personal notes to me in school had always referenced events in my life—even those I'd only alluded to in public posts—so she'd likely foreseen my expulsion long before it tore me loose from my moorings. I told myself she'd

stayed away now for my benefit. To lessen my pain of homecoming. But also to delay witnessing my disgrace. But what I really needed was for her to hold me while I cried on her breast like a baby; how I so needed to be her child, just for a while, now that Father's nurturing nature had faded.

Life seldom plays out as we wish.

My fists clutched my bags tighter. I started toward my childhood room to try to weave a future from air, to build hope from dust.

"So you're out," said Father. I stopped but kept my back to him.

Father had grown old earlier than most, but the frailties of age weren't his problem. Everyone's body ages; no dishonor in that. Worse than the failures that lost him his occupation at the Ministry were the personal grievances that kept him confined to the house. Details need not be mentioned. Original Man might have overlooked flaws such as his, seeing them as little more than mundane deviations, but not Karalang.

I'd been a late-life child, the kind a family brings into the world in a desperate attempt to shore up shaky *fidalgua*. My sister was 218 years old when I was born, a geneticist programming adaptations for life on her desolate colony moon far from the sun. Established on her own and dissociated from the family well before it began to rot. But I was young and dependent on our parents, bound to their honor or lack thereof.

I guess I stopped to listen, because I hoped he'd at least apologize for dissolving into so much less of a person, that he'd promise to strive for restoring some self-respect, if not for himself, for me and Mother. His stain spread to her the longer she remained with him.

"I've arranged for you to attend Saracen Academy," Father announced. His voice held the firm confidence of pride. I faced him.

"Military school?" I said, incredulous. I had known cadets while at university, and it would be mild to say that academics seldom found friends among soldiers, wasting resources to play at war during a time of peace.

The old man smiled, baring teeth stained yellow from inhaled psychotropics. Did he think this news would please me? No, looking back with perhaps better understanding of what honor meant to my people, I'm sure he didn't believe this. He was *hoping* it would, because having a military officer as a child might restore some fragment of his lost *fidalgua*. But whatever drove him to abatement in chemical and virtual alterity couldn't be so easily cured.

I dropped my bags, my mouth fell open to begin spouting curses, my fists rose . . . then I had a flash of insight. I was only forty-two at the time, still a *tabula rasa* of a child, on the verge of adult rationality. In many ways the developmental equivalent of a teenage Original Man. This slow maturation is a side effect of the genmods for improved long life our founders performed on our ancestors' DNA, part of how we can safely hibernate. We avoided overpopulation despite living long lives partly because well-established centenarians seldom harbor a desire to raise children, partly because many Karalang like myself never developed a sex drive or gender identity, and mostly because of strict behavioral codes.

So, despite the passions of youth, I held back. I recognized what my father's addled mind had somehow perceived: I could preserve my own *fidalgua*, at least, by going to academy, and mother's. Even my sister would benefit from having a respectable sibling. And I faced a thousand years of discredit and hopelessness if I didn't act to shape my life. As much of a fool as he was, as inexperienced as I was, I couldn't help but see the utility of such a plan.

I nodded, picked up my bags, and began toward my room.

"What, no appreciation?" he said. The ragged edge of his thoughts infested every syllable he uttered.

I didn't need to face him to picture his twisted sneer as he reclined in his sensorium cell. The stench of his corpse from living fictions too long in that virtual coffin made the room rancid.

"Grow up! I did this for you," he said.

His creaking couch and the hiss of the cell's dissolving aerogel telegraphed his movement. Though he was in decline, he was still my physical superior—our nature, again—and he had long since shed his ability to feel shame about raising a hand against family. How rooted in the

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Human psyche is that misdirected behavior? More than we care to admit, as evidenced by how Original Man behaves in times of war against its children.

I turned and smiled. He had nearly risen from his couch.

“Sorry, Father. It was just a surprise. Thank you for considering my needs.”

That seemed to satisfy him. He nodded and attached the headpiece. His eyes defocused as the cell misted back into place around him.

This was the person who had held me when imagined monsters clattered at my childhood window. Who had pointed to the stars and named the people who called each their sun. Whose love had soured as his self-loathing fermented. Who only grew more erratic with the passage of years.

He was right about academy, of course. But I wouldn't attend to please him.

\* \* \*

### Extinction -521 - -514 years

Academy was not easy for someone like me. After my friend Juan congratulated me for earning top test score, a cadet from Huangtzu with spotless heritage began frowning at me. However, after *fidalgua*-rich Juan missed three targets in a sniper-training session where I got a perfect score, and I beat him during the final open competition, he didn't celebrate and stopped inviting me out to drinks.

*Dishonor draws wrath:* That's central to our military—academy existed not only to toughen the body but also the mind. Both winning and being broken during a sanctioned duel could earn expulsion for one like me. Expulsion from academy is a much darker stain than from university, because for many it is the final chance at establishing honor.

Growing up with my father taught me to be small and quiet when situations dictate invisibility. To strike only when victory is apparent, or when the target least expects.

These tactics served me well in combat sims, though they clouded me in the eyes of others. Because I wasn't held to the same expectations, it also served to help them dismiss deviant behavior. The cadets stopped noticing me after Juan ceased pointing out my successes. This allowed some freedom.

So, despite my tarnish, I quickly rose in cadet rank—though prudently not as fast as those who might feel threatened. My love of human and Karalang heritage, my utter devotion to our people, drove everything I did. As I exceeded my instructors' expectations while failing to fulfill the prejudices of other cadets—and stopped taking top spot in every aspect of training—my personal *fidalgua* bloomed like nightflower under moonlight. Without the distraction of Juan's friendship, I used nights for further study and training.

I'm sure it was a great surprise to my fellow students—and certain instructors—when I graduated top-clan in class. In a different life, I might have graduated cadet clanmaster. I didn't care. Hunger and rage—and, yes, loneliness and despair—drove me. Always.

This disquiet has been my companion, and would one day grow as furious as a star. After a visit home not long before, it began to flare beneath the skin, pinpricks of light shining through cracked crust.

\* \* \*

### Extinction -519 years

“I came as soon as I could,” I told Mother as she unsealed the house's front entryway and led me through the diaphragm by the hand. For the first time I'd witnessed, she bore a bruise beneath one eye, and a small cut just treated. On her *face*, where everyone could see.

I forced a smile, dropped my duffel, and embraced her. I inhaled deeply of the scent of her neck, warm and familiar as a favorite winter coat. For a moment, I melted into the sensation of being held. Like all euphoria, it ended.

I opened my eyes to see Father in his cloud, face calm and eyes defocused. The cell's normally transparent aerogel was hazy from overuse and too-infrequent refreshing.

My duty became clear.

*Dishonor draws wrath.*

“Can we have *tambo* for dinner?” I asked, certain she wouldn't have any of the fish in the

house—the real stuff ages quickly, and she never skimped when her children visited.

Mother smiled and soon left to acquire some.

“Father,” I said.

I approached him. After two more attempts to get his attention, he pulled off the headpiece. The cloud of nanos settled into their floor-mesh. He blinked a few times.

“Child,” he said. He smiled and stood, then stumbled toward me. It took great effort not to cringe as he placed his hands on my shoulders. Violence suffused his bony clutch. He stank of dust and sour death. My mind raced.

How could Mother choose to live with such a creature? How could she allow him to further stain her *fidalgua* as the years wore on? How could she bear such a life? Even if she cared nothing for herself, how could she merely observe as he eroded before her? How could she allow him to harm her children? Ignorant as I was then, I assumed she would have learned better by witnessing the horrors her mother-in-law wrought upon their family before she regained enough lucidity to end her own suffering.

But I still cannot understand how this man could bear to live as he destroyed himself gram by gram. Most in his condition would have visited a euthanasia clinic decades ago.

Can simple loss of memory erase one’s sense of self-respect? Father seemed devoted to personal entropy through chemicals and virtuality. One can dream oneself into the greatest positions—as long as reality doesn’t impinge upon the dream. Perhaps he was beyond understanding why his mother went to the clinic.

Yes, of course he was. He was so far ruined that he no longer remembered what it meant to be Karalang. Well beyond his mother’s decline, now barely even human. Though, given our ancestry, that is hardly a term of honor.

“You look good in *Matpoc* green, child,” he croaked. I stiffened as he placed his hands on my uniform sleeves.

“And what’s this?” he asked, fumbling with the silver arrows on my lapel. “Cadet lieutenant? You make me proud.”

I forced a smile and tried to remember the gentle man who brought Mother and child-me on a day-trip to the sea. As receding surf exposed squirming marine animals along the beach, Sandlopers pecked from the wet sand. Birds chirruped as they scoured the air clean of insects. Father lifted me onto his strong, broad shoulders to provide a giant’s-eye view across the waves to the glittering islands beyond. Breakers thrashed against rocky outcrops and filled the air with salt spray as on any world with ocean and moon, touching the hearts of creatures who depend upon water to survive.

I’ll never forget Mother’s complicated expression as she looked up from her sand foldout. Her face was as radiant as a wave-smoothed stone baking in sunshine. I would like to believe that she was proud and content, pleased that their decision to bear a child so late in life was turning out well.

That was a long time ago.

I led Father into my old room.

I removed my dueling knife from its arm-sheath and showed it to him, running my fingers along the hilt, the guard, the blade. Emotions transformed his face the way the sea reshapes sand as waves push and lift, pull and flatten. I watched and waited. Perhaps hesitated. Finally his expression smoothed into what I interpreted as acceptance. I wanted to believe he was calm in the face of personal extinction.

For a minute or an hour—time loses meaning in such moments—he said nothing. Finally he drew a deep breath, let it out shaking, and gave one sharp nod.

Embracing the image of Mother’s joyous face, I placed one arm around him. Perhaps in affection. He felt much smaller than he used to. My other fist gripped the knife’s hilt so tight my knuckles creaked. Time passed. Father’s body trembled slightly, but he emitted neither whimper nor plea.

Before I could summon the will to fulfill my duty, he leaned close. His lips brushed my neck as he whispered harshly into my ear, “Be Karalang, my child.”

He exhaled slowly as if in anticipation, like a marksman preparing to pull the trigger. I drove

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the blade with one swift stroke deep into Father's midsection. Without pause I slipped it upward, cutting through the flesh beneath the ribcage and into the heart. My hand warmed in the arterial flood. A firm slash in each direction assured destruction of the vital muscle and its vascular systems and quickened the end. Father's breathing became erratic as he grew heavy in my arms.

That day at the beach, he had smiled up at me as I rested upon his shoulders, the still-proud but failing old man so terrified of the abyss of mortality that he was willing to bring a baby into a world certain to reject and try to destroy it, passing on the damage the old man had begun to wreak upon himself. Binding himself solidly to his fate: Producing another child forced him to remain in life even longer beyond his time.

Did he bring me into this world only to take him out of it? Was this honor or betrayal? Cowardice or pragmatism?

Father remained silent as his life emptied in wave upon wave down my arm. Quiet dignity was all he had left.

It was enough. With my other arm, I held him tighter. His shaking stilled. His mass against me was warm.

This was the only way I could show my love. Even in his last moments, I wanted him to be proud of me. To know he could finally rest. That, in the end, his child *did* cleanse him of shame and misdeeds; that he had not been wrong to think a late-life child could resolve his dishonor. Only in a nonconventional way.

I became a child again, ignorant of honor, sensing the sea wash over me and stain my clothing, feeling through the tool in my hand the final ragged pulses of a heart as dear to me as any would ever be again. My chest resonated hammer-blows with each fading heartbeat. Wounds opened across my whole being, as vast as all timespace but as invisible as a Calabi-Yau manifold, a rent in my reality that would not close until I'd been destroyed or found peace.

Violence is so much simpler than healing. Some damage never fully heals. Scars protect us against future harm, but whenever you move in certain ways, you feel them again, unyielding and hard.

I held him for a long time after silence fell. Fatigue gripped my body like drowning. I felt very old. So much history pooled on the floor. My anger at Father cooled with other spilled emotions. I had emptied us both.

I incinerated his body in the basement power system before Mother returned home. A few packets of sanitary nanos dissolved the evidence on the floor, consumed what suffused my uniform. I brushed the resultant dust onto the heap on the floor. Though they were now as clean as the day of manufacture, I stripped off my clothing and shook them. The dust seemed endless. I threw my uniform into the incinerator with the dust.

I ran myself through three cycles in the 'fresher before hearing Mother in the hallway and immediately felt dirty again.

Thing theory says objects possess power in the mind of the observer. History imbues value or pollution.

I don't remember any of the words Mother spoke. I'm sure she said many things during those blurry hours before I returned to academy.

The authorities didn't seriously question my father's disappearance. Lacking clinical documentation, they assumed he'd grown incapable of using traditional euthanasia, easily dismissed for a man such as him. That may be true, but it was also true that in his final moments he showed more courage than I'd ever seen.

He and I had granted Mother the freedom to create a new life, at least until her time came to visit a clinic. Because of her own parents' successful longevity, I assumed she would enjoy at least another century, healthful and fully capable, during which she could restore her own *fidalgua*.

Mother sent one last message some days later. Voice only.

"I loved him," she said. "Who he used to be and still was, once in a while. But I understand. I'm free." She ended with, "I love you. We both did."

She went to a clinic without notifying anyone.

My sister never spoke to me again. She wasn't on Karalang when Original Man burned our cities to ash, but her colony suffered the same fate.

I didn't grieve until recently, after my work was complete. After losing Mother, my tears were groundwater constrained by the weight of generational geology, not open sea crashing against naked shore.

Guilt is one of the most poisonous things society and ancestry force upon us. It demands forgiveness—which is attainable, and that's the point. Guilt arising from within, however, that which stems from what we brought upon ourselves, no one can forgive. Only we can grant ourselves absolution.

How does one make amends for much grander scales of loss? A life for a life does not suffice when one has only a single life to pay, and one plans to spend billions.

Dishonor leads to wrath. Wrath destroys, creates absence. If honor is like that, if it flows in to fill hollow places and emotional vacuum, I was the most honorable of my people.

\* \* \*

### A time of changes

Once I joined the force after graduation, I quickly rose in rank. Perhaps my superiors suspected what befell my father. Regardless, our family dishonor began to fade. The day the admiral summoned me, I recognized that I had crossed an invisible bridge since my time as an outcast. Yet, even at 562 years of age, I was still scared. Not in the way most imagine the emotion, though fear had always lurked in every shadow of my mind. Perhaps then more than ever: I was wiser, more knowledgeable, growing more and more aware of the surrounding abyss as I aged toward the zenith of life, to be followed by the long decline. I often wondered how soon until my time arrived. Would I recognize it? Should I end it now, while at my peak?

Anxiety is a form of fear. It is just so low-level that living with it as a constant inoculates one against its violence. A background hum, no more noticeable than air traffic or words from one's father in another room. Weapons-fire at the shooting range. The rumble of heavy shield generators resisting damage. Distant explosions. The roar of silence. Blood pulsing through one's veins, contained only by the thinnest membrane of flesh.

This is not the same as bravery. I've known brave soldiers who threw themselves against danger to assist fellow crew without thought for themselves, moved to action regardless of accompanying terror. They seem alien to me. I'm fully aware of danger, but my condition is more like immunity from feeling its effects. The results are the same—perhaps better: Because anxiety forces one to plan for all possible outcomes, I was less likely to perish when pulling an engineer from a shattered reactor room or anything else later deemed heroic. Things that needed to be done. My father knew this. Or perhaps I simply cared less about survival, sought an honorable conclusion over waiting passively for the inevitable decline.

I'm no braver than anyone else, no more honorable. But at least among the high officers of the Karalang fleet, I grew to possess great *fidalgua*.

Father would have been proud of how he shaped me.

\* \* \*

### Extinction -29 days

Original Man's first visit to Karalang space was abrupt and short-lived. They made demands, and a picket-captain's *fidalgua* forced him to respond with gunfire that slagged the intruders' vessel. Soon after, Original Man reappeared in force with stronger demands.

The admiral summoned me—in person—to her orbital station. A tube transported me from where I'd docked my ship to a featureless hallway. Two marines escorted me from the tube portal to a doorway, then fell back to attention as I passed within.

"Captain," the admiral said as the door irised closed behind me. Three others wearing captain's regalia already stood in the briefing room. I saluted her, then the others.

"Here's the situation," the admiral said, without preamble. The lights dimmed.

Tactical holos lit our faces. Tens of thousands of Original Man warships shone as red dots; our two thousand cruisers and drone clouds shone blue.

“Their vessels are equipped with superior drive and weapons systems,” she said. “They use an as-yet unidentified form of instantaneous locomotion far superior to our drives. We have no intelligence about how their AI systems compare, but we have logged no intrusions. That seems ominous. Their only apparent deficiency is that their ships rely on spatial displacement, so they possess little of our realspace maneuverability. Their capital vessels greatly outnumber ours, though we appear to command more drone-formations and nano-clouds as well as war stations and planetary support networks.”

The big admiral turned her sharp attention to each of us in turn. Her hair was grey, an unusual trait. Must have held personal meaning. She locked eyes with me as she gestured to the others.

“My advisors tell me we will be victorious in battle, should we engage.” Her voice was rich, comforting in the way only the truly confident can express. She even smelled self-possessed: brass and the ozone of a personal-shield, musk and freshly washed cotton. I had never felt physical attraction before that moment.

“You have always been honest with your superiors,” she said. “To a fault, at times.” That evoked some chuckling. My cheeks flushed, but that would have been my only outward exhibition of discomfort, hidden by the diffuse lighting.

She ignored the others and said, “Clearly the Karalang people will not stand for their imperialist demands. Governor Fernandes has ordered us to repel this invasion. You’ve studied Original Man academically. I believe you could see something we might miss. What’s your assessment?”

I tried to ignore all the eyes on me and studied the tactical situation. We had a surprising amount of data about each vessel, its estimated offensive and defensive capabilities, maneuverability, and so forth. But none of that really mattered. After a few moments, I drew a deep breath and spoke the truth I’d known since the first confrontation.

“We will win this battle, Admiral.” I tried to make my voice as calm and certain as possible. The captains nodded and gave one another smug glances.

“They have already defeated themselves,” I said, “because they expect capitulation due to their assumed superiority. Such is the mind-set among servants of empire. Our tactics are superior, our ships are nimble and well shielded, our crews are smart and quick thinking. And we possess the reactor, if we need a big gun. If we strike before their deadline, we will repel this incursion.”

“That’s our current plan, Captain.”

I nodded. Of course she planned this, to set us on the path toward suicide. The other captains muttered consent, proud of themselves. I could imagine them at some officers’ club whacking one another upon the backs. Dust flying up from their uniforms. Old fools, dwelling in the past.

I cleared my throat, but only the youngest of them gave me his attention. The admiral had never joined in the self-congratulations, her eyes locked on mine.

“But,” I said, “they are rebuilding their empire. This is only a fraction of their fleet. In the last thousand years, they’ve occupied Zhou-Shang and defeated half the worlds of the Qui Confederacy. They have likely spread to Newholme by now.”

“Which suggests what?” the admiral asked.

“After we repel this invasion,” I said, “Original Man will return with a much more powerful force, and we will be utterly humiliated.” I selected that word for effect.

“How dare you?” said one captain. One of the others blubbered in indignation. The admiral quieted them with a wave.

“This is your careful consideration?” she asked. “I urge you to think this through. I’m aware of your Original Man studies at university and your ongoing research and publications on the matter. I respect your understanding of our foe, neither strictly academic nor military.” She crossed her arms like a shield before her, looking more formidable than anyone I had ever met.

I swallowed. “I’m certain, Admiral. It has always been their way. Their notion of honor is bound to their individuality much as ours is bound to our collective *fidalgua*.”

Her hands fell loose. Her shoulders rolled inward. She seemed to lose half her mass and most of her worldly presence. “What shall we do?” she asked.

“What *can* we do?” I asked.

The captains suggested several courses of action, none reasonable. Of course, the question was rhetorical, because there was only one path our dignity allowed us to follow.

To survive as Karalang, we would fight. We would win this battle. Then we would be crushed. These were givens in the equation. The only way to retain our *fidalgua* would result in defeat and absorption into the Empire of Man.

None of us could have imagined just how utterly we would be destroyed, how extreme would be Original Man’s wrath. Not even I, with my supposed special understanding. I, who expected disproportionate violence and generations of enslavement, couldn’t envision that Original Man would reply to a military defeat with genocide.

My studies of human history should have taught me better, but academic theory and military reality stand at opposite poles of understanding, and I am far from a perfect being.

\* \* \*

### Extinction +15,000 years

After shaking off hibernation, I stepped out of the refresher and checked on the intruder. Security informed me it was still secured. I donned a stiff and fragile—but otherwise fresh—uniform that had waited thousands of years for this day and called up the portable command center as I headed toward my cabin. A bubble of holos displaying specialized technical readouts followed me along the passage like a herd of glowing beggar-children. I greyed-out all but the Unified Command interface.

From my cabin I fetched sidearm and knife. The blade still held the weight of Father’s blood.

“Status of Karalang infrastructure?” I asked UCI.

“Ground, air, sea, and space infrastructure was annihilated 15,203 years ago,” answered Tactics. “This ship is all that remains measurably functional.”

“Solar reactor systems remain intact and in formation around the sun,” announced Navigation. “The propulsion Jet has been sustained. Shi’s delta-vee relative to Galactic Orbital Standard at this radius is plus 2,130.7 kilometers per second. Ship remains on course to intercept Sol System in 89.5 years.”

I set out toward the other conscious human aboard the cruiser. “Tell me about our intruder.”

“Gene-sensors suggest it’s Original Man,” Medical said.

I moved like the sea brought to boil.

“Wake the crew?” Medical asked.

“No,” I said. “If it’s a single Original Man, I can deal with this and resume hibernation.”

Als make great crew because they’re not driven by motivations beyond their duties. They don’t care about anything one way or another. They certainly don’t concern themselves with *fidalgua*.

As I ran, the passageways tufted with dust gathered over thousands of years ago—what felt like yesterday. Evidence of life and loss. I recalled vividly the scent of many people in close quarters, heard their whispers as the air swept past my ears.

“*Coward. Deserter. Traitor.*”

Ghosts inhabit and shape our lives always, indifferent to physical evidence. We are shaped more by events of the past than the tangible present.

I found the enemy in the conference room, held fast by a spiderweb security system. A young male wearing a simple set of trousers and a loose shirt adorned with nonfunctional straps and buckles. Only a civilian would consider such a garment appropriate for facing the dangers of space travel. Even so, I kept my sidearm trained on the center of mass. I silently ordered Medical to test for biohazards and other possible threats.

*I detect no known weapons systems, a ctive nanos, AI minds, or dangerous microbes, Medical replied directly to my implant. However, the intruder wears a device on one wrist whose operation I cannot determine.*

*The device appears to affect the principal foundations of timespace, Science added. I get*

*inconsistent power source readings. It appears to be very low-energy, yet a massive burst of quasiparticles and scalar bosons preceded the invader's arrival that would have required megawatts of energy. It appears the energy source routes through a timespace-plus dimension, such as with the Rhonding Router Principle. Note that this is speculation based on untested observation.*

The invader said something, probably in its native tongue, one of many spoken in Sol System. Original Man is notorious for expecting the rest of the Galaxy to learn its ways or use a universal-translation AI.

"Speak a language I can understand," I said. An envoy here should speak Karalang and Common, unless Original Man was much more foolish—or elitist—than I gave them credit for. Of course, by now my people and our language had been extinct for some fifteen millennia. Likely a lost language. My heart sped as my hatred flared.

"Humble apologies," said the intruder, in surprisingly well-accented Karalang. "Could you loosen these?"

I noticed the face betrayed rather considerable pain. Natural response, I suppose, to being stretched taut by the security-web's cloud of fibers hooked into its flesh.

"I could." I made no move to do so. "Why are you here? How did you get aboard my vessel?"

The invader chuckled in that universal half-weep all humans have at some point suffered. I too began to laugh. The release let loose a flood of emotions so powerful my knees again weakened. I slumped into a chair and set down my knife on the tabletop. A day for inappropriate and outsized emotional responses. Finally I fought my way through the outburst and dried my cheeks on a sleeve.

When I looked up, the Original Man wore a lopsided grin.

"Well, now that we're past that," it said, "would you please free me?"

I stood, pointing my sidearm at a small scar between its eyebrows. "First you will answer my questions."

I decided to grant the invader ten seconds to satisfy me. After that, this individual would serve as stand-in for Original Man. A prelude to what I was about to wreak upon their worlds and stations, a means to witness in person what would consume billions of Original Man citizens in a starburst flash.

"Of course," said the invader. "I mean no offense, and I humbly apologize for my presumption." It took a breath and noticeably composed itself before saying:

"I *blinked* here."

"Explain."

"It's a mass-transfer technique—"

"*Teleportation*?" I asked.

"I don't know the details. I'm just a guy, not a physicist or engineer. *Blink* booths operate in all our cities, space stations, everywhere. Some leaders and the very wealthy are rumored to possess private booths. Most of our heavy vehicles and space transports use *blink* drives, too."

"You have a ship?"

"No," said the intruder. "Well, yes, but nothing like yours. A personal pod, back home. I've been studying your approach. You finally reached remote-*blink* range from the small outpost near the limits of our Solar System where I've been studying your people."

The Original Man winced. Dark hair was matted to the forehead by sweat. Scabs like drying paint had formed over fresh scars, tiny mouths where security-web fibers pierced skin. Such rapid healing suggested their people were not so "original" as their name suggested. I leaned back, rather impressed this person could hold a conversation while enduring such pain. Must have been secured like this for at least the six hours it took to wake me from hibernation.

Good, I thought. *Suffer*. Another part of me considered freeing this person of the bonds.

"We're imprisoned within the limits of the Oort Cloud," the intruder said. "They . . . oh, wait, I suppose you don't know what I'm talking about."

"Assume I know nothing," I said.

I holstered my sidearm and leaned onto my elbows. This was getting interesting. Though I

was aware of their star system's frontier realm of comets, I knew nothing about our enemy having been corralled while I slept.

"You sent a message to the other races," the intruder began.

\* \* \*

### Extinction -21 days

Our first real battle against Original Man, fifteen thousand years ago, was glorious. As predicted. My cruiser participated in a brief skirmish, just long enough to clear a path to the half-mined nickel-iron asteroid I'd selected. We destroyed a few fighters and holed one heavy enemy warship along the way, sustaining only minor damage to our shield generator. My pilot was loyal, but others whom I was wise enough not to entrust with the plan soon recognized that we were not rushing headlong into battle alongside the other suicides.

"Captain," said Gunnery Chief Homan. She had always been efficient and unquestioning, though never showing personal loyalty. I hadn't expected someone with her unimpeachable *fidalgua* to confront me like this in a passageway of my own vessel.

"Why are you directing *Nova wind* into the asteroid belt, away from battle?" she demanded.

Several other respectable officers stood behind her. Other crew crowded among the officers, their faces shifting hard-soft with youth and inexperience.

I felt the comforting presence of trusted officers moving up beside me. Was I facing mutiny? Now, when we were so close, when all would be lost by adhering to one path to honor over another? Tension made the air vibrate. Remaining still and projecting calm required all my restraint.

"We will hibernate in the hollow of an asteroid until after Original Man's counterattack," I said. I described our people's imminent glory and ensuing annihilation. Though her eyes narrowed, she listened.

"We are at war, Captain!" Homan shouted. "We're all prepared to pay for victory with our lives. How dare you dishonor the crew with your cowardice?"

I'd grown so accustomed to obedience that I'd forgotten not everyone had learned the same lessons as I, that most people are puppets to honor. I contained my wrath. I had practice submerging my *fidalgua* for practical needs, could afford to.

"We will wait until the enemy least expects to teach Original Man that they can never take tribute from the Karalang people."

"Deserter," she said. She made as if to draw her weapon.

I was at the peak of physical fitness, reflexes as sharply honed as the edge of a combat blade. I stepped aside, seized her gun arm, and shattered radius and ulna. She collapsed to her knees. I placed my sidearm's barrel against her temple and looked up at those trembling behind her.

"Will you die here for nothing?" I shouted at them. "Or will you die taking the battle to heart of the enemy?"

None responded. Homan slumped. Her mutiny sputtered out before we even reached the asteroid.

I knew that even Original Man held a degree of honor to protect, but I couldn't have predicted the outrageous measures they'd take to do so.

The last act we performed after rebuilding our sun's reactor was to inform the other Descendent Species about Original Man's atrocity. My comms officer wrote an emotional plea. We kept secret the specifics of our plan, hoping the other races would distract Original Man from investigating our solar system until we were ready to strike back.

Then the long hibernation.

What is honor? Perhaps it is whatever you need to bury your ghosts, even if that might mean filling the universe with corpses. The dead are free from the senselessness that occupies so much time of the living.

Or maybe honor exists only for the dead.

\* \* \*

### Extinction +15,000 years

The invader told the story of the intervening millennia:

“Galactic history took a dramatic turn fifteen thousand years ago. Your call to arms united the Descendant Species. They finally stood together against my ancestors’ ambitions for renewed empire.”

“War?” I asked. He nodded.

“The most devastating phase of the war lasted ten thousand years. Hundreds of colonies and a dozen habitable worlds were incinerated. Billions more died. A total of four Human species were extinguished. First were the Karalang people.”

He closed his eyes. His thumbs twitched as he moved his lips.

“Next were the Zhou-Shang.” He repeated the silent motions.

“The Eteintrans.” Again the quiet ritual.

“Last to die were the Salatians.”

He remained quiet for a time, then opened his eyes. I forced myself to stare at him, seeking cues from his expression. Why would he tell me such things? Surely he had to know that revealing the scale of his people’s atrocity would not place him in good stead. At an early age, I had developed an acute sense for people’s underlying thoughts and feelings. Out of self-preservation. Which of the intruder’s twitches and other involuntary movements might betray the true motives for telling me these things? But if he were well trained, everything he said and did could have been rehearsed for greatest effect. I held my expression impassive.

“But those tragedies didn’t deter them,” he finally said. “On the contrary. Our enemies were already fueled with hatreds carried over from the ancient Empire days, and those grew as the war blazed on. In the old days, such losses ended resistance. But no longer. Now they fight united beneath the Karalang banner. Your flag adorns their vessels alongside their own.”

The Original Man closed his eyes. When he reopened them—dark brown, I noticed—he looked directly into mine. My people seldom did this. I shifted my gaze to study the tendrils embedded in the hollow of his throat. Seepages of coagulated blood gripped the tendrils like the soft lips of slugs.

“That’s what finally brought us down,” he said. “We weren’t fighting two dozen enemies but a single, diverse one. Our military strategists realized that the only way for us to win the war would be to annihilate a large percentage of you . . . that is, methodically destroy more Descendant Species, one by one. In essence, we would have to destroy our children, wipe from the Universe all the beautifully divergent forms that Humankind had evolved or adopted to survive new environments beyond the cradle of Earth. Facing unwavering opposition, we could only win by continuing mass murder until we were the last ones standing.”

I scowled, caring not a bit that he could read me. He nodded.

“This was more than we could bear. Parents should never kill their children. Why were we more worthy to survive?”

I began to wonder if maybe Original Man had come to understand honor similarly to how we understood *fidalgua*, except that it had taken them countless generations of committing horrors to develop what we as individuals were taught in childhood.

“So we began withdrawing forces,” he said. “Fighting along a retreating front. We won more and more battles within a smaller and smaller sphere of space. Finally, we have become near-invulnerable at the limits of Sol System.”

A smile tightened my face. My teeth clenched so hard they creaked. He nodded again, causing fresh blood to leak along one of the tendrils holding him fast.

“But soon,” he said, “the Descendent Species will no longer need to press against our borders, will they?”

He went quiet. A puff of dust crossed between us as the ventilation system cleared out millennia of accumulated filth. The ship hummed, every few seconds resonating in a rumble I felt in my chest. All complex systems age.

I guess he’d finished his narrative.

My jaw relaxed, and my smile faded. His question was rhetorical. The weapon we dragged behind us would exact far greater vengeance than planned. It would not only disrupt Original Man’s capacity to wage war, not only ruin their homeworlds, but destroy all that remained of

them.

I needed to awaken my crew so they might understand how complete our victory would be. So they could share responsibility. Perhaps I needed their help in deciding if our actions were still justified in light of this new information.

*If his narrative was true.*

I walked into the passageway and summoned a private cell to study what the ship had collected of galactic history during my sleep.

“Sir?” the intruder called from the other room.

I let the cloud envelop me. I wasn’t ready to talk.

\* \* \*

I watched an increasingly horrifying accumulation of GNet ansibles. One glorious victory after another, as reported from Original Man’s perspective—the most common news source.

Long ago, they chose to retain short lifetimes (though many disregarded cultural pressure and lived embarrassingly long lives), and they used that trait to great advantage. Innovators, risk-takers, explorers—define them as you will, but Original Man’s technical prowess outpaced that of even the most technologically advanced Descendant Species.

When the other races united and attacked, Original Man felt justified in declaring Second Empire “in order to bring peace and unity.”

Cheering commentators covered the first record of planetary murder after Karalang:

“You’re watching Zhou-Shang’s final capitulation. They thought they could use terror to bring pure Humanity to its knees.”

However, as the war stretched to hundreds of their generations, maintaining the effort cost them more in resources and lives than they could sustain.

More damning, they weren’t fighting to defend honor. No level of authoritarian control or propaganda could convince their people they were just. They had no “good fight” to maintain morale, no matter how often they evoked the “terrorist” bogeyman. Xenocide is seldom well received for long, even in the victor’s home. As outside pressure mounted, they fractured within.

Invisible AI wars devastated economies when they managed to punch through firewalls. Captured weapons and other tech began to tilt the balance of power. Soon, United Humanity—as the Descendant Species had begun to call themselves—realized that all they need do to defeat the enemy was outlast them. It became a war of attrition.

The Eteintran genocide was dubbed with far less flamboyant language. The third simply stated that the world being destroyed was the strategically important planet Chalra, fourth of seventeen in the Ceti Rho Mahal System, manufacturing center of the Salatian people. The ansible didn’t mention this was also their homeworld.

I stopped watching.

Should I have felt growing outrage? Should witnessing further atrocities have bolstered my certainty that our vengeance was righteous? Should I have been comforted that Original Man had perpetrated such evil, justifying our cleansing Humankind by cutting out its rotten core?

Perhaps honor might have demanded this of another Karalang captain. Perhaps any number of others would have grown more resolved in our planned course of action. But that is not how I felt. I had developed my sense of *fidalgua* at too high a price to spend it without careful consideration. One can stomach only so much death in a lifetime. I felt as hollow and weak as the admiral must have when she knew in her heart that fighting the invaders would assure our defeat.

I deactivated the cell and walked toward my visitor. I ordered Security to free him. The tendrils withdrew and dissolved into puffs of dust that dissipated in the ship’s breeze. The emissary fell, panting, to his hands and knees. My muscles still shook. I dropped into a chair.

“Why are you here?” I asked. “What do you hope to accomplish?”

He calmed his breathing and looked up. “Will you come with me to Earth’s Moon?”

I sat motionless, unbreathing as I studied his micro-expressions. Those of Original Man appeared similar enough to ours, only exaggerated—or else this one had studied us well enough

to replicate them for effect.

There was no risk in going with him: If this was a trap . . . well, I had expected to die soon after I woke, anyhow. The AIs managing the reactor certainly needed no help to complete their task. And if Original Man could remote-*blink* onto the cruiser, my remaining aboard would make little difference.

I stood, tasked Medical to initiate Shauna's waking process, and agreed to go.

\* \* \*

The Original Man emissary tapped his wrist, *blinking* us to what seemed little more than an icy closet. Not a prison—he explained this was his group's secret outpost, in a comet.

From there we *blinked* to his vessel, a tidy gel-seat affair enclosed in what appeared to be a transparent hull, stashed in orbit above a blue gas-giant planet. A vast, coiling storm swirled in slow-motion violence below, as white as the clouds of Karalang. My guide called this world Neptune.

He tapped virtual controls I couldn't see, and we and the vessel were instantaneously transferred to orbit over a habitable planet. All this movement without the sensation of acceleration was unsettling to one familiar only with the violent maneuvers of high-performance drives, but I soon forgot my disorientation upon realizing where he had taken me. The shapes of the continents made it obvious:

Earth.

Despite myself, I couldn't help but feel awe looking down upon this little world, water-blue and life-green and soil-brown, the sky flecked with white clouds and meshed with glints of silver web: The wellspring of Humankind, the fount of all known high-order technological life, ancestral home to all the Descendent Species. He had unwittingly fulfilled my childhood dream. My mind played a hundred historicals at once: the discovery of fire, the domestication of the wolf, the battle of Thermopylae, the Plague Wars, the Great Migration into space of the first genmod child-species engineered to thrive offworld. . . .

"I brought you here to see this," he said, pointing away from Earth toward its huge moon. "We began work on this memorial more than two thousand years ago."

*The Moon*, they call the sculpted world orbiting Earth. He gestured, and we *blinked* closer. The gray orb expanded to fill our view. Engraved upon its surface in ancient Karalang script rose the name of my people. Below that, what I recognized as the Zhou-Shang logogram for "the people." Next, the old way to spell "Eteintre," then Salatian character-shapes depicting the name of their culture. The four civilizations Original Man had destroyed.

Stone-writing filled the entire face of the Moon visible from Earth. Below the names was carved a phrase of mixed Earth languages, in a smaller font. The emissary translated:

*"In eternal honor of proud and noble people. Never forget our disgrace. Never again."*

I was unsure how to interpret this. Emotional manipulation?

"The Moon is the only celestial object visible from everywhere on Earth, even to those dwelling in brightly lit cities," said my guide. I could feel his eyes on me. "When we look to the skies, we must face and accept the truth of human history."

He closed his eyes and touched thumbs to earlobes, nose, and forehead, moving his lips silently each time his hands came to rest.

After the ritual, he opened his eyes and directed his vessel to *blink* to a surface-skimming altitude over the Moon. We floated among the giant runes. They rose sharply from the surface, several kilometers tall, carved with precision. We slowly approached one cliffside. Countless space-suited figures worked the surface with hand tools, like ants polishing skyscrapers. If I grasped the scale correctly, the individual etch-marks were no larger than my forearm. I could not imagine the magnitude of this effort.

"After the rough excavation of the regolith," he said, "this has all been carved by hand. To attain citizenship, every adult in Sol System must contribute to this project. Some spend years polishing sections of the Moon monuments glass-smooth. At any given moment, tens of thousands come here to meditate through service. This ritual is core to a dozen religions whose temples and churches are carved deeper into the regolith below."

He gazed down for a while, an expression like pain wrinkling the skin around his eyes.

“Countless lives have been sacrificed to this project,” he said, watching a figure descend the precipice from above.

He faced me, and I looked away. Upon every vertical cliff we drifted past, hundreds were chiseling Original Man’s shame into the face of their sister world.

“Do you understand?” he asked.

The message was clear. I said nothing.

Every night when the people of Earth looked up at their oversized moon, they would be reminded of how they had sealed their fate. And they would know this place first-hand. They would remember the rasp of basalt resisting their chisels and files.

How many Original Man lifetimes is two thousand years? At least twenty. That many lifetimes before our fall, pre-*fidalgua* Karalang was still a collective anarchy of near-immortals maneuvering for control of our world. To us, events from two thousand years past were recent history, stories great-grandparents might tell children with the heat of personal experience, passing on old ways of thinking over geological timescales. Our culture had ossified twelve generations before our final war.

Not so for Original Man. Their defining characteristic had always been changeable. How much could such a people learn in twenty generations?

I looked up through the clear canopy, across starry darkness to Earth.

Time passed.

So much time had passed, especially for this short-lived people.

“Captain,” he finally said.

The sound startled me. I had drifted deep in thought, absorbing this archaeological site-become-ongoing project, replaying the nauseating chain of extinctions that had transpired since my hibernation.

This man seated beside me represented the enemy. Child of genocidal empire-builders. Original Man, bearing within his genes all that is wrong with the Human species. I’ve studied Human history since I was a child. Even enlightened—or obfuscated—scholarship cannot hide the fact that Humankind has always been defined by war and genocide. Oceans of fear and hate have grown so deep, drowning our capacity for empathy.

My stomach tremored—disorientation from this strange mode of transport? Euphoria? Humiliation?

“Your solar system will pass through ours in about ninety years,” he said. “It’s now traveling toward us at faster than two thousand kilometers per second. Its relativistic gravitational wake will shred the Oort Defense Network and destabilize the orbits of all our worlds. If your system passes through ours, you’ll devastate us.”

He paused and looked up into the starlit void.

“And that’s only the froth on the shore, as they say. Machines of war as countless as the stars surround the Oort, operated by soldiers who have only ever known war. Some from the Undying races still bear scars from the ancient Empire Wars. They remember. They’ve nurtured their hatred for tens of thousands of years. Sol System has been our prison for centuries. We’ve only been putting off execution.

“Your attack will prompt United Humanity’s final assault. Most of my people will die. Along with most of their forces, because even a Sol System so disrupted will still not prove an easy victim. When our military leaders activate our defenses, they will wreak such horrors that all who call this arm of the Galaxy home will suffer. But we will still likely be exterminated, because long-nurtured hatred drowns self-preservation. So many will be lost. Forever.”

I grew quiet. As if it happened only yesterday, I felt Father’s heartbeat stutter against the knife clutched in my fist. We don’t call it “euthanasia” when another chooses death for you, yet my culture had rewarded my act by restoring my *fidalgua* and giving me command of a ship and its crew.

What of the Undying? One who lives a hundred times longer than the Karalang would be ruled by *fidalgua* magnitudes greater. One never forgets pain, only grows thicker callouses.

This young man was correct about his people's impending fate. Except he was unaware of how deep the blade would strike. I decided to bare it to him:

"Our star will undergo a synthetic nova as it approaches your solar system," I said. My voice was flat, my throat dry. "None here will survive."

"Oh," he said. A long pause as he looked up to the stars.

Another branch pruned from the Human family tree. More murder on my hands, graver than any I'd ever committed or conspired to commit. I had intended to destroy Original Man's capacity for war, not exterminate the species. And how much collateral damage would my strategy cause the invaders unexpectedly lurking in the darkness beyond? How many Undying would not survive to witness the evolution of the Universe? Countless dreams snuffed out.

Of all the actors engaged in this war, whose actions were least forgivable? Then again, with everyone dead, guilt and forgiveness would hold no meaning. Are we the only sentient species in the Galaxy? Does that imply responsibility to live? Or might Humankind's extinction be a boon for those yet to come? I was unsure if the Universe finding self-awareness through sentient beings was even a good thing. Perhaps it would be best to let the stars resume their mindless meditation, growing silently ancient until the heat-death of the Universe.

The bright horror held such allure, like a plague insect drawn to flame. All I need do was not act, and soon the Galaxy might be cleansed of what had long infected it. . . .

I turned to my guide. Moonlight lit his cheekbones from below, casting his eyes in shadow. His shaggy hair danced in the little ship's ventilating breath. He seemed so soft and fragile, delicate bones joined with thin sinew. I could kill him without significant effort. End our mutual discomfort. I had done it before, to someone far more dear.

He drew a deep breath. "I came to you as emissary, acting on behalf of my people, to ask a question. May I?"

I saw no reason to stop him. I made a slight nod.

"In the short time that remains, could you redirect your system away from intersecting ours?"

Without Navigation on hand to perform the calculations, it took me a while to answer. But I had dreamed trajectories for thousands of years. Yes. Barely.

"I could," I said. My hands formed into fists. They started to shake. Caged within my chest, my heart writhed like lava as it poured steaming into the sea.

"But why *should* I? To my waking mind, only yesterday I went into hibernation planning this act. All this time, I have been prepared to perish on your pyre. In my dreams I've already died countless times. Your people destroyed mine because of a simple military defeat. Slaughtered more than *four billion*, murdered everyone who will never be born in a future we'll never see. I went to sleep sinking into an abyss of hatred, and you expect me to pull myself from such depths?"

I gripped my seat's armrests so hard the fabric tore.

"You ask me to feel different because you show me your people's act of contrition? To reverse my decision, paid for with the lives and honor of my people? Your people have outlived your time. You ask me to abandon our due vengeance? To endanger everyone yet to be born?"

I leaned so close I could smell the dried sweat and blood on his cheeks.

"After all we've sacrificed, you ask me to throw away the last opportunity to restore our *fidalgua*?"

Though I was larger, much stronger, and trained in the military arts, he weathered this storm without flinching. The muscles of his jaw revealed a kind of resolve I understood. This was the face of *true* bravery, more than I had ever known. I have performed acts that might appear brave to someone who knows nothing of *fidalgua*'s malignant power, but real bravery arises from the freedom to choose the frightening option you know is most ethical regardless of consequences. The whipped thrall of a subconscious cultural meme is driven, not self-directed.

How many before him had failed to find my cruiser where it lay silently hidden among innumerable rocks? How many had ventured too far from safe territory seeking us and been destroyed by those operating under the Karalang flag? My cheeks heated with shame.

Why should I care about brave fools?

I waved my arm, encompassing his people's monument.

*"This is not enough!"*

He flinched and swallowed hard, but kept his eyes locked with mine.

"I understand," he said with a nod. "You are well justified. Your people have united all Humankind, something no empire ever could. My people have honored yours and the others we have wronged as best we can."

He closed his eyes, spread his arms, and lifted his chin to bare his throat. *Thuba*: the posture of submission and contrition. He had studied my people.

This simple act loosed a flood. Though the person displaying this posture was not of us—was in fact of the people who had murdered mine—this cultural expression had survived our extinction. It gripped my heart.

I wept. I raged incoherently. I do not know what words I howled, but I recall how he kept his chin high and his arms extended, as unflinching as a lighthouse swept in hurricane breakers.

Once my fury subsided, he opened his eyes and spoke:

"We are defeated. Your vengeance is complete in all but its execution." He bowed and held his hands toward me in the oldest pleading gesture. "Only you can save us. I beg mercy."

Sunlight reflected from a carved cliff-face cast my shadow across his shirt. Overhead, two hundred million suns glittered in the darkness. How many were home to those who endured atrocity at the hands of Humankind? Yet as significant as our species perceives itself, the vast majority of worlds remain unstained by our touch. Are even those uncontaminated places doomed to one day perpetuate our fears and faults? Or might they still harbor hopes and dreams for something better?

The rest of Humankind stood united, knives drawn against our parents. My star awaited the signal to trigger the doom of all combatants on the battlefield. Of course, they were prepared to die. War is death. They must remain until the final moment, lest the enemy escape. Friends and families would grieve, but they would accept the cost for freeing us from our mutual oppressor.

But wiping out Original Man wouldn't solve Humankind's problems. Vengeance teaches nothing but hate. It is entropy of the mind. It is dumping soil atop toxic waste. Groundwater remembers. Crops wither and die. Fresh rain only spreads the poison. Edifices sink. We drink, we die. Technology projects and magnifies its power across time and space until everyone is dead.

Is Humankind irredeemable?

I laughed. My eyes leaked. Buttresses within faltered. I sagged.

What is honor? Perhaps Original Man learned to understand it better than I could because they had continued to pay dues incurred fifteen thousand years ago. I sought only revenge.

I finally began to glimpse the shape of the truth, and I believe it is much simpler than any theory one might concoct to hide ignorance and salve shame.

\* \* \*

### Rebirth

Today is the last day of my life. For a Karalang, I am old, 1102 today, not counting the sleeping years. Like Father, I have overstayed my time. I couldn't help it: so many things to do, so many talks and events. So much fresh history to participate in. Though I have lingered well beyond my prime and into my decline, Shauna tells me that I remain greatly honored. Perhaps, perhaps not, but that no longer matters. I've never known honor. *Fidalguia* is all I sought, yet everything I did in its service led me further astray. In this, I have become much like my father. I like to think he might have found *true* honor if not for the poisoned cultural memes we were steeped in.

What matters is that I finally attained my childhood dream. I have served as Chief Restorational Anthropologist of United Humanity for most of my long life. Working side-by-side with real archaeologists, I have studied Human DNA and cultural artifacts on nine worlds, including some of the most-ancient Original Man colonies lost to plague or other catastrophe. Our digs

help build the future by seeking to understand and articulate the errors of our shared past. Our core mission is to purge our diverse species of the poison we've all blindly swallowed for as long as we've tilled soil.

I've come to believe *this* is the true meaning of honor. It is not the mad, ravenous predator our ancestors believe it to be. The one they fed out of fear that became tradition. We haven't suffered the ravages of scarcity since long before we first fledged beyond the nest of Earth. In the worlds of plenty that humans created wherever we went, scarcity is a starved beast that feeds by warping the perceptions of its prey. It breeds writhing young in the dark swamps of the mind where few venture, in jealousy and pride and ego and wrath, gnawing on the roots of what little remains good inside us until we begin to wither.

Yet this beast is only a phantasm in worlds of plenty. It can only survive in darkness. If we are worthy of survival, we must remain forever vigilant. Whenever we sense it infecting our minds, or recognize its spores germinating in our cultural artifacts, we must expose it to the light. If we do not, we deserve our fate.

\* \* \*

Forgive one who has lived too long—I'm getting ahead of myself.

"This is not enough!" I told Chen while we flew over the monuments on the Moon.

Chen: That was the emissary's name, he who found me hibernating in a battle cruiser hidden in a half-mined asteroid. Chen served me for the remaining thirty-three useful years of his life. He never questioned my instructions, though he respectfully let me know when I acted out of ignorance or bad habit. Which, I'm certain, was far more often than he pointed out. When I needed to learn the hard way, he patiently endured my foolishness. He regularly demonstrated his willingness to sacrifice however he must in order to help make amends for his people's dishonor. I still feel the shame of the day on the cliffs of Zahad-Bur, when I nearly cast my only friend into the abyss.

Original Man does not hold the distinction of being the only flawed people.

Chen eventually married. Her name was Delia, and she bore him two children in the ancient way, one of whom later joined me on digs. Maria was her name. She came close to becoming a friend as well. Because she was Chen's child, thus in my mind washed of his inherited sins (see how I still harbor my people's mental infirmity?), I felt too much the parent or mentor to allow myself such intimacy. It wasn't until she was gone that I recognized my foolishness. After she launched her own crew, I took on no new apprentices.

I am flawed. We all are. Our most selfless, noble acts only temporarily suppress the growth of the deadly grubs within. There is no end to striving to become better. If you learn nothing more from my story, please remember this. A moment's lapse could loose the beast once again. It is not dead; it only hibernates within.

How did we arrive at peace? How did United Humanity stand against Original Man's death-throes? How is Earth not a frozen ruin, torn from orbit around its parent star? The obvious answer is because I decided to change course. But I believe the root reason is that Chen's people chose to retain the evolutionary advantage of short lives, which grants them flexibility with each fresh generation, and the mental robustness that blossoms in the optimism of youth that so often fades with age. It's a struggle for the old—even those grown wise with continued learning and diverse experience—to feel hope. Wisdom seldom confers comfort.

The mind wanders again, apologies.

\* \* \*

"You will do these things," I told Chen, in his transparent vessel, all those years ago, surrounded by towering monuments and their army of supplicant workers.

"You will surrender Sol System to United Humanity, so the people you displaced can co-inhabit these historically significant worlds. It will become a cultural crossroads for all Humans to meet, where we can learn to understand one another and peacefully work out differences.

"There will be plenty of room for this, because most of you will leave. You will travel to every world you have murdered and study what remains of their former inhabitants' lost cultures and languages. Where there are survivors, you will do everything in your power to restore those

worlds as closely as possible to their original condition and their genetic diversity, and you will work to free them from the toxic traditions that contributed to their downfall.

“You will erect monuments on the uninhabitable worlds of these systems, so the people living there will always know Original Man murdered their ancestors, but that you are *also* their ancestors, as much a part of them as their own parents. In doing these things, you will demonstrate how to discard the ways that led to these tragedies so they do not repeat them. You will teach how killing brings nothing but pain and regret. You will do all this, and you will be joyful in doing so.”

I slammed my hands upon the armrests of my seat. “Like it or not, we are all descended from the same people. We’re children of flawed parents, and flawed, ourselves.”

I looked up and shook my fists at the Earth set against the multitude of stars.

“Damn you all! You will do this or I will destroy you. I will murder everyone in this system, including those slaving at its frontiers, all who have assembled here for war. You will build a future that’s better than the past, or I’ll put an end to our lineage.

“*This, honor demands.*”

\* \* \*

I later learned that Chen had live-ansibled my outburst. An edited version received a great deal of attention across the Galaxy. Still does, on holidays and festivals commemorating the establishment of Galactic Union. I am far better known for that speech than for all my published research.

I have recorded this narrative so you know the rest of the story. Just as we must always be vigilant for new expressions of the monster lurking within us, so too must you remember that the Founder of the Union is far from saint. None of us are free of Original Man’s fatal flaws. Perhaps one day.

\* \* \*

This morning, one of our teams finished sequencing the full diversity of the Eteintran genome, based on ash-preserved remains found in their capitol city and the few hundred survivors living nomadic lives as interstellar traders. Turns out that when Original Man puts its mind to it, they’re even cleverer at restoring worlds and peoples than they had been at destroying. They will have completed the reconstruction of the Eteintran homeworld within the century. Some half-million Reparation workers will stay behind to finish the work and to keep the cities functioning while Eteintran settlers raise their first new generation of children born on the homeworld in thousands of years.

The rest of Original Man have begun their boldest project to date: creating the first Pan-Human homeworld designed from the outset to house the full diversity of Human life, a cultural melting-pot where we can develop new ways to keep the family healthy. Unlike crossroads-Earth serving as political hub, this will be a fresh start. Our best hope for a better future.

They have fulfilled their duty.

I would like to believe that a people of biologists, archaeologists, and terraforming engineers will find much productive work in a Universe so unfriendly to life, rather than take up the sword once again. United Humanity will keep close watch for shadows. We must remain forever vigilant. The rabid predator lurks within us all.

Like the Restoration, my work is done if not complete.

\* \* \*

Today I stand on a balcony high above the busy streets of Hayarta, Karalang’s capitol city, restored to original plan. This is my home, much as I remember. My crew and their children have lived here for centuries, though I have only just returned.

As so often happens lately, I break down and sob, my hands having to support my frail mass against the railing. I don’t know if I weep at the beauty of this honor to a people lost long before we nearly went extinct, at the unimaginable suffering of war, or with long-overdue relief that my people will never again feed the beast. Maybe it’s only that I’m very old and have lived beyond my time.

Late sunset reflects pink gold off the towers behind me. Above, in the deep violet of nightfall,

## ANALOG

glows the galactic arm: countless bright futures for the children of humankind. We have finally reached adulthood. Not the rigid adulthood of the past, but something new. Wiser. More honorable. Hopeful.

Heat rising from the streets below brings to mind the warmth of Father wrapping me in his arms. I hear Mother tell me how proud she is of the child who transcended the foolish ways of our ancestors. Father tells me that our *fidalgua* is at last restored, but more importantly that I have created my own honor.

A breeze tousles my hair, and I smile. It takes a while to fade.

What is honor? Perhaps it's the satisfaction of knowing that the world ahead will be better than what lays smoldering in your wake. That you're part of shaping a new path.

Whatever it is, honor only blooms after making peace. With one's self, with others, with the uncaring Universe. For all our history, humans were only driven to make peace when the cost of fighting grew too dear. Despite what Original Man long believed, empire bestows nothing. You cannot *win* honor; it cannot be taken. It must be earned. It's also not other-directed, like *fidalgua*. That was only selfishness and fear masquerading as social concern.

The most difficult peace to negotiate is within. No smiling lie can deceive the person aware of their own mind. There is no greater achievement than learning how to forgive yourself.

City lights begin to glow in familiar, new buildings. The stars above brighten against the night. A soft breeze caresses my cheek. It carries no odor of death, only the scent of asphalt and hyacinth.

We are finally worthy of respect. At least for now.

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