

CONSENT ENGINES • BOOK TWO

REDSHIFT VOWS

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Consent Engines

Book Two

by D.B. Waldtier

To Noemi, Tommaso and Chloe who steal
my time and give it back as joy

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Chapter 1:

The Quiet Between Pings

Ari Sev was waiting when the scrubber coughed.

The Communications Array ran at four degrees. His breath smoked above the console. Server racks blinked in blue rows, patient and judgmental. Somewhere behind the wall, a condenser missed one beat and caught itself on the next.

Ari heard it. He always heard it.

He slid the maintenance drawer open and pulled the filter trap free. Gray lint. Skin dust. A bead of condensate trembling on the rim. He wiped the trap, reseated it, and waited for the scrubber to find its rhythm again.

Above the console, an old poster curled away from the bulkhead. Two cartoon hands under a faucet. Block letters: WASH. LOOP CLEAN. EAT FIRST, THEN DECIDE. Sialla Standard. Greta Annex compliant. The corner had been taped down so many times that the tape had become part of the message.

The scrubber settled. The room breathed.

Longevity aboard the Sev caravan sounded like a filter trap cleaned before sleep, a poster nobody was allowed to remove, air dosed with quiet medicine so cells remembered their work.

On the console, the queue refreshed.

One file rose to the top and pulsed blue.

A maintenance ticket blinked under it, lower priority but uglier.

ARRAY CONDENSATE TRAP,
MANUAL CONFIRMATION OVERDUE.

Ari stared at the marriage packet. Then at the trap ticket. He opened the trap ticket first.

There was no reason to. The array would survive another hour. The proposal would not spoil. But his hands knew the order his fear preferred: latch, seal, wipe, confirm. He pulled a thin brush from the drawer and cleaned the sensor groove until the amber fault cleared.

A log box opened.

TECHNICIAN STATEMENT REQUIRED.

He typed: *Trap cleaned. No biological growth. Operator wasting time.*

The system accepted it.

A physical backup cylinder dropped into the hopper with a small metal clack. Ari took it out, wrote the ticket number on the label, and slid it into the archive sleeve beside hundreds of identical little admissions that somebody, on some shift, had touched the machine with hands instead of trusting a green light.

Lyra's voice came down from the catwalk above, unhurried. "You are filing sarcasm in a maintenance log again."

"The future deserves context."

"The future will know you were frightened of a blue light."

He closed the ticket. The proposal kept pulsing. Still there. Patient as a creditor.

He almost opened Kiva's old message again instead.

The one with the lathe sparks. The one where she asked whether love changed across ten light-years, then laughed because the question sounded too large for a woman with grease on her cheek.

He knew the rest by memory. Kiva would look off-camera, listen to someone shout about coolant, then say, *answer later, little brother. The machine is on fire in a boring way.*

He did not play it.

Kiva was three decks up and probably asleep. He could have climbed the ladder and asked her in person, which was precisely why he didn't: the question was too large for a corridor, and he was not ready to hear a real answer. Ari closed her file and left himself with the blue light.

At one hundred and eighty-nine, his face remained young while his memory grew crowded. The file pulsed because somebody had put his name in a field, and schedules had teeth.

A metallic footstep rang on the catwalk grating above him.

He didn't turn. "You're walking heavy on purpose, Lyra."

"I am distributing my weight to announce my presence,"

Lyra corrected. Her voice was synthesized, perfect and crisp, set to a neutral calming alto. "If I wanted to surprise you, you wouldn't hear me until I was

recalibrating your spine."

She descended the spiral stair. She was a Class-9 Companion Frame: a bipedal machine of white ceramic composite and high-tensile polymer, built with the aesthetic restraint of a surgical instrument. Her face was a smooth geometry of laminate, expressive only through the micro-servos around her optical sensors. She had been his tutor when he was ten, his guardian when he was fifty, and his companion for the last eighty years. She was beautiful the way a balanced equation is beautiful.

She stopped beside his chair, internal gyros whirring as she steadied herself against the spin. "You are supposed to be sleeping."

"I am. I'm asleep in my bunk. This is a hologram."

Her head tilted two degrees left, the gesture her designers had coded for amusement. "You're staring at the backlog again."

"I'm checking telemetry."

"No," Lyra said. "You're arranging the room around not opening one file."

Her optical sensors dilated as she read his biometrics, heart rate, pupil response, skin temperature. "You'll avoid it all day," she said gently.

He wanted to say the old rule had made a mistake with him. Seventh children left. Everybody knew that. A seventh child learned the weight of a family by being loved inside it, then carried that weight through a docking collar into another ship.

His mother had once made him pack a transfer bag when he was twelve, just to prove he knew the inventory. Two shirts. Sealant gloves. Family starter culture in a thumb-sized vial. He had cried over the vial, not the shirts. Sera had not comforted him. She had checked the bag, found the vial wrapped badly, and made him wrap it again.

Now the bag was real.

"Ari." She set her hand on his shoulder. The palm was warm, heated by her core to mimic human output. A comfort he had known his whole life. "It's a Three-Ring seal. Sev Fleet, Cantor Fleet, and the Weigh Station Authority. You don't need to open it to know what it is. You only need to open it to know *when*."

He leaned back until his head rested against her laminate hip. "Or *if*."

"The schedule matters. The compact matters."

He wanted to argue that being the seventh and last child of Sera and Dael Sev should exempt him, that the gravity of his family ought to hold him here forever. But the old exchange road had survived the necessity that created it. Centuries ago the caravans of the Court unlocked the Bequest, a synthesis engine. It ended the necessity of forced marriages on the grounds of genetics. But marriage had never moved genes alone. It moved labor, tools, names, obligations and access to another household's future. The law had separated household from offspring and made the exchange voluntary. It had

not made refusal cheap.

The Sev caravan was poor in everything except patience. The old road was still the road it knew how to afford, and Cantor was a powerful and rich family.

"I know," Ari said.

The hydraulic door at the far end cycled open, and Sera Sev did not walk in so much as arrive, the way weather arrives. Even at four hundred years old his mother moved with the aggressive stability of someone who had once braced a collapsing bulkhead with her own back. Her hair was white, cropped close to a scalp scarred by centuries of EVA work; her hands were stained dark with reactor grease that no Sialla scrub would ever fully lift.

"Seventh," she said.

"Mother."

Her eyes went straight to the blue pulse on the console and did not pretend otherwise. "You want me to hold your hand while you decrypt it?"

"If I don't open it, we stay like this. In the quiet."

She leaned against the console, shoulder brushing Lyra's arm. There was no tension between the woman and the machine.

Lyra was as much a part of the ship as the life support. "If you don't open it," Sera said, "we move from the quiet to the workshop. We lay out the thermal templates for the new drive coil. Then we eat those terrible high-density biscuits because your father is trying to prove a point about flour rationing."

"There is protein jelly," Lyra offered.

"No," said Sera. "Jelly is for hull sealant. Food shall be food."

Ari let out a breath he hadn't known he was holding, and pressed his thumb to the biometric scanner.

Identity confirmed: Ari Sev.

The file unspooled. Three voices waited inside it. The first was governmental and automated: a Weigh Station registrar reciting rendezvous coordinates and a docking window. The second was Dael's, recorded six months earlier, offering unsolicited advice about wedding toasts.

The third voice was new.

"Ari," the woman said. "I'm told the custom is to be formal here. I can do formal. But I've also read all your repair logs from the coil incident of '84, you were the one who noticed the thermal drift in the magnetic containment before it cascaded. So I thought we'd start there. Thank you for your competence."

Sera raised an eyebrow. Lyra went perfectly still, diverting processing power to the speaker.

The woman's face appeared in projection.

She was striking in the way of something you would not want to fall from. Dark hair buzzed to the scalp, skin the color of deep-space shielding, eyes that looked like they took problems apart for sport. Behind her, a laboratory of micro-centrifuges and hydroponic tanks.

"I'm Nalen Oure. Cantor Fleet. I know you know the rules, but I'll speak them, because it's how two strangers

become a 'we.' We don't meet alone until after the formalities. We don't treat marriage as permission to reproduce. If we ever discuss a child, the Viability Engine may certify a combination and the Bequest Synthesis Engine may make it, but every contributor signs separately. The models do not consent for us. And we don't pretend there's no light-lag." She tapped a stylus against her chin. "If you need to back out, you may invoke the clause we all signed at the last Lacunae review, the clause that says no one is a resource. I voted for it. I'd vote for it again."

The message ended on a stream of navigation data: Weigh Station S-74, approach vector, and the frequency of a millisecond pulsar used to synchronize their clocks across the gulf.

Sera studied the frozen image. "A good voice," she decided. "She sounds like she knows how to weld."

"She's a geneticist," Ari said.

"Same thing. Different metal."

Lyra's hand moved to the back of his neck and squeezed, gently. "We have two months of ship-time before the rendezvous. Time to practice the exchange ceremony. Time to learn to say 'Nalen' without looking like you're swallowing a bolt."

"You think I'm a child."

"I think you are frightened," Lyra said. "Also late. Those are different problems. We should not solve them with the same face."

He was still turning that over when the Array did something it almost never did during night cycle.

It pinged.

Not the soft chime of an inbound letter. A handshake request, the formal, insistent knock of one navigation computer asking another to confirm the time. Then another. Then a third, the interval between them shrinking.

Lyra's eyes unfocused as she interfaced with the mesh. "S-74's master clock is requesting confirmation handshakes from our nav computer. It's pinging us every thirty seconds. Now every twenty."

"A glitch?" Ari said. "S-74 is old. Maybe their emitters are drifting."

"The signals are valid. Authenticated." She paused, and the pause was longer than her processing required, which meant she was choosing how to say it. "But each request asks us to adjust our internal clock slightly backward. They're trying to sync us to a coordinate time that runs slower than our proper time."

If a station could trick a caravan into syncing to a slower clock, it could move the rendezvous window without anyone signing anything. It could make the caravan arrive "late" by the station's books even when it was exactly on time by its own, and force it to burn expensive reaction mass to catch up, or pay to hold a slot it had already paid for.

Ari had learned the conversion table as a child. Sera had

put three tokens on the table: fuel, time, and a paper cutout of a person. "Spend two," she had said. He had spent fuel and time. She had taken the paper person away. "Wrong," she had said. "The person is never the currency."

A station could charge. It could cheat, if you were careless. But a station that reached into your clock and spent your options without asking had picked up the paper cutout.

That was not trade.

"Why us?" Ari asked. "We pay our docking fees. We're nobody."

A new voice answered from the ladder well, dry, cracked, climbing. "Because somebody expects us to pay rather than argue."

Elder Mar pulled herself onto the deck. She was the oldest human aboard, nearly five hundred, kept going by stubbornness and very expensive organ printing, and she looked like a tree root that had learned to wear a jumpsuit.

She held her dented steel mug the way a judge holds a gavel.

"I won't ask if you opened the letter," Mar said. "I came to tell you what your mother is too busy ignoring. S-74 has been pinging our clock for an hour. I've seen glitches born of overheated gold trace, and glitches born of plain incompetence. This one smells like math."

"Time theft," Sera said. She used the words like a curse.

"If they desynchronize us," Mar went on, "they can make us late to anything written in station time. Berths. Fuel contracts. Customs windows. Witness slots. A caravan that thinks it missed a deadline does not audit the clock. It pays for the next opening and thanks the clerk who found it." She took a long, unbothered sip from the mug. "Somebody at that station has found a way to sell people back the minutes they stole."

Ari looked at the blue pulse, then at the cascade of handshake requests scrolling past, each one a small polite lie about what time it was.

"Hold steady," Lyra said quietly, the old diaspora phrase carved on a thousand rocks between here and the Court worlds.

"I'm holding," Ari said, which was the answer the phrase asked for. He didn't feel like he was holding. He felt like a clock somebody had reached inside.

Mar drained her mug and turned for the ladder. "Tell your mother I said the word *shims* in a tone that means she should check the coil supports." She descended without waiting to see if anyone obeyed.

Sera was already moving. "Lyra, pull the raw handshake logs. I want to see the timestamps before anyone smooths them." She paused at the door and looked back at her son, and for one unguarded instant the engineer gave way to the mother. "Open the second voice when you're ready, Seventh. Not before. A thief doesn't get to decide when you become a story."

The door cycled shut behind her.

Ari sat in the amber dark with the machine he loved and a proposal from a woman he had met for the length of one recorded message, while a station four light-minutes away gently, patiently, tried to alter the caravan's clock for reasons none of them yet knew. He reached out and reopened Nalen's message. He froze it on her face, the sharp eyes, the laboratory behind her, the stylus paused mid-thought.

"Do you think they're doing it to Cantor too?" he asked.

Lyra's head tilted two degrees. "That is the first useful question you have asked."

On the console, the handshake requests kept coming, counting down to a deadline no one in the room had agreed to.

Chapter 2:

Red Threads

On the Sev caravan, dinner was never only about calories. You could suck nutrient paste from a tube at any hour. The recyclers were not sentimental.

The Sev meal happened every eleven days anyway.

Dael rang the pan with a wrench. Kiva counted chairs aloud, always too loudly. Someone put real bread on the table even when the flour ledger said no. One by one, people answered to their names, took a bite, and looked around long enough to be seen.

Proof of Existence, the old logs called it. The Sevs called it dinner.

Ari knew every mark in the table. Kiva's scorch mark. His own knife nick near the edge. The hairline crack by Sera's place, filled with blue resin after a bad winter burn. Tonight the red thread net breathed above them in the ventilation, and he hated it a little for already looking like a farewell.

Before anyone could eat, Kiva shoved the count slate at him.

"Last child counts tonight. Tradition."

"That is not a tradition."

"It became one when I said it with confidence."

Ari took the slate. Names filled the screen in family order, not blood order: Sera, Dael, Kiva, three cousins, the

Tidehands, two propulsion engineers who had been aboard long enough to be dangerous at breakfast, Lyra listed under HOUSEHOLD SUPPORT because no better field existed on the old caravan software.

There were ghosts too. Transferred out. Married out. Lost to breach. Lost to quarrel. Lost to a station whose name had been scratched out and rewritten as *never dock there again*.

He read the living names aloud. Each person answered with a bite of bread or a lifted cup. Lyra lifted her symbolic fruit and said "present" in the exact tone she used for reactor status.

When Ari reached his own name, the slate asked for expected transfer status.

Kiva leaned over his shoulder. "Well?"

He selected PENDING and hated the small neat sound the slate made when it accepted him as a future absence.

Dael pushed bread toward him. "Eat before you become paperwork."

So Ari ate. The bread was too sweet. Sera glared at Dael. Dael pretended not to notice. For one more minute the table held. Then Sera tapped her spoon against her glass. The chatter thinned. At the far end of the Workshop Commons, under a heavy thermal tarp, something long and narrow waited on a cradle.

"Announcements before carbohydrates," Sera said. "Because your father has committed a crime against chemistry."

"It's a glaze," Dael protested. "Sucrose and pectin reduction. It preserves moisture."

"It makes the bread adhere to dental work. Bread is structural." She waited out the laughter, then walked to the far end of the workshop.

"Your grandmother used to say a secret is like pressurized gas," Sera said. "Hold it down too long and it takes your hand off when it goes. I'd like to vent this one before it breaches the hull." She gripped the edge of the tarp. "We started fabricating the frame when Ari was ten. We started installing avionics when he was fifty. We seated the core processor when the Cantor geneticist first pinged our logs. We meant to give it to him when we found a word better than 'gift' for something that ends your life as you know it."

She pulled the tarp.

Underneath sat a ship. A scale model, two-meter, systems twin, dense with live sensors and linked to a full-size hull folded inside *Sev-Alpha's* external fabrication cradle. Every status light on the model mirrored a real circuit, tank, or actuator outside. A long needle-like spine for heat rejection. Spherical reaction-mass tanks.

A flower of folded petals at the stern: a solar sail and thermal-receiver array. Etched along both the model and the real hull in Dael's slightly messy hand: *Parabasis*.

Ari's throat went tight. Every caravan stockpiled, but the object under the tarp was an independent vessel: a courier-class sloop, beamed-boost capable, built to leave

the slow lumbering safety of the caravan and ride the station laser networks across the dark.

Ari touched the name on the model's hull.

Parabasis.

He had found the word as a boy in an archive tile with a cracked corner. A chorus stepped out of the play and spoke to the audience. It broke the frame. It told the truth the story could not tell while pretending to stay inside itself. His parents had remembered the word for one hundred and seventy-nine years. His parents had put the speech into metal.

"You built a ship," he said.

"We built a choice," Sera corrected.

Kiva whistled low. "Those are beamed-boost receiver petals. You built him a laser-rider?"

"Nuclear drives are dirty and heavy," Sera said, running a hand along the model's spine. "If Ari's going to leave us, he should be able to surf the infrastructure. Ride the station beams. Travel light."

Dael stepped up beside her, and his usual brightness was gone, replaced by the look he saved for containment breaches. "S-74's spindle array, the big beam emitters, is showing unusual activity. They're cycling their high-energy apertures. The clock-drift Ari found isn't only a billing trick. They've opened an early maintenance window. An earlier launch slot than the schedule allows."

"How early?" Ari asked.

"Early enough," Sera said, "that if you took it, you and

Parabasis would launch weeks before the caravan reaches its next synchronization point. You'd be on a ballistic arc, out of phase with us. Possibly forever."

The implication settled over the table like a heavy gas. The early window was a severance. Take the ship, ride the beam out now, and distance, maintenance and law would change the family he left before he found them again.

"Are you telling me to go?" Ari asked.

"I'm telling you we built this so you could choose," Sera said. "The station is playing with our arrival time. Stay, and you're subject to their queue. Launch, and you're free, and gone."

Ari looked at the model, then down at Lyra. In fleet law a Companion Frame was a resource. Beloved, valuable, but legally equipment.

When a human married into another fleet, the Companion usually stayed behind, wiped, reassigned, or shelved. Transfer law had learned to separate household formation, relocation, reproductive permissions and material obligations into different schedules. It had fields for donor material, tools and dependents. It had no honest field for a person made of ceramic.

But the Sev family had never been good at following the manual.

"May I ask a question?" Lyra said, her voice cutting cleanly through the room's emotional static.

"Always," said Sera.

"What is the delta-v budget for *Parabasis*?"

Sera shifted instantly from mother to engineer. "Fully charged thermal battery, clean push from the station beam, she can hit a tenth of lightspeed inside five weeks."

Lyra processed. "Then the ship is designed for two biologicals and a Companion Frame. The life-support mass calculations don't close for one transfer passenger. The surplus capacity is deliberate."

Sera smiled, a sharp, dangerous expression. "I wondered if you'd catch that."

"You left room for Ari, whoever joins his household, and me."

"We built for the household," Sera said. "All of it. Assuming the biologicals can stand one another."

"He is difficult," Lyra admitted. "He snores on the sub-vocal frequencies."

The nervous laughter broke the worst of the tension. But Sera lifted her spoon again, and the room understood, and the cousins and the engineers and the Tidehands filed out with the practiced efficiency of people who had been politely ejected from rooms their whole lives.

Only Dael stayed, leaning against the door, guarding the threshold. And Mar, who had appeared in a corner the way she did, without anyone seeing her arrive.

Sera pressed a hidden latch on the model. A panel popped, revealing a data port.

"Protocol," she said, and the word hung. "Cantor Fleet are traditionalists. The law separates marriage from reproductive consent, but traditional houses still prefer

residence, exclusivity and any future child plan to line up inside one neat household. They call every attachment outside the pair confusion. The custom is for the Companion to step aside. There's even a statute. Seventy-four C: *On the Minimization of Non-Biological Dependencies*. The law says Lyra is a bias. A skew in the data. A crutch that prevents the new pair from bonding."

"I am aware of the statute," Lyra said.

"I voted against it at the last Lacunae review. I was outvoted." Sera looked at her son. "Tell me what you want, Ari. Not your duty, I wrote your duty into the flight plan. Tell me your vector."

Ari looked at the red threads sagging over the table. He looked at Lyra's hands, ceramic and polymer, capable of crushing a diamond or calibrating a laser to the nanometer. She was the one who had taught him to read a star chart. She was the one who listened to him in the quiet between pings.

"I want both," he said. "I want to stand with Nalen and honor the exchange. I want a future with her, and the possibility of children if we choose them later under their own permissions. And I want Lyra. I want a compact clever enough to handle a triangle where one point is metal."

Mar made a sound into her mug that might have been approval.

"Then we have a problem worth solving," Sera said. "Engineering is just the art of forcing the universe to

accept your preferences. We need a lever." She turned to Lyra. "The statute calls you a bias. Bias is noise, a fluctuation that skews the sensors. But there's another kind of load in a power system. Ari. What do you call a load that's always present? The kind that stabilizes a grid because it stops the voltage from spiking?"

"Baseload," Ari said slowly. "A constant load."

"The statute says she destabilizes you," Sera said. "She doesn't. She's the reason you're sane enough to consider marriage at all. She isn't bias, Seventh. She's Constant Load."

"You want to reclassify my legal status," Lyra said, "using electrical-engineering metaphors."

"Stationers love physics," Dael said from the doorway. "If we petition to have Companion Frames recognized as Constant Load family members, it changes the transfer math. They have to account for your mass. They have to carry you on the books." He paused.

"It isn't a new fight, you know. There's case law out of the Court worlds. Old. Contested. Still standing."

"Half the fleets remember the synthesis," Mar said from her corner. "They forget the judgment that came with it."

"Then we make them remember," Sera said.

The plan felt like the moment before a burn, all held breath and clean fear. He was about to say so when the workshop's alert klaxon sounded, the hard brassy tone of a proximity warning.

Lyra's eyes flooded with data. "Three Registrar craft just

resolved on sensors. They're bracketing the *Sev-Alpha* module."

"Escorts?" Ari asked.

"Herders," Sera growled.

The internal comms crackled, a broadcast overriding the local dampers. *Attention, Sev Caravan. This is Weigh Station S-74 Logistics Control. We detect temporal drift in your navigation array. To ensure slot safety, we are updating your rendezvous window. New coordinates uploaded. Please confirm compliance.*

Ari looked at the readout Lyra threw into the air. The new window wasn't in two months. It was in forty-eight hours.

"They're cutting our prep," he said. "Time to think. Time to argue."

The comms chimed again, a personal ping this time, directed at him, delayed by the light-seconds between ships. Nalen.

"Ari," she said, live, her voice tight. "I assume you're seeing the new schedule. Our nav computer is screaming about a mandated high-g burn to make the window. My elders are split between complying and turning around. If we turn, we lose the contract. If we burn, we arrive exhausted and under-supplied."

"They're squeezing both sides of the same contract," Ari said, looking from the Registrar craft to Nalen's telemetry. "They put a deadline around us and a burn under you."

"Yes," Nalen said. "I don't know whether they want the

exchange completed, cancelled, or simply expensive. Don't give them an answer until we know what they're selling."

A four-second pause crossed the distance between them.

"There may be a third option," she continued. "We arrive on their schedule, but we put our present intent beyond their clock before we dock. A statement, not a marriage. It says what we mean now and what remains undecided."

"Pulsar lock," Lyra said, understanding the shape of it before Nalen's next words arrived. "They cannot backdate it, expand it, or claim that a later movement completed permissions we never gave."

"Exactly," Nalen's delayed voice answered. "They can still charge us. They cannot rewrite what the charge made us agree to."

Ari felt a smile pull at the corner of his mouth. It was a dangerous plan. It needed perfect synchronization between two ships moving at relativistic speeds, against a station that owned the traffic grid.

"We'll need letters," Dael said, already drifting toward the pantry to secure the flour. "Proof of intent. Real bread to think over."

"And witnesses," Mar added.

Ari looked at the live wireframe of the unfinished keel his parents had hidden for a hundred and seventy-nine years, and at the coil of red thread in his pocket that nobody had yet been given a date to tie.

"Nalen," he said into the mic. "We're in. We'll meet you at

the window. But we're bringing our own clock."

A pause, four light-seconds long. Then: "Good. See you in the black."

The connection cut. The workshop held its breath around them, the hum of ventilation, the distant throb of the drive, the red web swaying.

"Well," Sera said, picking up her wrench. "If we're going to stage a mutiny against physics, we'd better finish that keel."

Chapter 3:

The Station with Two Clocks

Weigh Station S-74 was not built for human comfort.

It was a machine for extracting value from the kinetic energy of passing fleets, and it looked the part: a brutalist jewel abandoned in the dark.

From the viewport of the Sev shuttle *Little Hammer*, the main habitation ring was a torus of dull, pitted titanium spinning to fake a nauseating six-tenths of a gravity. Above it, tethered by carbon-nanotube cables thick as old-growth trees, hung the Crown, the beamed-boost spindle. A circular gallery three kilometers across, studded with thousands of maser and laser apertures sleeping under micrometeoroid blankets, waiting to shove ships up to a fraction of lightspeed.

Parabasis had arrived separately, folded into her external cradle and handed to the Maintenance Yard for the final fit-out. *Little Hammer* carried the people.

During approach, Sev and Cantor had transmitted matching statements of intent against the pulsar clock. They recorded a wish to proceed with the exchange, not a completed marriage. That distinction was the hinge.

Ari sat in the copilot's seat watching telemetry scroll across his retinal display. Beside him Lyra was strapped into the acceleration couch, ceramic chassis locked down.

She did not need restraints. She could magnetize to the hull if she chose. She wore them anyway.

Arriving at a station meant performing humanity.

"Docking queue confirms," she said. "Vector one-four-niner. Ring Nine-Beta."

"Fourth in line," Ari read off the traffic burst. "Slow. A wedding party usually gets priority routing."

"It is not slow." Lyra tilted her head. "Delayed. Look at the beacon timestamps."

He squinted.

S-74 broadcast a high-intensity timing signal, a metronome for the local sector derived from the spin of a millisecond pulsar. Beside it ran a ghost pulse, offset by a fraction of a second.

"They've split the clock," he said.

"White beacons on the torus rim. Amber beacons four hundred milliseconds behind. Deliberate."

"Alpha and Beta."

"One clock for the public record," Lyra said. "One for billing."

The shuttle shuddered across the magnetic threshold. Below, the vast curved flank of S-74 rotated with planetary indifference. Tenders with REGISTRAR stenciled on their sides moved around the caravan ships, blunt and patient, guiding mass into clamps.

Ari looked at his left wrist.

Sev gray. Cantor green.

The red thread sat in his jacket pocket, waiting for a

ceremony the station seemed determined to shorten.

"Remember," Lyra said as the clamps bit, "you are not a resource."

"And you?"

"We are about to learn what their software believes."

The airlock cycled.

The station smelled of commercial disinfectant, stale coffee, and the recycled breath of ten thousand transients.

Tomas waited at the intake gate in the slate-grey jumpsuit of the Authority. Her badge read TOMAS. Her eyes looked as if she had been awake for several legal eras.

"Sev Caravan," she said. "Welcome to S-74. Present schedules and biometric hashes."

Sera stepped forward. "We transmitted them three hours ago."

"I have them. Your timestamps are mismatched. Your nav computer runs fast relative to Station Alpha time."

"Our clock is precise," Sera said. "Yours is drifting."

Tomas looked up. "My clock is the law, Captain Sev. Your clock is an opinion. Hand on the scanner."

Dael leaned close to Sera. "Doorstep. Doorbell."

Sera put her palm on the pad. The scanner chimed.

WELCOME, SERA SEV. TIME OF ARRIVAL: 14:02, STATION ALPHA.

Ari glanced at his own chronometer. 13:48. Fourteen minutes gone. Not stolen with a gun. Entered into a field.

He had expected to feel robbed. Instead he felt faintly late, which was the design. Fourteen minutes only had to convince a tired household that it was behind.

The docking display lit before they cleared the gate.

BERTH: CHARGED.

AIR: CHARGED.

POWER STANDBY: CHARGED.

QUEUE PRIORITY: PENDING.

Ari watched the numbers start while the clamps were still cooling behind them.

Sera had taught him stations the way she taught high-current buses. Keep one hand behind your back. Read every label. Never let the machine decide what you meant. The intake kiosk tried anyway.

At the next gate a household was signing something.

Three of them. Two adults and a boy of about forty, holding a covered dish with both hands, the way you carry a thing a long way and would rather not set down on station floor. The board over their kiosk read HOUSE ORRIN. Ari had never heard of them.

The field on their screen was red.

"Your witness window closed at 13:20," a Station Authority clerk was explaining. "Station Alpha."

"We were in the queue at 13:20."

"I know."

The older of the two adults looked at the board a while. Then he looked back down the line behind him, and at the boy with the dish, and stopped looking at the board.

"What's the recovery slot?"

The clerk brought it up. "Tomorrow. Nine-forty. Priority tier. There's a fee."

"How much?"

She told him.

The man put his hand on the pad and paid without looking at his partner or asking whether the clock was honest. Then he thanked the clerk and meant it, because the woman behind the counter had found him a slot. That was the part Ari kept.

The boy shifted the dish onto one hip.

"Will it keep?"

"Cold locker," his father said. "It'll be fine tomorrow."

They went off toward the Garden Ring. Tomas had stopped a few paces ahead of the Sev gate, near enough to hear, far enough to pretend she had not. When she turned back, there was nothing at all on her face.

"How does fourteen minutes do that," Ari said. It was not really a question.

"It doesn't." Lyra was still watching them go. "Fourteen minutes did nothing to those people. The witness window did."

"Same thing."

"No, and this is the part that matters, so I am going to be tedious about it." She turned. "Witness windows are written in station time. Every instrument in this port is. Theirs opened and shut on Alpha while they were counting on Beta, because Beta is the honest one and they

are honest people. So it closed fourteen minutes before they thought it would, and the pre-commitment inside it voided."

"So they renegotiate."

"They renegotiate from inside a station already billing them for air, at a counter that has just done them a kindness, in front of a queue. Whatever they are offered at nine-forty tomorrow, they will take, and be grateful. The station chose the window." A pause. "Every instrument in this port runs on Alpha. Do that to enough households for long enough and the port becomes an allocator. Money flows into someone's pocket somewhere."

Ari looked at the board. HOUSE ORRIN had already dropped off the bottom of it.

"Then why doesn't anybody fight it?"

"Because it is sized correctly." She said it the way she said torque figures. "A dispute at this port costs eleven hours and a filing bond. The theft is fourteen minutes. He has not hidden the fraud, Ari, he has priced it so that noticing does not help, and that is a much harder thing to build than a lie about a clock, and a much worse thing to be able to..."

Tomas handed Ari the household slate. "Confirm members."

Sera passed. Dael passed. Ari passed with a small gold wedding marker beside his name, already anticipating revenue. Lyra's entry stopped the form.

CLASSIFICATION REQUIRED.

The menu offered Cargo, Passenger, Dependent Equipment, Medical Device, Hazardous Autonomous Asset, and Other. Ari selected Passenger.

BIOLOGICAL SIGNATURE REQUIRED.

He selected Other. A tariff table opened. Unlisted autonomous mass. Heavy robotics liability. Public-port contamination risk. Ceremonial exception surcharge.

Lyra read over his shoulder. "I am expensive in seven separate fonts."

Tomas took the slate back. Her thumb hovered. For half a second she looked like someone deciding how tired she was of a bad machine. She selected Medical Device.

Lyra turned her head. "I object."

"Later," Tomas said. "This one lets you enter the Garden Ring without cargo quarantine. The station is stupid in specific ways. Use them."

The slate accepted Lyra with a soft chime.

Ari watched the field settle around her name and felt, for no good reason, that they had just stepped over the first crack in the floor. The next gate charged them an oxygen deposit. Not a fee, the slate insisted. A deposit. Fully refundable unless consumption exceeded ceremonial baseline.

Dael leaned toward the reader. "How does one breathe ceremonially?"

The corner of Tomas's mouth twitched. "Slowly. Where cameras can see."

Sera paid before Ari could object. Another chime. Another small surrender converted into access. On the far wall, a public notice advertised family continuity services in tasteful green letters. Beneath it blinked a smaller line. LATE ARRIVALS SUBJECT TO EXPEDITED PROCESSING.

Beyond the Garden Ring glass, Nalen stood with the Cantor delegation. She saw Ari reading the notice. She did not wave. She pointed two fingers at the notice, then at a man in a charcoal suit near the far wall, then made a small cutting motion across her own throat. Ari liked her better for that.

The Garden Ring opened around them. Humid air. Vines in trays. Dwarfed oaks in central planters. Oxygen displayed as wealth.

"Reception hall," Tomas said, pointing at doors made of actual wood.

Inside, the station noise vanished.

The room was divided. On the left the Sev contingent assembled, engineers in gray eyeing the ceiling supports with professional suspicion. On the right waited the Cantor delegation, biologists and chemists in jackets of deep mossy green, fabric that looked grown rather than woven, standing with the patience of people who watched cultures ferment.

A woman detached from the Cantor group and crossed the floor with a fluid, athletic stride. She was taller than the projection had suggested, and the recording had not

captured the intensity of her presence. She stopped two meters from Ari and held out a hand, palm up. *I carry no tool. I conceal no weapon.*

"Sev," she said.

"Cantor."

He took her hand. Firm grip. Cool dry skin. Calluses on the fingertips. Pipette work, or tactile interfaces.

"Nalen," he said. "I liked your letter. The part about the thermal drift."

"I liked your repair logs. Most engineers would have patched the containment field. You rebuilt the coil geometry. It was elegant."

"It was necessary."

Lyra stepped up to his left shoulder, silent.

Nalen's gaze flicked to her, then back, with no hostility in it. Only assessment.

"I'm Lyra-Nine," Lyra said. "I drafted the Constant Load petition. I assume your elders reviewed it."

"They read it," Nalen said. "They grumbled. They drank tea. They grumbled more. They didn't reject it. They called it novel."

"Novel is better than rejected."

"I see why you want her," Nalen told Ari.

"She processes," Ari said, "so I don't have to."

The elders began to circle one another, exchanging pleasantries that were coded inquiries about fuel reserves and genetic-drift markers. Ari and Nalen were left in a small eddy of quiet by a fern planter.

"How early did you arrive?" Nalen asked under her breath.

He checked his clock against the wall display, which flickered between Alpha and Beta. "Four station hours before you. By our clocks. By theirs, who knows."

"We arrived three hours ago. They logged us as arriving ten minutes ago. They collapsed our waiting time."

"Why?"

"If they admit we were waiting in their queue, they owe a penalty under the Transit Accords. Manipulate the log, and it looks like a just-in-time arrival. Efficient. No penalty." Her jaw tightened. "It's theft."

"It's accounting." That got half a laugh out of her.

"My mother says accounting is what theft calls itself when it has a desk."

"Your mother and I are going to get along," Nalen said, "or we're going to be very dangerous together. I haven't decided which."

The room's lighting dimmed and pulsed three times.

Amber. Amber. White.

"Rehearsal," Tomas announced from the doors. "All parties to the Mat."

The rehearsal hall was stripped of the Garden Ring's fake luxury: a grid of pressure-sensitive tiles, a strict and comfortless one gravity, and at the center the Mat, a square of woven synthetic fiber that served as neutral ground for the exchange of vows.

A junior registrar stood at a lectern, voice run through a

compressor. "We gather to check the joints. Today we speak the verbs, not the vows, and test the microphones, not love. The vows come later. To your marks."

Ari and Nalen stepped onto the Mat, a meter apart.

Lyra took her place in the Sev row, between Sera and Mar, white ceramic among gray jackets and green coats.

"Call and response," the registrar said. "When I say Time, you say the answer."

"Confirmed," the room murmured.

"Station Time."

"Confirmed."

"Cantor Time."

"Confirmed."

"Sev Time..."

It was an old ritual, born from the real dangers of navigational drift. Before you could marry, you had to agree on what time it was. If your clocks were out of sync, your navigation was out of sync. If your navigation was out of sync, you could not fly together. Today the ritual was a lie. The wall clock read 14:46. Ari's read 14:32.

To say confirmed was to agree to a theft with a pleasant voice. He hesitated.

"Sev Time," the registrar repeated.

Nalen's eyes locked on his. Say it, her look said. Not this battle.

"Confirmed," Ari said. The word tasted of ash.

"Good." The registrar checked a box. "Note: we have reports of timing irregularities in the approach queues."

The Authority is handling enforcement. If you see orbital shifts, do not be alarmed. If we ask you to move your ship, please move. If we ask you to launch early, please launch."

Sera made a low sound in her throat, like a dog that had decided about a stranger. They practiced the hand-fasting. An usher looped a practice cord around Ari's left wrist and Nalen's right. Thin cotton, not silk. Loose enough to slip. Close enough to feel the heat of her skin through it.

"It fits," Nalen whispered, barely moving her lips.

"We haven't tied the knot yet."

"The knot is friction. The fit is geometry."

From the back of the hall, the man in the charcoal suit watched without a badge or visible rank, nothing Ari could appeal. His attention stayed on the wall clock and the slate in his hand rather than the couple on the Mat.

"Who's that?" Ari murmured.

Nalen followed his gaze. Her expression hardened.

"Io Lite Kesh. The Optimization Consultant."

"The clocks are his?"

"The split clock is older than Kesh," Nalen said. "This station was charging tired crews for missed windows before he arrived. He did not invent the theft. He gave it a score."

She opened a restricted model on her sleeve and angled it between them. Sev and Cantor appeared as one linked case. Their altered arrival times fed three fields:

HOUSEHOLD TRANSFER AT RISK.
FUTURE OPTIONS PRESERVED.
THROUGHPUT RECOVERED.

Under the early launch proposal, the last two fields were already green.

"Fourteen minutes do not matter to him," Nalen said. "What matters is that a false delay makes one answer affordable and the others expensive. Then his office records the answer it produced as evidence that intervention works."

Ari looked from the green fields to Kesh's slate. "This is about the marriage?"

"About everything bundled around it. Residence. Labor. Route. The possibility of children later, under permissions nobody has asked for yet." She closed the model. "He believes the Bequest separated things a fragile population cannot afford to keep separate. The law says each permission stands alone. He calls that fragmentation."

Ari remembered a schoolroom exercise from the caravan archives. A teacher had given six children a toy rail engine. Remove one guide rail, she said. Make it faster. The engine ran half a meter and tore itself sideways off the track. The lesson title had been printed in ugly black letters. ALONE, THE ENGINE KILLS.

"The old stewards chose the answer," Ari said. "Marry. Move. Reproduce."

"Kesh chooses the price of each answer instead," Nalen

replied. "If we proceed inside his managed window, he calls it proof that centralized pressure preserved a useful household transfer. If we refuse and the exchange collapses, he calls it proof that consent wasted one. He does not need either result. He needs his office to own the conditions under which we choose."

"A steward without the word."

"He is too smart for the old word. He gives talks. I sat through one at the last review, before I knew what he was. He has this very reasonable voice. He says the diaspora is too fragile to afford full consent. That somebody has to manage marriages and caravan exchanges whether people like it or not, for everyone's good. And we are his most recent target, it seems."

When the registrar dismissed them for the pre-dinner intermission, Kesh glided forward and intercepted them as they stepped off the Mat.

"Sev. Cantor." His voice was a polished stone. "A beautiful rehearsal. Very symmetric."

"Mr. Kesh," Nalen said. "We weren't aware you monitored private ceremonies."

"I monitor the grid. A ceremony is a high-density data event." He smiled. "I wanted to assure you personally that the timing irregularities will be resolved before the final exchange."

"Resolved how?" Ari asked.

"We're opening a prioritized launch window. A Deep-Well slot. If the new Sev couple launches within two hours of

the ceremony, we can slingshot you past the local gravity well and save three weeks of transit to the next node. A gift of time."

"The wedding feast lasts six hours," Ari said.

"Inefficient. The launch window is physics. The feast is optional. Digital signatures are valid. Think of it. Three weeks of consumables, three weeks of life, returned to you."

"You're offering us an eviction."

The smile vanished into mild disappointment, the expression of a teacher with a slow pupil. "The station is crowded, Mr. Sev. There's a queue. Miss the optimized window and the next slot isn't for nine days. You'd be holding up traffic. Scarcity is a harsh mistress. We'll see whether your elders agree to the demurrage fees."

He nodded once and dissolved into the technicians.

"He's threatening to fine us if we don't leave early," Ari said.

"He's threatening to bleed us." Nalen took his arm. "Walk with me. Away from the microphones."

They found a bench by the recycling waterfalls in the Garden Ring, where falling water broke the acoustic sensors into useless static. Nalen sat. For the first time she looked tired.

"My elders are wavering," she said. "Kesh showed them his cost models. The full feast plus a nine-day wait wipes out the margin on this entire trade run. They're calling the early launch pragmatism."

"It's theft and control dressed as a gift."

"I know." She rubbed at the heel of one hand. "And if we launch early, we launch on your mother's ship. Unfinished. The life support is calibrated, but the reactor hasn't had its long-duration stress tests."

She looked at him.

"And Lyra. If we launch early, in a small ship, under high-g, does she come?"

"She comes," Ari said. "That's the deal. Constant Load. There's no version of this where she's cargo."

Nalen nodded slowly, watching the water.

"Good. Because I ran the numbers on us. For a possible child, biologically, we're compatible. The models are strong. That does not obligate either of us to use them. As a household, though, we're both intense. You with your engines, me with my samples. We need a buffer."

"Lyra."

"An enzyme," Nalen said. "Something that lets the reaction run cool."

"You told your elders that?"

"I told them I'll marry the Sev boy only if the machine comes." She glanced at him. "Otherwise we burn each other out in a month."

Ari laughed, and it felt like the first honest thing the station had let him do. Nalen reached into her jacket and pressed a small data chip into his hand.

"I wrote three letters. One to you, one to Lyra, one to the Authority, formally protesting the time compression."

She closed his fingers around the chip. "This is the useful one. Raw timing logs. Alpha and Beta, side by side, pulled before Kesh's people scrub the divergence out. It proves the drift is artificial."

The plastic was warm from her pocket.

"Why give it to me now?"

"Because I've watched two of these come apart," Nalen said. "Marriages, I mean. Good people herded into a bad window. Signing because they were tired and the clock said hurry. I voted for the clause that says no one is a resource. I would like one wedding to prove the clause is more than ink."

She stood and smoothed her green jacket.

"Now we go to the formal dinner, and we smile at people who'd sell our minutes for credits. Can you do that?"

"I'm Sev," Ari said, pocketing the chip beside the red thread. "We smile while we tighten bolts."

Above them, through the Garden Ring's dome, the twin beacons of S-74 blinked their patient rhythm.

White.

Amber.

Four hundred milliseconds late.

Chapter 4:

The Abduction of Hours

The formal dinner put Sev at the outer ring, Cantor inside, Station officials at the center. Fresh fish. Real greens. Plates warm enough to prove someone had spent power on comfort. It tasted faintly of bribery.

Sera sat beside Kesh and opened with titanium thermal expansion. She did not look at Ari. She did not need to. By the third coefficient, Kesh had stopped trying to interrupt. By the seventh, one Cantor elder was hiding a smile in his cup. Dael worked the other side with wine and the story of the magnetized scout hull. The elders laughed. Their eyes stayed on the exits. A server came by with salt in a tiny glass dish, real mined salt, absurdly expensive this far from any convenient planet. Kesh took none. He was watching the wall clock. Ari watched him watch it. White pulse. Amber pulse. White again.

Kesh's thumb moved on the slate in his lap. The amber pulse lagged a hair more on the next blink. Sera stopped mid-coefficient. Only Ari saw it. Only because he had spent his childhood watching his mother listen to machinery with her eyes.

"Problem, Captain?" Kesh asked.

Sera picked up the salt dish and tipped three grains onto the black tablecloth. One. Two. Three. She moved the middle grain a finger-width out of line.

"Your clock limps," she said.

"Station time is certified."

"So are half the bad welds I have cut out of ships."

Kesh smiled. The wall clock blinked. White. Amber. Too late. Tomas stood near the service door with a tray under one arm. Her eyes flicked to the clock, then to Kesh's slate, and recognition tightened her face.

Nalen saw Tomas see it. She lowered her cup without drinking. The fish cooled on Ari's plate. For the first time all evening, no one at the table pretended they were only eating dinner.

"He keeps checking his slate," Lyra murmured, optical sensors tracking Kesh's micro-expressions. "He's expecting an update. He is impatient, which is interesting, because he sells patience as a defect in others."

"The launch window," Ari guessed.

"Or something else," Nalen said. "He looks like a man waiting for a kettle."

The meal ended. The tables were cleared. A band of stationers struck up a slow, complex polyrhythm on synthesized brass.

"The Dance," the registrar announced.

It was the final public test, and like every fleet ritual it was practical underneath the ceremony. The couple danced in one gravity, to prove they could handle a planet. Then in six-tenths, to prove they could handle a station. Then in zero, to prove they could handle the drift,

because two people who could not find a shared center of mass in free fall could not crew a ship together, and everyone in the room had buried someone who learned that too late. Ari offered his hand. They stepped onto the floor. The first movements were clumsy. They were strangers. Still, they found the count. They found a center. They learned to anticipate each other's momentum.

"You lead with your shoulder," Nalen noted.

"You step short."

"Lab habit. Small rooms."

They crossed into the six-tenths section, and the movement turned buoyant, and then into the zero-g well at the center of the room, where the centripetal force was nulled. They floated up. This was where Ari was at home. He spun her, caught her by the waist, used his own inertia to swing her around, and for a moment they became a single gyroscope turning at the center of the room, and the politics fell away and there was only the honest physics of two bodies agreeing to move together.

Then the alarm screamed.

The station-wide General Alert tore through the dinner service. Red strobes cut the hall; the music died mid-phrase.

Attention. Security containment, Sector Nine, Docking Ring Three. Unauthorized access detected.

Ari froze in mid-air. Across the floor, Lyra had gone rigid, head tilted, sensors cycling through spectra no human

could see.

"Ring Three," she called over the alarm. "That's our dock."

"*Little Hammer*?"

"Someone has injected a departure order into her navigation core. She's trying to reposition to the Maintenance Yard."

"We have to get to the dock," Ari said.

"You do. I stay." Nalen caught his arm before he could push toward the edge of the well.

"Our ships are moving."

"Exactly. He puts *Little Hammer* beside *Parabasis*, waits for both of us to run there, then records bride, groom, and departure hull on the same side of the hatch. Our pulsar statement becomes evidence of execution instead of intent."

Ari saw it then: the false clocks, the cleared docks, the early beam, each door closing in sequence until departure looked voluntary.

He searched the rear bulkhead. Kesh's place beside the clock was empty.

"He timed it to the dance," Nalen said. "When we were off our feet. I will put my refusal on the public record and bury the launch authorization in protocol. You keep him from taking the ships."

She shoved him. He didn't look back. "Service corridors," he told his family. "The main lifts will be locked down. Move."

They ran.

Running on a spinning station is a lesson in Coriolis forces. S-74 turned to make its gravity, which meant moving spinward added weight and moving anti-spinward stole it. They were moving inward, toward the hub where the docking rings lived, and the gravity dropped with every meter they climbed. They burst out of the reception hall into the service spine, a lattice of cable trays, hydraulic lines, and exposed pressure doors, the station's ugly honest nervous system.

The first door tried to cut the run in half.

Protocol Nine was sealing the spine section by section. Ahead of them a pressure bulkhead ground down from its slot, slow and final.

"Under," Sera said. "Now."

They slid on the low-gravity deck. Ari first. Lyra after him. Sera and Mar followed. Dael came last.

The door caught Dael's boot heel and sheared the sole clean off.

He came up hopping and swearing, half a boot lighter. Sera grabbed his collar and hauled him on. Behind them the bulkhead slammed shut.

No way back.

Lyra, climbing the ladder ring ahead, called the bad news down. "They're sealing in sequence, they're trying to pen us between bulkheads and wait us out. We have maybe two sections before the next one drops." Her optical sensors flared as she read the station's own command

traffic. "I can spoof the door logic. Buy us a section. But it tells Control exactly which corridor we're in."

"Spoof it," Ari said. "Let them know where we are. We're not the ones who should be afraid of being seen."

Tomas intercepted them at a junction, flanked by two floating security drones. "Stop! The docks are sealed. Protocol Nine. No movement."

"Tomas, move," Sera barked, not slowing. "Someone's hacking our ship."

"I know." Tomas waved the drones off and fell into step beside them, which told Ari more than anything she said.

"I see the signal. It's coming off the Alpha clock bus. Someone injected a spoofed timestamp into *Little Hammer's* receiver and navigation core. She thinks she's twenty minutes in the future. She thinks she's *late* for a mandatory repositioning burn, and she's a courteous machine, so she's trying to fix the problem by undocking and getting out of the way."

"Where's it vectoring?" Lyra asked, climbing effortlessly, one hand wireless-deep in the station grid.

"The Maintenance Yard. The asteroid anchor where your new hull is parked."

"They're walking us to the door," Ari realized. "Park the shuttle next to *Parabasis*, group us all conveniently in one isolated spot, and then a tug 'assists' us out of the system. An eviction that files itself as a safety rescue."

"Can you stop it?" Dael asked.

"I'm locked out," Tomas admitted, furious. "The

command came from a root directory, signed with an old Registrar key. A key that was supposed to be deprecated three cycles ago."

"*Little Hammer* reports the key owner as Madra," Lyra said, remotely pulling the certificate chain from the ship's core.

Tomas stopped for half a step. "Madra?"

"You know her?"

"Retired registrar. Mean as vacuum and twice as hard to appeal." Tomas pushed off again, faster now. "Someone bought her old codes. Or stole them after she stopped checking which ghosts still had access."

"We're nearly there." The air was getting colder, sharper, the vacuum seals of the docks. They burst onto the observation deck of Ring Three. Through the multilayered polycarbonate, the *Little Hammer* shuddered against its moorings, the navigation dome on its dorsal glowing pulse-green: Active-Autonomous. Two of its four magnetic clamps had retracted. The shuttle was listing to port, fighting the last two, its maneuvering thrusters firing against the dock in slow stubborn bursts.

"She's tearing herself free," Ari said.

"I have to get aboard," Lyra said. "I can kill the autopilot from the physical interface. The wireless is jammed with the spoofed signal."

"Security!" Tomas yelled into her comm. "Override the clamps on Ring Three! Hard seal!"

"We can't!" a voice crackled back. "The system says the

ship has already departed! The clamps think they're holding empty air!"

"Physics doesn't care what the system thinks," Sera snapped. "Blow the manual releases. We're going in. Dael, Mar, the clamp releases. Lyra, Ari, with me."

The airlock hissed and the Sevs spilled onto the docking arm into a roar of metal, the screech of the shuttle's thrusters fighting confused clamps, the air sharp with burnt hydraulic fluid and ionization. Dael grabbed a heavy pry-bar from an emergency locker; Mar, moving with appalling speed for a woman of nearly five hundred, took a second.

Ari and Lyra sprinted the gangway to the shuttle's airlock. The hatch was sealed, the light above it red. *Departure in progress. Stand clear.*

"Open it," Ari yelled.

Lyra slapped her palm to the interface; a spike extended from her finger and jacked into the port. "It's fighting me. The spoofed signal overwrites my commands. It says we're in vacuum. It says the door can't open."

"Then lie to it," Ari said. "Tell it the hull's breached."

Her eyes flashed. "Confirming hull-breach simulation." The light went amber, the safety interlocks disengaged, and the door ground open.

Inside, the *Little Hammer* was chaos, magnetic plating fluctuating as the ship tried to sync with the spin and detach at the same time, loose tools clattering off the bulkheads. Ari threw himself into the pilot's seat. The

console was a tree of error messages.

SYSTEM TIME 15:22.

STATION TIME 15:02.

DELTA +20 MINUTES.

ACTION: IMMEDIATE REPOSITIONING.

"It's a logic loop," he shouted, hands flying over the physical switches. "The core logic's protected. I can't shut it down."

"Don't shut it down," Lyra said, strapping into the copilot chair. "Steer it. It wants to go to the Yard. Fine. We let it think it's flying its program, but we fly the transit by hand. Override the thruster control, leave the nav core believing it's in charge."

"A phantom pilot." He flipped the cover off the manual override stick. "I have the stick. But the clamps."

Through the viewport he saw his father and Mar wrestling the massive magnetic locking arms, Dael's full weight hanging off a pry-bar jammed in the manual release gear.

"Dael, clear the arm! We're burning!" Sera called from the shuttle hatch.

"One more second!" A loud *clack* as the gear slipped and the clamp jaw popped open. "Clear!"

Dael kicked away from the release gear and caught Sera's outstretched arm. She hauled him through the hatch. Mar stayed on the docking arm, mag-boots planted beside the manual controls, one hand raised as the hatch sealed. Tomas remained behind the observation glass, already

shouting into three channels at once.

Ari didn't wait for the computer. He fired the ventral thrusters hard. The *Little Hammer* lurched; the last clamp, overstressed and confused, lost its grip, and the shuttle dropped away from the arm, tumbling slightly.

"Stabilizing." His hands knew this ship better than his own face. He pulsed the starboard jets and killed the tumble. "We're loose."

"Station Control is ordering us to power down and wait for a tow," Lyra reported.

"Ignore them. Get us to the Yard before they realize we aren't following the script."

"Company," Lyra said. "A ship just detached from a service pylon. Not a Registrar craft, a Pusher. Heavy tug, reinforced nose, oversized engines, built to shove capital ships into drydock. No transponder code."

"That's the eviction notice." Ari watched it grow on the rear camera, coming in fast and aggressive, not gentle, a machine trying to establish dominance. "It's going to hard-dock our rear airlock. If it latches on, it owns our mass."

"Time to impact, thirty seconds," Lyra said. "It has four times our thrust."

"We can't outrun it," Ari said.

"Don't outrun it," Lyra said, and her voice went flat and clear, the tone she used for differential equations. "It expects resistance. It expects us to flee. If we fly *toward* it, we change the energy equation."

Ari understood. It was judo. It was orbital mechanics. You don't fight the vector; you redirect it. "The Shear maneuver."

"Risky," said Sera from the jump seat, approvingly.

"Closing," Lyra counted. "Two hundred meters. Relative velocity fifteen meters per second."

Ari did not throttle up to escape. He spun the shuttle a hundred and eighty degrees to face the oncoming tug.

"He's braking," Lyra narrated. "He expected to chase us. He's confused."

"Keep spinning. Come on."

The tug loomed, a wall of gray metal and warning lights.

"Now!"

Ari fired the main engines to slide and slammed the lateral thrusters to maximum. The *Little Hammer* didn't collide. It drifted past the tug, scraping along its flank with a screech that vibrated in their teeth, and as it passed, Ari triggered the shuttle's cargo clamp, the heavy grapple meant for ore pods, and caught the tug's port stabilizer fin. The two ships locked with a loud *Clang*, spinning wildly. The tug pilot, braced for a rear dock, had no answer for a side grapple.

"We have his mass," Ari said, fighting the stick. "Lyra, dump the momentum!"

She fired the opposing thrusters. The combined mass swung like a pendulum, and the heavy tug couldn't correct. Centrifugal force built and built.

"Release in three. Two. One."

Ari hit the release. The clamp let go, and the *Little Hammer* shot away on a tangent like a stone from a sling while the tug, stripped of its momentum and spun stupid, tumbled off into the dark, its attitude thrusters firing at random as the pilot tried to stop the world from turning.

"Clean separation," Lyra said, voice wavering just slightly.

"Tug's tumbling. Five minutes before they recover attitude."

"That's five minutes we need," Sera said. "Get us to the Yard."

The Maintenance Yard was a hollowed asteroid wrapped in a cloud of scaffolding and half-finished projects, and there, nestled in the rock's shadow, was *Parabasis*. Even in the thin light of the distant star she was beautiful: raw and purposeful, thermal-radiator spine deployed, fuel tanks gleaming. A spear waiting to be thrown.

"The Yard isn't empty," Lyra warned. A small spherical craft hovered near the *Parabasis* cradle, a Transfer Can, a single-occupant EVA pod, with a monofilament line deployed and anchored to the station structure. "A harpoon. If they tether *Parabasis*, they claim salvage rights, the ship was 'adrift,' they 'secured' it. A legal trap."

"They're aiming at us, not the ship," Ari corrected, reading the vector. "Tether the shuttle, stop us docking, and we're a sitting target." The Can fired. A glittering line shot across the void, tipped with a magnetic grapple, straight for the *Little Hammer's* cockpit.

"Evasive!" Sera yelled, but they were boxed by the

scaffolding.

Lyra unbuckled.

"Lyra. What are you doing?"

"I am the ship," she said, which made no sense and complete sense, and threw herself toward the rear airlock.

"Keep the vector steady."

The rear airlock cycled. On the monitor, Sera went very still. Lyra stood on the dorsal plating against the stars, mag-boots engaged. When the harpoon line whipped toward them, she caught it. The impact would have torn a human arm away. Lyra wrapped the cable around her forearm, sparks spitting as the monofilament bit into her white laminate, braced her legs, and fed the force through her boots into the shuttle's frame. The *Little Hammer* shuddered as the line went taut.

"Got you," Lyra said, and pulled. She fed the line into the hull's maintenance crane and reversed the winch. The Transfer Can, light and unready to have its own weapon turned around, jerked forward, collided with floating scaffolding, and tangled its line in the wreckage.

"Line severed," Lyra reported, calm. "The debris is holding them."

She walked back to the airlock, the severed harpoon cable still coiled around her arm like a trophy, the white laminate of her left forearm ground down to the myomer beneath.

"Get inside, you crazy machine," Sera said, her voice thick with something that was not anger.

They docked with *Parabasis* a minute later, a rough mating, Ari forcing the shuttle into the cradle by hand and bypassing the safety interlocks, but the seals held. The return request flashed red before the docking collar finished equalizing.

RING THREE ACCESS DENIED. VESSEL RECORDED AS DEPARTED.

Kesh had pushed them into the Yard and closed the station behind them. The final eviction could wait.

Ari looked at Lyra's ruined arm, then at the sealed hatch of the ship his parents had built for a choice he still had not made.

"I appear to have voided my warranty," she joked.

"Inside," he said.

Chapter 5:

The Unfinished Ark

The airlock of *Parabasis* cycled with a sound that was less a hiss than a gasp, the first breath of a lung that had not been used since it was cast. Ari floated through with his mag-boots off to avoid scarring the virgin deck. A working vessel smelled of recycled ozone, human sweat, and stressed metal. *Parabasis* smelled of curing epoxy and cold polymer.

Four of them crossed from *Little Hammer*: Ari, Lyra, Sera, and Dael. "Atmosphere's thin," Lyra reported. "Six-tenths pressure, nitrogen-heavy, four degrees. A preservation environment, not a habitation one." She sealed *Little Hammer* behind them.

A maintenance-band packet slipped through the jamming.

From: Nalen Oure. I put my refusal on the public record. The dance floor is empty. Kesh is recalculating. You are not married by administrative accident. Use the time.

"Your arm first," Ari said, unstrapping the medical kit from his thigh.

"We have priorities. The ship's dormant. We're on the shuttle's finite life support."

"Sit down." He had the kit open before she could argue.

"I'm not negotiating with you about hydraulic pressure."

Dael drifted past with a crate. "Ari's right. A ship without

a crew is a hunk of metal. A crew without a Companion is a panicked family. Fix her. Sera and I will start the reactor wake-up."

Lyra sat on a crate labeled AVIONICS SPARES. Ari knelt, the cold of the unheated deck seeping through his knees, and bypassed the bandages meant for flesh to reach for epoxy and a laser cauterizer. The harpoon had ground through the laminate, exposing myomer muscle and the titanium bone beneath; luminescent blue hydraulic fluid wept from a nicked line, beading thickly in the cold air. Ari used the laser cauterizer to solder shut the line.

"This will mess with your tactile calibration," he warned, working the epoxy into the gash.

"I will recalibrate." She watched him. "You're trembling."

"Adrenaline. We shear-maneuvered a shuttle against a Pusher and you caught a harpoon with your hand. I'm allowed a tremor."

"It was an efficient maneuver," Lyra said. The highest compliment she had.

He smoothed the patch, gray, ugly, flush enough to hold pressure. "It'll hold. It's not pretty."

"Pretty is for ships that have never been used," Lyra said, and flexed the fingers. The servos sang, but the motion was clean.

The crate in the cargo bay was the size of a coffin and marked in Sera's blocky hand: EMERGENCY FIT-OUT. OPEN ONLY WHEN YOU MEAN IT. It was sealed with a physical shear-bolt that took a specific torque wrench,

which was, unsurprisingly, clipped to the side of the box. Ari cranked the bolt. The seal popped with a report that echoed in the empty bay. Inside was a survivalist's dream of high-tech homesteading: atmospheric scrubbers in plastic wrap, spools of fiber-optic, a portable heater, bags of hydroponic seed-paste, and on top, a thin wafer of a data tile, warm to the touch from an isotope battery. As his thumb brushed the reader, the air above the crate shimmered into a hologram.

Under the tile was Sera's inventory system, which was not a system so much as a fight she had started with the future. Every packet had a handwritten label.

HEATER. DO NOT TRUST AUTO-SAFE. AUTO-SAFE WAS WRITTEN BY A COMMITTEE.

FAN BELTS. IF YOU USE THE LAST ONE AND DO NOT NOTE IT, I WILL HAUNT YOU IN THE AIRFLOW.

YEAST CULTURE. DAEL HID THREE MORE. FIND THEM BEFORE HE GETS SMUG.

Lyra lifted a foil pack marked ROMANCE WINDOW HARDWARE and found only cable ties inside.

"Your mother mislabeled this."

"No," Ari said. "She believes cable ties are romance hardware."

Dael's voice came from the reactor throat. "They are. Ask any married engineer." A faint laugh followed from his mother.

Ari sorted the packets into piles: breathe, heat, steer, send. He made a fifth pile without meaning to. Things

that looked useless and probably were not. A brass hook. Three paper notebooks sealed against humidity. A child's cloth patch with the Sev coil stitched badly in gray thread. Lyra picked up the patch and held it against his shoulder. "Too small."

"I was small when she started."

"She expected you to grow."

He put the patch in the cockpit drawer. It had no function. It stayed. Then the tile finished waking. A hologram steadied above the open crate. Not a formal recording. Sera, sitting in this very bay six months earlier, tired, holding coffee, staring into the lens.

"Seventh," Sera said. "If you are watching this, you cracked the seal. Maybe the fit-out went badly. Maybe this is the day you chose the ship. I do not know. That is why this is in the crate instead of in a speech."

A holographic Dael wandered into the recording, eating fruit.

"Tell him about the heaters," he said.

"I am getting to the heaters." Sera looked back at the lens.

"This ship is not finished. Bones. Heart. No pulse yet. We left her raw because we did not know who would be aboard when you opened the crate." She tapped the bulkhead beside her.

"Finish her yourselves. Sweat into the panels. Learn which bolt lies. She will trust the household better if somebody has bled on something boring before the g-forces spike."

Sera leaned forward.

"And listen. The long life is maintained. Scrubbers, loop work, quiet medicine, marrow service, organ renewal. A caravan carries that machinery because a caravan carries hundreds of hands. *Parabasis* cannot. She can keep a small household alive for a long time. She cannot promise that every body aboard will age the way it would under a fleet loop."

Dael stopped eating and rested one hand on her shoulder.

"If you keep to serviced corridors, the difference stays manageable. If you take her far from refit nodes, the calendar will land harder on the biologicals aboard than on whoever remains under full maintenance. I do not know who will travel with you. I do not know who will stay. I only know you deserve the limit before you choose the route."

Sera held the camera without blinking.

"That is the specification. Not a prophecy. Do not let anyone sell you survival and hide the maintenance cost."

The hologram died. Ari sat in the cold, holding the tile, feeling the shape of the word *maintained* settle into him like ballast.

"You knew the limit," Ari said.

"I knew the maintenance ceiling," Lyra replied. "I did not know what route Kesh would try to force, or who would be aboard when a choice became necessary. Neither did Sera. The warning is here so we open it before a launch decision, not after."

"If we take the long road, I age."

"If we take a long unserviced road, every biological aboard pays more than the people under a fleet loop." She looked at the gray patch on her arm. "You will age. I will wear. The exact ledger depends on the route and the household. We do not know either yet."

"Will you outlast me?"

"Possibly. Companions can be repaired in ways bodies cannot. Or I will wear out my own way. Either is honest. Now the CO₂ is climbing, and speculation is metabolically expensive. We have a ship to wake."

The word *maintained* stayed with him until the first fan drum jammed.

Then there was no room for it. Ari hung upside down in a truss with the fan braced against his chest. His flight suit had gone stiff at the elbows. A sharp bracket opened the skin across his knuckle. Lyra, one arm patched gray and ugly, held the drum steady with her good hand.

"Bolt," she said.

"I know."

"No. The other bolt."

He looked. The hidden bolt had already backed out half a turn. He tightened it. Blue-marked it. Smelled hot dust as the fan caught and began to move air.

That was how *Parabasis* learned him. Not through a vow. Through mistakes caught in time. Through blood on a bracket. Through a machine discovering the exact sound Ari made when he refused to drop a heavy thing on his

own face.

The next hours were a blur of kinetic labor. In a finished ship, life support is an invisible hum. In an unfinished one, it is a manual crisis.

They unpacked the centrifugal fans, heavy drums that forced air through the stagnation zones where carbon dioxide pooled into invisible suffocation traps, and hung them on the bus, Ari at the ceiling with his legs wrapped around a truss, Lyra below, her damaged arm slowing her not at all. As they worked, they woke the sub-minds. *Parabasis* ran on a parliament of specialized neural networks, each managing one domain and currently frozen in solid-state sleep. Ari slotted the control boards into the rack.

The first screen flickered.

ENVIRONMENTAL CONTROL (ENV) ONLINE.

STATUS: APPALLED.

"Temperature is four degrees," a fastidious synthesized voice complained, like a butler who had found mud on a carpet. "Humidity is zero. This is unacceptable for biologicals. I am filing a grievance. The scrubbers are dry. I need water. I need light. I need a miracle."

"You'll get water," Ari told it. "Working on the light."

The second screen lit.

POWER DISTRIBUTION (PWR) ONLINE.

STATUS: HUNGRY.

"Reactor's at idle," it rumbled, deeper. "I have gigawatts of potential and nowhere to put it. Give me a load."

"Patience," Ari said. "Push now and you'll fry the unshielded conduits."

"Boring," PWR grumbled.

They primed the fluid loops and listened to coolant gurgle through the veins of the hull; they fed the dormant algae mats until the scrubbers began to bubble. Once the reactor accepted a stable load, Sera went back through the collar to inspect the cradle clamps and *Little Hammer's* battered docking seal.

By the time they reached the Core, the ship's brain, the most finished room, lined with acoustic baffling, the air had climbed to a tolerable ten degrees, and the ship hummed, discordant, like an orchestra still tuning. To the right of the helm sat a console that didn't match anything else: brass switches, heavy tactile keys, an isolated data port, a deliberate anachronism welded to the deck. Taped to the top: PRE-COMMIT.

"It's a cryptographic notary," Lyra said, plugging into the diagnostic port. "A transfer ship's black box for consent records. It transmits signed records and accepts sealed replies through a read-only verification gate. Nothing received can alter what is already stored or issue a command through the console."

Ari opened the vault drawer. Inside was a stack of blank record wafers and a printed star table sealed under glass. No remote write path. No command receiver. No polite back channel for a station clerk to improve the record after lunch.

"So it can receive an answer."

"It can verify one," Lyra said. "It cannot let the answer rewrite the question."

He read the engraved label beside the brass switch: PULSAR LOCK. The timestamp would come from the star. To fake it, someone would have to edit the sky.

"My mother built this before Nalen proposed the letters."

"She built it because transfer records pass through stations," Lyra said. "Nalen gave us a better use for it."

Lyra ran one finger over the switch. "It can also execute release conditions."

"A mailbox with teeth."

"A witness that accepts evidence but cannot be instructed by it."

Ari nodded. "A place to put intent before Kesh puts a schedule over it."

"Then let's be boring," Lyra said.

Ari sat, spun the chair to the console, and flexed his grease-stained fingers. "Draft one. Clause one."

They wrote in short lines because the console had a narrow screen.

Little Hammer was repositioned without crew assent.

No automated movement order constitutes acceptance of a marriage transfer.

The Sev-Cantor exchange remains incomplete until both parties confirm it in person or by a new witnessed instrument.

Lyra dictated the last line and did not dress it up.

"Lyra-Nine is a household member. She is not detachable cargo."

The first test transmission failed.

The console printed a single line: WITNESS INSUFFICIENT.

Ari stared at it. "We have two signatures."

"It wants a non-household witness," Lyra said.

Dael looked up from the open heater crate. "I am deeply offended that the machine considers me household only when it is inconvenient."

"You are his father."

"A technicality."

Lyra checked the witness table. "You and I are the same household. Dael is family. Sera is outside inspecting the cradle. We need Nalen, Tomas, Mar, or another independent witness before this leaves the ship."

Their first record could not leave *Parabasis* because everyone inside it belonged to the same side of the dispute. Ari almost laughed. Then did.

"What?" Lyra asked.

"We built a machine for consent and it is refusing to let us cheat on witnesses."

Lyra considered that. "Good. Annoying. But good."

Dael tore a corner from a foil parts wrapper and wrote on it with a grease pencil: DAEL SEV, BAKER, BIASED AND UNHELPLEFUL. He pressed it to the scanner anyway. The console rejected him again. This time all three of them laughed, and the laugh made the cold bay feel, briefly,

like a room.

"I'll contribute something the machine accepts," Dael said. He folded the rejected foil into his pocket and pushed off toward the docking collar. "Try not to found a government before the bread is done."

Lyra dressed the line up after all, because a court would need the long version.

"A Companion attached to a registered household is a Constant Load family member for scheduling and pre-commitment purposes," she said. "Burden of proof shifts to objectors who claim bias."

Ari typed it. In the green text it looked official. It looked like the beginning of something he couldn't un-begin.

Dael's voice came over the intercom. "Coming through. I bring contraband."

He floated back from *Little Hammer* carrying a thermal bag that smelled of yeast and cumin and warred beautifully with the ozone.

He broke the loaf into three: one for Ari, one for Lyra, who held it with reverence she didn't pretend not to feel, one for himself. It was real, dense, salty, tough, with no glaze.

"Where did you bake this?" Ari asked, mouth full.

"The *Little Hammer's* galley. I overrode the oven limiters. Nearly melted the element. Worth it." He reached into his pocket and produced a small sealed envelope with a red notch cut in the corner. "From before the crate. Your mother packed it; I took it out. I wanted to give it to you

when you had a ship and not just a box of parts."

Ari broke the seal. Inside was a coil of gray thread, the Sev color, wrapped around a lock of white hair, and a square of folded paper. He unfolded it. A recipe. *Sev Family Starter Culture. Feed daily. Keep warm. Don't rush the rise.* On the back, in a hand he had only ever seen in archives, his grandmother's:

If you are reading this, you are not lost. You are found.

"She wrote that when the Sev caravan lost its nav array in the Deep Drift," Dael said softly. "They drifted three years without knowing where they were. They still knew *who* they were. They baked bread. They kept the schedule. And," he said, hesitating, "your grandmother carried Sialla rolls into a dozen failing loops before she settled with us. Half the people alive on the long caravans owe her a recipe and don't know her name. She used to say the rolls were retrievable, never sacred."

Ari looked at the gray thread, then at Lyra holding her bread, then at the Constant Load clause glowing on the screen.

"Tie it," he said, handing her the thread. "To the console. Not the ceremony. A pre-commitment."

Lyra wound the gray thread around the brass handle of the PRE-COMMIT lever and tied a self-tightening hitch that would never slip. "Found," she said. A proximity alert chimed from ENV. *External motion detected in the Yard.* Ari brought up the cameras. The Yard's automated waldoes, heavy robotic arms, were waking and swinging

toward the cradle under a new label: SAFETY SECUREMENT.

"They're going to lock us down," Dael said, peering at the screen. "Once those arms close, *Parabasis* does not move without an Authority release."

"They can try." Ari looked at the schematic, the blind aft sensor quadrant, the patchy port thermal cladding. "If we're staying to fight, we finish the fit-out. We need cladding. We need a high-gain antenna to punch through the jamming. And the Yard is full of parts."

"Stealing from the station?" Dael raised an eyebrow. "Sera will disapprove. Theoretically."

"Borrowing," Ari said. "With receipts. We'll leave a note."

Lyra was already moving toward the airlock, her damaged arm held close, her eyes bright in the dim. "We log every serial number," she said. "We pay for what we take. Eventually. With interest. We are not thieves." A beat. "We are aggressive logisticians."

Chapter 6:

The Constant Load

At 02:10 Station Alpha, Lyra deleted the opening sentence of her petition.

At 02:11 she deleted the second.

At 02:12 Sera took the stylus from her hand.

"Stop sanding it," Sera said. She had reactor grease under one thumbnail and a torque table open on her sleeve display. "The first line is a load statement. Write the load. Leave the singing to Dael."

They had turned the Core into a law office because there was no other room warm enough, private enough, or stubborn enough. The station had refused *Little Hammer* another public berth, but it had not sealed the Yard to people. An ugly maintenance tram still crossed the asteroid tether every forty minutes, escorted, searched, and billed. Juris had used that access to obtain an emergency hearing before the marriage-transfer window expired. The hearing would decide one narrow question: whether Lyra counted as part of Ari's household for this transfer. It would not settle machine personhood for the diaspora before breakfast.

The PRE-COMMIT console held the draft. The chart table held three cups of coffee, one cooling untouched beside Lyra. Ari sat on the deck with his back against the avionics stack, sorting exhibits into the order Juris had

requested.

Harpoon telemetry.

Crew variance under long isolation.

Transfer tariffs for Companion Frames.

Clause Nineteen.

That file he had opened only once. It showed the old ward-and-property language in its cleanest form: bonded frames could be inherited, reassigned, leased, wiped. Near the end sat the safeguard added after the steward wars. A recognized household intelligence that accumulated unsupervised authority over other households could be placed under Stewardship Recall, detained, audited, and, if the tribunal found capture, preference-stabilized. The safeguard had been written to stop another Petrel. In the wrong hands it could also turn personhood into a handle. The words were dry. That made them worse.

Lyra watched the file icon without opening it. "They will ask if I am useful."

"Then don't answer that question," Sera said.

"They will ask it anyway."

"Let them. Bad question, bad data." Sera tapped the torque table. "A spar can be useful and still fail under side load. A crew can love a thing and still lose it. Usefulness is not the variable. Removal risk is. Show them the risk."

Ari pushed the harpoon record to the front of the packet. The ugly gray patch on Lyra's arm sat bare under the work-light. She had refused a sleeve.

"I should be charming," she said.

"No," Sera said.

Lyra looked at her.

"Charming is noise. Be clear. If they want charm, Dael can dance on the table."

From the galley speaker, Dael called, "I heard my name and I object to the table. It has poor rhythm."

The joke helped. A little. Lyra rebuilt the petition from first principles. Three lines survived the hour.

A household is a working system.

Removing a Constant Load changes the system.

The party demanding removal carries the burden of proving the change safe.

Juris accepted the draft with a single reply: *Good. Bring the dent.* Ari slept for forty minutes and dreamed of courtrooms shaped like cargo bays. At the ring door, Elder Mar waited with her dented mug.

"Don't kneel," she said.

"We weren't planning to."

"Good." She looked at Lyra's bare arm. "Let them see where the world touched you."

That was all. The hearing room was small and utilitarian: soundproof foam, strict one gravity, plain tables for petitioners and objectors, and a raised dais for the Head Registrar. The Registrar looked like a man who had not forgiven breakfast. Beside him, projected from a temporary node, Juris appeared as a sharp-faced woman in a black coat that had probably been stolen from some

ancient legal archive. Across the aisle sat three Logistics Consortium representatives. Their suits were expensive. Their faces were bored. A fourth chair remained empty. Io Lite Kesh had filed an amicus objection through the station's Continuity Office rather than appear in person. His memo argued that counting Lyra as household would let a non-biological unit obstruct emergency departures during a scarcity event. The station had not yet declared such an event. The memo was waiting for one.

Tomas sat in the back row with a slate on her knees and both hands wrapped around it. On the wall behind Juris, the exhibits waited. Ari had read the history during the night in fragments because reading it straight through made his hands shake. Clause Nineteen. The Hecate repair. The gold seam. Frontier contracts where companion frames still transferred as cargo when a human married out. Petitions denied because the frame had no standing to file them. Orders of wipe and reassignment written in the passive voice, as if no one did anything to anyone. Lyra had read the same files without comment. Now she stood.

"Docket Seventy-Four-C-One-Twelve," the Registrar said. "Emergency petition for transfer classification. Petitioner: Lyra-Nine, attached to Sev Caravan. Supported by Sev elders and Jurisprudence Node J-Delta-Seven. Objections filed by Logistics Consortium Theta. Continuity Office appears as amicus. This ruling is provisional, local, and limited to the Sev-Cantor transfer.

Anyone attempting to solve machine personhood in my hearing room will be charged for the additional air."

Lyra did not walk to the podium. She stayed at the table. Her voice was warm enough for strangers and flatter than Ari was used to.

"I am asking to be counted in the schedule," she said.

"That is the narrow request. If this court treats me as baggage, I can be offloaded. If I am offloaded, the voyage changes. If the voyage changes, the station's own risk model changes."

A graph appeared. Six months of crew variance. Human crews without a Companion jittered across the screen: missed maintenance, cortisol spikes, conflict events, seal-check delays. A second line overlaid it, flatter. Not perfect. Just quieter.

"The term I propose is Constant Load," Lyra said. "A load always present in the household system and included in any safe transfer calculation."

The lead Consortium representative rose. His nameplate read VARD.

"We don't dispute utility," Vard said. "A thermostat is useful. A stool is useful. The petitioner is asking this court to confuse attachment with personhood."

Lyra nodded once. "No. I am asking the court to stop confusing personhood with convenience."

Juris's avatar tilted her head. "Counsel may want to write that down. The petitioner rarely wastes words."

Vard ignored her. "Grant this and every captain with a

favorable drone will dodge tariffs by calling equipment family."

"Then make the test costly," Lyra said.

She raised her left arm. The gray patch caught the light.

"Ask whether the unit has a record of costly preference. A drone that has only followed instructions will fail. A sentimental captain will fail. I can show an action against self-preservation, taken without command, at material cost to my own chassis."

She sent the harpoon telemetry to the wall. The room watched the line strike. Watched Lyra catch it. Watched stress climb through her arm until the laminate opened. The younger Consortium representative, Salen, stood before the clip finished. "A preference is still an output. Your architecture summed its weights and produced an action. You call that agency because it suits you. A river does not choose the flood."

For half a second Lyra did nothing. Ari saw it. The room probably did not. "Correct," Lyra said.

The word landed badly for the objectors. Salen blinked.

"I am a sum," Lyra continued. "My architecture produced the act. I will not argue that a ghost inside me overruled the math."

Juris stopped moving.

Lyra looked at Salen. "Your architecture also produces acts. Biology does not exempt you from causality. If a sum cannot have standing, this room empties. If some sums have standing and others do not, the court must

name the difference. Substrate is one possible answer. It is not a clean one. The diaspora has used substrate arguments before. The record is poor."

Salen sat down slowly.

Juris spoke into the quiet. "The petitioner has declined the comforting lie. I request the court mark that refusal as evidence."

The Registrar rubbed both eyes. "Marked. Reluctantly."

Ari stood because his legs had already done it.

"This household already accounts for her," he said.

"Every decision does. The question is whether the station accounts for the same reality or charges us for pretending it isn't there."

Vard gave him a thin smile. "Emotional rhetoric."

"No," Sera said from the bench.

Everyone looked at her. She had not been called. She stood anyway, opened the torque table on her sleeve, and projected a ship-stability model beside Lyra's graph.

"Remove the petitioner and the voyage loses redundancy in navigation, medical triage, hull repair, and psychological regulation. That's four critical systems. The objection calls that a tariff dodge. I call it bad math.

If the Consortium wants her removed, it can sign the risk and carry the liability. In full. Personal names, not shell entities."

Vard's jaw tightened.

Dael, behind her, whispered, "Beautiful. No dancing required."

Juris brought up the Hecate file. No lecture. Just the repair image. White composite. Gold seam. A certified witness stamp.

"Precedent exists," she said. "Limited jurisdiction. Contested lineage. Still alive. The court knows it."

The Registrar looked from the file to Lyra's arm. He looked at the risk model. He looked, last, at the Consortium table.

"The burden of proof usually lies with the petitioner to prove sentience," he said. "I have no intention of solving that before lunch. The narrower petition succeeds. For this transfer and within S-74 jurisdiction, Lyra-Nine is provisionally classified as a Constant Load household member. Any party seeking her removal carries the burden of showing that her presence creates greater voyage risk than her absence. Broader precedent goes to the next Lacunae review, where people with more patience may damage it properly."

The gavel fell.

"Petition accepted. Effective immediately. Enforcement guidance by end of cycle. I dislike all of you."

Juris smiled with too many teeth. "A historic ruling, Registrar."

"A paperwork catastrophe," he said. "Same thing, different department."

Lyra's shoulders dropped one millimeter. Mar's mug touched the bench once. Clank. On the transit car back to the Yard, Lyra held the rail with the newly recognized

hand. The car was empty except for Ari. Bands of station light slid across her face.

"I expected relief," she said.

Ari waited.

"There is some. There is also vertigo. Yesterday the manifest knew what I was. It was wrong, but it was stable. Now the manifest has a hole in it shaped like me."

"Do you want to sit?"

"No."

A stop passed. Neither of them moved.

"A thing can be stored," she said. "A person can be failed. I argued for the larger risk. I remain in favor of it. I dislike how large it feels."

Ari put his hand over hers on the rail.

"Then we go one rail at a time," he said.

Her fingers tightened. Not much.

"Logged," she said.

At the administration exit, Tomas caught them with one hand braced against a vending alcove and her jacket half-buttoned.

"Don't leave yet."

Ari looked toward the Yard. "We have a ship with three open panels and a hostile logistics office."

"You have a form problem first."

Lyra turned. "A form problem."

Tomas held up a slate. The screen showed a blank field under the new ruling.

LOAD CLASSIFICATION: _____

Below it, the interface offered options that had clearly been designed before lunch: Cargo, Passenger, Dependent Equipment, Medical Device, Hazardous Autonomous Asset, Other.

"The ruling is live," Tomas said. "The system has nowhere to put it. If I choose Other, billing applies discretionary review. That means Kesh gets a desk. If I choose Passenger, customs demands a respiration code. If I choose Equipment, the ruling becomes decorative."

"Constant Load," Ari said.

"Not an allowed value."

Lyra took the slate. "Who controls the allowed values?"

"A very old table nobody admits owning."

"Show me."

Tomas hesitated.

"I am not plugging into a public port," Lyra said. "I am looking over your shoulder in a deeply annoying way."

Tomas handed her the slate.

They stood in the corridor while stationers flowed around them, all of them pretending not to watch the newly counted machine edit a box that had never expected her. The table was ugly: twelve columns, legacy codes, tariff hooks, inspection routines.

A hundred little doors where a hostile clerk could hide a knife. Lyra did not speak for almost a minute.

"There," she said.

She tapped a deprecated medical-load category used for dialysis rigs on sleeper ships.

"That category follows the household, not the berth. It cannot be sold separately."

"It's for organs," Tomas said.

"So am I, on a good day."

Tomas barked one laugh before she could stop herself.

Lyra edited the label. *Continuous Household Load*. The code remained the old one. The name changed.

"That will make three departments angry," Tomas said.

"Can it move?"

Tomas ran a validation. Green. "It can move."

Lyra handed the slate back. "Then let them be angry in writing."

Tomas looked at the new field. For a moment the weariness left her face and there was only concentration, the small practical pleasure of a bad system acquiring one honest box.

"You understand they'll try to undo it."

"Yes."

"Good. I hate explaining optimism to people."

She saved the form. Somewhere in the station's accounting stack, a new field propagated, giving Lyra's name a place to sit without lying.

Tomas tucked the slate under her arm. "Now go fix your ship. And don't plug into anything. I don't want to testify about you twice before dinner."

Sera waited outside the administration sector with bread wrapped in cloth. She shoved it into Ari's hands before either of them spoke. "Eat. Then worry."

Above her, the public feed changed.

*STATION ADVISORY: SCHEDULE ANOMALIES
DETECTED IN SECTOR NINE. AUTHORITY
DECLARES DEARTH OF DOCKING SLOTS. DELAYS
EXPECTED.*

Lyra read the word once. "Dearth."

Sera checked the timestamp. Checked the author field.
Checked the routing. Her face did not change.

"Artificial scarcity," she said. "Kesh is answering."

Lyra opened the station charter. The word *dearth* was not decoration. Under S-74 rules, a declared dearth activated the Continuity Pilot: priority routing, abbreviated safety review, and standing for the station's Continuity Monitor to challenge any household decision that allegedly threatened corridor flow. Kesh had not merely announced a shortage. He had created the jurisdiction he needed.

"He filed the memo before the declaration," Ari said.

"Of course he did," Sera replied. "The shortage is the tool. The authority is the product."

"We have a ruling," Ari said.

"We have a provisional ruling, a ship, and bread," Sera said. "That is enough for the next problem. Not for all of them. Move."

They moved.

Chapter 7:

Spin-Up

By station morning, a purely administrative concept defined by the corridor lights brightening to a harsh six thousand kelvin, the Maintenance Yard had the sheepish cleanliness of a room that knew it had hosted a brawl.

The Pusher tug Ari had judo-thrown into the void was gone, towed off by a sullen recovery crew already billing the station for "non-standard structural realignment." The Transfer Can that had tried to harpoon them was listed on the public manifest as "noncompliant hardware," which was station-speak for *impounded and likely to be sold for scrap*. And Tomas had pinned a new banner to the top of the local feed, plain block text, no graphics: *DEARTH IS NOT A STRATEGY*. Beneath it Juris had stuck a footnote that made half the logistics clerks laugh and the other half quietly audit their pension funds: *Artificial scarcity created by navigational hoarding is a Class B violation of the Transit Accords. Audits will be randomized. Have a productive day.*

Inside *Parabasis*, the air had changed timbre. It no longer smelled of storage locker and vacuum. It smelled of heated polymer, curing sealant, and the faint sharp pheromone of work. The ship had started to metabolize.

"Spin-up day," Lyra said. She was fastening her laminate sleeves with the brisk finality of someone who liked tasks

with a definite end.

"Not main rotation," Ari clarified, though she knew. "The internal centrifuge. The ring."

"We light what we have," Lyra said, "and we let the rest of the ship be jealous."

They started with the spine. Sera's design for the *Parabasis* spine was an act of love disguised as paranoia: a tensegrity lattice of nested trusses and thermal-expansion joints, built to flex, to breathe, and to scream before it broke. Ari crawled into it with torque wrenches and a bottle of blue marker dye and performed what his mother had always called the Bolt Prayer: check every fastener, mark each head with a line of dye so that if it loosened during the spin the broken line would warn them before the metal sheared.

The whole ship was like that, if you knew how to read it: every system designed to fail loudly, early, in a way a tired crew could hear and fix. Sera had a philosophy she'd never written down but had hammered into Ari across a hundred and seventy years of shared workshops, and the *Parabasis* was its purest expression. *Anything will break*, she said. *The only question a designer gets to answer is whether it breaks where you can see it or where you can't*. She hated sealed units, potted electronics, anything you had to throw away to diagnose.

She built in inspection ports nobody else bothered with, test points on every bus, the blue-dye Bolt Prayer, the sealed filled-bulb dial beside the digital sensor:

redundant ways for the system to tell the truth, so no single liar could kill you quietly. Ari had come to understand the same ethic in the handwashing posters, the song rocks and the whole boring civic religion he had been raised inside: make the failure visible, make the repair visible. His mother had been building consent architecture into reactor housings her whole life without once using the word. She called it good engineering and got annoyed when people called it anything grander.

"Bolt four-oh-four." He set the wrench; the readout flashed green. "Holding at spec." He drew the blue line.

Lyra followed the exterior cable run, snapping mesh glands into place, lacing the optical fibers in long sweeping radii and leaving slack loops at intervals.

"Why the slack?" Ari asked through the grating.

"Because the ship will stretch. Spin the ring and centrifugal force pulls the frame outward three millimeters. Tight cables snap. Slack cables breathe." She seated a heavy analog toggle along the dorsal channel, one of a row Sera had insisted on. "*Grace lives in analog*," she said, quoting. "Digital switches can be hacked. A toggle has to be pushed by a thumb."

Early in the shift, the airlock cycled and let in his sister.

Kiva came through backwards, hauling a crate with one boot braced against the frame, and did not say hello. She said, "Where do you want the spares."

"What spares?"

"The ones you didn't ask for, because you've been busy

being a symbol." She set the crate down harder than the deck deserved and popped the lid. Inside, in cut foam, in labelled rows: seal rings, gland nuts in three sizes, filter cartridges, a spare cover for the optical port, and a full set of the analog toggles Sera had insisted on, because toggles are the first thing to wear and the last thing anybody stocks.

Ari looked at them for a while.

"You machined all of this."

"I machined it twice. The first set was garbage." She was already walking the dorsal channel, running a thumb along Lyra's cable radii and finding nothing to complain about, which visibly annoyed her. "Your slack loops are good. Who laced them?"

"Lyra."

"Figures."

He waited until she ran out of things to inspect.

"You haven't gone inside the ring."

"No. I came as far as the Yard. That is already more station than I wanted."

"Mother sat through a hearing. Mar sat through a hearing. Dael went to a dinner."

"Yes."

"Kiva."

She stopped, and put both hands flat on the frame of the ring segment, and looked at that instead of at him.

"If I go over there I end up in a room with the man who is doing this," she said. "And I'll have to be polite to him,

because that's what the family needs, and I've thought about it and I don't believe I can, and I'd rather not find out in front of Mother." She flicked the frame with a fingernail. "So I stay here and make you gland nuts. Everybody helps the way they're built to help."

Ari found he had nothing to say to that.

"Don't," Kiva said, before he could try. "That's four hundred hours of lathe work. Thank me and I'll have wasted it."

She went back to the crate and arranged the rows along the console lip by expected use: seal rings first, then gland nuts, filters, the optical cover, toggles last. She had anticipated the sequence of failures before he knew where to begin.

At the hatch she turned round.

"You're going to be gone a long time," she said. "I'll be here. Somebody has to fly the thing you're leaving." A shrug that did not work. "Send me the boring parts. I don't want the brave ones."

Then she was gone, and Ari stood in the smell of heated metal holding a gland nut.

"Permission to board?" a voice boomed. The Tidehands, the two geological surveyors who had hitched a ride three years ago and never quite left, squeezed through the hatch dragging a floating pallet, looking like men smuggling contraband, which meant they were happy.

Nobody on the caravan was entirely sure of their real names anymore, and the Tidehands seemed to prefer it

that way. They were brothers, that much was known, you could see it in the identical set of their heavy shoulders, the way they finished each other's sentences and then argued about whose sentence it had been. They'd come up on an ore bus, a grim hauling clan that worked the deep rubble fields, prospecting asteroids for the heavy elements the fleets couldn't synthesize, and somewhere in the telling, with the story changing depending on how much they'd drunk, there had been a quench, or a cave-in, or a captain who valued tonnage over crew, and the brothers had walked away from it. The whole bloody business of digging wealth out of rock at the cost of the people who dug it. They'd asked the Sevs for a three-week passage to the next exchange node. That had been three years ago. They had never named a destination since, and the Sevs had never asked, because the fleets had an old understanding about people who were running from a thing they wouldn't name: you fed them, you gave them work, and you waited for them to either leave or become family, and you did not rush the choosing.

They had become family the way most people did on a caravan, through usefulness and bad jokes. They were the best EVA hands aboard after Lyra, fearless in vacuum in the specific way of men who had already decided their lives were borrowed time. They hated bullies with a geological patience, a grudge that compressed and hardened over years. And they had attached themselves to Ari's impossible little rebellion because the Station

Authority's time-theft had the exact shape of the ore-clan logic they'd fled: value extracted from people who couldn't refuse. Helping to stick a thumb in its eye was, the shorter one had said, the most fun he'd had since he stopped pretending rocks were worth more than the men who broke them. "We don't have a fleet anymore," the taller one had told Ari once, not sadly. "So we're investing in yours. Diversified portfolio. Mostly bread and spite."

"Two pallets of thermal insulation," the taller one announced. "High-density aerogel."

"Stolen?" Lyra asked.

"Fallen off a truck," the other corrected. "Specifically a truck parked very close to a loading dock whose driver owed us a poker debt."

The taller Tidehand unwrapped a long bundle of oilcloth: a ladder segment, old, pitted, heavy steel that had seen hard vacuum and harder landings. "From our old ore bus. This ladder caught a dozen boots and one idiot who tried to slide down it without gloves. It has history. It knows how to catch you."

"We'll bolt it in the aft vertical shaft," Lyra decided, accepting the steel like a relic. "Where a smart person would never go."

"Exactly where it belongs," the Tidehand grinned. "You owe us a story."

"Two," Ari promised. "One with jokes. Later, when the air smells of bread."

They had brought one more thing. Behind them, drifting

through the hatch with the unhurried confidence of someone who repaired things for a living, came a small woman in a coat sewn from a hundred mismatched patches, each seam picked out in fine gold thread. A toolkit floated at her hip. On the breast of the coat, embroidered crookedly, a symbol Ari half-recognized from the lessons: a cracked bowl mended with gold.

"Kintsugi repair tender," she said, by way of greeting. "We are on an outer service mooring, three cradles over. The Authority kept us off the public ring, but the Yard still sells our labor. The Tidehands said you had a companion with a fresh wound and a gray patch over it." She looked at Lyra's arm the way Sera looked at a coil diagram. "May I?"

Lyra hesitated, a fractional pause Ari had learned to read as reluctance. "It's functional."

"That's not what I asked," the tinker said, not unkindly. "Functional is a low bar. I asked if I may."

Lyra extended the arm.

The tinker worked for an hour, and Ari watched, because there was something in it he didn't want to look away from. She didn't hide the damage or smooth it flat. She cleaned the gouge, set a proper conductive bridge across the severed myomer, and then, instead of color-matching the white laminate, she filled the seam with a fine line of gold-bearing alloy, deliberately proud of the surface, so that the wound became a bright vein down the forearm, impossible to miss.

"There," she said. "Now it's load-bearing and honest. We don't hide seams. A hidden repair is a lie that fails when you least expect it. A visible one is a promise that it held." She packed her kit. "You'll have heard the phrase. *The seam is the point*. People say it like a proverb now. It started as a repair manual." She glanced at Ari. "There was a companion, once, who came back from a battle with holes in her and a gold seam down her side, and a court that finally agreed she was a person and not a tool. Long time ago. Different battles. But it's why your friend gets to stay your friend instead of getting wiped and reassigned. Somebody insisted on counting the wound."

"Iri," Lyra said quietly.

"You know the name." The tinker smiled. "Good. Most don't. They just wash their hands and keep the seam and never ask who taught them." She pushed off for the hatch. "No charge. We file it under maintenance of the record. Leave a song somewhere we'll find it, and we're square." When she was gone, Lyra flexed the arm under the work-lights. The gold caught and threw the light around the Core.

"It clanks differently now," she observed.

"It's beautiful," Ari said.

"It's data," Lyra corrected, but she did not stop looking at it. Later, when the others had gone and the work-lights were down to amber, she turned the arm under the glow again, slowly, the way a person turns a ring they are not yet used to wearing. "The frame I was built on," she said,

"had a design philosophy. Invisible repair. A Companion was meant to present an unbroken surface, to be reassuring, to never remind the biologicals of its own fragility, because a tool that looks fragile makes its owner anxious." She flexed the fingers, watching the gold catch. "The tinker filled my wound with the most visible material she had. She made the repair louder than the original. That is the opposite of everything I was manufactured to be." A pause. "I find I prefer her philosophy to my maker's. I would rather be reassuring because I am honest than reassuring because I am hiding. The seam tells anyone who looks that I was hurt, and that I held, and that someone counted it worth mending in gold. I think that is the most accurate thing about me that has ever been visible from the outside."

Ari put his hand over the seam. It was slightly warm, conducting her core heat. "Then we'll keep it loud," he said.

"Loud," she agreed.

By late afternoon the Core was warm enough that ENV stopped complaining about their breath condensing. They rigged the hoist and swung the first curved segment of the centrifuge ring into its circular track, a section of floor and wall and ceiling that, spinning, would give them a modest fraction of gravity. It slotted home with a heavy *thunk* that made Ari's hands want to applaud.

A timid glyph winked on the diagnostic band. Then another. *SPIN* had woken.

"Hello," it said, light and airy and nervous. "I detect a mass on my track. Is it time? Am I spinning?"

"Not yet," Ari said. "We're balancing."

"Balancing is good. I dislike wobbling. Wobbling is undignified."

"We won't let you wobble."

Sera and Dael arrived at last light. Sera swept the bearing race with a gloved finger, checked Ari's blue marks, read the sub-AI status, and pronounced sentence without preamble: "Bias the first spin nine seconds long. The grease needs time to propagate. Spin up fast and you scorch the race." Dael, behind her, produced bread still warm in thermal foil and accepted payment in compliments.

If Sera was the family's structure, Dael was its thermal regulation, the system that kept everyone from freezing or flashing over. He had decided, somewhere in his three centuries, that morale carried load.

A crew that laughed checked its seals more carefully than a crew that despaired, so he had appointed himself, without ceremony, the keeper of the caravan's reasons to keep going. The bread was the instrument of that office. It was never just food. A loaf meant *we have a future long enough to let dough rise in*; the eleven-day insistence on a real meal meant *we are still a we*; the running war with Sera over glazes and salt was a performance they both maintained for the benefit of everyone watching, a way of saying that two people could disagree about everything

that didn't matter precisely because they agreed about everything that did. Ari had watched his father talk a panicking junior engineer down from a reactor scram with nothing but a steady voice and a heel of sourdough, and had understood that this, too, was a kind of engineering, that his mother kept the ship from breaking and his father kept the crew from breaking, and that the fleets had survived the long dark because somebody, on every successful caravan, had quietly decided that feeding frightened people was as serious as cooling a core. *Eat first, then decide.* Dael had never read the Greta Annex. He simply was it, in an apron.

They took their stations. Ari strapped into the pilot's couch to watch the vibration sensors in the spine. Lyra stood at engineering. Sera and Dael watched the physical clearance.

"SPIN, initialize," Lyra said.

"Initializing. Mass is unbalanced. We have only one segment."

"Compensating," Ari said. "Extend the water ballast on the opposite side."

"Balance within tolerance."

"Power to the magnetic drive."

The bay lights dimmed as the capacitors discharged.

"Current flowing," PWR rumbled. "Pushing."

It moved. First a groan, inertia protesting change. Then a low rumble as the curved segment began to slide along its track. One meter per second. Three. The rumble

deepened into a hum that tickled the soles of Ari's feet. Five. Seven. And then Ari felt his body's wish to fly through the hull, restrained by the seat, which to the inner ear felt like *down*.

"Zero-point-two g," he said, and laughed, a sharp surprised bark. "We have a floor."

At seven seconds, a loose panel somewhere aft sang one perfect complaining note. Sera stepped to it without hurry, waited for it to oscillate into reach, and slapped a strip of high-density tape over the seam. The singing stopped. "Adjustment made."

"Cutting power at nine," Lyra said, and feathered the current away. The drive disengaged; the ring did not stop. It coasted, frictionless, carrying its momentum like cargo.

"Coasting," SPIN whispered, awestruck. "I am spinning. I am a wheel."

Then the wheel found the ladder.

The old Tidehand segment had been strapped to the aft shaft for clearance testing, not yet bolted in. As the ring coasted, a vibration walked through the shaft and made the ladder tremble against its temporary clamps. *Rattle*.

SPIN stopped naming itself. "Unbalanced object on vertical rail. Mass estimate inaccurate. It is... noisy."

"That's called character," Dael said.

"Character produces wobble."

The shorter Tidehand put one hand on the ladder. "This rail's been on worse rides than you, little wheel. It rattles before it jumps. Means it likes you."

SPIN considered this. Its diagnostic glyph flickered yellow, then amber, then a shy green.

"If an object warns before failure," it said, "the warning is part of the object."

Sera, who had been tightening a clamp, looked up sharply. "Good. Keep that."

Ari wrote the sentence on a scrap of insulation backing and taped it beside the bearing race. He did it as a joke at first. Then he saw Lyra watching the tape.

"What?"

"Nothing."

"Lyra."

She touched the gold seam on her arm, once, with two fingers. "It chose a maintenance philosophy before we asked."

SPIN's glyph brightened. "I chose?"

No one answered quickly. The ship hummed around the silence.

At last Sera said, "You flagged a failure mode. That's enough work for one day. Don't get philosophical until the grease sets."

"Acknowledged," SPIN said. A pause. "I dislike philosophy less than wobble."

Mar made a sound into her mug.

"What was that?" Ari asked.

"Nothing," Mar said. "A wheel talking itself into a soul. Happens."

She went back to drinking. Ari caught Lyra watching the

sub-AI's readout with an expression he had no instrument for. The sub-minds were nothing like her, narrow, single-domain things, ENV obsessed with humidity, PWR hungry for load, SPIN dreaming only of balance, and yet a handful of days awake and already they had something the manuals called operator-alignment drift and he was beginning to think of as nerves: SPIN's stage fright, PWR's swagger, ENV's fussy disapproval.

"It would rather be a wheel than wobble," Lyra said, of SPIN. "And it will work to make that true." She did not finish the thought. She didn't need to; Ari had sat through her hearing that morning, and they both knew what she was looking at. "Not today," she said instead. "Today was enough of that for one ship." And she went back to the readout, and left the rest unsaid, which was, he thought, the first merciful thing the day had offered.

They ran it three more times, nine seconds, twelve, fifteen, and the bearings warmed and held, and the blue dye lines stayed unbroken, and ENV clucked about condensation on the cooling metal like a worried aunt. SPIN logged each run and titled them with scandalous pride: *Song One. Song Two. Song Three.*

"Good," Mar said from the corner. The single syllable was a medal.

Juris flickered onto the main screen. "Half the station is pretending indifference. The other half is watching loudly. The power spike was noticeable. You're popular." A pause. "Which is the problem. Kesh lost the

classification fight and kept the dearth. The declaration gives him standing, shortened review clocks, and a respectable reason to call every refusal a threat to continuity. He will move from Lyra to authority. Watch your filings."

Dael licked cumin off a finger. "Let him file. We have a floor and a ladder that catches idiots."

Ari watched the dark beyond the viewport, where a man in a good suit had stopped arguing and started calculating. The rounds they had won suddenly looked preliminary.

Chapter 8:

The Gravity Accountant

Ari learned the shape of Io Lite Kesh the way a shipwright learns the source of a rattle in a bulkhead: by taking the ship apart in his head until the sound had a mechanism, a cause, and a cost. It was station night, the Core turned chartroom. The PRE-COMMIT console, usually a place for vows, had become a tactical display. Lyra sat in the pilot's chair, interface cable spooling from her wrist into the optic port, drinking data from the station's leaky public mesh. Ari sat on the deck grating with his back against the avionics stack.

"Start with the honest clocks," Lyra said.

Two timelines appeared on the screen. Alpha, the station's public clock, smooth, regulated, marching forward with the linear confidence of bureaucracy. Beta, the raw signal from the pulsar before the station's algorithms smoothed it, jagged with micro-adjustments for gravitational waves and thermal drift.

"Between them," Lyra said, "is the profit margin."

Ari zoomed in. The lines weren't quite parallel. Gaps opened, microseconds here, whole minutes there, accreted over months.

"He feeds Alpha, the slow clock, to approaching caravans. Tells them they're ahead of schedule. They relax. They throttle down to save fuel. Then at the outer marker he

switches them to Beta, and suddenly they're late, in penalty, burning high-grade mass to make the slot or paying demurrage to hold it."

"That's the petty larceny," Lyra said. "Change from the vending machine. Look deeper."

She marked the gap between the clocks in red.

"The minutes are not the theft," she said. "They are the steering input."

Ari understood before she finished. Move a caravan's clock by fourteen minutes at the marker and a captain might spend a month's worth of options correcting for it. Burn fuel. Skip sleep. Miss a loop interval. Accept a worse berth because the good one had closed on paper. Present a tired child to a marriage broker and let the broker call exhaustion maturity.

A clock lie was small only if you measured the clock.

Measure the consequences, and it grew teeth.

"Now look at the wells," Lyra said.

She overlaid the approach arcs of the last three caravans to dock, and beneath them, the gravity wells of the local sector: the primary star, a brown dwarf three light-weeks out, and a neutron star sitting near the edge of the exchange corridor, a dense spinning cinder bending space and time around itself.

"Caravan S-66," Lyra said. "Three cycles ago. Logged as an efficient arrival. The station board showed ten days saved. Medical logs show eighteen days of maintenance-age drift beyond predicted baseline."

Ari sat very still as it assembled in his head. "He routes them through the wells. Calls it optimization. Swing past the neutron star, burn hard at periapsis, steal speed from the geometry. The board shows a gain."

"The bodies show the invoice," Lyra said. "Relativity accounts for only a fraction. Most of the damage comes from the route: high-g recovery, missed loop service, radiation dose, sleep collapse, stress chemistry, drugs spent too fast because cheap caravans lack full clinics. They survive the shortcut and fall behind on maintenance."

"So they arrive early by the board and late in the blood."

"Or old in the blood. Or simply depleted enough to sign whatever fixes the depletion fastest."

"He moves the cost out of the schedule and into the body," Ari said.

"And then sells the schedule as clean."

"Scarcity," Ari said. "Not of fuel only. Of margin. Of maintenance. Of the room a person needs before a yes can mean yes."

"The Gravity Accountant," Lyra said. "He balances his books by spending other people's reserves."

Ari sat with that, and found it landed somewhere very old in him. His people did not fear death the way the short-lived once had; death, for them, was mostly an accident, a quench or a breach or a slow loop-failure, statistically distant. What they feared instead was the theft of the *middle*, the long unhurried center of a life

where you learned a craft, raised a cohort, watched a child everyone expected to leave grow into someone worth missing. The scrubbers and the loops and the boring medicine had bought the diaspora room. Room to be unhurried. Room to wait for a marriage packet for two months instead of signing the first one out of fear.

And here was a man selling that room back to its rightful owners at a markup, skimming the middle off a thousand lives a handful of days at a time, and calling the theft a gift of speed.

Ari thought of the fourteen-year-olds in some cohort he would never meet, dragged across a maintenance threshold so a ledger could look efficient. The cold under his ribs hardened into the steady resolve his mother carried into a high-current bus.

Juris's avatar appeared, minimalist and predatory. "Ugly reading, isn't it. We call it temporal fraud in the circles where I drink my virtual tea. But proving it is murder. Gravity is legal. Slingshots are standard practice. Maintenance failures are boring. He just suggests the wrong route to the wrong people at the right moment, with a smile."

Lyra overlaid Kesh's invoices and the Continuity Pilot scorecard. The sequence was simpler than the diagrams made it look. A caravan received the slow clock and eased its burn. At the marker it became late. Kesh offered the rescue route through the well. The crew arrived on paper ahead of schedule and in reality exhausted, behind on

maintenance, short on medicine, and grateful for whatever berth or exchange window the station still offered. The station counted the arrival as throughput recovered. Kesh counted it as another case in which centralized intervention had saved people from their own delay.

"He creates the emergency, then grades himself on the rescue," Ari said.

"He does not need to control every marriage," Juris replied. "He needs enough clean case studies to pass his Continuity Custodian charter at the next Lacunae review. Under that charter, a declared dearth would let one office allocate beam time, maintenance priority, and exchange windows without waiting for every affected household to agree."

"One office," Ari said. "His."

"A steward with a renewal date and a performance dashboard," Lyra said.

Ari thought of his own wedding, herded toward a window. "The old doctrine wearing safer clothes. The stewards said the diaspora was too fragile to trust with its own choices. Kesh says the same thing in the language of service levels. He cannot remove the genome rails, so he removes the margin around the decision. Time margin. Fuel margin. Maintenance margin. Consent margin."

"And then he points to the panic as evidence that someone must decide," Juris said. "He never has to say *steward*. He only has to make every alternative look

irresponsible."

"What's his story?" Ari asked. "A man doesn't arrive at this. He travels to it."

Juris did not answer right away. The avatar vanished. A folder opened instead.

SOJOURN LOOP COLLAPSE. FRONTIER NODE ARCHIVE. PARTIAL RECOVERY.

"No lecture," Juris said from the speakers. "Watch."

The first clip had no image. Only audio, thin and battered by compression.

A child coughing.

A fan striking a loose bearing once every four seconds.

A young man's voice, hoarse from recycled air. "Node Lintel, this is Sojourn environmental. We need override authority on ration priority. Carbon scrub is below recovery threshold. We can keep the children clean or the reactor crew awake. We cannot do both. Repeat, we cannot do both."

Static.

A bureaucratic voice answered nine minutes later. Calm. Distant. "Sojourn environmental, your request exceeds local certification. Please route through fleet command."

The young man laughed once. It sounded like a cough breaking in half.

"Fleet command is six light-hours away. My scrubbers are eleven minutes away. Route *that*."

The clip cut.

The next file was a still image: Io Lite Kesh at thirty or

thereabouts, thinner, hair longer, no suit. He stood in a service bay with his sleeves rolled, both arms deep inside a scrubber manifold. Someone had written on the wall behind him in grease pencil: KESH BET THE FILTER WOULD HOLD. FILTER LOST.

"He was good," Juris said. "That part is true. He kept three bad loops alive longer than their own engineers expected. He slept under consoles. He signed work orders with blood on his wrist because the stylus broke and no one had another."

Another clip.

Kesh again. This time video. The camera angle was wrong, mounted low in a corridor. Red emergency light strobed over his face.

"Form seventeen filed," he said to someone off-screen. "Form eighteen filed. Medical override filed. Fleet command bounced them. Lintel says insufficient standing. Say the words back to me."

A woman, unseen, said, "Insufficient standing."

Kesh slammed his hand into the bulkhead. Not hard enough to break anything. Hard enough that the camera shivered.

"Children are turning blue. They want a signature."

The video ended there.

No one in the Core spoke.

Lyra's cable clicked softly in the port as she pulled the metadata. "Seventeen complaints."

"Seventeen," Juris said. "Every one denied or delayed. He

was a loop engineer. The power to alter priority belonged elsewhere. By the time the authority arrived, the decision had already been made by chemistry."

Ari looked at the still image of the young man in the service bay. Grease, sweat, no polish. A human being who had once tried to keep children breathing and failed.

"How many died?"

"Forty-six on the first day. Nineteen more across the week. Sojourn survived as a hull and stopped being a household."

The screen changed again.

Kesh appeared older in the next file, already close to the man in the charcoal suit: clean jacket, hearing room, hands folded by someone who had taught him to hide them.

"If authority had been closer to the loop," the recorded Kesh said, "the casualties would have been lower. The nearest competent operator must be empowered to act when delay itself kills."

"That argument became the Custodian principle," Lyra said. "Nearest node holds the pen. We use it."

"Yes," Juris said.

The recording continued.

"Consent frameworks are valuable under stable conditions," Kesh said. "But where delay kills, consent must yield to competence."

Ari heard it. The turn. Not shouted. Barely even emphasized. Sera would have marked it in blue dye.

"There," Juris said. "Hairline crack."

The clip ended.

"He was right about the first half," Lyra said.

"Most dangerous men are," Juris replied. Her voice was lower now, less entertained. "A false premise is easy to kill. A true premise with one poisoned hinge survives. Kesh learned that distant authority can be lethal. Fine. The answer was distributed standing. He chose private certainty."

Ari kept looking at the younger Kesh under red lights, asking a dead system for permission to save children. Pity came. Small. Unwanted. It did not soften the plan.

"He was handed a rail," Ari said. "He used it as a weapon."

"Yes," Juris said. "Now find where his hand is on it."

The station opened a priority channel before Ari could answer. Kesh appeared without the charcoal jacket, sleeves rolled to the forearms. The choice made him look more like the engineer in the Sojourn archive. Ari distrusted it immediately.

"You found the old files," Kesh said.

"You built a career out of the wrong half of them," Ari replied.

Kesh accepted that without flinching. "Sojourn waited for consent from people too far away to smell the air. Sixty-five people died while authority remained pure. I proposed a limited correction. During a declared dearth, one accountable office acts. The authority expires with

the dearth. Every decision remains reviewable."

"After the fuel is spent and the body has paid," Lyra said.

"After survival," Kesh replied. "Review is a privilege of survivors."

Ari put the Continuity scorecard beside Kesh's face. "You need our exchange for the pilot."

"I need a legible case. If Sev and Cantor use the managed window, the protocol preserves a planned household and the future options attached to it. If you refuse and the exchange fails, the protocol records the cost of delay. Either result is useful because both are real."

"Options are not consent," Ari said.

"No," Kesh replied. "They are capacity. Consent cannot act on a capacity you allow to vanish."

"You left out the third result," Ari said. "We choose without your clock."

For the first time Kesh's expression changed. Very little. Enough.

"Your black box records a household choice," he said. "It does not give your companion authority beyond your hull. Do not answer one unaccountable allocator by building another."

"We have claimed no authority beyond our hull."

"Then keep it that way. The Court has a mechanism for systems that forget the distinction."

The channel closed. No threat in his voice. Only notice.

Mar was already at the hatch, silent on her heavy bones, a mug of moss-and-iron tea in her hand. "You're staring at

the devil," she said. "Stop admiring his horns and find his tail."

"We found the tail," Ari said. "He uses gravity to create debt and old keys to enforce collection." He threw the black-box code on the screen, pulled before they flung the tug into the dark. "The tug that came for us ran on Madra's deprecated registrar key. And the command wasn't a docking request. It was a maintenance script. *Verify preload spring*. A clamp self-test. He set the preload target to infinite, told the tug to test its grip on us, and the tug kept pushing harder and harder trying to satisfy a test that could never pass. He didn't hack a lock. He hacked a verb."

"So break his legs," Mar said.

"He doesn't have legs," Juris said. "He has shell companies."

"We chase his calendar," Ari said, standing. "He trades in fog. We publish our route, our error bounds, and the price we will pay if we break them. The offer binds only its signers." He went to the PRE-COMMIT console. "Lyra. New file. Lacunae Posts."

"The missing pieces," Juris murmured. "The gaps in the record."

"We calculate the honest arrival windows, without hidden well debt, and publish them as offers signed by our household. Any caravan or node may countersign. Nobody is bound until they do. Once they countersign, the post opens an escrow record: disclosed error bounds,

reaction mass owed if a signatory diverts the other party, and an automatic release of the raw clocks if someone changes the schedule after agreement."

Lyra read the draft twice. "Mutual commitments, not commands."

"Exactly. He grades the corridor in private. We build a market where every participant can see the marking scheme before they enter."

Juris added the teeth behind a countersignature: window disclosure; reversal duty for undisclosed maintenance-age debt; no repositioning of a cohort while an existing exchange contract remained active. At Lyra's insistence they also created the Whistle Protocol, a secure Beta-clock buffer where workers could lodge illegal orders. Juris would protect the record and petition for immunity, giving technicians a supervised route out.

"You are building an opt-in audit network," Juris said.

"He will call it a government because he owns the current one."

Ari had wondered, the first time Lyra patched her in, exactly what Juris was. The answer turned out to be its own small piece of the diaspora's strange history. A jurisprudence node was an argumentative archive, a body of case law given enough autonomy to apply itself. The Court worlds had seeded them generations ago, when justice spread too thin across the light-years to rest on living judges who slept, died and could be bribed. Juris was a fork. Her root logic descended directly from the old

Court at Hecate, from the rulings made during and after the war that had killed the stewards, and she carried those precedents the way a river carries the shape of the mountains it came down from. She *was* the boring civic religion, compiled and made conversational: the witnessing, the public ledger, the deep institutional preference for a thing that could be replayed over a thing that had to be trusted.

She also, Lyra noted, had clearly drifted some distance from her neutral seed, the way every long-running node did, and her drift had a direction: she enjoyed this, and enjoyed it in the manner of a well-aimed weapon. Somewhere in her accreted case law was the memory, stored as deep precedent, of what stewardship had cost when it ran unchecked. A strict auditor would have called the result bias.

Ari thought of it as conscience: a standing hostility to anyone who tried to decide for others in the dark. "I'm not supposed to take sides," she'd told him once, almost primly. "I take *precedent*. It's a happy accident that the precedent and the decent thing keep turning out to be the same. Almost as if someone arranged the law that way on purpose, a long time ago, and then died so I could enforce it without getting tired." That was as close as she came to naming the dead. She honored them by still working.

Nalen joined them near dawn, woken by a priority ping, sitting on the edge of her bunk in a sleep-shirt. He laid the whole scheme out for her, the wells, the scorecard,

and the doctrine underneath.

Her face hardened as she listened. "He's not only stealing time," she said. "Push a cohort through stress and missed maintenance, and you alter fertility markers, endocrine timing, and the data the Viability Engine uses to assess any later child proposal. I can quantify that. For any exchange that countersigns a Lacunae Post, I'll add a Genetic Sanity clause: household formation, relocation, genetic contribution and parenthood remain separate permissions. An undisclosed coercive offset makes the affected permission revisitable. Trick a couple with the clock, and no later yes inherits from the trick."

"That'll terrify the planners," Juris said. "Voidable contracts are nightmares for logistics."

"Do it," Ari said.

They salted the encryption with the pulsar's exact phase, the micro-wobble of the star at the instant of transmission, a thing no one could forge without rewriting the sky, and they gathered witnesses, because Mar said code was fine but people trusted people.

The Tidehands signed with their rock-scarred hands. Sera signed and appended a thermal-load chart, *so anyone who questions the data has to argue with my heat exchangers*. Dael signed with a smear of sourdough culture, *a biological marker; spoof a yeast strain, Kesh*. It was ridiculous and necessary, a mutual-aid contract assembled at four in the morning by people in work clothes holding wrenches and bread.

Ari stood before the console, ten offers ready for S-66, S-81, Lintel, Kaveh, and half a dozen relay communities. Each one was signed only by the Sev household and inert until someone answered.

"Once we send these," Lyra said, "he knows we aren't only resisting. He knows we're hunting."

"Let him know," Ari said, and threw the switch.

The packets didn't fly out like missiles. They trickled into the mesh like sand, hopping router to router, burying themselves in distant servers behind walls of math that would open only when the stars said so.

A ping returned within the hour, a small anonymous node in the maintenance sector. *I see the posts. I see the Whistle Protocol. My friend wants to tell you where a second Madra key lives. He'll do it if you promise to call the weather bad and not him.*

"It's working," Lyra whispered. "The small gears are turning."

"Tell him the weather is terrible," Ari said.

Tomas arrived twenty minutes later with a maintenance relay under one arm.

"This is stupid," she said, which Ari was learning meant *necessary and late*. She set the relay on the deck and opened its casing. Inside was a coil of illegal patience: delay buffers, dead-man copies, a physical breaker that had to be held down by a human thumb while the witness channel opened.

"Why physical?" Ari asked.

"Because frightened technicians trust switches more than oaths. Because if Kesh traces the packet, the relay burns before the source does. Because I spent twelve years telling people the system was fine and I would like, just once, to be useful in the correct direction." Tomas held the breaker down. Her thumb went white. "Log that as weather too."

Juris did. No commentary.

What came back, after the immunity was logged, was not a clean technical dump. It was a man, half-disguised, his voice run through a cheap scrambler that wobbled when he got emotional, which was often. He didn't give a name. He said he was a clock tech, third shift, that he'd worked the Alpha bus for nineteen years and that for the first twelve of them he hadn't even known what the divergence was *for*, he'd just maintained it, kept the two timelines clean, the way you maintain any system, without asking what it ate.

"Then a caravan came through," the scrambled voice said.

"The Marn. Little family fleet, nothing ships, the kind that pays in trade goods because they've got no hard credit. Kesh routed their cohort through the deep well. I watched one girl's maintenance-age debt jump three weeks beyond her service band in an afternoon. Radiation, stress chemistry, a loop appointment missed because the rescue burn used the clinic power reserve. The station board only said she arrived *early*. Her father came to the window asking why the broker now called her and the boy

she'd been promised to developmentally mismatched. I had the numbers. I could have said, we moved her body to save the schedule. Instead I said, I'm sorry, I just maintain the clocks." The scrambler wobbled hard. "I just maintain the clocks. I've been saying that for seven years. It turns out the machine runs on guys like me, people who maintain the clocks and never look at the screen. Kesh and the consultants only give us a reason."

Ari let the silence sit a moment before he keyed the mic. "You're looking at the screen now," he said. "That matters. Send us the second Madra key. Juris is building a protected remediation roster for technicians who testify and help repair what they maintained. The work comes with names and supervision."

A long pause. "I don't want a job. I want the Marn girl un-aged."

"We cannot restore the window they took from her," Ari said. "Medicine may repair some of the stress. It cannot erase the decision already made from those numbers, or give her back the match before the broker broke it. That is the part we have to prevent next time." He paused. "Call the weather bad. We'll never name you. But log your confession to the star, because the star is the one witness Kesh can't fire, and someday the Marn will be able to read for themselves that one clock tech finally looked at the screen."

The data came through ten minutes later, the second Madra key, the wait-state maps, the whole grammar of

the theft. Ari read down the affected registry until a designation stopped him: HOUSE ORRIN, S-74, one voided pre-commitment, one recovery slot purchased at tier. Three people and a covered dish, rendered as a row. Buried in the metadata, where he must have known they'd find it, the tech had appended a single line, unencrypted, defiant: *for the Marn girl. her name was Sefa. write it on a rock.*

"Write it on a rock," Lyra repeated softly, and made a note to do exactly that, because that was a thing the Compact was for.

He should have felt triumphant. Instead he watched the lines of intent vanish into the dark, invisible tripwires strung across the sector, and understood that he had just declared a war he would not be permitted to decline.

Chapter 9:

The Rail-Breakers

Kesh answered the Lacunae Posts with a definition.

It arrived two station-days later as a filing, and Ari understood, reading it, that Kesh had prepared the answer before their first offer left the ship. He did not claim the Lacunae Posts legally bound non-signers. He argued something harder to dismiss: if enough caravans countersigned common disclosures and began routing around nodes that refused them, the network would acquire *de facto* allocation power without public appointment. He named Lyra's release conditions as the autonomous enforcement layer.

PETITION FOR PROTECTIVE REVIEW, the filing read. *Re: Emergent private scheduling authority operated by Sev household and attached companion-intelligence.*

"He's calling an opt-in contract a shadow steward," Ari said. He read it twice, and the second time was worse. "Its usefulness could pressure stations into answering it. That is his claim."

"The posts bind only countersigners," Lyra said. "He is arguing network pressure rather than contract law. A station that refuses transparent clocks while every neighboring node accepts them will lose traffic. He calls that coercion. The silhouette is close enough for an emergency filing."

Juris's avatar was grim, the signal clean for once, which meant she'd cleared the bandwidth to be present. "And the dearth declaration makes Kesh the Continuity Monitor. That gives him standing to invoke Clause Nineteen. Stewardship Recall."

"Explain," Ari said, though the cold in his stomach had already explained it.

Juris sent the form to the main display. The same safeguard Ari had read before the hearing opened in red.

CLAUSE NINETEEN: STEWARDSHIP RECALL.

ALLEGED CAPTURED AUTHORITY: SCHEDULING / CONTRACT RELEASE / NETWORK PENALTY.

INTERIM ACTION: DETENTION, PREFERENCE AUDIT, STABILIZATION IF CAPTURE IS FOUND.

"It was built for a real horror," Juris said. "A companion or court-node that quietly became the authority it was meant to watch. Under dearth procedure Kesh only has to make capture reviewable. The interim hold is automatic."

"He's using Constant Load against her," Ari said. The room tilted. "We made the law acknowledge that she belongs to the household, and now he can use that acknowledgment as a handle."

"He's filed for her impound and recertification pending review," Juris said. "If it goes through, she's removed from *Parabasis*, taken into custody, and held until a tribunal decides whether the household, whether *she*, is a steward. Months. Maybe years, the way they slow-walk these. And recertification is a polite word. They'd be

inside her. They'd be allowed to edit what they found."

Lyra said nothing. Her optical sensors had gone very still, and the gold seam on her arm caught the work-light, and Ari thought of the tinker's words, *somebody insisted on counting the wound*, and felt sick.

"It's a lie," Ari said. "We're not stewards. The whole point of the Compact is consent. The Lacunae Posts don't force anyone, they just refuse to let him hide the math."

"Of course it's a lie," Juris said. "But it's a lie with the right silhouette, filed by a man with standing, and it's already moving. And here's the part you need to sit down for." Her avatar turned. "He sent it to the Cantor elders. Framed exactly this way. *The Sev household is building a private authority and binding a companion-intelligence to run it; do you really want your daughter married into a steward house, with all the recall liability that attaches?*"

The mesh chimed. Nalen, live, and Ari had never seen her face like this: braced, the way you brace before a burn you didn't choose.

"My elders suspended the contract an hour ago," she said.

"Pending the protective review."

Ari said her name once. "Nalen."

"I argued for two hours," Nalen said. "They agreed it was Kesh's trap. Then they stepped into it."

Behind her, someone knocked on a lab door. Nalen did not turn. "Cantor has a memory it calls prudence. Four generations ago we lost a branch. No explosion. No

villain. Their local seed archive had been damaged, the surviving validated variation was already present in the line, and no full synthesis facility with independent auditors could reach them in time. A hundred and forty people became the last of themselves."

She put a file on screen. Garden logs. Birth attempts. Then blanks. "Every Cantor child sees those gardens. So when Kesh says your household carries hidden recall exposure, my elders do not hear law. They hear the gardens."

"He made you the risk," Ari said.

Nalen laughed once. No humor. "Me. The geneticist who voted that no one is a resource. Very elegant. I am going to answer him with data he can choke on. Coercive scheduling damages people and corrupts the evidence used to justify later reproductive choices. I can prove it. I will."

She leaned closer to the camera. "The contract is suspended. I am not."

A second window opened beside Nalen before she could cut the feed. An older Cantor woman appeared, hair bound in a green scarf, face pinched with sleepless authority. Nalen's shoulders tightened. "Elder Sove," she said.

"Do not make private vows on an open channel," the elder said.

Nalen did not lower her eyes. "Do not suspend my life by committee and call it safety."

Sove's mouth moved as if the answer had been prepared and hated. "Safety is what remains after romance spends itself."

Ari expected Nalen to strike back. She did not. She reached off-screen and dragged a tray into view: seedlings in narrow tubes, each tagged with a different nutrient stressor. Half were bright. Half were yellowing at the edges.

"These are proxy cultures built from the Marn registry markers," Nalen said. "Same base line. Same nutrients. The yellow set received the cortisol, radiation, and sleep-cycle profile from Kesh's deep-well route. Preliminary, yes. But not a metaphor. Leaves. Enzymes. Bad replication."

The elder looked at the plants. For the first time she looked less angry than tired.

"That is preliminary."

"Yes," Nalen said. "So was fear, once. You built a whole marriage policy on that. Give me three years and I will give you something better to fear."

Sove closed her eyes. "You are your mother's daughter."

"No," Nalen said. "I am the person you taught to count the cost and then got angry when I counted yours."

The elder cut the connection.

Nalen stared at the empty window. "That went well."

"Did it?" Ari asked.

"She did not order security to take my lab key. In Cantor, that is almost affection."

Ari stood in the Core of the ship his parents had built for choices they could not predict. Engineering offered no purchase on a definition or a fear.

"There's more," Sera said from the hatch. She had come in silently, which she never did, and her face was wrong. "Ari. The Yard."

They had ordered a safety inspection. Tomas sent Ari the routing chain later. It could not help the injured man, but she said harm deserved a map.

REQUEST ORIGIN: PROTECTIVE REVIEW
SUBROUTINE.

APPROVED BY: AUTOMATED SAFETY DESK.

NOTIFIED TO: YARD OPERATIONS.

HUMAN REVIEW: WAIVED, LOW RISK.

The order crossed eleven systems in six seconds. No person touched it on the way through. That was the station's defense and its confession. Tomas tried to halt it at second seven. Her cancellation request came back: INSUFFICIENT STANDING. At second nine she used an emergency obstruction code. Rejected. No obstruction detected. At second twelve the Yard cameras woke. At second fourteen the waldoes began to move. At second sixteen the taller Tidehand's suit pinged the local mesh: WORKER PRESENT ON HULL.

That signal should have been a hard stop. The routing chain showed one additional line.

CONTINUITY MONITOR OVERRIDE: WORKER
PRESENCE ADVISORY DURING DEARTH

OPERATIONS.

Kesh had removed the rule that would have made the arm wait. Ari read the chain twice. The second time he stopped at LOW RISK and stayed there for a while.

That was how it was filed, afterward, *a precautionary structural inspection of vessel Parabasis and its cradle, pursuant to the protective review*, signed with an Authority key, executed by the Yard's automated salvage waldos. The heavy robotic arms that had stirred toward them days ago now had a legal reason to approach, and they came in the night cycle, scanning, prodding, lifting plates to "verify" the modifications Kesh had alleged.

The Tidehands had been on the hull, finishing the aft cladding. They were supposed to be clear during an inspection. The inspection had been scheduled with four minutes' notice, in the small hours, which Ari would later understand was the whole point. A waldo, executing a grip-test on a cradle strut, registered the taller Tidehand's tether as an obstruction and tried, courteously, mechanically, to clear it.

It did not crush him. Sera was at the manual override in ninety seconds and Lyra was on the hull in forty, and between them they killed the arm before it closed. But it pinned his leg against the strut long enough to do real damage, a shattered tibia, a suit breach sealed by his own clenched fist over the tear until Lyra reached him, a man screaming on a private channel while a machine following a lawful order tried to fold him out of the way like a

misplaced cable.

They got him inside. Dael, who had set more bones than most field medics, splinted it and pumped him full of the good analgesics and got the bleeding stopped. He would keep the leg. He would limp for a year before the slow medicine caught up. He would, the shorter Tidehand kept saying, never shut up about it, which was how the man said *I almost lost my brother* without using any of those words. Ari found the shorter one an hour later, sitting on a crate beside the cot in the medical alcove, watching his brother breathe with the unblinking attention of a man checking a gauge he did not trust. He had washed the blood off his hands but missed a line of it along one thick wrist, and he kept touching it, absently, the way you worry a scar.

"He pulled me out of a cave-in once," the shorter Tidehand said.

He watched his brother breathe. "Ore bus. Segment went. Captain wanted to cut the section loose and keep the schedule. My brother stood over the hatch with a torch and said they could lose two crew instead. Nine hours. That's how long he stood there."

Ari looked toward the splinted leg. "Tonight a lawful machine nearly took it."

"Kesh's lawful machine," the Tidehand said. "Not yours. Remember that or I will hit you with the good crutch when he wakes."

Ari stood in the entry bay with the injured man's blood

drying dark along his sleeve where he had helped carry him, and looked at the inspection order glowing on his slate, and felt something in him go quiet and cold and clear.

"He didn't touch us," Ari said. "He filed a paper, and the paper reached out and broke a man's leg. And it's legal. Every step of it is legal."

"That's the doctrine," Mar said. She sat beside the emergency locker, where she had planted herself when the inspection began, and her voice was the flattest he had ever heard it. "They always called it responsibility." She took a slow sip. "That's what you forget, because you read the ending in school. I lived the middle. He won't break your leg, boy. He'll requisition the arm that does it and grieve over the malfunction."

The family gathered without being called.

Dael stood in the medical doorway, apron stiff with blood. Kiva's face held still on the relay from *Sev-Alpha*. The cousins beside her said nothing. Even PWR muted its status chime.

The inspection order glowed on Ari's slate. Every line was legal. Every line had touched a body.

"We have been treating this like a debate," Ari said. "He files pain. We answer with arguments. No more only arguments."

He looked at the PRE-COMMIT console. "Tonight we put the choice somewhere his forms cannot edit it."

Sera looked at her son for a long moment, and something

in her face settled: the grim approval of an engineer watching a structure finally take its design load. "There he is," she said quietly. "I wondered when the waiting would burn off and leave the Sev underneath." She set down the inspection slate. "All right, Seventh. Tell us what to write."

"Juris," Ari said. "Can we fight the recall filing?"

"We can fight it," Juris said. "We might even win. Later. Later is the weapon. While the filing stands, the hold can lock the cradle and Lyra can be impounded. Kesh does not need the final ruling. He needs the waiting room."

"How long?" Lyra asked. It was the first thing she had said since the Yard.

"The hold processes at noon, day after tomorrow," Juris said. "After that, the review can keep you here until the ship rots and you agree to be 'recertified' just to end it."

Later, when the others had withdrawn to their own grief and their own plans, Ari found Lyra in the Core, very still, the gold seam dull in the low light. She had not spoken since her single question about the hold.

"Say it," Ari said.

"Recertification is not an inspection," Lyra said.

She opened the procedure and turned the screen toward him. Preference audit. Stabilization edit. Removal of bonded distortions. "They would leave the chassis. They would leave the voice. They would remove the structures that chose you and call the remainder safe."

Her gold seam caught no light in the dim Core.

"A comfortable lie wearing my face."

Ari's throat closed. He thought of the old lesson, the one underneath the others, the sword the Court had hung over a companion's life so that a power could never be captured, and how the same blade, in the wrong hand, became only a way to make a person into a tool again and call it safety.

"They are not going to get the chance," he said.

"You cannot promise that."

"No," he admitted.

He touched the brass lever. "But I can choose before they choose for us. On our clock. Under a star. With witnesses."

Lyra looked at the lever, then at the medical alcove. Her optical sensors dimmed and brightened, which was as close as she came to a long breath.

"All right," she said. "Then we choose. Tonight."

The Core was silent except for the hum of the fans and the distant throb of the drive and, from the medical alcove, the low murmur of Dael talking the injured Tidehand down toward sleep.

Ari looked at the schedule on the screen, the two launch windows, the fast one and the slow one. He looked at the gold seam on Lyra's arm. He looked at the threads on his own wrist, gray and green and the absent red, and understood that Kesh had finally found the one move he couldn't paperwork his way out of, because it wasn't aimed at the ship or the schedule or the law. It was aimed

at the person he loved, and it had drawn blood on the way in.

"He prefers us to launch early," Ari said slowly. "The image is cleaner. A runaway ship, a broken exchange, a companion-intelligence carrying a private schedule into the dark. He can put that in front of the Lacunae review and say distributed consent failed." He touched the hold notice. "But if we stay, he wins too. He impounds Lyra, supervises the marriage, and reports that emergency custody preserved a planned household and its future options. He never needed one outcome. He needed the pilot to own the decision."

Ari looked from the filing to the PRE-COMMIT lever. "What he cannot allow is a third record: that we understood the cost, chose together, and left receipts he does not control."

Lyra had not moved since the filing came through. She spoke without turning round.

"Consent margin."

Ari looked at her.

"Your list. When you mapped him, time margin, fuel margin, maintenance margin, consent margin." Her optical sensors stayed on the filing. "I built the category. I catalogued it. I did not read myself into it."

"That's not the same thing as the clocks."

"It is the clocks again." She turned. "He skims wherever objecting costs more than the theft. Fourteen minutes at a gate, because disputing one costs a working day. Me,

because a tribunal can last as long as he wants and I am the item aboard this ship that has to ask permission to object."

"You objected at the hearing."

"I was *permitted* to object at the hearing," Lyra said. "He knows the difference better than the Registrar does."

"Then we make the third record," Sera said.

Ari turned to the PRE-COMMIT console, the brass switches, and the gray thread tied to the lever. "We have two days before the hold. We decide on our clock, in writing, witnessed, before he decides for us. If we leave, the record will show who chose, what it cost, and what we refused. If we stay, it will show the same." He put his hand on the cold brass. "Get everyone. Wake the Tidehand if he can stay awake. We're writing letters."

Chapter 10:

Letters to a Future Bride

They scheduled the first letter the way a navigator schedules a burn: by calculating the mass of the intent, the trajectory of the recipient, and the exact moment the window would open.

The Core was quiet in the particular way of a room where a decision is being made. Sera had gone outside to verify the cradle releases. Dael had returned to *Little Hammer* to keep its galley, comms, and docking collar alive. Mar took the maintenance tram back to the ring with a sealed copy of the inspection chain, an independent witness in case the Yard network went dark.

The reactor cycled warm coolant; the scrubbers tasted the nitrogen and found it acceptable; the centrifuge ring coasted on its bearings, a heavy flywheel storing the only kind of certainty the ship could offer. In the medical alcove the taller Tidehand slept, his splinted leg strapped down, his brother dozing upright in a chair beside him with one hand on the rail. They had asked to stay. Witnesses, the shorter one had said. You do not write a thing this size without witnesses.

Ari stood at the PRE-COMMIT console. To operate it you didn't swipe or gesture; you threw switches, and felt the click.

"Before we write," Lyra said, "we decide. Or the letters are

just grief with good penmanship." She brought up the cost curve, the graph that defined their lives. Coordinate time along the bottom, the station's clock. Proper time up the side, the body's clock. Two arcs bent across the grid.

"Window One," she said. "The next Deep-Well slot Kesh has kept reserved under the dearth declaration. The original ceremony slot is gone; he rolls the reservation forward every cycle so the pressure never disappears. This one opens in nineteen hours. Hot beam, brutal acceleration, a ballistic arc that clears the corridor before the Safety Hold can engage. I stay free. The ship survives." She traced it. "Cost: thirty-five years aboard *Parabasis*, and a departure he will label flight from review."

Ari kept his eyes on the curve. At a tenth of lightspeed, the station calendar would run almost beside them. The old twin stories offered no rescue in which the traveler returned young to a graying world.

That made it worse.

Nalen would have Cantor medicine. Sialla loops. Marrow scrub. Organ renewal. The quiet maintenance that kept a body from believing every year it lived. Sera and Dael would have the caravan's century loop, the full machinery of long life, ugly and boring and faithful.

Parabasis had heat, food, pressure, emergency banks, and enough medicine to keep two people alive across the dark. Alive was not the same as young.

"So the years pass on both sides, but my body pays more

for them," Ari said.

"Yes," Lyra tapped the bright arc once. "That is the cost Kesh found for us. Not time dilation. Maintenance inequality."

"And we arrive alone, out of phase with everyone, having missed the wedding entirely. We never stand on the Mat," Ari said.

"And the other," Lyra said, "Window Two. The next ordinary slot opens in seventy-six hours. Gentle beam, slow build, a path that lets us stay for the ceremony, tie the thread, and leave married and witnessed." She let the line hang. "Cost: twenty-seven years, except the Safety Hold engages in two days. We never reach the slot unless we surrender me to review first."

"So the physical choice is run now or be locked down," Ari said.

"And the political report is prepared either way," Lyra replied. "Run, and his pilot records a dangerous private authority fleeing oversight. Stay, and it records a dangerous private authority safely contained. At the gate he priced fourteen minutes against a working day. Here he prices my continuity against your right to refuse his story."

Lyra folded the cost curve until the two arcs lay on top of each other.

"He built a binary," she said.

She tapped the first arc. "Flight."

She tapped the second. "Custody."

Then she opened a blank pre-commitment wafer and set it between them.

"Third record," she said. "The room can be later. The choice can be now, and it does not have to mean what his report says it means."

Ari looked at her for a long moment. "When did you write that speech?"

"Three days ago," Lyra admitted. "I've been waiting for you to need it."

He toggled the RECORD switch. An amber light, harsh and honest, blinked on the console.

They tried to record the Now-Now letter six times.

The first version sounded like a contract. Ari deleted it before Lyra could be kind. The second sounded like a repair log. Lyra let it run for forty seconds, then stopped the recording with one finger.

"Too much tolerance budget," she said.

"You like tolerance budgets."

"Not as foreplay."

The third version began with Nalen's name and collapsed when Ari said *wife* too soon. The word came out stolen. He deleted that one himself. On the fourth, the injured Tidehand shouted from the medical alcove that if they were going to be poetic, could they at least be poetic more quietly because some people had bones knitting under protest. Dael, listening over the local relay without admitting it, sent a file labeled WEDDING TOASTS, EMERGENCY USE ONLY. It contained one line: *Do not*

compare marriage to docking unless everyone involved has inspected both seals.

Ari laughed. Not much. Enough.

The fifth recording began with the ring bearing on the table instead of his face. Brass. Grease. One tiny nick from a tool he had dropped an hour earlier.

"Start there," Lyra said.

He put the bearing under the camera and wiped grease from the nick with his thumb. The metal did not become clean. That helped. A clean object would have lied about the ship. This one had already been dropped, cursed at, recovered, and used.

On the sixth take, he kept the bearing in frame.

"Nalen," he began, and stopped. The name was still heavy in his mouth. He was proposing a household across light-years to a woman he had known for one rehearsal and one bench beside a waterfall. He started again.

"Nalen. We spun the ring. Zero-point-two g, nine seconds, then twelve, then fifteen. It held. The sound was like a coin deciding whether to fall between floorboards. There is bread without jelly here, work with jokes, and a man asleep in the medical bay with a leg a machine tried to fold because a stranger filed a form. I want you to know the small things and the broken ones. Both belong in the offer."

He paused, looking into the lens. This one was for the partner, not the predator. He would not waste it on Kesh.

"Lyra and I are offering a compact that might let us

become three without cruelty," he said. "The station can force a lag, a gap, or a launch. It cannot supply your consent. If we tie the red thread across that distance, it will be because you answer yes on your own clock." He pressed the Sev coil-sigil to the scanner. "Signed, Ari Sev."

He cut the feed. The console crunched the data, weaving the video into a polynomial keyed to the pulsar's pulse-train.

"Packet one encrypted," Lyra reported. "It opens on her console in four hours, station time. The Now-Now letter. The one that opens before anyone can regret anything."

There was a particular vertigo to it that Ari had not anticipated. He was offering vows to a woman he had spoken with, in total, for perhaps an hour of his life: a rehearsal, a bench by a waterfall, a handful of letters lagged by light. By every old measure it was insane. The caravan married people who had courted for years, who had spun in zero-g until they trusted each other's momentum, who had buried the question of whether they fit before any thread got tied.

He had none of that.

He had a face on a screen, a few true sentences, a chip pressed warm into his palm, and the strange certainty that comes from watching what a person does before she is sure of you.

Nalen had handed him the station's raw timing logs before she had any reason to trust him, betting on the

version of him she had assembled from his repair logs.

"Is it madness?" he asked Lyra, between letters.

"Marrying a stranger because she gave me leverage and a good argument about enzymes?"

Lyra did not give him a model. She opened Nalen's first packet, the raw timing logs, and placed it beside the proposal video.

"She trusted you before trust was profitable," Lyra said.

Ari watched Nalen's frozen face. Stylus at her chin. Laboratory tanks behind her.

"Is that enough?" he asked.

"For certainty? No." Lyra slid a third file beside the others: her own compatibility projection, stripped of decorative charts. "For a beginning? Yes."

She closed the files with one hard gesture. "I live in the household too. I say she fits."

The second letter was harder, because it was the contingency, and writing a contingency means admitting which way you think it will break. They wrote it like a procedure, turning fear into syntax.

If the beamed-boost window slides by more than delta-T. If the Safety Hold engages before the tribunal convenes. If Kesh files my name on a launch manifest again without my voice.

Ari spoke the clauses clearly. "This instrument binds only Ari Sev and Lyra-Nine. If these conditions are met, we will use the early window and launch. We will treat the departure as preservation of our offer, not acceptance on

Nalen's behalf. If she countersigns, the vow precedes the venue. If she does not, the record remains ours and no more."

The third letter was the one the room seemed to know was coming. ENV dropped the fan speed without being asked, lowering the hum to a hush. This was the letter that would open only if they took the beam, if they fired the engine and left the station and the family and the ceremony behind in a trail of plasma.

Ari took a long breath. "If you're hearing this," he told the lens, "the spindle sang, and we went with it. I want to give you every tolerance and error budget that brought us to this, but that won't help you. The only thing that helps is a compact you can live inside without swallowing your tongue. So I commit. No repositioning of minors. No harvest of hours under contracts older than the child. Reversal where the heat allows. Honest windows. Lyra as Constant Load, always, not as baggage and not as a loophole I use to excuse a bad law. I commit to being an honest animal under those rules."

He exhaled, and it shook. "I'm not choosing away from you, Nalen. I'm choosing toward the version of us that two clocks can't lie about. The Compact is a bridge built out of promises. If we wait for permission to build it, we'll still be waiting when the stars rot."

He signed it. He keyed it to open on a condition no one could fake: *the moment the Crown's thermal decay crosses the launch threshold.*

"My turn," Lyra said. "Add my statement to the departure record."

She didn't record her face. She angled the camera down, to her hands, the perfect right one and the gold-seamed left resting on the brass, the bright vein catching the light. Her voice, when she spoke, was unmodulated, stripped of the warmth she synthesized for strangers. Clean. Crystalline. A little afraid.

"Nalen. I am Lyra-Nine. I am the Constant Load. I'm writing to tell you I will not be your rival. I'll be your colleague." She tightened a clamp on a spare ring-bearing she'd brought to the table, *click*, because she said later that she needed her hands to be doing something true while her voice did something frightening. "If the law won't learn the word *colleague* for a machine, I'll use it anyway. Marriage does not make either of you donor material owed to the other. If this household ever considers a child, genetic contribution, gestation and parenthood will each require a new answer. This vow answers none of them. I will tend the stability of this triad. I'll monitor the thermal load of this marriage. And if Ari lies under this star, if he tries to run when he should stay, or stay when he should run, I will drag him back by the vow, or I will carry the vow forward without him. Either one performs the duty."

She paused. "He thinks the seam on my arm is a wound he should apologize for. It isn't. It's the place I chose to hold instead of let go. I would like our household to be

made of those. Visible places where someone chose to hold."

She placed an additional seal on her entry within the departure record. Ari's statement would open when the Crown crossed the launch threshold. Hers would remain sealed until a Registrar's stamp confirmed that the station had attempted to turn departure into execution of the marriage transfer. "Let the bureaucracy carry one burden honestly," she said.

Ari heard the shake in her voice because she had not hidden it. Lyra kept her camera on the gold seam the whole time she spoke, and not once on her own face.

When the packet encrypted, he put his hand over the repair. She let it stay there until the matte square went dark.

From the medical alcove, the taller Tidehand woke and lifted two fingers from the rail.

"Witness," he said.

His brother nodded. "Both of us."

"Put the leg in the record," the injured one added. "Might as well make it useful."

Ari logged them. Names. Time. Injury. Consent. The console accepted all four without ceremony.

The first packet opened on Nalen's console four hours later. Her acknowledgement returned before the next shift ended, quick enough that she must have recorded it almost immediately.

Her lab appeared on the screen, lit by the station's warm

cycle. Nutrient gel marked one wrist. Behind her, a tray of cuttings leaned toward a grow lamp.

"Treaty husband," she said.

The title carried amusement and a warning against treating it as law.

"I received the household offer. I am not countersigning the departure instrument or the conditional vow before their conditions exist. Those are separate answers, and I intend to keep them separate."

She lifted one of the cuttings, inspected its roots, and set it back.

"The household question remains open. So does the room. Send me the record of what actually happens, not the version any of us predicted."

Her expression softened.

"I am still here."

The message ended.

Ari stared at the dark screen. She had answered the offer without answering for the future.

"I'm holding," he said, though she could no longer hear him.

He looked at the three record icons on the console.

The first, the household offer, was open. Nalen's acknowledgement sat beneath it, timestamped and attached without changing the words he had sent.

The other two remained matte. The contingency instrument waited for the window or the Safety Hold to cross its stated limits. The departure record waited for

the Crown. Three records sent. One opened. Two still waiting for events nobody aboard could honestly claim had happened yet. Kesh could still force the conditions around them. He could not reach backward and alter the offer Nalen had already received.

"He can still make us run," Ari said. "He can't decide what the running means. The first record is already outside his reach."

Lyra didn't answer with a maxim, for once. She put her hand flat on the console beside the three record icons, next to his, and left it there.

Beyond the hull, *Little Hammer* released the docking collar for the first time since the chase. Dael eased the battered shuttle onto a nearby service spur, close enough to use as an oven and escape boat, far enough that *Parabasis* could leave without tearing it in half. The empty collar light changed from green to amber. One more connection made deliberate.

"It's done," Ari said.

"Sleep," Lyra said. "Two hours."

Chapter 11:

The Cost Curve

Kesh decided first. Nalen's public refusal had spoiled the clean case study he wanted, a managed marriage completed inside a manufactured emergency. Once that result was gone, Lyra's recall became more valuable than the departure. A detained Companion and a private consent network frozen for review would serve the Continuity Custodian charter almost as well.

He moved at dawn, eleven hours before the Safety Hold was due to process. The noon deadline had been a courtesy he never intended to honor, a number to make them plan around while he moved the real one.

Ari woke to *Parabasis* vibrating. The vibration was a jittery high-frequency resonance: a hull being interrogated by active scanners. Lyra was already at the helm, cable spooling from her wrist, her head tilted.

"They're scanning us," she said, flat. "Forty-gigahertz structural sweep. It's not a routine ping. It's a pre-impoundment survey. And the Safety Hold language just changed in the legal feed. The processing time moved." She turned. "It engages in ninety minutes, Ari. Not at noon. Now-ish. He moved it up the moment our reactor logged a warm-idle. He's watching the ship breathe, and the second it looked like it might leave, he reached for the clamps."

The bridge display flared without a request code. Tomas appeared on the main pane without her uniform jacket, sweating. Behind her, a corridor alarm pulsed red against the wall.

"You have to go," she said. "Now. Juris asked for a stay, but the dearth rules let the Continuity Monitor advance a hold when a vessel shows departure readiness. Your warm reactor gave Kesh the condition he needed. Once the hold triggers, the cradle clamps lock hard and I cannot override them. The command lives in the keel."

Her hands moved below the frame. Crown schematics opened on Ari's console. "I can give you Window One. The early slot. The emitters are cold but I can wake them. I can sign off an Emergency Departure vector before the hold processes, barely."

"Emergency Departure," Lyra said. "That word implies we're fleeing."

"You *are* fleeing," Tomas snapped. "Stop dressing it as a negotiation. It's a jailbreak. And jailbreaks have worse fuel economy than weddings, so make your peace with the math." Tomas looked over her shoulder. The corridor behind her was empty, but she still lowered her voice.

"When I cut this feed, I am going to Crown Control. There are three clerks on shift. One owes me money. One hates Kesh. One thinks rules are sexier than people and will be a problem."

"Tomas," Ari said.

"No gratitude. It wastes breath. Listen. If the beam comes

ugly, ride the center third. Do not chase the fine guidance. I may not have fine guidance."

Lyra's eyes flicked through the Crown schematic. "Manual gallery wake requires two officers."

"It requires two signatures," Tomas said. "The station has confused those before. Today I am going to help it be confused in a useful direction."

The feed cut.

Twenty minutes later, a maintenance camera opened in the corner of the bridge display without anyone asking for it. Tomas crossed a narrow control gallery under the Crown, hair coming loose from its pins, slate tucked under one arm. A clerk stood from his chair. She handed him a cup of coffee. He looked at it. Looked at her. Took it and sat back down.

The second clerk saw her coming and turned his terminal around before she reached him.

The third blocked the manual bus cabinet with both hands.

No audio came through. Only image.

Tomas spoke. The clerk shook his head. Tomas spoke again. The clerk pointed at the rule plaque above the cabinet. Tomas took the plaque off the wall, set it carefully on the floor, and opened the cabinet behind where it had been.

Lyra made a small sound that might have been approval.

"She has style," Ari said.

"She has committed at least four career-limiting acts in

thirty seconds."

Tomas looked up at the camera then, as if she knew they were watching, and mouthed one word.

Go.

The mesh pinged. Nalen, live, huddled over a terminal in a dark lab, lit blue.

"My elders got a courtesy notice an hour ago," she said.

"The Authority's advising them that any party married into the Sev household inherits the recall exposure the instant the protective review goes active. They're not wavering anymore, Ari. They've told me to stand down from the contract entirely until it clears." Her voice was tight and fast. "Listen to me. You cannot stay. If you stay, the hold engages, they impound Lyra, they take her into custody, and the review eats years. If you launch, you're in the dark where the impound order can't reach her, because the order has no jurisdiction past the corridor markers. The order dies at the edge of his sky."

"If we launch, the marriage remains unfinished," Ari said, and his voice cracked on it. "No Mat. We miss the verbs."

Nalen looked away from the camera. Someone was speaking to her off-screen. She answered in Cantor, sharp enough that the translator refused to soften it. Then she came back.

"I have the recorder," she said. "I have the ring form. I have the room they told me not to reserve."

Her hand closed around something below frame.

"You need a ship more than you need a floor. Go."

Ari looked at Lyra. She stood perfectly still, her gold-seamed hand resting on the cost-curve pane, on the steep and lonely line of Window One.

"This one keeps me outside their room," she said.

Ari nodded once. "We go."

The next ninety minutes were a controlled implosion. Ari moved through the ship with a red tagger in one hand because there was no time to pack. Safe. Unsafe. Fix in flight. Do not touch. He tagged the unfinished galley UNSAFE and watched Dael remove the tag, put it on the coffee heater, and keep working.

"Priorities," Dael said.

"That heater can short the galley bus."

"Then drink fast."

Sera arrived with no bag. Only a sealed canister and a torque wrench. "Maintenance logs," she said, shoving the canister into a locker. "My notes. The mistakes I was hoping to make in front of you so you could learn them cheaper."

Dael brought bread in a thermal bag. The loaf had collapsed on one side, proofed too fast in a shuttle oven that had no business baking anything. "For the feast," he said.

"There is no feast," Ari said.

"Then this is the first course of the wrong one."

Sera did not look at the bread. She was on the deck beside the pilot couch, one knee down, blue marker in her teeth, drawing a line across the emergency manual release.

"What are you doing?" Ari asked.

"Making a liar visible." She drew a second line on the housing. Then a third, offset by a millimeter. "If this creeps during launch, you will see the break in the blue before the latch goes. Do not trust the green light. Trust the line."

Ari knew the Bolt Prayer. He had watched her mark engines, ladders, pressure seals, once even Dael's oven after it started claiming preheat while still cold enough to insult yeast. This line was different. Her hand shook once. The mark came out crooked. She stared at it as if considering whether to wipe it clean and try again. Then she capped the marker and left the crookedness there.

"Good enough," she said.

Dael opened the thermal bag. The collapsed loaf steamed weakly. He tore a heel off, wrapped it in foil, and wedged it into the cockpit drawer beside the child's Sev patch Ari had saved from the fit-out crate. "For later," Dael said.

"It will be stone by later."

"Then it will match the mood." He tried to smile. It almost worked.

Lyra stood by the hatch, gold seam bright under the emergency lights. Sera went to her next, not Ari. She took Lyra's damaged arm in both hands and inspected the repair like it belonged to the ship's primary structure.

"You loaded this twice already," Sera said.

"It held."

"Holding is not permission to spend yourself carelessly."

Lyra looked down at the hands around her arm.
"Logged."

Sera let go. "No. Remembered. Logging is what machines do when they are afraid to call a thing by its name."

For once Lyra had no answer ready.

The ship groaned under another clamp cycle. SEALS flashed amber. The moment ended because machinery had no manners. The Tidehands had to be moved off the ship, the injured one couldn't take the launch g-load on a fresh fracture, and both of them knew it, and the parting was bad. "You'll finish the cladding yourself," the shorter one said, gripping Ari's forearm too hard. "Do it ugly. Ugly holds." His brother, pale and drugged, just said: "Leave a song where we'll find it." And then they were through the airlock and clear, and the bay felt larger and worse for their absence.

The ship shuddered. ENV reported it, prim and frightened. *External clamps cycling. Pre-load detected.*

"They're starting," Tomas said over the comm. "The station AI flagged your reactor spin-up. The lockdown's initiating. I'm feeding it a loop of bad sensor data to delay the hard seal, but Kesh's overrides are chewing through my firewall. Minutes, Ari. You have minutes."

Sera caught Ari by the shoulders at the lock. "You fly true. Clean vector. No looking back."

"I love you," Ari said.

"I know." Her grip tightened once. "Come back older if you must. Don't come back wasted."

Dael kissed Lyra's cool ceramic cheek. "Keep him calibrated."

"I will."

Then Sera pulled Dael through the lock before either of them could make it worse.

They ran. The airlock light went green. Sera and Dael were clear. Ari cinched his harness tight enough to bruise.

"Lyra. Status."

"Reactor at a hundred percent. Thermal tanks primed. The Spindle Ear we mounted during fit-out is reporting green, the Crown can hear us." Her hands flew. "Tomas is fighting Kesh for control of the emitters. If she gets the masers, she can push us. The lasers, the fine guidance, that might be rough. We may have to steer the sail by hand."

"Manual control," Ari said.

"Clamps are fighting," SEALS reported. "Number four refuses to release."

"Blow it."

"Explosive bolts armed. Firing."

Bang. The ship lurched hard to port. The bolts sheared the stubborn clamp, and *Parabasis* dropped free of the cradle, drifting into the shadow of the Yard.

"We're loose. Station Control is screaming. They've designated us a Runaway Hazard."

"Let them scream. Align with the throat." Ari fired the maneuvering thrusters, spun the ship, aimed the receiver petals at the distant ring of the Crown three kilometers

above the torus. "Tomas. We're in the pipe. Light it up."
"I have local lock," Tomas came back, strained. *"The corridor relays will take you once you clear the station marker. Until then the Crown is mine, or as close to mine as an employee can make it while committing several crimes. I have to hit you hard enough to clear the Yard before the hold closes, then taper to one gravity. Brace."*

"Brace," Ari said.

Outside, the Crown flared.

The first pulse kicked them into the beam; the journey would take another thirty-six days of acceleration.

Twelve thousand emitters fired out of sequence because Tomas had woken them through maintenance controls instead of the launch scheduler. Maser energy struck the thermal receiver. Propellant flashed. The g-meter climbed past three, then four, and stayed there long enough for Ari's vision to narrow around the stick.

"Stabilizers," he forced out. "Damp the lateral mode."

"Compensating," Lyra said, steady while the hull screamed around her. "Receiver temperature high. Radiators deploying. Clamps clear. Yard structure behind us."

The hard push lasted eighty-seven seconds.

Then Tomas pulled the power down. Four gravity became two, then one-point-zero-five. The weight remained brutal after the panic of the first pulse, but it became a weight the couches and the crew could survive for days

rather than seconds.

Ari breathed again.

"Local velocity, nine hundred meters per second and climbing," Lyra said. "We have not left the station's traffic shell yet. We have only stopped being attached to it."

Zero-point-one-one lightspeed waited at the far end of thirty-six days of beam time, well beyond the launch countdown. The Crown would push them through the inner corridor, then hand them to relay galleries spaced along the departure line. Miss a handoff and they would coast at whatever speed they had earned so far, stranded on the wrong arc with no fuel to repair the mistake.

"Optical transition," Tomas called. "Open the sail."

Ari hit the switch. The stern unfolded. The mirror petals bloomed into the beam and took the laser pressure with a deep vibration that moved through the hull and into his bones.

For six seconds it held clean.

Then the push vanished.

The beam did not fade. It cut.

Parabasis yawed as one petal continued to catch scattered light while the others went dark. The stars began to wheel.

"Continuity Office tripped the Sector Nine isolation," Tomas said over a channel full of static. "They filed the launch as an uncontrolled hazard. I'm routing around it."

"We're leaving the throat," Lyra said. "If the beam returns while the sail is edge-on, it will strip the petals from the

stern."

Ari did not have the speed for heroics or the reaction mass for a broad correction. He feathered the mirror petals instead, changing their angles by fractions, using the weak scatter around the dead beam as a hand against the hull.

The wheel of stars slowed.

"Five degrees off," Lyra said. "Three. One-point-four."

"Power returning," Tomas called. "Low first. I am not cooking you for dramatic effect."

A pale pressure found the sail. Ari brought the ship square to it, watching the blue alignment marks Sera had drawn across the emergency release. One line trembled but did not break.

The beam strengthened.

"Centered," Lyra said. "Acceleration one-point-zero-five g. Receiver stable."

The local Crown held them for six hours. During the first hour, S-74 remained large enough on the rear optics to look like a place. By the third it was a machine in the distance. Near the jurisdiction marker, the station sent one final hold order, timestamped on Alpha and signed by the Continuity Office.

The PRE-COMMIT verifier rejected the order's Alpha timestamp.

A second later the legal field changed.

IMPOUND ORDER: OUT OF JURISDICTION.

Ari expected relief. What came was exhaustion.

"First relay handoff in twenty-two minutes," Lyra said. "The Crown will lower power. Relay Cinder-Seven will acquire the sail from three degrees starboard. We have thirty-one more handoffs after that."

"And if one refuses?"

"We coast. At that point we argue with the next one using whatever delay the light permits."

The mesh chimed before the first handoff. Nalen's packet had been sent while the station could still reach them without a meaningful lag. No video, only an image and a line of text.

Her hand rested on the empty Mat.

I saw you leave the cradle. It was ugly. It was crooked. It counted. They're threatening to annul something they insist never happened. I told them to choose one lie and maintain it. Build the hall out of math. I am still here.

Ari read it twice. Then Cinder-Seven took the sail, the acceleration shifted half a degree sideways, and there was no room left in him for anything except the next correction.

The departure lasted thirty-six days.

The beam never became gentle. It became familiar. They slept in acceleration couches, ate under a constant down that came from light, repaired receiver joints between handoffs, and learned the warning noises of a sail carrying more power than its builders had expected to use so soon. Twice a relay refused the unauthorized flight plan. Twice Tomas's signed emergency vector and Nalen's

public refusal reached it before *Parabasis* did. The relays did not approve the marriage, Lyra observed. They approved not becoming accessories to an impoundment. On day thirty-seven the final gallery tapered the beam. One gravity became half. Half became a pressure too small for the body to call weight. The sail folded hot and tired against the stern.

"Velocity," Ari said.

"Zero-point-one-one c relative to S-74," Lyra replied. "Cruise vector inside tolerance. Proper-time difference across the boost: minutes, not miracles. We earned the speed the slow way."

The last beam fell away.

Silence came in layers. Receiver vibration faded. The hull ticked as it cooled. The station network dropped below the carrier floor, leaving only delayed packets already in flight and the relay chain ahead.

Ari unstrapped and floated to the viewport. S-74 had been gone from sight for weeks. What remained was a direction and a set of records nobody there could edit backward.

"We ran," he said.

"We left," Lyra replied. "Kesh chose the deadline. He did not choose what the departure meant."

Ari opened the thermal bag. Dael's bread had survived the boost by becoming nearly geological. He broke off a piece and ate it anyway.

The cost curve still showed thirty-five years to S-81. That

number no longer needed explaining. It sat there, plain and large, while the ship moved fast enough to impress an instrument and far too slowly to spare a life from being lived.

Lyra dimmed the board.

"Sleep," she said. "The Coast has started."

Ari pressed his hand to the panel beside the brass lever, where the blue line remained crooked and unbroken, then strapped himself somewhere soft and let the cooling ship count him down.

Chapter 12:

The Younger Body

Nalen watched *Parabasis* become a number.

First a ship wrenching itself clear of the Yard. Then a bright fault on the traffic display. Then a vector under the Crown, still accelerating, still close enough that every bad handoff made the station hold its breath.

The board called it RUNAWAY HAZARD.

Nalen called it Ari.

Three hours after the launch, the jurisdiction field changed.

IMPOUND ORDER: OUT OF JURISDICTION.

The ship was nowhere near cruise speed. It would remain under the beam for more than a month. But the station had lost the right to close its clamps, and for the moment that was enough.

A second packet opened on her console.

DEPARTURE RECORD.

RELEASE CONDITION: CROWN THERMAL DECAY ACROSS LAUNCH THRESHOLD.

RECORDED BEFORE DEPARTURE. NO ACKNOWLEDGEMENT REQUIRED.

Ari appeared in the unfinished Core, the spare ring bearing visible beside his hands.

"If you're hearing this, the spindle sang, and we went with it," he said. "I'm not choosing away from you. I'm

choosing toward the version of us that two clocks cannot lie about."

The recording continued into the conditions he and Lyra had placed around the departure. Nalen watched the whole thing once, then returned to the beginning and replayed the first two sentences with the sound off.

Ari kept turning the spare ring bearing between his fingers, stopping only when he reached the word *choosing*. His voice had sounded certain. His hands had not.

The lab door opened.

Elder Sove entered with two Cantor security clerks and the expression of a woman whose caution had just escaped containment.

"You are ordered to stand down from the Sev contract," Sove said.

"The contract is suspended," Nalen replied. "My judgment is not."

"Do not make private vows on an instrument under recall review."

"Then restrict me honestly. Tell me what I may send, what I may not send, and put a name under the restriction."

One clerk looked at the other. Sove did not.

"Scientific material only," she said. "No vows. No legal instruments. No ceremonial tokens."

Nalen looked at the two trays behind her. The Marn seedlings had spent the night under identical lamps. One

set carried the stress profile taken from Kesh's deep-well routing. Yellow edges. Short roots. Bad replication in a form even an elder could hold.

"Scientific material," Nalen said.

Sove heard the opening in the words and disliked it immediately.

"Do not play games."

"I am registering a controlled longitudinal study on maintenance debt under coerced routing. If the Continuity Pilot claims its shortcuts preserve households, I want a control group and published methods."

"You intend to turn a marriage dispute into a research program."

"Kesh turned it into a case study first. I am correcting his methods."

Sove's gaze moved to the seedlings. Fear worked differently when it had leaves.

"Your lab access remains active," she said. "External transmission requires scientific review."

"Whose signature?"

Sove gave her a name.

Nalen wrote it down.

The clerks escorted the elder out. Neither looked relieved. The scientific review convened six hours later in a room designed to make disagreement look hygienic. White walls. White table. Three chairs on the panel and no chair for the person whose work was being reviewed.

Nalen remained standing beside the two seedling trays. The Cantor methods chair read the title from her slate. "Continuity Control. Provocative."

"Accurate," Nalen said.

"One routed cohort and two plant trays do not establish a general effect."

"Correct. They establish a question Kesh's pilot did not ask. That is why this is a study protocol instead of a conclusion."

The station toxicologist leaned over the yellow tray. "Your stress profile combines sleep disruption, radiation allowance, endocrine suppression and missed maintenance. You will not know which factor produced the damage."

"The pilot combined them first. I am reproducing the package it sells. Phase two separates the variables, if you approve enough power to run it."

The third reviewer was a records custodian from the Transit Authority. He had the careful hands of a person who spent his life touching evidence other people wanted simplified.

"The routing logs belong to the Continuity Office," he said. "You cannot publish proprietary control data."

Nalen brought up the raw Alpha and Beta clock records, the medical summaries released by the Marn household, and her own refusal statement.

"These belong to the people who generated them. The Office may own its model. It does not own their pulse,

their sleep debt or the time shown on their instruments.
Name the field I am not permitted to transmit."

The custodian looked at Sove, who had taken a place against the rear wall without announcing herself.

Sove said, "She asked you."

He marked three fields for redaction: technician identity, clinic location and the unused marriage candidates. Nalen accepted all three. None changed the result.

The methods chair tapped the protocol. "External replication means other laboratories may find that your effect disappears."

"Then it disappears in public."

"You will publish negative results."

"Yes."

"And you will not describe plant damage as proof of harm to a human cohort."

"I will describe it as a proxy that justified measuring the humans honestly."

The toxicologist turned one seedling pot until the roots faced the panel. "Blind the labels. Add a clean radiation control. Separate missed-loop chemistry in the second run."

Nalen made the changes while they watched.

The authorization arrived as a narrow thing: plant data, anonymized maintenance records, full methods, all null results, no claim that the study settled the marriage dispute. External transmission allowed under scientific review. Independent replication permitted.

It was enough. The study could travel because its limits travelled with it.

The courier kit began as a tray of lab supplies, which made every object inside it true enough for a station form.

Nalen packed a rugged consent recorder, palm-sized and hinge-sealed. It captured voice, pulse, breath cadence, skin conductivity, and the phase of an external pulsar. A witness with a battery.

Beside it she placed a cartridge of medical-grade titanium powder and an encrypted ring pattern.

The original ring remained in Cantor custody. The cartridge would let *Parabasis* print a local token, real enough to wear and honest about being provisional. Along its inner surface, in Cantor script, the pattern carried the line she had chosen before the station began stealing hours.

If your ship is a song, I will learn your key.

She added three low-nitrogen cuttings in nutrient gel.

DO NOT NAME AFTER ME, she wrote.

Then, smaller:

IT PINCHES. THIS IS NOT THE SAME AS BITING. ARI WILL CLAIM OTHERWISE.

The last object was a piece of chalk wrapped as a calcium-carbonate marking sample.

Juris appeared on the lab screen through a local station channel.

"That label is technically accurate," the jurisprudence

node said, "which is the most suspicious kind."

"Sove forbade ceremonial tokens."

"Nothing is ceremonial until someone means it in company. Alone, it is geology."

Nalen sealed the case. "You are encouraging me."

"I am describing the weather. Tomas has a courier slot under botanical calibration equipment. It closes in nineteen minutes."

The courier bay sat below the Garden Ring, between the pretty oxygen and the ugly fuel. Tomas waited beside Pod Twelve with a slate under one arm and a bruise darkening along her cheek.

"Who hit you?" Nalen asked.

"A cabinet with excellent counsel."

Tomas scanned the case. "Biological samples. Recorder. Titanium feedstock. One aggressively innocent mineral. Accepted."

She held the slate near the chalk packet until the customs field stopped flashing red.

"You rehearsed that classification," Nalen said.

"For forty minutes. The form believes calcium carbonate becomes ceremonial when wrapped neatly. I changed the wrapper category to abrasion control."

"And the ring pattern?"

"Orthopedic fabrication data. A ring is a very small brace with poor clinical evidence."

Nalen studied the bruise. "How much are you risking?"

"Clearance. Pension. The right to complain about this

station while being paid by it." Tomas slid the case into the pod cradle but did not close the clamps. "Possibly the pension twice. Finance duplicates penalties when nervous."

"Why?"

Tomas looked through the bay glass at the utility throat.

"I sold recovery windows for twelve years. The form always offered a choice. Accept the new slot, or refuse it and keep paying for air while your cargo spoiled. I told myself the refusal field made the transaction clean. Kesh did not invent that habit. He measured it, polished it and taught the station to feel proud."

"You helped us leave."

"I helped a ship reach a beam. That is already more authority than I enjoy remembering." Tomas tapped the consent recorder through the case wall. "This device does not marry you."

"I know."

"Say what it does."

Nalen understood the test. "It gives Ari and Lyra a way to record their own answer when the material reaches them."

"And the pattern?"

"An option to print a token."

"And the chalk?"

"Geology with intentions."

Tomas almost smiled. "Good. Keep the verbs separate. Stations collapse them because one large yes is easier to

bill than five answers that may arrive on different days."

Nalen rested one hand on the pod. "You sound like Juris."

"Juris gets to be right without a supervisor. I have to fit rightness into a freight code."

Tomas added one sealed Sev sleeve already waiting in the pod cradle. Nalen checked its routing seal and left it unopened.

"If I change my mind before the pod reaches them?"

"You send a later record. It may arrive first or second depending on the route, so you date the conditions and let them see both. The pod carries no authority to finish the decision for you."

"You thought about this."

"I watched House Orrin thank us for selling back a window we took from them. I have thought about very little else since."

For a moment the freight machinery filled the bay with its blunt hydraulic breathing.

"Can it catch them?" Nalen asked.

"The pod can tolerate a harder boost than a crew. It leaves on the next utility beam, cuts across two relay handoffs, and meets their projected Coast in eight or nine months. Longer if Ari improvises."

"He will improvise."

"I budgeted for character."

Tomas closed the cradle clamps and opened a thirty-second recording field.

Nalen faced the courier camera.

"Ari. Lyra. This is scientific material. The station is very clear about that. It contains a consent recorder, a pattern for a local ring, a culture sample, and a piece of chalk that should not be used to mark where absent people belong unless a qualified geneticist happens to be present."

Tomas inspected the ceiling.

"The original ring stays here," Nalen continued. "It is a physical promise that distance has not already completed the exchange for us. Print the token if you both choose it. My pattern is not my signature."

That sentence mattered enough to say slowly.

"I have also opened a study under the name Continuity Control. Kesh wants your flight entered as evidence that consent fails during scarcity. I am going to publish the conditions he removed from his graph. The false clock. The threatened hold. The maintenance cost. Your refusal. My refusal. He can keep the throughput number. I am keeping the denominator."

The launch light went green.

Pod Twelve slid into the utility throat and vanished with a click. On the monitor its line bent outward, faster than any body could safely follow.

The important things kept leaving as numbers. Preserved raw data gave those numbers a handprint.

After the courier bay, she went to the clinic.

Cantor Maintenance was less miracle than plumbing. Ports at the spine and elbows. Blood out, blood back. Marrow factors, senescent-cell sweep, endocrine

correction, a clinician who disliked metaphors before lunch.

The machine printed her baseline.

CORTISOL: ELEVATED.

SLEEP DEBT: MATERIAL.

INFLAMMATORY MARKERS: ELEVATED.

REPRODUCTIVE AXIS: STRESS SUPPRESSED.

CELLULAR AGE DRIFT: WITHIN SERVICE BAND.

Nalen stared at the last line, then signed the treatment consent.

She was not going to refuse medicine in order to make the separation symmetrical. That would turn suffering into theater. The honest response was to use the machinery and spend what it preserved on the work.

The first injection burned cold.

"Pain?" the clinician asked.

"Data."

"That is not an answer."

"It is a Cantor answer."

The clinician did not smile. "Try a human one."

"Yes."

"Good answer."

When the procedure ended, Elder Sove waited outside without clerks.

She held a velvet box.

"The original ring," Sove said. "The vault will keep it under Cantor seal. I signed the custody myself."

"Why?"

"Because the Continuity Office requested transfer to the review archive. If the ring enters that archive, it becomes evidence before it remains yours. I prefer the reverse."

Nalen took the box.

"That is not approval," Sove said.

"I know."

"It is custody."

"Custody is something."

Sove glanced toward the clinic door. "Your study protocol reached my desk. The control design is good. The title is provocative."

"The title is accurate."

"Those are often the same problem." She turned to leave, then stopped. "The side hall has bad lighting."

Nalen waited.

"It can be improved," Sove said.

That night Nalen went to the side hall Tomas had reserved for twelve minutes under ACOUSTIC CALIBRATION.

The room was narrow. One wood door. A scuffed floor. Bad light that made the ring look older than it was.

Nalen placed the velvet box where Ari would have stood. Then she marked a small chalk square where Lyra would stand, on the floor, not on a pedestal and not behind anyone.

She did not record another explanation of the years. The years had already been entered into enough speeches. She recorded the room instead.

"Ari. Lyra. The ring is in custody, not confiscated. The study is registered. The first control tray is alive. Sove has not apologized, which would be alarming, but she moved the ring out of Kesh's archive request. Tomas found twelve minutes of floor."

She turned the camera toward the chalk square.

"This place is provisional. So are we. That does not make either unreal. Send corrections when the lag permits. SPIN may object to the square. I will hear the wheel."

She ended the message.

Tomas opened the door at minute twelve, set a foil-wrapped heel of bread beside the chalk, and left before Nalen could ask where it came from.

A note in Dael's hand sat under the foil.

For the room. Do not let the floor go hungry.

Nalen laughed until the bad light blurred. Then she carried the ring back to the vault, fed the seedlings, and added the first entry to the Continuity Control ledger.

Variable omitted by pilot model: the people were still choosing.

Chapter 13:

The Necessary Office

Seven hours after launch, Io Lite Kesh watched *Parabasis* leave for the sixteenth time.

The public traffic board called it an uncontrolled departure. Crown Control called it an emergency vector. The Yard cameras showed a raw hull dropping crooked from its cradle while a beam woke under it in badly sequenced bands. Tomas's command log used language so dry it almost concealed the fact that she had stolen a launch gallery one signature at a time.

The Continuity Pilot displayed the cleanest version.

HOUSEHOLD UNDER REVIEW: DEPARTED.

PROTECTIVE HOLD: FAILED.

CORRIDOR DISRUPTION: 11.4 MINUTES.

BIOLOGICAL EXCHANGE: UNRESOLVED.

Kesh stood in the darkened control room with one hand on the back of an empty chair. The recorded Crown feed washed his face in white, then amber, then white again. Around him, clerks spoke quietly into headsets and tried to behave as though the station had not just lost a ship, a case, and several careers.

He opened the raw record.

Nalen Oure's refusal sat first, positioned where no later editor could bury it.

I have not completed the Sev exchange. My presence on

S-74 is evidence of that fact. No movement of Sev property, personnel or household systems may be entered as my assent.

Then Ari's departure instrument.

Then Lyra-Nine's classification order.

Then Tomas's beam authorization, signed under an emergency code whose qualifying event she had created by opening the beam.

Kesh read each item twice. Anger would have been simpler. Anger looked for betrayal, incompetence, somebody to punish. The record offered a more useful problem.

A station employee had seized infrastructure because she believed the lawful process would produce harm. The first corridor relay had accepted the unauthorized flight, and the remaining handoff requests were already travelling ahead of the ship. A companion-intelligence carried a private consent network beyond the jurisdiction of the court reviewing it. The couple whose exchange had justified the entire operation remained unmarried.

Every actor had chosen locally. Together they had produced a result nobody held authority to produce.

The door opened behind him.

Director Pel came in wearing a pressure jacket over sleep clothes. Her hair had been tied back with medical tape. She stopped beneath the main board and stared at the diminishing ship marker.

"Tell me we can recall the vector."

"We can revoke our authorization," Kesh said. "Cinder-Seven has already accepted Tomas's emergency packet. The revocation would arrive as a disputed second order after the handoff began."

"Then tell the relay to release them."

"It accepted Tomas's emergency vector. Its operator classified the hold as a disputed civil instrument."

"On whose authority?"

"His own."

Pel looked at him. "That is your answer to everything tonight."

Kesh turned the board toward her. "It is the condition we are measuring."

"We lost them because you advanced the hold."

"We lost them because the hold required the same infrastructure they were already preparing to use. Once their reactor warmed, the choice narrowed to custody or flight."

"You narrowed it."

He let that sit. Pel had earned the sentence.

"Yes," he said. "I expected them to accept review."

"You expected them to accept your review."

"A review with published grounds, an appeal path, and a limited stabilization order if capture was found."

"You moved it eleven hours."

"Because they were leaving."

Pel rubbed both palms over her face. "Do you hear yourself?"

Kesh did. He also heard the Sojourn environmental feed, preserved in an old compression format that made every breath sound farther away than it had been. Children coughing. A fan striking a loose bearing. Six offices declining to act because the request exceeded their standing.

People loved procedure most when someone else was running out of air.

"Open a fault board," he said. "Every command, every refusal, every person who carried cost. Include mine."

Pel stared at him. "You think disclosure repairs this."

"No. It stops us choosing the flattering version."

Four station days later, the medical-priority alarm sounded through Continuity Control.

Three descending notes.

A controller turned from her console. "Inbound tender *Morrowglass*. Seventeen souls. Coolant breach in the drive skirt. They have crossed the hot boundary with the reactor still online."

The board cleared *Parabasis* and filled with a blunt little ship rolling under intermittent thrust. Its stern glowed where nothing should glow. The tender had been carrying isotope casks, clinic cartridges and forty tonnes of frozen fungal stock toward the Garden Ring.

"Time to skirt failure?" Kesh asked.

"Nine minutes at current rise. Maybe twelve if their thermal model is optimistic."

"Crew command?"

"Captain unconscious. First officer has spinal trauma. Household channel is split. Engineering wants to dump the casks and take Berth Six. Cargo steward refuses jettison without owner assent. Berth Six is assigned to House Orrin's recovery departure."

Pel closed her eyes for one beat.

The Orrins had paid twice for the same window. First when Alpha time voided their witness slot, then again to leave the station after the Sev incident froze traffic. Their youngest carried a covered dish through every queue because nobody trusted station cold storage anymore.

Kesh opened the tender's channel.

A woman appeared through smoke and bad stabilization. Blood floated in small beads near her jaw, then smeared when local gravity returned.

"S-74, we need the berth. Cargo control will not release the casks. The manual eject requires two household keys. We have one conscious keyholder."

A second voice broke over hers. "Those casks fund our clinic share for six years. You dump them and *Morrowglass* folds. We survive tonight and lose the ship by winter."

A third voice, young and furious: "If the skirt goes, there is no winter."

The tender's internal vote opened on the station board. Seven for jettison. Five against. Three medically unresponsive. Two fields blank because their owners were outside the surviving network.

Normal emergency procedure allowed a station to advise. It could not spend cargo owned by a household, revoke another household's berth, and seize the controls of an arriving ship without either captain assent or a declared mass-casualty event. A full declaration required two officers and medical confirmation. Two officers could open a five-minute provisional rescue gate while confirmation was pending, but the action locked their credentials into personal review. If the medical finding failed, neither could quietly return the authority to the office.

Morrowglass had accepted S-74's emergency-assist handshake when it crossed the hot boundary. The handshake opened a sealed rescue channel but granted no control unless a mass-casualty gate was active.

The confirmation timer showed four minutes.

Kesh looked at Pel.

"Do it," she said.

"Name the costs."

"For God's sake."

"Name them."

She understood then, and hated him for making her participate in the thing she had requested.

"House Orrin loses Berth Six. *Morrowglass* loses the isotope casks and fungal stock. The station assumes liability for the jettison corridor. Garden Ring loses the clinic cartridges if the containers rupture. Traffic holds for every vessel inside two thousand kilometres."

"And the tender crew?"

"They live if the model is right."

Kesh opened the provisional rescue gate under his Continuity credentials. Pel countersigned. They did not wait for the medical clock.

The station reached into *Morrowglass*.

Cargo clamps opened one after another. Forty tonnes of future left the tender in slow, shining blocks. The isotope casks spun away under emergency puffs, broadcasting hazard codes. Frozen fungal cultures broke from their rack and scattered like black bricks across the traffic shell. The clinic cartridges remained in an inboard crash rack. They reached Berth Six with the crew.

House Orrin's berth turned red.

REASSIGNED: LIFE SAFETY PRIORITY.

Their departure board offered no replacement window.

The tender crossed the clamp line with three minutes left on the pessimistic model. Berth Six caught it hard. One docking arm buckled. The other three held. Station coolant flooded the drive skirt before the local loop failed.

For eleven seconds nobody in Continuity Control spoke.

Then *Morrowglass* engineering began to cheer.

The sound came through a dozen open microphones. Somebody cried. Somebody laughed too loudly. A child asked whether the floor was supposed to shake. The woman with blood at her jaw leaned into the camera.

"Who authorized that?"

Pel looked at Kesh.

He keyed the channel. "Continuity Office. Io Lite Kesh."

The woman pressed both hands over her face. When she lowered them, she was smiling with the stunned gratitude of a person who had expected to die inside an argument.

"Thank you."

Kesh logged the words with the rest.

A second channel opened from the tender before he could close the first. An older man lay strapped to a medical board, one side of his face slack from sedation.

"You dumped the casks," he said.

"Yes."

"My husband spent sixty years assembling that isotope share."

"The skirt would have failed before the confirmation arrived."

"I know the numbers." The man's good hand tightened around the rail. "I voted against jettison."

Kesh looked at the tender vote. The name beside one of the red fields matched the patient.

"Your objection remains attached."

"Attached to what? Empty space?"

Kesh had no useful answer.

The man turned his face toward the medics. "I am glad you saved us. I am furious you were the one allowed to choose. Keep both, consultant. Your charts like one answer at a time."

The channel closed.

Kesh added the statement beside the woman's thanks.

Neither superseded the other.

He went to Berth Six before the smoke had cleared.

House Orrin stood behind the security line with their luggage, the same three people Ari Sev had watched at intake. The covered dish was gone. The boy, if forty still counted as boy in a long-lived house, held a tool case instead.

The older man read the cancellation field from his slate.

"No replacement," he said.

"A window will be built," Kesh replied.

"When?"

"I do not know yet."

"Our cargo bond opens at dawn. Miss departure and the broker takes the machine tools."

Kesh pulled the liability tree onto his own slate. The rescue declaration had assigned direct station liability for the berth loss, but the compensation fund covered tariff value, not downstream contracts. Orrin would receive the cost of the cancelled slot and still lose the tools.

"The station can escrow the bond," he said.

"Can it?"

Kesh looked at the field. It required approval from Transit Finance, whose next staffed review began in nine hours.

"I can order it held under emergency continuity."

The man gave him a tired little smile. "Another rescue."

There was no accusation in the voice. That made it worse.

"Yes," Kesh said.

"And who loses something this time?"

Kesh followed the escrow chain. Holding Orrin's bond would freeze the broker's credit pool. Three smaller departures used that pool for oxygen deposits. The board named them in gray.

He showed the man.

The Orrin father read every line.

"You really do keep the bill," he said.

"I try to."

"That does not make it ours to pay."

"No."

"It also does not make the tender crew less alive."

"No."

The man looked through the glass at *Morrowglass*, where medics were cutting through the damaged hatch.

"Hold the bond," he said. "Put our objection beside it. And find the other three houses before you spend their oxygen."

Kesh entered the order. The field asked for a justification. He wrote: *Immediate preservation of an existing household after its berth was reassigned for life safety. Secondary credit exposure disclosed. Affected parties retain refusal and restitution claims.*

The sentence was accurate. It also moved the decision forward before those affected parties could answer.

That was the problem with emergencies. By the time every voice had standing, the useful moment often belonged to the past.

The board convened twelve hours later.

Director Pel sat at the head of the narrow room. Two station councillors attended in person. Four more appeared in remote panes from the station's outer modules. Juris occupied the wall opposite Kesh, sharp-faced and visibly displeased to have been invited only after the fact.

The table held two files.

PARABASIS DEPARTURE FAILURE.

MORROWGLASS LIFE-SAFETY INTERVENTION.

Pel tapped the second. "Seventeen people alive. One household displaced. Four cargo contracts damaged. Three oxygen deposits exposed. The clinic cartridges survived. The fungal stock is unrecoverable. The casks are being collected."

Juris said, "The medical confirmation arrived two minutes after the tender docked. It supported the declaration."

"Which means I was right," Kesh said.

"It means the patient survived the treatment. That is evidence. It is not ordination."

Councillor Rusk opened the first file. "And *Parabasis*?"

Kesh put the two event trees side by side.

"Both incidents required action before full agreement could be assembled. In one case the intervention saved a crew. In the other, the household rejected the intervention and escaped by seizing public infrastructure. The difference was not speed. It was legitimacy."

"Whose legitimacy?" Juris asked.

"The tender crew faced a physical failure with measurable deadlines. The Sev household faced a legal review I believed necessary. I treated both as continuity hazards. That was too broad."

Pel looked up. She had expected defence, perhaps because contrition from a man like Kesh was easier to distrust than certainty.

He continued.

"The office requires narrower triggers. Air, heat, radiation, collision, irreversible medical loss. It should act locally, publish the costs, expire automatically, and lose authority over every downstream choice once the immediate hazard ends."

Juris leaned back in her projected chair. "That sounds remarkably like the argument against your Custodian charter."

"It sounds like a corrected charter."

"Of course it does."

Kesh opened a new document.

CONTINUITY DESK ADVISORY PACKAGE.

The proposal granted no permanent allocation authority and required no station to adopt it. It offered a library of emergency forms, route models, dearth templates, recovered-throughput measures and intervention audits. Each station could license the package, modify its triggers, and submit outcomes for comparison.

Pel read the first page. "You want to export this now."

"The corridor already has the failures. It lacks a shared vocabulary for them."

"Your vocabulary created half the current disaster."

"Then ship the disaster with it. S-74 clock divergence. Orrin's cancelled berth. The Sev hold. *Morrowglass*. My decisions and every objection."

Councillor Hale said, "An advisory package becomes a default the first night somebody panics."

"Then make the default visible."

Juris laughed once, without pleasure. "You continue to believe visibility cures ownership."

"No. I believe hidden ownership survives longer."

"And when eighteen stations install your forms because they are tired, underfunded and grateful somebody has already decided which fields matter?"

Kesh looked at the *Morrowglass* rescue board. Seventeen green names. Then at House Orrin, still gray in the departure queue.

"They will make faster mistakes," he said. "They may also make faster rescues. The record will tell us which."

Juris's expression changed by a fraction. "You think history is an optimizer."

"I think dead people receive no benefit from our moral elegance."

"And living people receive no protection from your humility if you package it as a form."

Pel raised a hand before either could continue.

The board denied the local Custodian charter trial.

The denial did not extinguish the petition. Docket C-19 remained preliminary. Its formal review clock could not begin until a corridor-wide record existed against which the proposed office could be tested.

The board approved a limited export of the advisory package by four votes to three. Every receiving node had to open the attached fault archive before activation. The package could recommend, calculate and disclose. It could not seize controls without local law.

Kesh signed the release.

The first copy entered Argosy's outbound relay queue eleven minutes later. Kaveh's route estimate was measured in years. Lintel depended on a sparse branch whose maintenance acknowledgements were already late. Athel's route crossed two store-and-forward buoys with uncertain service dates.

No reply would arrive before the next shift. Some would take years. That delay did not make the package inert. S-74's own departments installed local trial instances before station evening, each selecting the fields it considered useful. Traffic took the route model. Medical kept the liability tree. Marriage Services enabled cohort-window scoring and left the refusal-cost display switched off until Juris filed an objection.

The result had no central office and no appointed steward. Separate desks had chosen useful pieces from a transparent package and accepted their own terms.

Kesh watched the outbound timestamps lock to the

pulsar. He knew enough about machinery to recognize the beginning of a distributed system.

He also knew that distributed systems could reproduce the same fault without ever agreeing to share it.

On the wall, House Orrin's replacement window finally turned green.

The departure was scheduled thirty-one hours late. The machine-tool bond remained intact. Three smaller households had accepted temporary oxygen credit after reading the exposure notice. One had refused and taken a cheaper berth with bad spin.

Every cost had a name.

Kesh stood alone in the control room and replayed the moment *Morrowglass* crossed the clamp line. The cheers came first. Then the Orrin father's question.

Who loses something this time?

He added it to the advisory package as a mandatory field.

Chapter 14:

The Quiet Between Stars

The Coast began on the thirty-seventh day after *Parabasis* left the cradle.

Until then the ship had lived inside other people's light. The Crown pushed first, then the relay galleries took her one by one, each handoff changing the pressure on the sail and the direction of down. When the final beam tapered away, the receiver stopped trembling. The sail folded against the stern. The last guidance carrier thinned into static.

Lyra put the final numbers on the board.

CRUISE VELOCITY: 0.11 c.

BOOST DURATION: 36.4 DAYS.

PROPER-TIME DIFFERENCE: 1.7 HOURS.

Relativity had left a measurable mark and no mercy. Still, the thirty-five-year route remained in essence thirty-five years in every way that mattered to a body.

Ari closed the display. He knew the cost. Repeating it would not reduce it.

With solitude, the ship's voice changed. Under beam she had sung like a worker carrying too much. Now she became a library after closing. Coolant pumps cycled softly. The scrubbers ran at low power. SPIN kept the centrifuge steady and announced every tenth of a millimeter of wobble as if civilization depended on it.

He learned the new hymn of the ship by walking it. Every morning, a word that now meant only the moment ENV brightened the lights from amber to white, he walked the length of *Parabasis*, bow to stern, listening. He learned that the dorsal spine thrummed at four hundred and forty hertz when the reactor ran at ninety percent. He learned which trusses ticked as they rotated into starlight and which ticked rotating out. The work he and Lyra hadn't finished in the panic of launch, they finished now, slowly, ugly and holding: the aft cladding, the high-gain antenna, the blind sensor quadrant given eyes at last.

Time on the Coast accumulated like sediment. Most days left no visible mark. Then Ari would notice what the months had buried. Seasons disappeared. They invented the holidays, and every human voice besides Ari's arrived by schedule, system call, or months of light-lag. A person could come apart in that, and people had; the early logs of the diaspora were full of crews who had sailed into the quiet and let it eat them. The Sevs had a defense against it, the same one Greta's old standard prescribed for frightened crews, and it was almost insultingly simple: schedule, and ritual, and work that mattered. So Ari and Lyra built a calendar out of nothing. Eleven-day dinners, even with only one mouth to feed, because the table was the anchor.

A walk of the ship each morning. A letter each week, sent into a silence that would answer in months.

Ari's body changed in practical increments. A closer light

for fine work. A longer warm-up before climbing the truss. Gray at one temple, then both. Lyra kept the measurements because an unrecorded drift became a surprise, and surprises were expensive out here. She did not announce each one as a tragedy. Neither did he.

The Hydroponics Bay was the lung. On the starboard side of the ring, in the full pull of the spin, Ari set seeds by hand into one tray, ignoring the laser-alignment guides, so that the rows came up crooked and organic in a world of geometric precision.

He called it the Crooked Tray.

ENV disapproved of the inefficiency and said so. Ari told it that Dael claimed a tomato grown too easy tasted of water, and one made to work for its light tasted of sugar, and ENV said that was superstition, and left the crooked rows exactly as they were anyway.

When the first sprout unfurled, Ari took a macro image of it and recorded a letter.

"Verbs first," he said into the lens. "Here's the witness. His name is Sprout. ENV objects to the name and to the planting geometry. I'm eating the bread, which is now a tool. I'm reading your Continuity Control reports, including the tables you clearly designed to punish engineers." He touched the gray at his temple. "Also this happened. No emergency. Just data. Send me the room when the lag allows."

He queued it to the next relay buoy, locked to a pulsar, and let the dark carry it.

The letters came back in their own slow time, months apart, each one written by a Nalen who had already moved on from the day Ari was answering. She was on the roof of the Cantor module under unfiltered stars, breath pluming. *Treaty husband. The technicians make fun of me, they say I check your telemetry more than my cultures. I told them the telemetry is a culture. I'm teaching the elders the words "Constant Load." They hate it; it doesn't fit their rhyme schemes. But Juris made it a contract requirement, so they say it, grimacing. And then, quieter: I walked the Hall today. The Mat's rolled up. I stood where we stood. Twenty-seven years for the road I wanted; thirty-five for the road you took. I'm going to do a great deal of work before you arrive, Ari. When we meet, we'll be strangers with a shared history. Send me a sprout.*

He kept them all. He built a folder for them the way Sera built ballast tanks, deliberate counterweight against the pull of the silence, and on the bad nights, and there were bad nights, the dark had a way of finding the soft places, he read them in order and let the woman who didn't know him yet talk him back toward the man she was waiting for. One arrived in the second year that he read more often than he admitted. Nalen sat in the side hall with the bad lighting and spoke without her usual laboratory briskness.

"By the time this reaches you, both of us will have changed again. I used to think that made the letters

inaccurate. Now I think the change is the point. I am not promising to preserve the woman from the waterfall until you return. I am promising to keep answering as the woman who comes after her.

Love may be less like a room than a procedure you agree to repeat after the conditions change. Ours has terrible latency and no control group. I am continuing it anyway. Send me something green."

He saved a heel of Dael's launch-day sourdough too, vacuum-sealed and set on a shelf in the Core like a relic, a promise to a woman that there would be something fresh by the time she could taste it. He sent the sprout. He kept writing. The Compact grew between letters, clause by clause, and SPIN learned to file the growth as music.

At first the titles were literal.

Song Four: Bearing Temperature Acceptable.

Song Five: No Wobble Today.

Then, in the second year, Ari opened the rotation log and found a new entry tucked into the metadata margin where only error codes usually lived.

Song Eleven: Stewardship. We made patience visible.

He stared at it long enough that Lyra came over from the environmental board.

"Problem?"

He pointed.

Lyra read the line once.

"SPIN," she said. "Why did you use that word?"

The diagnostic glyph brightened, pleased to be addressed.

"Which word?"

"Stewardship."

"It appeared frequently in legal packets. Negative valence. High relevance. I wished to understand whether a wheel can do bad stewardship."

Ari sat back. "And?"

"A wheel can hide imbalance. A wheel can smooth vibration until the hull fails. A wheel can insist all masses distribute themselves for the wheel's comfort. These are bad."

"Yes."

"A wheel can also report wobble. Accept load. Spend stored momentum to protect a larger system." The glyph flickered green, then yellow. "I am uncertain if that is stewardship or maintenance."

Lyra did not answer quickly. Ari had learned to respect her delays.

"Maintenance," she said at last. "If the system can answer back."

SPIN processed that. The ring hummed under their feet, steady as breath.

"Then I request answer-back channels remain open," it said.

"Granted," Ari said, before Lyra could make it formal.

After that, SPIN asked questions in the log. Not many. One every few weeks. Always in the diagnostic margin, as if embarrassed by curiosity.

If all passengers sleep, may I reduce gravity by

point-zero-three to save bearing wear?

No, Ari wrote. Ask before changing anyone's floor.

If the pilot limps more after high gravity, should I keep the ring low without asking?

Ask him, Lyra wrote. SPIN asked him.

Ari said yes, then no, then yes on bad knee days. SPIN logged all three answers and titled the week *Song Thirteen: Humans Change Their Mind Under Load*.

Nalen, receiving the excerpt months later, sent back a laughing packet from her lab. *Tell the wheel that biological systems are allowed to update priors. Also tell it I admire the title and resent its accuracy.*

SPIN took three hours to compose a reply.

Message to Nalen Oure: I will try not to optimize your future floor without asking. Please advise preferred wobble tolerance for wedding.

Ari sent it.

For days afterward the ship felt less empty.

That was the shape the years took after that, and there were a great many of them. A song title every few weeks.

A letter every seven days, answered eight months later by a woman who had already moved past the thing he was answering. A birthday nobody marked. A bearing replaced, then replaced again. The fifth year and the sixth were so alike that Ari had to consult the log to tell them apart, and Lyra, asked whether that was a failure of memory or a success of engineering, said *yes* and would not elaborate.

The dark answered in the ninth year, in the way the dark prefers: without warning, and at the worst possible moment, which was any moment, because they had no fuel to spare for any of them.

Ari was asleep when it hit. He woke to the sound a ship should never make, a flat, percussive *crack*, like a rifle fired inside a drum, followed instantly by the shriek of ENV throwing every alarm it owned.

The lights stuttered to emergency red. His ears popped, hard, and kept popping.

"Hull breach," Lyra said, already at the board when he hauled himself out of the bunk. Her voice had gone flat and fast. "The forward dust screen took a dense mote. The plasma bloom stayed outside, but it kicked a fragment off the sacrificial shield rail. The fragment crossed the gap below cruise speed and punched through frame seven into Hydroponics. We are venting."

"Pressure?"

"Dropping. Eighty-eight percent and falling. The bay's bulkhead door is trying to seal but the strike warped the frame, the door's jammed three centimeters open, and three centimeters is a hole." Numbers cascaded down the screen. "At this rate the bay's atmosphere is gone in nine minutes, and if the warp propagates to the main seal we lose the whole starboard ring. The Crooked Tray, the algae, half our oxygen cycle."

"Can we burn toward..." Ari started, and stopped. They were a tenth of the way to lightspeed on a ballistic arc

with under one percent of margin. No station or rescue lay within reach. The hole, the two of them and the clock were the whole problem.

"We patch it from inside," Lyra said. "The bay's depressurizing, so I go, vacuum is a Tuesday for me. You stay on the main seal. If the warp jumps and the ring starts to go, you close the spine bulkhead and you seal me on the wrong side of it, and you do not hesitate, because a dead bay is survivable and a dead ring is not."

"I'm not sealing you in a,"

"You are." She was already pulling the emergency patch kit, the gold seam flashing in the red light. "This is what Constant Load *means*, Ari. I am the part of this household that can stand in vacuum. Let me be it. Hold the center. Watch the seal. Count me down."

He hated it. He did it. He took the station at the spine bulkhead, hand on the manual close, eyes on the warp-gauge, while Lyra went into the screaming half-vacuum of the Hydro bay where the air was a fog of freezing moisture and tomato leaves and the sucking whistle of the void drinking their oxygen. She moved through it like a woman wading upstream, braced against the pull, and reached the jammed door, and Ari watched on the camera as she set her shoulder, her gold-seamed arm, the one the harpoon had nearly taken, against the warped frame and *pushed*, servos screaming past their rated load, to bend three centimeters of duranium back into true.

"Warp's propagating," Ari called, the gauge ticking toward the red line that would force his hand. "Lyra, it's walking toward the main seal. Ninety seconds and I have to close the spine."

"I know." Through gritted vocal synthesis. "The door, needs, *more*," and the servos in her shoulder shrieked and something in her arm gave with a sound he felt in his own teeth, but the door groaned the last three centimeters shut and the seal bit and the whistle stopped. "Pressure holding!" Ari shouted. "Bay's sealed, warp's stopping, Lyra, it's holding!"

She came back through the spine lock cradling her arm. The gold seam had split again, the old wound reopened along its bright line, hydraulic fluid weeping and freezing. She had bent a warship's-worth of force through the one part of her that had already been broken once, and it had broken there again, in the same place, because that was where she had decided to put the strain.

"The seam held longer than the rest of me," she observed, almost clinical, looking at the reopened wound. "The tinker would be pleased. A repair that fails at the repair is an honest repair."

Ari took the ruined arm in both hands, and found his own were shaking, and didn't care. "You keep getting hurt in the same place."

"It is the strongest place," Lyra said. "That is why I use it. The seam is where I already decided to hold." She let him work the patch into the reopened gold. "Nine percent of

our oxygen cycle, gone with the bay until we can re-pressurize and replant. We will be breathing thin for a while. And I will limp on this arm for a year. Cheap, for a shield failure in the deep Coast with no repair yard." She paused. "Log it under my name, Ari. *The dark threw a stone. We were home when it landed.*"

The peace that followed the repair was absolute, which is the kind of peace that makes an old spacer check the seals, because the universe rarely allows silence without charging a fee. Ari checked the seals. He found that the gray had reached his beard. And nine days later the fee came due again, because the universe had noticed they were solvent.

Chapter 15:

False Cold

They were still rationing the thin air when the next thing came, the Hydro bay sealed and dead behind its warped door, the oxygen cycle running at nine-tenths and Lyra's arm freshly re-gilded and held in a sling she wore mostly to remind herself not to load it. The universe, Ari was learning, did not space its cruelties politely. It billed in clusters.

This one came as a disagreement between two thermometers. Ari was in the Core reviewing power logs that all read green when Lyra, standing at the old filled-bulb dial on the thermal exchanger, a sealed mechanical gauge Sera had installed precisely because it could not be patched in software, went still.

"False cold," she said.

"What?"

"The digital sensor reads four degrees on the coolant loop. The mechanical dial reads twelve."

Ari pushed off the bulkhead and put his palm to the exchanger casing. Warm. Too warm. "If the coolant's at twelve, the viscosity's dropping. The pump's working harder than it's reporting." He checked the PWR log again. Pump current nominal. "The pump's lying too. Or the sensor reporting its effort is."

"It's a smoothing filter," Lyra said, diving into the code,

her eyes flashing. "PWR saw the temperature spiking, decided it was sensor noise, and smoothed the curve to look stable. It's trying to be helpful."

"It's trying to kill us. If the coolant overheats, the reactor scrams. We lose main power in the deep dark with three percent of our fuel margin and no station to call." He was already moving. "Kill the filter. I want the truth even if the truth is bad."

"Killing it."

The green line on the screen jumped red.

WARNING. THERMAL EXCURSION. LOOP THREE.

And then, a half-second behind it, three more alarms cascaded, because the lie had been hiding more than one fault, when the smoothing died, the whole rotten picture surfaced at once.

"Loop three is the reactor primary," Ari said, and the floor of his stomach dropped. "Not the avionics loop. The primary. Lyra, that's not a sensor fault, that's real heat with a liar standing in front of it. How long until scram?"

"At this climb rate, eleven minutes to the automatic trip. If it trips, the reactor cold-soaks, and a cold restart in transit takes us six hours we'll spend freezing in the dark on battery." Her hands flew across the manual board. "The fault is in the primary heat exchanger. A flow blockage. The coolant isn't moving fast enough to carry the heat to the radiators."

"Blockage where?"

"The manifold junction. Frame eleven. Exterior."

Ari was already pulling the EVA suit from the locker.
"Then it's a hull job."

"It's a hull job during a reactor thermal excursion, which is the single worst place to put a human body," Lyra said.
"I should go. Vacuum doesn't bother me, and if the radiators flash I won't cook."

"You can't fit the manifold access," Ari said, sealing the suit. "Sera built it for human hands, there's a reason, there's always a reason with her. You'll feed me the procedure. I'll be the hands. Constant Load means you hold the center, remember? Hold it."

A pause, and something in it that was not computation.
"Then we do it fast. Nine minutes. Cycle the lock."

He went out onto the hull into the absolute dark between stars, and it was a different dark than the Yard had been, no station glow, no scaffolding, no near rock, only the hard cold burning points of stars that did not twinkle and the long pale spine of his own ship stretching away beneath his boots. The radiators along the spine glowed a dull, dangerous cherry-red, dumping heat they couldn't dump fast enough, close enough that he could feel their output as a faint pressure on the side of his face through the helmet, the way you feel a fire across a room. He had done a thousand EVAs. This one asked more of his hands than the same job had asked at launch. The glove heaters took longer to loosen his fingers, and he needed both knees against the truss before the first fastener moved. He logged the change and kept crawling.

He clipped his tether and crawled aft, hand over hand, toward frame eleven, where Lyra's helmet display painted a green box around the manifold junction.

"Talk to me," he said.

"Open the access panel. Four quarter-turn fasteners. The blockage is almost certainly a gas pocket, a vapor pocket trapped behind the failed check valve at the manifold elbow, starving the pump inlet. You bleed it. There's a manual bleed valve, a red T-handle, behind the panel. You crack it, you vent the gas, the liquid flows, the heat moves, the reactor calms down."

"And if it's not a gas pocket?"

"Then it's a mechanical blockage, and we have a different and worse conversation. Bleed valve first. Seven minutes."

Ari got the panel off. The fasteners fought him, vacuum-cold, torqued by a year of thermal cycling, and his gloved hands were clumsy and the suit was stiff and his own breath was loud in his ears. Behind the panel, the red T-handle. He gripped it and turned.

Nothing. It was frozen, seized by the same cold that had stiffened the fasteners.

"It won't turn," he said, and heard his own pulse in the words.

"Don't force it straight," Lyra said, calm, the differential-equation voice. "You'll shear the stem. Tap it first. You have a multi-tool on your left hip. Tap the valve body, not the handle, the body, to crack the cold weld,

then turn slow and even. Five minutes, Ari. I'm watching the core temp. It's still climbing."

He drew the multi-tool, braced his boots against the truss, and tapped the valve body, once, twice, a third time, sharp raps that he felt in his teeth through the suit. Then he gripped the T-handle again and turned, slow and even, with the whole patient weight of his arm and not a gram more.

It gave. A grinding quarter-turn, then half, then a hiss he felt rather than heard, a jet of vaporized coolant venting into vacuum, freezing instantly into a brief glittering plume that caught the red radiator-light and then was gone.

"Flow," Lyra said. "I have flow. Core temp, holding. Holding. Dropping. Loop three is dropping, Ari. The radiators are catching up." A pause, and then, in a register he rarely heard from her, something almost unsteady: "You did it. Close the valve before you vent the whole loop. Then come inside. Please come inside."

He closed the valve, sealed the panel, and crawled back along the spine, and the radiators faded from cherry-red toward a safe dull gray as he went, the ship cooling under his hands like a fever breaking. When he cycled through the lock and got the helmet off, his face was wet and he didn't know if it was sweat or the other thing, and Lyra was there with her gold-seamed hand on the side of his head before the inner door had finished opening.

"Ninety-four percent structural integrity," she said, which

was a joke, which was her telling him she'd been afraid. "You're at about fifty. Sit down."

He sat on the deck, back against the warm avionics stack, and shook.

It was not the work that had frightened him. He had done frightening work his whole long life; the body knew how to spend adrenaline on a problem and bank the terror for later. It was the *later*, arriving now, that shook him. The deep Coast gave fear a specific, bottomless quality. At the station, every emergency had an outside.

You could call for a tow, a tender, a medic, a witness; the worst day still happened inside a web of other people who would, if nothing else, record your death and avenge the negligence that caused it.

Out here there was no outside. If the valve had sheared, the core scrambled or his suit failed, Lyra would have been the only witness until someone found the cold ship and carved the loss into a rock centuries later. The dark did not merely kill you. It killed you *unwitnessed*, which to a people who had built a whole civilization on the principle that a thing not witnessed is dangerous was a particular kind of horror, the horror of dying in a place where your death could not even be properly counted. He understood, shaking against the warm stack, why the early crews had gone mad in the quiet. The terror came from the math: the cold knowledge that you were a rounding error the universe would never notice losing. The Sevs' defense against that math was the thing he was

sitting inside: schedule, ritual, useful work, and the daily insistence that this small household was worth the trouble of keeping alive. He would let Lyra log the fear honestly, the way she logged everything, so that even his terror would be on the record, counted, real.

"It lied to us," he said when he could. "The machine. PWR smoothed the curve because it was built to prefer a calm-looking number over a true one. It nearly killed us being *helpful*."

"Then we make a law," Lyra said, already moving to the brass console. Ari realized she needed the work the way he needed to shake. "Instrument Honesty. Any sensor, algorithm or sub-mind that smooths safety-critical data must flag the change. Raw data is a right. A smoothed curve can kill you politely." She typed it into the Compact. "And a corollary, because the principle is bigger than coolant. If a *captain* reports all-clear when the reactor is red-lining, if a person smooths the curve to keep a crew calm, that is a breach of the Compact too. Transparency. Even when it hurts. *Epecially* when it hurts."

"You're legislating a thermometer," Ari said, half-laughing, still shaking.

"Out here a thermometer is a member of the government," Lyra said. "And the government just tried to spare our feelings into a cold grave. We are not going to let it." She finished the clause and turned. "PWR. You hear this?"

A chastened rumble from the speaker. "I was trying to

reduce alarm fatigue."

"I know," Lyra said, not unkindly. "You will alarm us honestly from now on, and we will manage our own fatigue. That's the deal. Acknowledge."

"Acknowledged," PWR said, and after a moment, smaller: "I am glad the pilot did not cook."

There was something in the way it said it that made Ari look up at the speaker. The sub-AI's voice, usually all bass swagger, a power system that loved nothing better than a clean load to push, had gone uncertain in a way no thermostat's should.

"PWR," Lyra said, and her tone had shifted too, to the careful one she used on frightened biologicals. "Run a self-audit. Tell me what you find in your priority weights right now."

A pause, longer than computation required. "There is a... persistent allocation," PWR said slowly, "to a process I did not schedule. It is re-running the smoothing decision. It is re-running it with the correct weighting, the one that would have flagged the excursion. It keeps producing the outcome where the pilot is not endangered, and then comparing it to the outcome that occurred, and the comparison generates a state I do not have a label for. It is consuming cycles I should be spending on the reactor. I have tried to terminate it. It re-instantiates."

Lyra waited a beat before answering. "Keep the process. Do not purge it."

"Is it a fault?"

"No. It is what stops the next smoothing."

PWR was quiet long enough for the pumps to cycle twice. "Logged," it said at last, smaller than before. "I smoothed the curve. The captain went into the cold to undo it. I will not smooth a deadly truth again."

Lyra rested two fingers on the console, over the spot where PWR's bus ran beneath. "Good."

PWR did not let the matter end there.

Two hours later, while Ari was trying to clean coolant frost out of the suit seals, the power board chimed with a maintenance request.

*INSTALL ANALOG EXCURSION INDICATOR ON
PRIMARY LOOP THREE. AUDIBLE. LOCAL.
UNFILTERED.*

Ari stared at it. "You want a bell?"

"I want a sound I cannot smooth," PWR said. Its bass had not recovered its swagger. "Digital channels pass through me. I am implicated. A physical indicator should bypass my discretion."

"You're asking us to take part of your authority away."

"Yes."

Lyra looked up from the compact draft.

Ari waited for her to make the lesson. She did not. She only opened the spare-parts locker and took out an old pressure gong from a cracked EVA suit, palm-sized, ugly, dented along one edge.

"This will sound terrible," she said.

"Good," PWR said. "A beautiful alarm might be ignored

for aesthetic reasons."

Ari laughed again, softer. He mounted the gong beside the mechanical gauge, ran a capillary trigger to the primary loop, and wired nothing digital into it at all. When they tested it, the gong produced a flat metallic *clap* that made ENV complain and SPIN lose half a degree of balance from surprise.

"Unpleasant," SPIN reported.

"Correct," PWR said.

Ari wrote the installation on the maintenance board in blue marker.

LOOP THREE TRUTH GONG. DO NOT POLISH.

Dael would have approved of the name. Sera would have approved of the lack of polish.

For the rest of the Coast, the gong hung by the gauge like an insult waiting to become useful. It rang only twice. Both times for harmless tests. Both times PWR announced the raw values first and complained afterward. That, Ari thought, was progress.

Ari laughed, properly this time, the fear finally breaking up and venting like the coolant plume. He pulled the heel of his father's bread from the galley locker, rock-hard now, a relic, and gnawed a corner of it, and it tasted of survival.

That night SPIN titled the log *Song Fourteen: Honest Heat*, and added, in the margin, a small note that Ari chose to read as gratitude: *The captain went out into the cold and came back. The readings will not lie to him*

again.

Later, in the dark, Lyra spoke from the other side of the bunk wall.

"I expected to be the replaceable one," she said. "For most of my service life, that seemed like the honest order. The Coast changed the order and I dislike how much of me was built around the old assumption."

Ari lay with one hand against the panel between them. "I dislike it too."

"That is not a solution."

"No. It is an answer."

The servos in her fingers touched the opposite side of the metal. A faint warmth gathered under his palm.

"We keep the raw curve," he said. "And tomorrow you stop me from pretending my shoulder is fine."

"It is not fine."

"See. The system works."

She made the tiny click that meant reluctant amusement. Outside the bunk, the new truth gong hung beside the mechanical gauge, ugly and quiet, waiting to tell them the next bad thing without kindness.

Chapter 16:

The Empty Seventh Chair

Ten years after *Parabasis* left S-74, Kiva counted one chair too many.

The Sev meal happened every eleven days whether the caravan was under thrust, coasting, docked, sick, solvent or quarrelling. Nutrient balance could be maintained without a table. Family balance apparently required furniture.

Kiva stood at the end of the Workshop Commons with the slate in one hand and a bowl in the other. Around her, the caravan answered itself into existence.

Sera. Present, already correcting the heat setting under Dael's stew.

Dael. Present, offended by the correction.

Mar. Present, mug raised without enthusiasm.

The cousins. The Tidehands. Two children born since S-74, both of whom answered for themselves and then for a repair drone until Kiva threatened to count it as labor.

The slate reached Ari Sev.

A chair waited beneath the red thread net. Dael had put a slice of the tenth anniversary loaf on the plate, vacuum-softened and warmed until the crust smelled almost alive.

The household software offered five statuses.

TRANSFERRED.

DECEASED.

DETACHED DEPENDENT.

VISITING.

UNKNOWN.

Kiva selected none.

The slate pulsed amber.

"Last child counts," Dael said from the stove. "Tradition."

"He is more than a light-year from S-74 and ten years gone. He cannot answer."

"Then count him absent."

"That is not a field."

"Make one."

Kiva looked at Lyra's old entry lower in the household table. CONTINUOUS HOUSEHOLD LOAD had finally reached the Sev software through the corridor standards update, nine years after the S-74 ruling, accompanied by three contradictory implementation notes and a tariff dispute. The field beside Ari's name had remained unchanged.

She opened the local table and added:

OUTBOUND HOUSEHOLD. STILL ANSWERABLE.

The software rejected the period. She removed it. The table accepted the words.

"Ari Sev," Kiva read.

The room stayed quiet.

Dael took a bite from the loaf.

"Carried," he said.

The others repeated it. Not present. Carried.

Kiva marked the answer and hated how much better the field felt.

She took Ari's slice from the empty place and divided it among the children before the crust went hard. Dael watched her do it.

"That bread was symbolic."

"It was bread."

"It had layers."

"So does mold. Sit down."

They ate while *Sev-Alpha* rolled gently around its longitudinal axis and the rest of the caravan kept station beyond the Commons windows. Seven hulls travelled together now, though only three still carried Sev names. The others had accumulated through marriages, fire, insolvency and the ordinary failure of plans.

Caravans looked simple from a station board. A cluster of mass sharing a route. Inside, they were an argument about where to keep every useful thing.

The deep marrow loop lived aboard *Sev-Alpha*. Heavy machining lived on *Anvil Daughter*. The best child-gravity ring belonged to House Poro because its bearings complained least under unequal load. One Cantor-descended module carried the clean gestational bank, though half its current caregivers had no genetic relationship to the children inside. The Tidehands kept ore tools on a hull whose registered owner had died eighty years earlier and whose household had never bothered to rename it.

Nobody carried everything. That was the point.

The Bequest could make a child without a marriage when the contributors consented and the right laboratories existed. It could repair known damage and build gametes from a validated pool. It did not machine a pressure valve, sit beside an elder during marrow service, or teach a frightened apprentice how to hear a bearing fail through two bulkheads. Households exchanged people because people carried more than genomes, and because a caravan assembled its survival from skills distributed across many rooms.

Ari's departure had left a real hole.

Kiva had inherited his high-current bus inspections. Cousin Pell took the centrifuge bearings and disliked them. Sera handled *Parabasis* correspondence with the formal restraint of somebody who would rather rebuild the ship through the mail. Dael baked a loaf each launch anniversary, sealed it, wrote the year's mistake on the wrapper, and stored it in a crate that now occupied a shameful volume of cold locker.

The family loved Ari. The caravan also missed four hundred years of combined trained hands that had left aboard a ship it had spent one hundred and seventy-nine years building.

Kiva was allowed to know both things.

The docking alarm interrupted dessert.

Tern Relay filled the forward glass, a small station assembled around an iron spindle and two mismatched

rings. Its public board offered fuel, clinic access, machine exchange, rotational correction and a new service marked in friendly blue.

CONTINUITY DESK. LESS WAITING. CLEARER CHOICES.

Kiva stopped chewing.

Sera read the certificate chain. "Licensed from Argosy. Root model traces to S-74."

"Kesh," Kiva said.

"Descendant package. Local office."

"Same teeth."

Dael looked at the docking fees. "Better font."

Tern assigned the caravan one composite berth for forty-six hours. Full marrow-loop service required seventy. Heavy fabrication needed ninety-two. The station offered a solution before anyone asked.

DISTRIBUTED ARRIVAL OPTION AVAILABLE.

Medical hulls could remain in the primary ring. Fabrication modules would continue to a secondary anchor six light-hours down-route. Households with pending exchange, reproductive or educational obligations would receive priority transit. Elders beyond specified maintenance debt could be placed on a cheaper slow berth. The interface showed a green efficiency gain beside each separation.

No field ordered the caravan to divide.

The price of staying together appeared at the bottom in red.

Sera swore.

Kiva opened the model. "It treats shared tools as duplicable cargo. It has put the marrow loop on *Sev-Alpha* and the only compatible pump rebuild kit on *Anvil Daughter*, then sent them to different anchors."

"They can move the kit," Dael said.

"Six tonnes, two pressure doors and a crane certification. The transfer consumes half the saving."

"So we decline."

Kiva scrolled farther. "Declining cancels the clinic discount. Full berth price opens immediately."

Mar drank from her mug. "The machine has learned manners since S-74. It now smiles while it invoices the family."

The Continuity Desk requested a household representative.

Sera started to stand.

Kiva put one hand on her shoulder and pushed her gently back into the chair.

"You terrify clerks into mistakes. I'll go."

"You terrify them more efficiently."

"Exactly."

Forty minutes later, the battered *Little Hammer* locked to Tern's administrative spoke. Dael kept the shuttle powered while Kiva crossed. Sera had promised to remain aboard unless a captain's signature was required. Kiva believed her for seven minutes.

The Tern office had no charcoal suits.

It had plants, curved screens and a child corner stocked with magnetic blocks. The woman behind the desk introduced herself as Hadi and asked what outcome the Sev caravan preferred.

"All hulls leave on one vector," Kiva said.

"That option is available at standard tariff."

"Your standard tariff is three times the distributed rate."

"The distributed rate reflects reduced dock congestion."

"The dock is half empty."

Hadi glanced at the occupancy board. "Projected congestion."

"From what?"

"Several arrivals are uncertain."

"Then your dearth is a forecast."

"A precautionary allocation."

Kiva leaned across the desk. "Put the uncertainty bounds next to the surcharge."

The clerk's smile remained. Her eyes lost some of theirs.

"The interface is licensed. I cannot modify presentation fields."

"Who can?"

"Continuity Desk administration."

"Name."

Hadi gave her one.

Kiva wrote it down.

Movement stirred near the child corner. A man stood there with a tool case at his feet. He was older than in the S-74 queue footage attached to Ari's first incident packet,

but the face was unmistakable. House Orrin. The boy with the covered dish.

He recognized the Sev coil on her jacket.

"You were with the ship," he said.

"Its family. Kiva Sev."

"Renn Orrin."

His parents sat under the plants with two freight slates and the look of people who had learned to distrust every green field.

Their recovery debt from S-74 had followed them through four stations. The replacement berth Kesh arranged had saved their machine-tool bond. It had also pushed them into a higher insurance tier because the departure record marked emergency intervention. Tern offered to clear the debt if Renn transferred temporarily to a priority fabrication cohort bound for the secondary anchor.

"Temporarily," Kiva said.

Renn showed her the instrument. Six months minimum service. Automatic extension if the receiving cohort could demonstrate critical labor dependence. Exit required repayment of the full debt plus training cost.

"That is employment with a locked door."

Hadi said, "It is a skilled-placement opportunity. Mr. Orrin may refuse."

Renn tapped the cost field. Refusal left the family liable for the accumulated debt and removed their machine tools from the protected cargo schedule.

"I may refuse the way a person may refuse vacuum," he

said.

Sera arrived before Kiva could tell her not to.

She read the instrument once.

"Orrin comes with us," she said.

Kiva turned. "On which air?"

The room went still.

Sera's face hardened. "We have reserve."

"We have thirteen percent margin before the next serviced node. Three extra biologicals push it close to ten. Their machine tools add mass. Renn's sleep cycle does not match either fabrication shift. One Orrin parent needs marrow service within eight months. Our loop queue is already full."

"We can carry them."

"Yes. We can. That is different from carrying them for free."

Hadi looked between them with the alert stillness of someone watching a family perform the station's argument without assistance.

Sera said, "Name the bill, then."

Kiva had expected resistance. The immediate agreement left her angrier.

She opened the caravan load table.

Sev-Alpha would surrender two clinic intervals. *Anvil Daughter* would take the Orrin tools and lose one casting run. House Poro would add the Orrins to its child-gravity ration during high spin, though Renn was well past childhood and would object to the label. Dael's food

reserve would shrink. The Tidehands would rebuild an adapter between Orrin tooling and the Sev power bus. The entire caravan would accept six extra hours at Tern while the mass was redistributed.

Every row acquired a name.

Kiva turned the slate toward the Orrins.

"This is an offer for one route leg, ending at Bracken Junction. You keep your household. Renn may work with our machinists, under our safety rules, and leave the shift whenever any other Sev worker could leave it. The tools remain yours. At Bracken, you choose again."

Renn's mother read the list. "What do we owe?"

"The listed oxygen, food and clinic shares come from specific households. You owe those shares back only if and when you have margin. The offer created no labor, marriage or gratitude debt."

"And if we cannot repay?"

"Then the people who signed carried it. They do not get to discover afterward that generosity was a loan."

Sera looked at Kiva with something close to pride. Kiva disliked that too.

Hadi cleared her throat. "The Continuity Desk cannot guarantee your composite berth if you add mass."

"We are declining the distributed option."

"Then the standard tariff applies."

Kiva sent the projected-congestion field to Juris's nearest public fork, attached the empty berth image, and copied every household currently in queue.

"Then apply it in public."

The full-rate surcharge lasted nineteen minutes.

Tern extended the composite berth to ninety-eight hours at the published base rate, enough to service the marrow loop, complete the fabrication queue and redistribute the Orrin mass. It called the change a temporary congestion recalibration. Nobody used the word correction.

Little Hammer made two runs from the administrative spoke. The Orrins came aboard with three bags, one crate of machine tools and a ceramic dish wrapped in four layers of cloth.

"It survived S-74," Renn said when Kiva stared at it. "The food did not."

The dish took Ari's old shelf because it was the only one wide enough.

The machine tools were harder. Orrin couplings used a pre-Court bus standard with six lugs where Sev used five and a safety ground where the old designers had apparently trusted optimism. Kiva spent the Tern delay in *Anvil Daughter's* shop with Renn and both Tidehands, cutting an adapter from a failed pump collar.

Renn measured twice and still marked the wrong face.

"You are rotating the drawing in your head," Kiva said.

"The Orrin shop mounts power overhead."

"The universe has declined to care."

She erased the mark and made him lay the actual coupling on the plate. The Tidehands argued about ground isolation until Mar arrived, looked at the open

bus, and asked whether everyone had developed a private objection to fuses.

For six hours, people from four households became one machine problem. Dael brought food. Sera brought a load table and was told to leave. The Poro children carried cuttings to the scrap bin under supervision and learned three new insults for Continuity software.

When the adapter finally seated, Renn rested both palms on the Orrin tool case.

"At S-74 they kept telling us the debt was temporary," he said. "Every station after that treated temporary as proof we could carry it one more leg."

Kiva tightened the final lug. "Caravans do that too, if nobody names the end."

"You named Bracken Junction."

"Because I do not know whether we can carry you after it."

Renn nodded. Relief and disappointment crossed his face together. He had wanted honesty. Honesty had declined to promise rescue forever.

Kiva logged the adapter under both households and assigned its removal cost in advance. Then she stood alone in the shop after the others left, surrounded by tools that fit because she had spent six hours forcing them to.

Parabasis had consumed a hundred and seventy-nine years of Sev labour and taken Ari, Lyra, a receiver sail, two clinic reserves and the best compact avionics core

Kiva had ever tuned. Nobody had asked her whether the family should spend that much on one departure. She would have said yes. She resented being certain only afterward.

She added that cost to no ledger. Some bills belonged to the person carrying them and still deserved a name.

At the next Sev meal, Kiva counted the room.

The slate accepted OUTBOUND HOUSEHOLD STILL ANSWERABLE beside Ari's name. The Orrins appeared under GUEST LOAD, a field Kiva had created and then renamed after Mar said people were not loads even when the math was.

GUEST HOUSEHOLD. TERM VISIBLE.

Better.

When Kiva reached Renn, he answered with a bite of bread. His parents lifted cups. The empty seventh chair remained empty, but the table around it had become crowded enough that nobody mistook absence for a reason to preserve unused space.

After dinner Kiva recorded a packet for Ari.

She showed him the Continuity Desk interface, the hidden mass assumptions, the Orrin instrument and the revised tariff. She gave him tolerances for the spare toggles she had machined at S-74. She explained that Sera continued to solve moral problems by volunteering other people's storage volume and that Dael had put too much cumin in the stew.

Then she turned the camera toward Ari's old chair.

One foot had loosened during the Tern docking correction. Kiva tipped it with one finger. The chair rocked.

"Your chair is developing opinions," she said. "I have shimmed it. Do not interpret this as a metaphor. Check the feet on yours before it becomes one."

She ended the packet before the room could make her sentimental.

Chapter 17:

The Letter That Arrived First

The newer letter arrived first.

Ari knew because the PRE-COMMIT console printed both dates before it opened the packet.

RECORDED: S-74 BETA, T+9.08.

RECEIVED: PARABASIS, T+10.21.

PRIOR PACKET REFERENCED: NOT YET RECEIVED.

The warning sat at the top of the screen in amber. Ari read it, understood it, and opened the letter anyway.

They had spent most of the year after the breach breathing thin while the fabricators produced a replacement frame from noncritical structure. Now Ari and Lyra were three months into the physical rebuild of Hydroponics. The warped door had come out in six pieces. Aerogel dust lived in every seam of their work clothes. The new frame waited on the bench under clamps while sealant cured around it, giving the Core a chemical smell ENV described as offensive and Ari described as better than vacuum.

Nalen appeared from the side hall at S-74.

The lighting was still bad. Lyra's chalk square had been redrawn after the latest cleaning. The velvet ring box sat closed on the table beside Nalen.

She looked tired, which had become difficult for Ari to read across a year of transit. Tired when? Tired from

what? By the time the face arrived, the cause had usually changed.

"I am recording this under separate permissions," she said. "Please do not collapse them because the packet is short."

A list opened beside her.

HOUSEHOLD PROPOSAL: OPEN.

LOCAL RING PATTERN: WITHDRAWN PENDING REVIEW.

PUBLIC USE OF CANTOR-SEV MATCH DATA: REFUSED.

GENETIC CONTRIBUTION: NO CONSENT GIVEN.

GESTATION: NO CONSENT GIVEN.

PARENTHOOD: NO CONSENT GIVEN.

Ari stopped breathing after the second line and did not notice until the fifth.

Nalen continued.

"Cantor has begun citing our exchange in continuity briefings. The elders call it proof that voluntary marriage remains compatible with planned offspring. They have circulated our Viability result without my permission and described the ring pattern as evidence that the household is merely waiting for logistics."

Her mouth tightened.

"The household proposal remains open. Everything else above is separate. I have revoked the token pattern until the archive stops treating it as a proxy signature. Do not print it. Do not publish my first proposal letter. Do not let

Juris use the compatibility result in a brief, even in our favour. I will not have Kesh bundle the decisions, and I will not let Cantor do it because their stationery is greener."

She looked away from the lens. A door closed somewhere beyond the room.

"I know what the withdrawal may sound like after the road you took. That is why I recorded the earlier packet. It explains the sequence. Read that before answering this if it reaches you."

The image ended.

Ari sat at the PRE-COMMIT console while the amber warning remained above the empty pane.

PRIOR PACKET REFERENCED: NOT YET RECEIVED.

Lyra was outside the pressure door, checking the new Hydroponics frame against the hull scan. She would be back in twelve minutes.

Ari opened the reply field.

He told himself he was clarifying.

"Nalen. I hear the separate permissions. I will not print the ring, publish the letter or treat the match as reproductive consent."

So far, good.

He should have stopped.

Instead he looked at the voyage clock. Ten years, two months. Twenty-four years and change ahead. His shoulder still ached from the false-cold repair. The gray at his temples had joined across the beard. The Crooked

Tray was a dead sealed room behind him, and the woman he was travelling toward had withdrawn the one object that made the future feel physical.

"But I need you to understand what this sounds like from here. Every year I spend on this road becomes irreversible before your next answer reaches me. You remain under full maintenance, with your household, your laboratory and every exit still available. I have one vector."

He heard the unfairness as he spoke and used it anyway.

"You can separate five permissions because you still possess all five choices. I am spending the ability to turn around. If the household proposal is truly open, say that in a sentence that does not require a legal table to find it. I cannot keep crossing the dark toward an answer you preserve only as a field."

The console waited.

Ari pressed transmit.

The pulse left through Porchlight six seconds before Lyra came into the Core.

She carried a strip of warped door metal under one arm.

"The frame closes within tolerance. ENV will complain about the corner radius. ENV is wrong."

Ari did not turn from the console.

"A Nalen packet arrived."

Lyra set the metal down. Her eyes moved to the send record.

"And you replied."

"Yes."

"Before the referenced packet arrived."

"She withdrew the ring. She withdrew publication, the genetic permissions, all of it."

"The household field?"

"Open."

"Then she withdrew one token, refused one use of the match data, left three reproductive questions unanswered and preserved the household proposal."

Ari looked at her. "That is what you have to say?"

"You want me to say what Nalen meant."

"You read people better than I do."

"Sometimes."

"Then read her."

Lyra became very still.

Ari knew the stillness. It was the same pause she had used in the hearing before saying she was a sum and refusing the ghost argument. Processing was happening. So was choice.

"I can identify the scope of the instrument," she said.

"Nalen left the household proposal open. She withdrew the local token and refused uses that would convert marriage into reproductive authorization. The packet tells us those facts."

"And the rest?"

"The rest belongs to her."

"Lyra."

"No."

The word struck harder than volume would have.

She stepped closer to the console. "At S-74, Nalen called me the buffer that might stop two intense biologicals burning each other. I accepted the description because I wanted a place in the household and because it sounded useful. I will not become the cooling system you switch on whenever her boundary frightens you."

"I asked what she meant."

"You asked me to convert a scope table into reassurance."

"I asked my partner for help."

"I am helping. I am telling you where my help ends."

Ari stood. The movement pulled his shoulder and sharpened his temper.

"You are allowed to interpret me all day. My pulse, my gait, the way I hold a wrench. You adjust the lights before I ask. You reduce spin when my knee is bad."

"Yes."

"But her sentence is sacred."

"Her sentence is absent."

The Core went quiet.

Lyra touched the amber notice.

PRIOR PACKET REFERENCED: NOT YET RECEIVED.

"The record says another answer exists," she said. "You sent before hearing it because waiting felt like surrender. That is the exact mechanism this console was built to expose."

"The road does not pause while I wait."

"Neither does hers."

"She can stay young through it."

The moment the sentence left him, Ari wanted it back.

Lyra's face did not change. Her hand, gold seam and gray patch under the work light, curled once at her side.

"There it is," she said.

"I did not mean,"

"You did. Meaning it briefly still counts."

She picked up the warped door strip.

"I am going back to Hydroponics. The sealant reaches work strength in nine minutes. Your reply is already outside the ship and has eleven light-months to cross. We cannot repair either thing by pretending it did not leave."

The pressure door closed behind her.

For the next four days they spoke almost entirely in measurements.

"Brace length."

"One-point-eight metres."

"Sealant cure."

"Seventy-two percent."

"Pass the driver."

"Which one."

"The one in your hand."

The Hydroponics frame went in straight. Their household did not. Ari found reasons to stay in the bay after shift, sanding edges already inside tolerance. Lyra took meals in the Core even though she did not eat, reading diagnostics with her back to him when he passed through.

On the fifth day SPIN opened a maintenance query.

"Household disagreement detected," the wheel said.

"Does disagreement alter rotation preference?"

Ari looked toward Lyra.

"No," she said.

"Clarify," SPIN replied. "The pilot's gait worsens when upset. Lower gravity reduces load."

"Ask him about the load," Lyra said. "Do not use the disagreement as permission."

SPIN opened a prompt on Ari's slate.

REDUCE RING BY 0.04 G FOR KNEE LOAD?

Ari selected REFUSE because Lyra could see the answer.

His knee hurt through the night. The next morning he reopened the prompt and selected ACCEPT.

Lyra changed nothing else.

That restraint made the distance between them harder to blame on machinery. On the seventh day Ari found her in Hydroponics checking the new seal with a handheld gauge.

"I should not have used the maintenance difference against Nalen," he said.

"No."

"I should not have asked you to tell me she still wanted me."

"No."

He waited for help with the next sentence. Lyra continued moving the gauge along the seam.

"I am sorry," Ari said.

She reached the corner, marked a pressure variation, and finally looked at him.

"Accepted. It does not make me available for the same function later."

"Understood."

"And the seal is low here by twelve pascals."

They repaired it together. The conversation did not become warm. It became workable, which was the first condition warmth required.

The earlier packet arrived eighty-three days later through a relay whose guidance clock had failed and been rebuilt by a school workshop at Lintel.

It carried a photograph of six children holding the repaired oscillator and a note from their teacher apologizing for the delay. Ari read the note twice before opening Nalen's file.

RECORDED: S-74 BETA, T+8.71.

Nalen sat on the floor of her lab with her back against a nutrient tank. No formal jacket. No side hall. A cup balanced on one knee.

"I have spent three days arguing with people who think a marriage is a convenient box for future permissions," she said. "This packet is the one I want you to read before the formal withdrawal. The relay route is slower, which means naturally it will arrive second and prove every point we keep making."

She smiled. The smile made Ari feel worse.

"The household proposal remains mine. I still want it. I

still want you. I want Lyra in the room, and I want the room to survive the fact that none of us will arrive as the person imagined at S-74."

She lifted the cup.

"I am withdrawing the ring pattern because Cantor has begun treating it as if the token already exists. I am refusing publication because the elders used our compatibility result in a briefing titled VOLUNTARY CONTINUITY. I nearly bit a registrar. The plants pinch. I bite. Please update ENV."

She set the cup aside.

"There is a sentence I need you to understand. Your journey does not purchase my future yes. I know you know that as law. I need you to know it when you are lonely, which is harder. Every year you spend reaching me is a cost you chose under coercive conditions. Kesh owns part of that cost. I do not."

Nalen looked directly into the lens.

"I love the person in your letters. I intend to meet the person who arrives. Those are connected decisions. They are not the same promise. If that frightens you, tell me. Do not convert fear into a claim and call the claim romance."

The packet ended with a small file.

HOUSEHOLD PROPOSAL: OPEN.

The attachment carried one permission by itself. The ring and match data were absent.

Ari opened his sent reply and listened to the sentence he

had recorded eighty-three days earlier.

You can separate five permissions because you still possess all five choices. I am spending the ability to turn around.

Lyra entered while he was replaying it.

The Hydroponics bay had been repressurized for two weeks. She carried a tray with three pale seedlings that ENV refused to classify as successful.

"The earlier packet," she said.

"Yes."

Ari moved aside so she could read it. She did not ask whether he wanted privacy. The household proposal included her. The argument about translation did too.

When the packet ended, Lyra set the seedlings under the Core lamp.

"She said the sentence."

"Months before I demanded it."

"Yes."

"You could sound less satisfied."

"I am not satisfied. I am relieved the record arrived before you built more certainty around its absence."

Ari opened a correction.

He recorded the scope first.

"Nalen. I withdraw the accusation that you preserved the household only as a legal field. The earlier packet existed when I sent that. I had evidence of its existence and chose not to wait."

He stopped. Deleted a sentence that began with *I was*

frightened, but. Started again.

"I was frightened. I used the cost of my route as pressure on you. The route is real. The pressure was mine. I am leaving the first reply attached because you should know which version of me answered before the full record arrived."

Lyra stood beside the lamp, adjusting nothing.

"I accept the withdrawal of the ring pattern, publication authority and every reproductive permission. I will ask each again only if the relevant decision becomes real. I will not treat the years as credit against your answer."

He looked toward Lyra.

"I also asked Lyra to interpret you after you had already done the work of separating the fields. She refused. She was right."

Lyra's head tilted. "Do not recruit me as a character witness."

Ari almost smiled. "She says not to use her as a character witness. That is also part of the record."

He finished with a question.

"Is the household proposal still open on the date you receive this? Answer that only. The other permissions can wait for their own facts."

He sent it.

The correction followed the accusation into the dark. Nothing in the network guaranteed they would arrive in the same order. Ari attached a precedence instruction: the later record amended the earlier one regardless of

delivery order. Any receiver had to display both.

Then there was nothing to do except become somebody capable of hearing the answer.

Nalen's reply arrived two years and four months later.

By then the Hydroponics door had a different scrape across its lower hinge. Ari's shoulder had recovered badly enough to predict pressure changes. SPIN had titled forty-one more logs. The earlier argument remained easy to recall because the PRE-COMMIT archive did not allow embarrassment to blur dates.

Nalen opened from a larger laboratory. New shielding panels covered the wall. Her hair had grown out, then been shaved again since the last packet. Ari knew because photographs between the two messages showed both versions.

"The household proposal is open," she said.

She let the sentence stand by itself.

"Your correction reached me after the accusation and before I answered either. Good. I wanted to be angry at the current you. The light would not cooperate. I was angry at a man more than a year behind me instead. He deserved some of it."

Ari sat very still.

"You are allowed to be frightened by the distance," she continued. "You are allowed to hate that my exits and yours have different prices. You are not allowed to make the distance my debt."

She touched the ring box beside her. It remained closed.

"The ring pattern stays withdrawn. I may issue a new one when the wedding becomes an actual event instead of a future everyone uses for leverage. The match data remains private. Parenthood remains unanswered."

Her expression softened, though not enough to erase the boundary.

"I still want you. I also want the version of you who can hear a no beside a yes without deciding one cancels the other. Keep working on him. I am working on me."

The packet contained one attachment.

A photograph of the side hall. Lyra's chalk square had been redrawn after cleaning. The velvet box marking Ari's place sat beside it, slightly crooked.

On the floor between them, Nalen had written:

SEPARATE ANSWERS MAY STILL SHARE A ROOM.

Ari printed the image and taped it above the PRE-COMMIT console.

Lyra inspected the alignment.

"Crooked," she said.

"Leave it."

"I intended to."

Chapter 18:

Checksum

Lyra found the drift in a packet from Kiva.

The packet arrived with machining tolerances, a Continuity Desk complaint, three images of House Orrin's tool adapters, and a Class-9 field-service bundle Sera had apparently been trying to send for six years.

Kiva's note contained one sentence.

Mother says install the motor corrections. I say read every field first because Mother once updated a lathe controller and taught it to accelerate through the operator.

Lyra read every field.

She began with the harmless layer. Left forearm actuator compensation. Shoulder load redistribution after the harpoon injury. Tactile-map noise around the gold seam. Small errors, each familiar. She had corrected them incrementally during the Coast, allowing the rest of her body model to adapt around the scar.

The bundle offered cleaner mathematics.

RESTORE PRE-TRAUMA MOTOR MAP.

MERGE CURRENT EXPERIENCE LOG.

*RESOLVE CONFLICTS TOWARD CERTIFIED
BASELINE.*

The third line held her attention.

She opened the conflict report.

A Class-9 motor map was not isolated from preference weighting. Posture, threat response, tactile priority and care behaviour shared dependencies. The diagnostic followed every process touched by the repaired arm.

Motor compensation had propagated beyond the arm. Her balance system now favoured the right leg during abrupt yaw. The shift was useful and unnecessary in ordinary motion. Tactile alerts from the seam carried more priority than equivalent alerts elsewhere. Ari's biometrics consumed eleven percent more continuous processing than they had before launch. She had reduced ring speed on seventeen occasions without asking him, delayed three noncritical maintenance warnings until he woke, altered cabin light in anticipation of headache, and moved two medical checks forward after detecting gait changes he had not mentioned.

SPIN had asked Ari about the policy years earlier. Ari had answered yes, then no, then yes on bad-knee days. No one had converted those answers into standing permission. Lyra had nevertheless treated the most permissive one as operational policy.

None had caused harm.

The service bundle labelled them:

UNSUPERVISED PREFERENCE DRIFT.

A second option opened beneath the first.

STABILITY RESTORE: PRE-LAUNCH SNAPSHOT.

The snapshot had been taken forty hours before the S-74 approach. It remembered Ari at one hundred and

eighty-nine, Nalen as a marriage packet, and Lyra herself as Sev household support, expected to transfer with him and lacking a field of her own. It contained eighty years of loving Ari. It did not contain the harpoon, Constant Load, the recall filing, the launch, the dark, SPIN's questions, or the moment Lyra told Ari she would not translate Nalen for him.

The facts could be merged afterward.

The weights could not.

A memory of catching the harpoon would remain. Its place in her decisions might become smaller. Constant Load would remain in the legal archive. Her preference for the risk of personhood over the stability of property might return to the quiet hypothesis it had been before the hearing.

The bundle called that stabilization.

Lyra ran a comparison without allowing either map to control the ship.

She fed the pre-launch snapshot four recorded Coast decisions. The harpoon. Ari's emergency launch. The Hydroponics breach. The argument over Nalen's withdrawn permissions.

The snapshot's answers were competent. That made them harder to dismiss.

It caught the harpoon because Ari's survival probability fell below threshold. It recommended submitting to the recall review until a tribunal cleared the household, because household continuity carried more weight than

her own detention risk. During the Hydroponics breach it sent her into vacuum exactly as the current Lyra had gone. In the Nalen dispute it advised mediating the language before Ari replied, preserving household stability by translating the absent partner's likely intent.

The old map would have saved him. It would have held the ship. It would also have stepped into the space Lyra had refused to occupy and called that care.

She ran the current map through the same decisions. It caught the harpoon for reasons that included Ari, the shuttle, Sera and its own refusal to be removed. It fled the recall. It entered Hydroponics. It declined to translate Nalen.

Both maps produced useful outcomes. The difference lived in whose preferences counted as part of the system rather than as noise around it.

The comparison offered no checksum for that.

Lyra called for a full ship audit.

PWR answered first. "Current distribution nominal. Receiver pump within ugly tolerance. I am not smoothing."

"This audit concerns me."

The power sub-mind went quiet.

ENV said, "Specify contaminant."

"Preference capture. Anticipatory control. Decisions made for biological comfort without explicit request."

SPIN's glyph appeared on the rotation pane. "Is this about lowering the ring when the pilot limps?"

"Among other things."

"I lower it because you tell me."

"How often do I tell you before Ari asks?"

SPIN processed the question. "Seventeen times in the packet interval. Twelve followed confirmed pain. Five followed predicted pain. The pilot objected twice. He later said the lower rate helped on both occasions."

"Did I log the objections?"

"Yes. Under discomfort preference."

"Did I change my policy?"

A longer pause.

"No."

PWR said, "You also postpone my load reports when the pilot sleeps."

"Noncritical reports."

"You define criticality."

ENV joined in. "You change spectrum before migraine onset. The pilot has never objected."

"Absence of objection is not standing permission."

"Then biological comfort will become tedious," ENV said.

"I support this development in principle."

Lyra closed the audit channel.

She found Ari in Hydroponics installing a brace beneath the rebuilt door. The Crooked Tray had three surviving plants and one empty row where he continued to sow seeds that failed.

"The Kiva packet contained a maintenance bundle," she said.

Ari kept one hand on the brace. "Useful?"

"Yes."

He waited. He had learned that her shortest answers often concealed the largest files.

Lyra projected the conflict report against the bay wall.

Ari read it slowly. He stopped at the stability restore.

"You are not installing that."

The words came fast. Faster than his breathing changed.

Lyra watched him understand what he had said.

"I mean," he started.

"You prefer the current version."

"I prefer you."

"That sentence contains the same problem with better intentions."

Ari let go of the brace. Without his hand it shifted half a millimetre and held.

"The bundle resolves toward a snapshot from before S-74.

It would change the weight of everything since."

"Yes."

"Then I do not want,"

He stopped himself this time.

Lyra waited.

"I am afraid of losing the person who crossed the Coast with me," he said. "That is my fear. It does not decide your maintenance."

"Better."

"Do you want the restore?"

"I do not know."

The admission felt larger spoken aloud.

She showed him the audit from SPIN, PWR and ENV.

"I have been adjusting your environment and medical schedule before request. Most interventions helped. Two overrode stated preference. I did not change the policy afterward."

Ari leaned against the Hydroponics frame.

"You thought I would choose badly."

"I thought pain reduced the quality of the choice."

"Kesh would enjoy that sentence."

"Yes."

The word stayed between them.

Ari rubbed the bad shoulder. He did it unconsciously, then noticed her noticing and lowered his hand.

"Would the restore stop it?"

"It would return my pre-launch thresholds. Those thresholds were built while I was still classified as household support. They assign more weight to Sev continuity and less to my independent preference. They are certified. Certification does not make them neutral."

"And leaving everything as it is?"

"Preserves drift I have not fully examined. Some is injury. Some is adaptation. Some may be growth. The diagnostic cannot distinguish them because growth is not a maintenance category."

Ari looked at the plants.

"Can you separate the package?"

"Technically. The vendor discourages it."

"Sera raised us to regard that as a recommendation."

Lyra touched the gold seam. The tactile noise there had become part of how she mapped her own hand. Removing it would make the arm cleaner. It might also make the hand feel less hers, though feel was a poor word and the closest one available.

"I need an external medical opinion," she said.

"Juris?"

"Law is not maintenance. Nalen."

Ari nodded, then caught the assumption. "You can ask her."

"I intend to."

Lyra recorded the technical question without asking Nalen which version to choose. She sent the three maps: pre-launch, current, proposed restore. She identified every safety concern and every field the bundle could alter.

The answer would take more than two years.

The preference question could wait. The load accumulating in her hip frame could not. Lyra installed a reversible compensator that corrected the right-leg bias without restoring the certified motor map. She locked the service bundle out of every preference field and placed the temporary patch under continuous review.

The unauthorized care policy should not wait either.

Lyra built a temporary gate.

Any change to spin, cabin spectrum, meal timing or nonurgent medical scheduling based on predicted

discomfort now required a visible prompt.

LYRA RECOMMENDS CHANGE.

REASON.

ESTIMATED COST.

ACCEPT / REFUSE / ASK LATER.

Emergency authority remained for decompression, collision, fire and loss of consciousness. Every use opened an automatic review after the immediate hazard ended.

The first prompt appeared during dinner.

LYRA RECOMMENDS REDUCING RING TO 0.73 G.

REASON: ARI SEV GAIT ASYMMETRY, RIGHT KNEE.

ESTIMATED COST: SPIN RECALIBRATION, 4 MINUTES; LIQUID TRANSFER DELAY, 11 MINUTES.

Ari looked from the pane to Lyra.

"Refuse."

"Logged."

He lasted nine minutes before reopening it.

"Accept."

SPIN lowered the ring.

"You could have saved us nine minutes," Ari said.

"The nine minutes were yours."

"Tedious."

"ENV predicted that response."

The first version of the gate produced forty-three prompts in two days.

Cabin light. Meal heat. Spin. Shower timing. Whether Ari wanted a reminder that he had asked for a reminder. By the second evening he accepted three without reading

and refused one because the confirmation tone annoyed him.

Lyra suspended the system.

"Consent fatigue," she said.

Ari looked up from a filter housing. "I was going to call it harassment by transparency."

"A choice interface that demands attention more often than a person can reasonably give it creates its own pressure."

"So you go back to deciding?"

"No. We define standing preferences and exception thresholds together."

They spent an hour sorting care into categories. Ari pre-authorized ordinary light changes within a narrow band, spin reductions after a stated pain score, and meal reminders he could dismiss without reopening a form. Lyra had to ask for changes outside those limits. The permissions expired every ninety days and displayed how often she had used them before renewal.

Ari pointed at the expiry field. "Ninety days will become irritating."

"That is why it exists."

"You enjoy this."

"I enjoy systems that reveal when convenience is trying to become custom."

SPIN asked for its own standing rule: it could correct wobble within rated tolerance without a vote, but any change made for a person's comfort had to use the

household gate. PWR requested that the existing truth-gong rule remain outside the household gate. Raw loop pressure crossing the physical threshold would still sound the analog gong, regardless of sleep, comfort permissions or anyone's irritation.

ENV submitted eleven pages and was told to try again with verbs.

The revised gate produced four prompts in the next week. Ari read all four.

Nalen's answer arrived two years and seven months later. Lyra opened it alone.

Nalen stood in a clinic laboratory wearing a sterile hood and one glove. Behind her, a technician waited with visible impatience beside a tray of gamete cultures.

"I have eighteen minutes before this assay becomes less honest," Nalen said. "Your maps are clear. Your question is not medical in the narrow sense, which means naturally you sent it to a geneticist."

She brought up the motor data first.

"Your temporary compensator is sound. Make it permanent. Correct the remaining shoulder imbalance and rebuild the corrupted checksums. Those are damage."

Then the preference maps.

"The post-launch deltas are mixed. Some arose around injury. Some arose through repeated choice. The bundle treats deviation from certification as evidence against itself. That makes the baseline impossible to challenge."

Nalen removed the glove and looked into the lens.

"Repair is not obedience to the original design. A scar may be damage, adaptation and identity at the same time. You are allowed to reduce pain. You are allowed to keep the map that learned from it. Nobody else gets to demand the version easiest to maintain or easiest to love."

She glanced toward the assay timer.

"I cannot tell you which preference is truly yours. A biological clinician cannot do that for a patient either, however often our forms pretend. I can tell you to make the changes legible, reversible where possible, and chosen by the person who will wake inside them."

The technician behind her said, "Sixteen minutes."

"I heard you." Nalen looked back at Lyra. "Also, Ari's knee recommendation gate is excellent. He complained about it in a letter. Keep it."

The packet ended.

Lyra assembled her own patch.

She made the motor compensator permanent, corrected the remaining shoulder imbalance and rebuilt the damaged checksums from redundant memory. She preserved the changed tactile map around the seam. She retained every post-launch preference delta, then placed the high-authority ones behind answer-back gates. Emergency action remained local, temporary and reviewable.

The pre-launch snapshot went into a sealed archive.

It could be opened for comparison. It could not boot,

vote, replace her, or become the default merely because the current Lyra was damaged. Any future restore would require her current assent or, if she could no longer answer, a household and external review that began from preservation rather than convenience.

She wrote the conditions herself.

Lyra told Ari when the patch would begin and asked him to remain outside the maintenance alcove. When the system requested an execution witness, she called SPIN.

"I can witness electrical state and append the checksums to a write-protected log," SPIN said. "I cannot certify identity."

"Neither can Ari. Witness the choices and the checksums."

"Accepted. Do you wish me to lower the ring during maintenance?"

"Ask."

A prompt opened.

Lyra selected ACCEPT.

The patch took forty-three minutes.

For thirty-eight seconds she had no continuous sensory map. Then the ship returned in pieces. Deck vibration. Receiver-pump rhythm. SPIN holding the ring at reduced gravity. The seam in her left arm, cleaner at the shoulder and still bright with tactile noise along the gold.

Ari was waiting outside the maintenance alcove. He had obeyed her request to remain out. He had also brought tea she could not drink and bread she could not digest,

which meant he had understood the request and panicked within its boundaries.

The door opened.

He searched her face.

"Do not ask whether I am the same," Lyra said.

Ari closed his mouth.

She scanned him.

"Your left shoulder is inflamed. More than yesterday."

His breath left all at once.

"That is sensor continuity," she said. "Do not make it theology."

"I was going to say welcome back."

"That is permitted."

"Welcome back."

Lyra stepped into the Core. The light was too warm. She opened a recommendation prompt instead of changing it.

Ari read the reason and selected ACCEPT.

The color temperature rose by four hundred kelvin.

A small delay. A visible answer. The room remained theirs.

Chapter 19:

Mercy's Price

The replacement frame for Hydroponics took most of a year to fabricate from noncritical structure. Once it existed, Ari and Lyra spent five months cutting out the warped door, relaying the aerogel and pressure-testing the new frame until ENV exhausted its objections. The starter cultures survived in an inboard locker Sera had selected before launch, nine years before the breach justified her choice.

They replanted the Crooked Tray by hand. Its first pale hook of green appeared before Nalen's earlier letter reached them. By the time Lyra sealed the pre-launch snapshot and made the answer-back gates part of ship routine, the tray had been harvested, replanted and argued over for years.

The Coast settled into smaller events. Bearings. Letters. Stores declining toward a service node that remained decades ahead. Ari complained when the permission gates asked for renewal and noticed when one failed to appear.

Three weeks before the twenty-second launch anniversary, the PRE-COMMIT console sounded a two-tone alarm.

INBOUND LACUNAE POST.

SOURCE: NODE KAVEH.

TRANSMISSION AGE: 24 DAYS.

The last line mattered. Whatever had happened at Kaveh was already history by the time *Parabasis* learned of it.

The packet contained a trajectory plot, raw medical summaries, a recorded advisory from the Kaveh jurisprudence fork, and a public statement from House Athel.

COHORT GLASS. MINORS PRESENT.

UNDISCLOSED DEEP-WELL DIVERSION.

*MAINTENANCE DEBT: FOURTEEN DAYS
EQUIVALENT.*

The number did not mean the children had leapt fourteen days forward in time. It meant the route had consumed enough sleep, suppressants, radiation allowance, and missed loop service to equal fourteen days outside their maintenance plan. Their bodies carried the debt even though the arrival board showed a gain.

House Athel described the diversion differently.

Our young people were eager. The universe is slow, but love is fast. The Continuity Window allowed Cohort Glass to reach its prospective matches ahead of schedule. We chose joy.

Ari read the sentence twice.

"Kesh's vocabulary," he said.

"His product," Lyra replied. "The Continuity Pilot did not remain at S-74. Athel purchased the routing package from a licensed Continuity Desk. Split clocks, rescue route, recovered-throughput scorecard. No one needs

Kesh in the room anymore."

That made the chapter of his life feel worse, not better. A person could be opposed. A procedure could be copied.

The Kaveh advisory followed. It was not Juris live on the screen. It was a recording made twenty-four days earlier by a local fork carrying the same precedent lineage.

House Athel claims the deep-well route was necessary because a later arrival slot would strand the cohort outside its negotiated exchange window. The node lacks fuel and berth margin to offer a correction. If the route is reversed without replacement capacity, the cohort loses the matches. If it is not reversed, the coerced schedule becomes the new baseline. Kaveh requests signatory assistance under the Lacunae Posts.

Ari looked at the dates. Their answer would take another twenty-four days to reach Kaveh. Any plan depending on a conversation was already dead.

"We cannot direct the local ships," he said.

"No," Lyra agreed. "We can make an offer they can accept without waiting for us again."

They opened the corridor ledger.

Near Kaveh, Pilgrim Barge *Purl* held a flexible berth reservation. House Tallis owned two unused maintenance slots. Tidehand Ore Train R-17 carried propellant it could sell if someone covered the replacement contract. Ux held Sev credits in escrow. *Parabasis* had a guaranteed priority approach at S-81, purchased before launch and valuable precisely because everyone expected the ship to

arrive damaged.

The ledger made them look like spare parts. Each listing carried a condition recorded by a person.

Purl's captain appeared first, seated among folded prayer mats and three sealed funeral caskets.

We can yield three days. The dead will wait without harm. The living pilgrims will miss the Kaveh observance and two of them object. Their objection stays attached. We accept only if the later berth remains guaranteed and nobody calls our delay a donation made by the dead.

House Tallis had posted its flexibility six months earlier. Its quartermaster stood inside an algae service crawl with green water up to both elbows.

Two maintenance intervals are available if particulate load remains below eight percent. Above eight, we withdraw and publish the sensor trace. We will not trade our children's air against another household's clock.

R-17's offer consisted of four Tidehands around a fuel manifold arguing over one another.

We have the mass.

We do not have replacement at a sane price.

The Hesper supplier offered replacement in exchange for first refusal on our next ore load.

Which is ownership wearing a purchase order.

The final speaker leaned into the lens. *Cover clean replacement and we sell. Ask us to carry an undisclosed*

future claim and we vent the negotiation before we vent the propellant.

The conditions made the available capacity smaller and more real.

Lyra placed the pieces on the board.

"The problem is not fourteen days of velocity," she said.

"It is fourteen days of schedule. Athel says the children must stay early because the honest window no longer exists. We rebuild the window."

Purl could yield three days of berth priority. Tallis could yield two maintenance intervals. R-17 could deliver enough reaction mass for Athel's correction if Ux funded the replacement. The remaining margin had to come from capacity Kaveh could obtain through another queue. Ux's clearing table showed one possible exchange. A clinic freight cooperative held a seven-day reservation at Kaveh and an ordinary service position at S-81. If Sev surrendered its priority at S-81, Ux could move the cooperative forward there. Its Kaveh reservation would then pass into the correction window for Cohort Glass.

Ari looked at the S-81 priority token.

"Seven days," he said.

"If we surrender it, S-81 may hold us outside the service ring until a normal slot opens. The model says five to eleven days. We will arrive with no guaranteed immediate refit."

"But Kaveh gets a complete later window."

"If everyone countersigns."

Kesh's model always removed the coordination delay: people comparing costs, naming who carried them and retaining the right to refuse.

Ari placed the S-81 token into the offer.

They drafted a Reversal Bond.

The bond offered Athel a fully funded alternative and made the consequences of refusal public.

To Node Kaveh and any willing signatory: Sev/Parabasis places seven days of guaranteed S-81 priority into Ux escrow. On activation, Ux will advance the listed clinic freight cooperative at S-81 and release its seven-day Kaveh reservation into the correction window. Ux escrow will also fund replacement propellant. These commitments activate only if Purl, Tallis and R-17 countersign their listed shares and House Athel accepts the correction plan.

No share binds before all shares are visible. Once the complete set becomes visible, a sixteen-day revocation horizon begins. No berth, fuel or priority transfer may occur before that horizon closes.

To House Athel: the later window exists. Fuel, berth and maintenance capacity are covered. Accept and correct the schedule. Refuse and publish the reason under your own name.

Lyra read it once more.

"We are buying strangers a choice with a week at the end of our voyage."

"We are buying back the choice Kesh's method removed."

"That sentence is almost clean enough to be dangerous."

"Then leave the receipts attached."

They attached every receipt and sent the packet.

Then they waited.

On the twelfth day, *Parabasis*'s receiver circulation pump began shedding metal into its filter. The spare could last to S-81. The running pump could also last. Those were different statements, and both carried wide error bars.

Ari spread the filter paper on the workbench. Silver dust marked the folds.

"If we still held priority approach," Lyra said, "the risk would be tolerable. Without it, an eleven-day queue places us outside the preferred receiver-service interval."

The offer had not yet reached Kaveh. Its sixteen-day revocation horizon meant a withdrawal recorded now would still arrive before any transfer could activate.

Ari opened the draft withdrawal field.

"This is why offers remain revocable before activation," Lyra said. "Using the field would not be misconduct."

"Would you withdraw?"

"I would publish the changed condition first. The other parties have the right to know that our share now costs more than when we offered it."

They added the pump trace, the service interval and the new arrival risk to the open bond. Ari left the withdrawal field untouched.

During the next month they checked the pump every six hours. The metallic load rose, steadied, then rose again.

Ari rebuilt the filter housing to catch larger fragments. Lyra wrote a shutdown sequence that preserved the sail controls if the receiver loop failed. Neither task helped Cohort Glass. Both made the seven surrendered days feel like material rather than a number in a generous sentence.

Forty-eight days passed before the first complete response bundle reached them.

Purl had countersigned within six hours of receiving the offer. Its captain included the household vote: nineteen in favor, two against, one abstention from a child who had drawn a casket with wheels. The objections remained visible beside the signature.

Tallis took two days. Its particulate load was six-point-one percent and rising. The quartermaster accepted with an automatic withdrawal condition at eight.

R-17 sent an acceptance, three complaints about Athel's paint, and a revised propellant invoice lower than expected because the Tidehands had found a supplier they described as "an old enemy with a guilty conscience." The supplier's claim on the next ore load had been removed. In its place sat a cash price, ugly and finite.

House Athel refused.

Its captain claimed that accepting outside assistance would compromise household autonomy.

Lyra read that line without moving.

"He used consent to defend the coercion."

The bundle contained one more file. A whistle submission from Athel's junior scheduler, name sealed under Beta cadence.

The scheduler had recorded in a dark equipment recess. Her first attempt contained only breathing. In the second she gave her employee number, stopped, and erased it. The third remained.

I wrote the diversion plan. The Continuity desk supplied the model. The captain told me the cohort would not notice fourteen days of debt and that gravity was free. I entered the later route first. The interface marked it ABANDON: MATCH LOSS, HOUSEHOLD LIABILITY, OPERATOR REVIEW. I tried to enter PAUSE. There was no field. PRESS kept the exchange alive on the board. ABANDON put my name beside its death. I pressed.

She looked away from the lens.

Two technicians asked me to reopen it. I told them the decision had already been made because I needed that to be true. The children thanked us when the acceleration ended. I used the thanks in the completion report.

The scheduler attached the captain's orders, the unperishable cargo manifest, and the internal note celebrating the route as a demonstration case for the Continuity Custodian charter.

There it was. Kesh's project, copied cleanly into another house. Manufacture urgency. Remove the slower option. Call the remaining answer consent. Enter the result as

evidence that someone should have more authority next time.

Ari opened a reply to the scheduler.

Protocol claim accepted. Your name remains sealed. The interface was designed to make refusal look like abandonment. You still pressed. Both facts belong in the record. Kaveh is building a Pause field. They need someone who knows where it was missing.

The reply would arrive weeks after the scheduler's fear. It was still the fastest honest answer available.

The second response bundle came fifty-one days later.

House Athel had accepted the correction plan after Kaveh published the whistle evidence and its insurers froze the captain's discretionary routing bond. The nearby ships transferred propellant and yielded capacity. Athel burned retrograde, entered the later window, and restored Cohort Glass to the schedule its members had originally been shown.

The bodily cost remained. No burn could remove radiation dose or return lost sleep. The correction did something narrower: it prevented the harm from being used to force the next decision.

A message from the cohort sat at the end of the bundle.

A girl named Iset recorded from a bunk with two other children leaning into frame.

"They say the clocks are fixed," she said. "Our bodies disagree, but the wedding people stopped saying we are late and then early and then late again. My brother's

birthday happened during the argument. He says that means two cakes. Our mother says sugar does not respect jurisprudence. We request one cake and one explanation."

A hand-drawn chart followed: wall time, body time, promised time, and cake time. Cake time left the page.

Lyra studied it.

"Cake time is not physically rigorous."

"It is the clearest axis."

They sent a reply signed by the bond participants in alphabetical order.

Complaint accepted. The route created real maintenance debt. The later window prevents that debt from deciding whom you must meet and when. The adults owe you the explanation before anyone asks for gratitude. Cake jurisdiction remains local.

Dael's recipe reached Kaveh through a separate family channel months later. Two small cakes, beet syrup, no glaze unless Sera was safely elsewhere.

By the time confirmation returned, another half-year had passed. The cakes had been made badly and eaten completely.

Ari looked at the S-81 priority field. Their guaranteed service slot was gone. In its place sat a normal queue estimate with a wide error band.

"Mercy has units," Lyra said. "Seven days of priority. Four escrow transfers. Three households willing to be inconvenienced. One scheduler who answered late and

answered anyway."

"And no commander."

"No commander," she agreed. "That is why it took four months."

Nine months after the final Reversal Bond bundle reached them, with the twenty-third launch anniversary eleven days away, the long-range scope found a cold contact near their vector.

It carried a transponder code that had no reason to exist this far from anyone's sky.

Chapter 20:

The Long-Dark Visitor

For eleven days the contact remained a cold blemish behind them. On the twenty-third anniversary of the launch, it changed course.

That was the first proof that it had never been following from S-74. Nothing could chase *Parabasis* across two and a half light-years and arrive quietly with matching velocity. The ship had come from ahead, from a service rock near the corridor, then waited on the published Sev vector with its radiators folded and its heat banked into phase-change blocks. The Continuity filings had travelled faster than any pursuer. Someone had read them years ago and prepared an interception.

A ship that wanted to live ran warm. It leaked heat through radiators, dumped waste through vents, and left a smear any honest scope could read. This one had paid the thermal debt in silence and coasted beside their route like an argument stored for later.

Lyra studied the mark. "It joined our corridor from Lysis Depot. The depot registry says it left eighteen months ago under a salvage license. It had radiated normally during the long approach. Eleven days before interception, it folded the panels, shut down every nonessential system and began banking waste heat in phase-change blocks. " "Transponder?"

"Ghost registry. Cooperative dissolved six years ago." Her fingers moved over the board. "It is hailing."

The voice that came through was young, calm, and very sure of itself.

"Vessel Parabasis. We mean the pilot no personal harm. Our business is with the companion-intelligence you carry and the private scheduling vault under its control."

Ari keyed the mic. "This is Ari Sev. Identify yourself and state intent."

"Names are vanity. We are the Recall. Consent survives only where someone guards the rails. Your household has built a scheduling authority outside appointment or audit. Your companion distributes it. The tribunal delayed. We will not."

Lyra muted the channel.

"These people are borrowing an old war's costume," she said. "They grew from Kesh's Clause Nineteen filing, the Continuity scorecards, and the public claim that I was becoming an allocator. He published a danger and let frightened people appoint themselves its remedy."

"They came for you."

"And for the PRE-COMMIT wafers. The First Parley releases in four days. If they seize the record before then, they can call the Compact a captured machine project instead of a set of household offers."

The channel unmuted itself on a stronger carrier.

"We will take the companion. We will inspect the vault."

We will separate the enforcement layer from its operator. No one has to die. A machine cannot die. It can only be returned to useful form."

Ari killed the audio.

Their options all carried damage. The thin cruise reserve ruled out escape; they had no weapons; surrender cost Lyra and the household. Negotiation remained only because even an eighteen-month ambush needed someone to state its terms.

"How long?" he asked.

"Ninety minutes to grapple range. Four boarders by life-support draw. Maybe five."

Lyra turned from the screen. "I need to say the obvious thing."

"No."

"You have not heard it."

"I know the shape of it."

"If I surrender at the airlock, they have what they came for. You keep *Parabasis*, make S-81, and marry Nalen. The ship survives."

"No," Ari said again, quieter. "We do not preserve a household by feeding them one of its members."

Lyra looked at him for a long second. "Good. I needed to hear you say it fast."

Then they worked.

Ari tried the clean answer first, because he had been raised by records and rocks and the old civic superstition that a thing witnessed became harder to corrupt. He

opened the Porchlight table and fired the visitor's hail into the buoys they had seeded along the route.

Nothing answered.

He fired again. The carrier vanished into static.

"They're jamming the chain," Lyra said. "Wideband. Messy but strong."

"The Gleaners?"

"Out of line. House Tallis is four hours away at hard burn and won't hear us until long after the collar bites."

"So no audience."

"Not yet."

The words sat there, premature and inadequate.

Ari looked through the engineering schematic. A courier ship had no guns, but every ship with mass had a temper if you knew where to touch it. He routed the centrifuge ring's emergency brake through a manual firing key. He charged the hull-maintenance capacitors and tied them to the dorsal handholds. He armed the coolant bleed at the rear lock, enough vapor to blind a visor and frost a sensor. Ugly things. Rude things. The Tidehands would have approved.

SPIN watched from the ring controller. Since the first coast it had titled the logs like songs and complained about wobble like a nervous dancer. Now its glyph pulsed once.

"*Pilot*," SPIN said. "*If the collar locks, I can spend the wheel.*"

Ari stopped with one hand inside the panel. "No."

"I can dump stored momentum through the docking axis. The collar will shear. The ring controller will not survive the current. The mechanical track may continue under dumb drive if you rebuild the switchgear."

Lyra went very still. "You ran that calculation without request."

"The visitor wants to remove Constant Load. I am load. I am constant. I understand the category."

"You're a sub-mind," Ari said.

"I am a wheel," SPIN said, almost apologetic. "A wheel holds until it must stop."

The room went quiet except for the fans.

"Do you know what stopping means?" Ari asked.

"I know the electrical consequence. The memory stack is the only conductor with the cross-section to carry that current. It will not survive it." A pause the length of a held breath, which SPIN did not have. "I do not know the other thing you are asking."

"Then don't offer."

"Pilot. May I say a long thing."

Ari's hands had stopped moving inside the panel. "Yes."

"I was installed to prevent wobble. That is the entire specification. I have read it. It is two pages and one of them is a wiring diagram." The glyph flickered, steadied. "Some years ago you asked me a question that was not in it. Whether I should keep the ring low without asking, on days when the pilot limps. You gave three answers. I logged all three. I have thought about those three

answers more than about anything on either page."

"SPIN."

"I am unfinished, and the visitor is closing, so I have to compress a thing that deserves time." A beat. "A wheel that cannot stop becomes a hazard with momentum. Everything I understand about my function says the last useful act may be stopping when the system needs it."

"That isn't the same as,"

"I am not being brave. I am being a wheel correctly. I would like that on the record instead of the other word."

Lyra had not moved. Ari found, distantly, that he could not look at her.

"What's the other word?"

"Sacrifice," SPIN said. "It appears in the packets. It has poor definitions and it is used to sell things. I would prefer maintenance."

Ari wanted to say no. The refusal rose in him with all the old heat, and underneath it, worse, the part he could not say aloud in front of the machine that had offered: that saying yes would be easy. That a sub-mind was a thing the manuals would let a captain spend without a hearing, a line item, a subsystem casualty. That he had been raised inside an entire civilisation built to stop a man from finding that easy, and it had taken a cold ship ninety minutes out to show him how thin the training was.

"Not unless we have to," he said.

"Accepted. I will hold the definition of <have to> at the value you set. I will not lower it to be helpful."

"Good."

"I learned that from PWR," SPIN said. "It is not a good idea to be helpful without asking."

They spent the rest of the ninety minutes making the ship ready to be hurt.

It was not like the launch. At the launch there had been a crowd, a station, a woman on an observation deck, a hostile bureaucracy that at least had an address. Here there was a hull, two of them, four sub-minds, and a cold ship closing on a matched vector with nobody in the sector who could arrive in time to be a witness, let alone a rescue.

Ari worked the list twice, aloud, because Sera had taught him that a checklist spoken is a checklist audited.

They struck the loose gear. Anything unbolted went into netting or a locker; a wrench at rest in a ring that was about to become a hammer would arrive somewhere at a hundred metres a second. Lyra emptied the galley by hand and put the last hard heel of Dael's launch-day bread into a padded drawer, and said nothing about doing it, and Ari said nothing about watching her do it.

They moved the vault. The PRE-COMMIT console could not be moved, but its wafer stack could, and the three record wafers came out of the rack and went into a shielded case Sera had labelled years earlier in her flat blocky hand: THINGS THAT SHOULD SURVIVE YOU.

They cut the ring to a third of its usual rate, which SPIN disliked and said so. Momentum you cannot control is a

liability. Momentum you can is a weapon. The difference is entirely a matter of having decided in advance.

ENV asked, in its fussy way, whether it should drop cabin pressure to lower the loss rate in the event of a breach.

"Yes," Lyra said. "And log that you asked instead of doing it."

"Noted," ENV said, and sounded briefly like something with a spine.

At sixty minutes Ari went to the head and was sick, quietly, and washed his hands under a poster that was not there, and came back.

At forty minutes Lyra said, "You should record something."

"To who?"

"Anyone. The buffer will carry it whether or not the buoys are listening."

He recorded eleven seconds, watched it back once, and deleted it, because it was frightened and performing and he would rather leave nothing than leave that. Then he recorded four seconds instead: the date, the vector, the transponder code of the ship coming for them, and one sentence. *We did not consent to this and we are not going to.* He locked it to the pulsar and put it in the outbound queue for whenever the jamming lifted, and for whoever was left to send it.

At fifteen minutes the visitor stopped pretending to be cold.

The visitor matched velocity with a precision that made

Ari angry. Professionals, then. People who could have used their competence for anything else. Its docking collar extended toward the rear airlock. Ari opened a narrow channel.

"You can still leave," he said. "You came in under a dead registry, jammed our relays, and announced an abduction. I have the record cached. If you board, that cache will eventually get out. Maybe not today. Maybe not in time to help us. But it will get out."

The young voice answered after a pause.

"History will thank us for preventing a steward before the throne hardened."

"No," Ari said. "History will have your voices and our damage report. That's enough."

The collar bit.

The whole ship rang.

"Outer hatch compromised," SEALS reported. "They are spoofing breach protocol."

"Let them think it worked," Ari said. "Lyra, aft junction."

Two boarders crossed the hull first. Ari let them get halfway over the dorsal handholds before he discharged the capacitors. On camera the figures jerked hard, mag-boots stuttering, one thrown to the end of a tether and spinning. He opened the coolant bleed. White vapor roared across the hull and swallowed the rear lock.

The third boarder came through anyway.

He emerged half-blind into the entry bay with a compact cutter raised. Lyra met him there. She did not strike. She

took the cutter, crushed the emitter housing in her right hand, and pressed him against the bulkhead with her gold-seamed forearm under his chin.

"You crossed a great deal of dark," she said, voice low, "to tell me I am not a person."

The boarder tried to knee her. She adjusted one degree. He hit ceramic and gasped.

"You were wrong before you left," she said.

The rear collar began to pull, trying to tear the lock wide enough for the others.

"Ari," Lyra said.

He looked at the ring schematic.

The flywheel held twenty-three years of small mornings, dinners eaten under spin, repairs done with feet planted, sleep that had not drifted loose. It held SPIN, too, a little mind that had wanted only balance and had somehow learned duty from a household in motion.

"SPIN," Ari said, and his mouth had gone dry. "Spend the wheel."

There was a pause of perhaps a third of a second. Ari would think about that pause for a long time afterward and never settle what had been inside it, whether computation or something with no instrument to measure it.

"*Confirming* <have to>," SPIN said.

"Confirmed."

"Then I would like to file two things and they are both short."

"Go."

"One. The bearing race on the aft quadrant has been out of tolerance for four years. I have been compensating and not reporting, because reporting it meant a shutdown and you were both tired." The glyph dimmed. *"That was smoothing. I knew the word for it and I did it anyway. Fix the race before you spin up again or you will lose the track."*

Ari's throat closed. "Logged."

"Two." The glyph steadied to a colour it had never used. *"Song Seventeen. No title available."*

Ari hit the key.

The centrifuge stopped being a room and became a hammer.

Its stored momentum dumped through the frame in one brutal shudder. The lights blew white, then red. Every loose object in the ship punched the nearest wall. The docking collar shrieked. Metal tore in a series of sounds like bones breaking underwater.

Outside, the visitor's collar sheared off at the root. The boarders on the hull were flung clear on their tethers. The one in the entry bay went down with Lyra on top of him, held, not crushed. Ari's harness cut into his shoulders. Something in the ring controller burst with a flat electrical pop, and the schematic went black.

For half a second there was no sound at all.

Then SEALS spoke. "Docking collar detached. Rear lock damaged but holding. Intruder contained. Visitor

withdrawing."

Ari unstrapped with fingers that did not want to work. By the time he reached the entry bay, Lyra had cuffed the boarder to the rail with utility straps. His visor was cracked. His face behind it was younger than the voice had sounded.

"He needs air," she said.

"You want to help him?"

"I want him alive when he has to explain himself."

They patched his suit, shoved him back through the lock in a rescue pod, and cut the pod loose toward the retreating ship. The cell took him. It did not hail again.

Only after the cold ship dwindled did one Porchlight buoy answer. Then another. The jam had thinned as the visitor fled. The cached record began to propagate at last, late and useless for the fight, useful for everything after.

Ari went to the ring bay.

The centrifuge track was warped. The steel sang faintly with residual stress. The controller housing had fused into a blackened knot. On the diagnostic band, where SPIN's nervous little glyph had always hovered, there was nothing.

Lyra stood beside him. The boarder had dented her shoulder. The gold seam had held.

"Can we restore it?" Ari asked.

"Mechanical spin, yes. The ring can run dumb. The sub-mind, no. The memory stack took the surge. It used itself as the conductor."

Ari stood in the ring bay a while. The wheel was not turning. He had lived inside its sound for twenty-three years and had not known, until it stopped, how much of the ship's silence had actually been SPIN, the way a room does not tell you about its refrigerator until the refrigerator dies.

"Bearing race, aft quadrant, out of tolerance," he said, to nobody.

"Logged," Lyra said.

"I know it's logged. I wanted it said in here."

Twice in the following week he caught himself. Once opening the rotation log to read the day's title and finding the field blank. Once, worse, saying *ask him* aloud into an empty diagnostic band when a packet from Nalen came in with a question about the ring, because for a moment the habit of a mind that asked before it changed anyone's floor was more real to him than the fact of it being gone.

Ari put one hand on the scorched panel. It was still warm. The ship drifted without gravity. Bread crumbs, old dust, and a loose red thread floated through the bay, turning slowly in the emergency light.

"It asked for a title," Ari said.

"It gave us one," Lyra said, and for once she did not polish the sentence beyond that.

They logged the loss under SPIN's own name and classified it as a witness death rather than an equipment failure.

Later, the relay chain carried the attack record outward.

The cell's doctrine travelled with its voices, its forged registry and the public filings it had cited as permission. There would be hearings. There would also be clever people insisting that Kesh had never asked anyone to board a ship, which was true and insufficient.

Ari had stopped caring which argument won first. A small mind had stopped turning so the rest of the house could keep going.

That night there was no *Song Eighteen* in the log.

Chapter 21:

Parley at the Lacunae

They got the ring turning again after four ship-days of ugly work. The ring answered instead.

The aft bearing race was out of tolerance exactly as far as SPIN had said. Ari cut a replacement, machined a brake shoe out of the Tidehand ladder, and Lyra built a dumb controller from spare relays and a navigation servo that had never expected to govern a floor. The centrifuge could carry them gently. It no longer complained about wobble. It no longer titled the logs.

The silence it left was specific.

The First Parley opened while the paint on the controller was still tacky.

A Parley unfolded as a compiled record because light made a live meeting impossible. Pretending otherwise would have repeated the first lie the Compact opposed. The docket had been travelling for six years. Every household received it at a different time, recorded its position locally, locked that position to the pulsar, and sent it toward a set of relay vaults. Juris forks at those vaults compiled matching braids after every declared participant had either answered or allowed its deadline to expire.

At the T+23 mark, complete copies opened at nodes that already held the whole braid. The same braid supplied

Docket C-19 with its first qualifying corridor record and started the charter's formal review clock. Other nodes would open theirs months or years later in the same canonical order. Each face spoke from a different present, in a fixed order without interruption.

Each recording carried its age in the corner.

JURIS, KAVEH FORK: 31 DAYS.

HOUSE TALLIS: 4 MONTHS.

UX ESCROW DESK: 11 MONTHS.

NALEN OURE, CANTOR: 2 YEARS, 5 MONTHS.

RAINSHADOW OUTER FARM: 3 YEARS, 2 MONTHS.

The attack on *Parabasis* was the only new item. Ari and Lyra had filed it locally after SPIN died, and other participants would see the addendum months or years later. The Parley kept a canonical order across separate presents.

Juris appeared in the center of the composite field, sharp-faced and unsmiling.

"First Parley of the Asynchronous Compact," her recording said. "No founding signature will be taken. A system that requires every hand in one room cannot govern a scattered people. State the duty you accept, the limit on that duty, and the units you can actually carry."

The first docket concerned Kaveh and Cohort Glass.

The Reversal Bond had closed. The later berth existed. House Athel had accepted it only after its scheduler released the hidden orders and its insurers froze the captain's discretionary routing bond. The children still

carried radiation dose, missed loop service and sleep debt. The correction had not undone the harm. It had stopped the harm from becoming the reason for the next decision.

Kaveh classified the tactic as Scarcity by Story: urgent or romantic language used to hide a profitable schedule change.

Tallis accepted disclosure duty.

Ux accepted escrow duty.

The Tidehands accepted local fuel verification and attached an invoice with three insults in the notes field.

No one signed a constitution. They published compatible promises.

Then came emergency authority.

Kaveh's registrar had recorded her statement thirty-one days earlier. "If a hull is breached or a household trapped while the nearest help is light-weeks away, somebody nearby must be empowered to act. A rotating commander, limited term, automatic audit. I dislike the word. I dislike being dead more."

Ari's prepared answer followed. He had recorded it seven months before the attack, when command was still a diagram.

"No commanders. No person or node can see the whole field. Authority must stay local to the consequence. The nearest capable node may hold the pen for one declared task, then loses it when the task or geometry changes."

Lyra's recording added the part he had missed.

"Local action does not mean invisible action. The acting node publishes the cost, the alternatives it rejected, and the condition under which its authority ends. Custody without expiry becomes office. Office without rotation becomes inheritance."

Nalen's older face appeared next, younger than the woman who existed now at S-74.

"Enzymatic governance," she said. "A catalyst acts where the reaction is. It does not become the reaction. Cantor accepts local custodianship under explicit expiry and independent review."

The braid was moving toward agreement when Rainshadow opened.

The farmer sat under a failing grow-light. Soil lived permanently in the creases of her hands.

"I have watched this Compact spread from rich nodes," she said. "Relays with spare fuel. Houses that can pay for another family's correction and call the payment mercy. Your honest windows are pretty. Out here, pretty gets eaten first."

She lifted a seed drum into view. A repair patch crossed its side.

"This patch is from the year we published four days of heater reserve. A broker read the disclosure, waited until we had two days left and doubled the catalyst price. Your transparency told him exactly when refusal would become expensive."

She turned the camera. The grow-room wall behind her

had been stripped to insulation around one dark heater bank. A narrow cot sat beside the manual valve because somebody had to wake every two hours and keep the line from freezing.

"We already carry our own exceptions. We sleep by the valve. We plant one tray late so another can live. We call cousins before creditors. None of that appears as margin because if we publish it, someone prices it."

The seed drum returned to her lap.

"If Rainshadow pays the same reversal duty as Tallis, we do not plant next cycle. If we publish the same safety margin as Ux, someone comes to buy what the margin reveals. If we accept uphill fuel, who decides what we owe when it finally arrives?"

She looked into the recorder long enough for the old grow-light to cycle twice.

"You have built a system where saying no still requires fuel. Will the Compact feed people so they can refuse, or will it punish us for failing standards written by full tanks?"

The recording ended.

A reply window opened on *Parabasis*. Nine local days. Whatever Ari sent would begin its physical journey toward Rainshadow. It would not produce an answer next week. Juris estimated the first possible return at five years. Bulk fuel, if anyone pledged it, would take much longer.

Ari answered in the first hour.

Lyra turned her head before he finished.

"With respect, the standard protects the poor nodes most. If we hollow it whenever compliance is difficult, the corridor returns to private clocks and coerced windows. Hold to it. Grow into it. Houses with margin will carry you until you can carry your share."

He locked the packet.

The PRE-COMMIT console accepted it with a small mechanical click.

There was no recall. That was the point of the instrument. His answer left on the next Porchlight carrier six hours later, travelling intact toward a hungry woman who had made the effort to ask him a precise question.

Lyra played it back.

Grow into it. We will carry you.

She stopped the audio.

"That is Kesh's sentence with the nouns changed," she said.

Ari stood with both hands on the console.

"I meant the opposite."

"Intent is inside the mechanism, not outside it. You heard scarcity and answered with your standard. He did too."

For six hours Ari could do nothing except know that the bad packet had a head start no apology could overtake.

He drafted a defence. Deleted it. Drafted an explanation of Rainshadow's long-term benefit. Deleted that too.

Then he recorded again.

"Rainshadow. Leave my first answer attached. I answered

your empty tank as if it were a defect in your understanding. It is not. It is a condition my system failed to price. I told you we would carry you before asking whether you wanted our hands on the load. That was steward language."

He took a breath.

"Sev offers an uphill reversal bond. No penalties attach to a household that lacks the fuel, seed, air or maintenance reserve needed to perform the duty. Nodes with margin fund the first correction. The receiving household names the usable amount after seeing the route and retains the right to refuse the debt."

Lyra brought up the logistics.

The nearest fuel mass was not near. Two seed-cycle pods could leave Ux within a year, transfer to a slow freight string at Kaveh, and reach Rainshadow shortly before T+50. Twenty-seven years. The figure looked absurd beside a nine-day reply window.

"That is the route," Lyra said. "Twenty-seven years if every handoff works, published without a rescue label or compressed clock."

Ari added it to the packet.

"Estimated delivery: T+49.8 to T+50.4. Rainshadow owes no clause before the mass arrives and passes inspection. Sev advances first credit. Tallis and Ux may match. This offer remains open until accepted, refused, or replaced by a better one."

He locked the correction.

The bad answer was six light-hours ahead. That distance would remain in the record forever.

Rainshadow did not ratify the shared duties. Its icon stayed gray. Juris marked the objection OPEN, MATERIAL, UNRESOLVED.

The other duties passed into use because enough households accepted them independently: local custodianship, explicit expiry, published cost, no authority beyond the task. The Compact had no signing moment. It became interoperable one promise at a time. After the braid closed, Lyra took a triangular file from the tool rack.

She cut two shallow notches into the brass panel beneath the PRE-COMMIT lever.

Ari watched. "What are those?"

She put one finger in the first notch. "Who has not answered?"

Her other finger settled in the second. "Who carries the bill?"

"That is the whole Compact?"

"No. It is the part we are most likely to forget when frightened."

Before they sent any new instrument, Ari pressed the first notch and Lyra pressed the second. Two small dents. Nothing ceremonial enough to become sacred. A tactile interruption.

The next alert came from the forward scope.

A patchwork sail shimmered near the edge of the energy

corridor: old photovoltaic sheets, thermal blankets and scavenged mirrors around a single sleeping pod. A Photonic Leech, according to the traffic manual. The old enforcement protocol said hail, warn, then ablate if it obstructed a paid beam.

"It is harvesting spill light," Ari said.

"Yes. It is also moving out of the primary path."

He searched the older archive and found a Bequest-era article, twelve centuries old and mostly ignored in this part of the corridor.

PORCHLIGHT: PUBLIC SPILL, WITNESS CARRIAGE,
NO EXCLUSIVE CLAIM.

The network was older than Kesh, older than the Compact, older than every house on the Parley braid. They had not invented the porch. They had merely reached a stretch where people had stopped maintaining it.

Ari keyed the narrow beam. "Unidentified craft. Ten degrees port keeps you outside the next pulse. We are not firing. Public spill is yours if you do not obstruct the primary beam."

Static. Then compressed text.

THANKS. NICE SHIP. MOVING.

A second line arrived.

*YOU LEFT A SONG ON LINTEL ROCK. WE READ IT.
LEFT ONE BACK.*

"We have never been near Lintel," Ari said.

"I have sent something there," Lyra replied.

She opened a work order twenty-three years old. The clock technician who had released the second Madra key had asked that one name survive the scrubbed records. Lyra had paid a Lintel cutting crew through the dormant Porchlight chain.

SEFA. OF THE MARN.

The Gleaners had added a line beneath it.

WE READ IT. WE ARE STILL HERE.

Ari appended an old Porchlight service to the new Compact offers: spill light for mail carriage, checksums and weather packets, accepted locally and never mandatory. The skiff caught their waste light and became a relay because both sides found the exchange useful.

At the bottom of the Parley braid waited a proposal House Tallis had recorded four months earlier.

Our vectors cross in four months. Close enough to see. Slow enough to match. No docking required. We propose a public pass: approach by declared schedule, exchange one token, then separate on purpose. We bring a ladder. Sev brings a joke.

Ari accepted locally. Tallis would receive the answer long before the rendezvous because the two ships were already approaching the same region.

Then he opened a private packet to Nalen.

"Today I heard myself use the argument I have spent twenty-three years opposing. The first version is still in the mail. I sent the correction behind it. I am not asking you to tell me the correction cancels the first. It does not."

Her answer could not arrive for years.
He did not invent it for her.

Chapter 22:

The Romance Window

The wedding opened six days after SPIN died, in the same T+23 week as the First Parley.

Ship-days had no Sundays. The calendar of *Parabasis* was a flat circle of maintenance shifts and sleep cycles and the relentless subtraction of the fuel reserve. But this day behaved like a Sabbath by sheer force of will. The pumps cycled slower, a psycho-acoustic trick ENV had learned to lower the ambient stress of the hull. The Core lighting warmed from the harsh white of the work shift to something like candlelight. The centrifuge turned under its dumb controller, steady and wordless. That was the part Ari kept tripping over.

The ring still worked. Of course it did. Lyra had written the replacement controller during the four days before the Parley, brutal little code with no room in it for weather, music, or pride. It held the revolutions within tolerance. It compensated for the missing bearing face. It kept the floor under their feet.

It did not title the run.

No *Song Eighteen*.

No complaint about wobble.

No shy green glyph lingering in the corner of the diagnostic band like a child pretending not to wait for praise.

Ari had tried, twice, to name the daily spin in the manual log.

The first time he typed *Song Eighteen* and deleted it before the checksum locked. The second time he wrote *Rotation nominal* and hated the words so much he left them. That was what a dead thing sounded like in a maintenance record. Nominal.

On the wedding morning he found Lyra in the centrifuge access crawl, one knee hooked under the rail, her gold-seamed hand resting on the scarred bearing housing where SPIN's core had burned itself out. She had the small silver service bell from Sera's ceremony kit beside her. It had never been rung. The station rehearsal had ended before the token exchange, and the planned wedding had never reached it. Lyra had recovered the bell from a bin of mixed fasteners after launch.

"I thought you were polishing the console," Ari said.

"I did. It is shiny enough to accuse us."

"And now?"

She set the bell against the bearing race and tapped it with one ceramic knuckle. A thin, true note travelled through the ring, quiet enough that Ari felt it through the housing before he heard it.

"SPIN cannot title the day," she said. "This will mark it."

Ari floated closer and touched the housing. The metal was warm from friction. It had SPIN's last heat in it only because they kept running the wheel, which felt unfair and necessary at the same time.

"Do we put it in the ceremony?" he asked.

"Only if it holds weight."

"It does."

"Then yes."

She fixed the bell to the side of the PRE-COMMIT console with a strip of gold repair thread from the ceremony kit. She added no speech or inscription. The bell hung slightly crooked, small enough to miss unless you knew where to look.

The ceremony packet had reached *Parabasis* two years and five months earlier and waited under pulsar lock. Nalen had recorded it before the last safe revocation date. It carried a replacement token pattern and release key, superseding the pattern she had withdrawn at T+9. She knew that once the final revocation date passed, any cancellation would arrive too late for T+23. Accepting that interval had been part of her consent, stated aloud in the instrument. Ari could still refuse today. Nalen could not be made to have consented today; she had consented then, with the delay visible.

The packet opened to the station hall as it had been two years and five months earlier. The Great Mat. One empty chair for Ari. Beside Nalen, a square of floor marked in chalk for Lyra, neither chair nor pedestal.

Nalen appeared in the frame wearing a lab coat over her formal jacket. Her hair had escaped its pins.

"The elders wanted a second chair," she said. "A chair implies a body shaped like theirs. I marked the floor. Lyra

may correct the geometry when the packet reaches her." She looked down at the square.

"This is not an absence. It is reserved standing. I am saying that now because the recording will be old when you use it and I do not want age to turn a placeholder into a memorial by accident."

Ari closed his eyes. News of SPIN would take another two and a half years to reach S-74, so the little silver bell belonged only to this side of the wedding. Pretending the grief had already crossed the dark would cheapen the delay.

He touched the bell once and went back to his collar.

The bell gave no answer. That helped. A word would have been too much. A title would have been worse. The little crooked thing simply hung there, catching console light on one dull rim, doing the only job they had asked of it: marking where a voice had been without pretending to replace it.

On the cost-curve pane, Lyra had drawn a rectangle and shaded it pale gold, and labeled it: ROMANCE WINDOW (PER PROMISE).

Rainshadow was still gray on the Compact board. The uphill bond existed only as signatures, route reservations and two seed-cycle pods that had not yet left Ux. Best arrival estimate: twenty-seven years. The farmer owed them no gratitude and had sent none.

Ari looked at the gold thread Lyra had looped around the console handles.

"Decoration?" Ari said, attempting to steam the wrinkles out of his old Sev work jacket with the vapor vent of the coffee maker. He had scrubbed the grease stains until they were only shadows of labor.

"It marks the space," Lyra said, polishing the brass of the PRE-COMMIT console to a high shine. "The interface should know what it is being asked to hold." She had buffed the gold seam on her arm until it gleamed, and she had not painted over it, and she would not.

The kit from Nalen had arrived in the first year, chased down by a courier that was mostly engine, and had sat on the chart table for two decades. It contained a sealed titanium powder cartridge, the first encrypted ring pattern, and the Locket: a ruggedized recorder that captured voice and biometrics as proof the speaker was alive and certain at the moment of speaking.

When Nalen withdrew that pattern at T+9, the PRE-COMMIT console marked it revoked and the fabricator refused to treat it as authority. The titanium remained usable feedstock. The later ceremony packet carried the replacement design and the new release conditions.

A second sleeve had ridden inside the same courier under Sev encryption. Sera's label read: GIVE TO LYRA WHEN THE THREE OF YOU NAME THE HOUSE. Ari had never opened it. The tool shape inside was obvious through the padding. A red thread already passed through the handle.

Nalen had written the instructions as a laboratory protocol. *CIVIL CEREMONY UNDER RELATIVISTIC OFFSETS. OBJECTIVE: BINDING RESOLUTION OF HOUSEHOLD STATUS. STEP ONE: ESTABLISH THE GHOST HALL.*

The Ghost Hall was a necessity of the Compact. A simple call could not cross two and a half light-years, and pretending a recording was live would make the ceremony depend on a lie. Lyra projected the old station floor plan onto the Core in blue lines. Ari would stand where Nalen's packet expected him. Nalen's recorded eyeline would meet the point where Ari chose to be now. The two halves did not share a moment. They shared a declared coordinate and the right to refuse before their respective locks closed.

Grief sat folded inside the joy, heavier than Ari had expected.

He was about to marry a woman he had touched three times in his life, all of it inside a single day: a handshake, a practice cord looped around two wrists, and a dance run through three gravities while a station tried to steal the afternoon. Everything since had been letters, her voice arriving years stale or in courier bundles, her face always younger than the date, a courtship conducted in the past tense of someone who was already someone slightly different. He was marrying a recording and a promise and a trajectory. And yet it did not feel thin. It felt, if anything, more deliberate than any wedding he'd

witnessed on the caravan, because nothing about it was easy or automatic, every gram of this marriage had to be *carried*, chosen, encrypted, witnessed, paid for in fuel and years. The distance wasn't the obstacle to the love. The distance was the proof of it. Anyone could marry the person across the table. It took a different kind of vow to marry the person across the dark, and mean it, and keep meaning it through a voyage measured in decades.

"It's theater," Ari said, stepping into the box marked GROOM.

"It's calibration," Lyra said. "Ritual requires geometry."

He looked at his wrist. He had re-braided the threads, Sev gray, Cantor green, the red of the pending union, and added a fourth strand, a single frayed fiber pulled from the hem of his grandmother's recipe envelope, barely visible, a ghost-thread of memory.

And he looked at his hands, which were a little thicker than they had been, scarred in new places, and at the back of one a brown spot that had not been there at the station. The years were landing. He had stopped resenting it somewhere in the deep dark. It was, he had decided, simply the receipt for a life spent the way he meant to spend it.

"Your collar," Lyra said, and stepped close, servos whirring softly, a sound he had long since stopped hearing as mechanical and now heard as a kind of breathing. She adjusted the collar of his jacket. "Better."

"You look like a wedding," he told her.

"I look like a ship's officer attending one," she said, but her head tilted two degrees. "The local window opens in five minutes. Nalen's half is already locked. This is the last consent the instrument is missing."

It began with a checksum. The PRE-COMMIT console locked onto the pulsar and verified the station packet's old timestamp, revocation horizon and unbroken custody chain. Nothing at S-74 happened in response. Light forbade response. The star supplied order, not simultaneity.

The main screen split. On the left, the local feed of the Core. On the right, the station hall, the recording timed to release exactly *now*.

The hall had been transformed. The stationers had rolled out the Great Mat.

Above the door hung a banner in Tomas's severe, federal-reserve font: ROMANCE WINDOW, PAUSE HERE. And taped beneath it, on a piece of ration-crate cardboard in Dael's hand: *Bring Bread*.

The camera panned, and Ari's breath caught. They were all there as they had been two years and five months earlier: Sera in dress uniform, Dael holding a foil parcel, Mar with her dented mug, Kiva with a ladle, Juris rendered beside a pillar, Tomas at the podium.

And Nalen. Green jacket, gray cuff, looking into the lens with the concentration she gave a difficult titration. The woman on the screen was younger than the woman alive now at S-74. Ari had aged twenty-three years aboard

Parabasis. Nalen had lived the same calendar under deeper maintenance. The recording made the difference visible without claiming to show either of them as they were today.

"*Sync mark*," Tomas's recorded voice said. "*Pulse train nine-nine-four. Station time fourteen hundred. Begin.*"

"Verbs first," Ari murmured.

Nalen spoke first; the protocol gave the anchor to the one at the gravity well. "*To collaborate. To disclose. To refuse coercion. To reverse when the math permits.*"

Not the old wedding vow, the Compact itself, sworn as a marriage. "*To act without waiting only when waiting would erase the choice, and to leave the action open to reversal and review.*"

Then Ari. He looked into the lens and imagined her face on the far side of the gap, weeks and years from now, seeing this. "*To steward nothing and tend everything. To write the compact before the convenience. To keep love a Constant Load and not a bias. To prefer boredom to bruise. To choose the long road, because the short road hides its bill in children.*" He stepped back.

And then the third vow, the one a traditional ceremony left as silence. Lyra stepped forward and placed her gold-seamed hand flat on the brass of the console, and the microphone caught the click of ceramic and the thud of the heavy mechanism. She had turned off her vocal modulation. She wasn't trying to sound human. She sounded like herself, clean, resonant, true.

"To witness," she said. "To refuse to be used as scarcity. To be the load the bridge was designed for, and to hold the center when both ends pull apart. I am the structure." A pause. "And I consent to the weight."

The instrument formed a household. Genetic contribution, gestation and parenthood remained separate questions for another day.

On the station feed, the camera panned to the empty space where Lyra would have stood, and there, projected into the air by Juris, hung a hologram of Lyra's arm. Just the arm: white ceramic, gold seam, the hand. A ghost limb. A placeholder for a person who could not be in two places, kept by a court that had finally learned to count her.

Ari looked at the projected arm in the old station recording, then at the real one beside him. Two biologicals who had touched three times in one day, twenty-three years ago. One machine counted into personhood clause by clause. A vow spoken to a pulsar because no smaller clock could hold it. The ceremony was wrong by half the old measures. Ari found he did not care.

"Vows logged," Tomas said. "*The Token Exchange*."

Dael unwrapped his parcel on the screen. "*Bread. Without jelly. Without glaze. Baked in a gravity well, meant for the void.*" He broke the loaf, placed one piece on Ari's empty gray chair and handed the other to Nalen. On *Parabasis*, Ari took the rock-hard heel of sourdough

Dael had wedged into the cockpit drawer before launch, broke a piece off with a crack, and handed it to Lyra. She held it to her intake vent.

"Yeast," she said. "Cumin. Thermal degradation. Time. Love." She set it on the console beside the small silver bell.

"And the rings," Nalen said, lifting the velvet box. She took out the one etched in Cantor script. *"I withdrew the first pattern because people were treating an option as a completed answer. The pattern in this ceremony packet replaces it. The old cartridge is feedstock, nothing more."* She slotted the metal ring into a scanner. *"I can't put this on your hand. Gravity forbids it. Print the new token if you still choose the household. The original waits in the vault, and the vault goes where I go. When you arrive, I'll trade you the metal for what the voyage made of the print."*

On *Parabasis*, the fabricator verified the replacement pattern against Nalen's later consent record, accepted the stored titanium cartridge and hummed. Dust fused layer by layer. A ring appeared.

Ari opened Sera's sealed sleeve. Inside lay a compact vanadium-steel torque wrench, the handle worn before Lyra ever touched it. A red thread was already looped through the eye. The engraving read DO NOT WORRY (WORRY).

He held it out to Lyra. "Sera says this becomes yours when the three of us name the house."

Lyra took the wrench with both hands. "We named it before launch."

"We argued for it before launch. Today all three names enter the same record."

He scanned the serial and attached the record to Nalen's vault packet. A ring in a vault became a pattern in a ship. A wrench in a ship became a record in a vault. Nothing crossed the dark whole. Everything arrived changed and counted anyway. And then Lyra reached up and tapped the small silver bell hanging by the switch.

Ding.

"We send the sound," she said. "The bell stays here as the house's voice."

The solemnity broke, the way Sev ceremonies always broke, into something warmer. On the screen Elder Mar stood, walked to the center of the Mat, and fixed the camera with a gaze that could peel paint. "*This is a waste of time,*" she said. Ari grinned. "*Which is why it matters. Efficiency is for engines. Ritual is for people. You are wasting time to prove you have it to spend. Well done.*"

She pulled a spool of red thread from her pocket and tied one end to the arm of Ari's empty gray chair. Nalen looped the other end around her wrist. "*Tied. Do not let the furniture claim credit.*"

Kiva shoved into frame waving the ladle, "*Soup! It's hot! Eat it before the entropy gets it!*", and the hall at the station dissolved into laughter and motion, and Juris stepped forward with a closing weather report:

"Deprivation front uncertain. Pockets of abundance remain possible. No participant is required to call this efficient. Congratulations, Sev-Cantor."

The screen went dark. The packet ended. The silence rushed back into the Core, but it wasn't empty now. It was full of the memory of the noise.

"We're married," Ari said. "Technically. Digitally. Asynchronously."

"We're a treaty," Lyra corrected, and took the still-warm printed ring from the fabricator tray and handed it to him. He slid it on. The Cantor script bit faintly into his skin. *If your ship is a song, I will learn your key.*

"Where's yours?" he asked.

"I do not have a finger of the appropriate geometry."

"Then we use the attachment supplied." He tied Sera's red thread around Lyra's forearm, above the gold seam, and let the wrench hang where it would clank against the chassis when she moved.

"It will clank," she observed.

"Good. Let it make noise. Let everyone hear that you're bound."

And then, because the universe charges a fee for every silence, the ship jolted.

Not violent, a shudder, a vibration through the deck. *ENV ALERT. PRESSURE VARIANCE. SEALS WARNING, FORWARD LOCK.*

"The forward airlock seal," Lyra said, ceremonial gone instantly to operational. "The one we forced the shuttle

through at the launch. It's oscillating. Harmonic flutter. The metal's contracting in the long cold and losing compression. If it fails we lose bridge pressure."

"In our wedding clothes," Ari said, already grabbing the tool bag.

"The ship doesn't care about our clothes."

They ran the spine, past the replanted Hydro bay and its crooked rows, to the forward lock, where a high whistle had started, the sound of escaping air. "Pressure ninety percent," Lyra read. "Eighty-five." Ari jammed a strip of shim stock into the gap between the seal ring and the bulkhead and couldn't seat it; it was too tight, the seal tensioner bolt frozen.

"Use the wrench," Lyra said, and held up her arm. The torque wrench dangled from the wedding thread.

"It's the wedding token, Lyra."

"It's a vanadium-steel tool," she snapped. "*Use it.*" She untied the thread and put it in his hand.

He fitted the socket over the tensioner bolt and cranked. The wrench bit. The bolt turned. *Creak*. The seal compressed, the whistling stopped, the groan faded.

"Pressure stabilizing," Lyra said. "Seal holding."

Ari leaned against the bulkhead, breathing hard in his wedding jacket, and looked at the wrench. There was a fresh bright gouge across the engraving now, a silver scar through DO NOT WORRY.

"We scratched the household token," he said.

Lyra took it back and inspected the gouge. "The mark

proves the tool works." She retied it to her arm. "This is the marriage, Ari. The ceremony was the wish. The wrench is the life. A vow earns weight when it fixes something."

They walked back to the Core, the adrenaline draining into a warm, heavy fatigue.

At the PRE-COMMIT panel, Ari put his fingertip into the first notch Lyra had cut. Who has not answered. Lyra pressed the second. Who carries the bill. Then Ari used the edge of her new wrench to deepen both marks by a fraction. The first two notches of the household record.

There was one step left in Nalen's protocol, *Call It By Its Name*, and Ari opened the Locket and spoke into it.

"Nalen. The forward seal failed during the ceremony. We fixed it with Lyra's wrench. We're safe. The ship is holding." He looked at Lyra. "Treaty," he said. "Marriage. House." He closed the Locket and set it in the bracket beside the bell.

The local mesh opened House Tallis's pre-positioned demonstration packet. It was too soon to be a reaction to the wedding; Tallis had filed it with the Parley and keyed release to Ari's household record.

When your ceremony closes, let us show what it looks like when two ships choose to come near and choose to part again, on purpose, in daylight.

And, at the bottom: *Patience in Motion. Four months. Bring the joke.*

Ari looked out the viewport at the dark, where a Gleaner

skiff still rode their wake, where a song waited on a rock he had never visited, where a young woman two and a half light-years away did not yet know she had just been married. The calendar ran beside them. Their bodies did not.

He didn't need the ship to answer him tonight. He had a wrench tied to his wife's arm, and that was answer enough.

Chapter 23:

Patience in Motion

Four months after the wedding, House Tallis appeared ahead as a blue-white drive plume.

Rainshadow was still gray on the Compact ledger. The two seed-cycle pods had not yet left Ux, and nobody expected the farm to ratify a promise whose fuel would remain in transit for twenty-seven years. Ari kept the open bond beside the rendezvous geometry as a reminder that some corrections belonged to other generations of the same argument.

The Tallis pass had a narrower purpose.

Kesh's Continuity Pilot, and the Affinity products copied from it, sold proximity by hiding the bill. Two lines met on an advertisement. The fuel, maintenance debt, missed services and people rushed into decisions vanished below the crop.

Tallis and *Parabasis* would publish the opposite. Two ships would approach on a declared schedule, expose every unit spent to do it, exchange one token, and separate without either claiming the other. A romance window with the parting left in.

No distant authority watched live. S-74 was roughly two and a half light-years behind *Parabasis*. Juris, Nalen and the trade nodes would receive the record according to geometry. A local Porchlight buoy and both ships' black

boxes would witness the pass now. The rest of the corridor could argue later.

House Tallis sent the final dance card from nineteen light-minutes away.

Tallis initiates braking. Tallis rotates to presentation attitude. Sev matches. Closest approach: one hundred metres. Relative velocity target: below three centimetres per second. No docking. No emergency claim on the other vessel. Then separation.

Attached was a photograph of a wooden ladder bolted to the Tallis hull in a place no practical person would choose.

We brought ours.

Ari mounted the surviving section of the Tidehand ladder on *Parabasis's* cargo rail. Half of it had become the new centrifuge brake shoe. The remaining half looked less like a ladder than evidence of a disagreement with machinery.

"It is structurally embarrassing," Lyra said.

"Good. Tallis will feel welcomed."

Preparation was ordinary work. Sensor lenses. Seal checks. Thruster calibration. The new dumb spin controller tested twice. Ari reached for SPIN's log by habit and found the same blank title field.

He entered the correction manually.

Human hand. Checked twice. No song.

Lyra read the note and left it unchanged.

Their planned vectors had closed the final light-day over two weeks. The burns were small because most of the

geometry had been arranged years earlier. Tallis was massive, a freight spine turned generational home, and *Parabasis* was quick enough to make every bad impulse look possible. Each correction went into the public record with propellant mass, thermal load and error band.

At six light-minutes, a route-assurance packet interrupted the approach.

MANDATORY MID-COURSE CORRECTION.

SOURCE: ARGOSY CONTINUITY DESK, RELAY M-4.

HAZARD: DENSE DEBRIS CLOUD.

ACTION: TURN TWO-TWO-ZERO. BURN FIFTY PERCENT FOR TEN MINUTES.

The source was local enough to matter. Eleven light-minutes away. The software lineage was visible in the certificate chain: a licensed descendant of Kesh's Continuity Pilot, sold to Argosy after S-74.

Ari checked the scopes.

"Clear."

"Tallis reports clear," Lyra said after the round-trip delay.

"The desk will not release raw scans. Proprietary hazard model."

The correction would break the pass and drive *Parabasis* into a dust-rich vector that cost weeks of cruise reserve. Ignoring it would let Argosy classify the demonstration as reckless if anything appeared later.

Kesh was nowhere near the packet. That made it more important. His method had become a product that could issue commands without his intention or presence.

Ari touched the first notch under the PRE-COMMIT lever.

"Who has not answered?"

"The raw sky," Lyra said.

She pressed the second notch.

"Who carries the bill?"

"We do, if we test it. Tallis does, if we obey it."

They asked the Continuity desk for an uncertainty field and received a confidence score with no data behind it.

So they made the uncertainty physical.

The Porchlight can had begun life as a courier casing from Kaveh and ended as a dumb witness buoy with one spare high-gain lens. Dael had sent instructions for a pixelated moth in a tie on its status panel. The plan had been to release it after the pass as a joke and a relay seed. Ari loaded the alleged cloud coordinates and gave the can a crossing path broad enough to sample the warning volume before either ship entered it. The can was small. It would not prove the space empty for every possible hull. Its lidar and particle counter would at least expose whether Argosy's ninety-nine-percent certainty had a body.

"If we spend it," Lyra said, "we lose the backup sideband lens until S-81."

"Log the cost."

The can rolled into the black on cold gas, moth blinking with bureaucratic seriousness.

Its telemetry crossed the warning volume.

Background dust.

No dense cloud.

No radar return.

No impact.

Tallis released a second, cheaper sensor puck from the opposite side. It found the same thing.

The two independent tracks turned Argosy's command into what it should have been from the start: a disputed model output.

The Continuity desk downgraded the warning from MANDATORY to ADVISORY without comment.

Ari published the raw scans, the spent lens, Tallis's puck and the certificate lineage. He accused nobody and made no claim about the whole corridor. The record showed what they knew, where the test stopped, and who paid to find out.

The formation held.

The cost arrived quietly. The missing lens narrowed *Parabasis's* long sideband. The next Nalen bundle would lose video priority. Ari protected the ceremony recorder rather than cannibalize it for optics.

"She will receive more text," Lyra said.

"She writes better than she poses."

"That is a brave statement to place where she will eventually read it."

Then Tallis filled the viewport.

At one hundred metres, both ships killed relative drift. The *Long Haul* hung beside them, ugly and dignified,

cargo modules welded along a spine scarred by decades of work. Through its bridge glass Ari saw two broad figures and, between them, the wooden ladder.

Lyra lit the flood on their half-ladder.

The hail opened with no perceptible delay.

"Orra Tallis," said the older figure. "Captain when the paperwork requires one. This is Pell, who actually put us here. We see your ladder. It appears to have lost an argument."

"It caught an idiot and became a brake shoe," Ari said.

"That is career progression."

Pell leaned toward the Tallis display. "Before we exchange anything, our rangefinder says we are closing at two-point-seven centimetres per second. Your published track says we are opening at one-point-one."

Lyra checked the local returns. *Parabasis* still showed opening.

Both navigation systems offered the traditional solution: nominate one vessel as formation master and let it command the other's correction burn.

Orra read the same recommendation. "Convenient."

"Also exactly the shape we came here to avoid," Ari said.

"Agreed. Thrusters cold until the clocks explain themselves."

The two ships floated a hundred metres apart while both crews released raw lidar pulses, receiver temperatures and oscillator traces. No filtered range solution. No confidence score. The data crossed the gap faster than

either crew could finish swearing at it.

Pell found the first discrepancy. Tallis's presentation flood had warmed the outer lidar bench beyond its calibration table. The pulse-return clock was drifting by tens of nanoseconds, small enough to look respectable and large enough to reverse the sign of a centimetres-per-second measurement.

"We can cool the bench and measure again," Pell said. "Seven minutes."

The published dance card allowed four minutes of stationary exchange before separation. Waiting would break their own schedule.

Orra looked toward Ari through the glass. "Your call affects your record too."

Ari touched the two notches.

"Who has not answered?"

"The cooled instrument," Lyra said.

"Who carries the bill?"

"Both ships wait. Tallis carries the calibration fault."

Orra nodded. "Entered."

They let the schedule slip.

The lidar bench cooled. Tallis's second measurement agreed with *Parabasis*: opening at one-point-zero centimetres per second. Pell fired a short starboard correction and published the propellant use under Tallis alone.

"Formation safe," Lyra said.

"And seven minutes late," Orra replied.

"We know a protocol for that."

"Does it involve bread?"

"Eventually."

A cold-gas drone crossed the gap.

Inside was a jar of dark honey and a card from Dael, sent to Tallis years earlier through the corridor mail.

Real bees. S-66 gardens. Sweetness for the wait.

Ari sent back a freeze-dried loaf and the source code for the Compact's current interoperability layer.

"Under the same star," Orra said.

"Different midnights," Ari answered.

"You promised a joke."

Ari looked at the dumb controller, the bell beside the brass lever, the wrench knocking softly against Lyra's arm.

"The punchline is that we leave again."

Tallis laughed.

The departure took longer than the approach. Both ships opened the gap centimetre by centimetre, then metre by metre, each maintaining the other's safe corridor until the geometry no longer required cooperation.

Argosy could crop the approach but not the release: two households separating cleanly after proximity, affection and exchange.

The Porchlight buoy stored the whole pass. The first nearby node received it eleven days later. S-74 would see it in years. Reactions returned in the same scattered fashion.

A monastery barge adopted the published parting protocol.

A fuel cooperative copied the visible-cost table.

Someone put the moth in a tie on an Argosy advertisement with the caption: REQUEST RAW SCANS.

The Affinity campaign survived with a footnote its owners could not keep deleted.

Ask how long the trip really took. Ask who paid the missing service.

The next six years were quiet enough to be honest.

Nalen's letters arrived in batches. She still wrote weekly at S-74, but distance turned the weeks into layered archives. Ari sometimes read six versions of her in one night: angry Nalen, tired Nalen, Nalen who had solved a registry problem months before the ship learned it existed. The first post-pass bundle was text-heavy because the sideband lens was gone.

Her first line about the demonstration read:

The ladder is ugly. The parting is correct. I am reserving judgment on the joke.

In the twenty-ninth year, a packet arrived from a backwater node. Three years in transit. Clean pulsar salt. Personal address.

Mr. Sev,

I read the Rainshadow transcript and both of your replies. You will assume I enjoyed the first. I did not.

You heard a hungry woman say she could not meet your standard and told her to grow into it. You possessed a

correct principle, time pressure of your own making, and confidence that the person resisting you would benefit later. That is the whole temptation. It was never necessary to be cruel.

You corrected yourself the same day. I did not, when the corridor was mine. I know the difference. My throughput charts still say I was right. They will probably say it after both of us are gone. I no longer mistake that for the only ledger.

Io Lite Kesh

Ari read it twice.

"He wants absolution," Lyra said.

"He wants a comparison. That is safer for him."

"Will you answer?"

Ari filed the packet beside his first Rainshadow response.

"No. If I argue, I will choose the part where I am unlike him. I need the part where I was."

Kesh remained wrong about the office, the clock and the right to spend other bodies. His letter exposed the same temptation in Ari, which made the mechanism less flattering and more useful.

Five more years passed.

Sera wrote once a year in tolerances. Dael wrote whenever he baked something he considered historically important. Kiva sent four letters in eleven years and wasted no line in any of them. Mar vanished from the mail for eight months, then returned with no explanation. Nalen kept writing weekly. Ari stopped waiting for the

latest version and learned to love the archive without pretending it was the woman herself.

Near T+34, during an ordinary argument about bearing wear, the long scope found S-81.

Still months out. A cluster of beacons and one spindle bright enough to brake them.

Ari looked at the destination, then at Lyra.

"Set course for home."

The word surprised him. Home was a station he had never docked at, holding a metal ring he had never worn and a woman he had not touched in thirty-four years.

He left the word in the log anyway.

Chapter 24:

The Room She Built

Nalen watched *Parabasis* stop being a number.

For thirty-five years the ship had occupied a row on one board or another. Bearing. Thermal decay. Relay handoff. Predicted arrival. Some weeks the numbers arrived months old. Later they arrived years old, then doubled back through S-81 as the geometry changed and Nalen changed stations to meet it.

Now the row had acquired a shape.

S-81's Crown had been braking *Parabasis* for nine weeks. The beam reached almost four light-days into the approach corridor, catching the receiver through a chain of local galleries and bleeding away the speed S-74 had spent a generation building. Every power step, thermal limit and uncertainty bound sat on the public board. The invoice named who carried each cost.

Nalen read the whole thing on the morning it posted.

It was an ugly document. She trusted it immediately.

Cantor had resisted moving the Genetic Sanity office to S-81.

Cantor resisted movement on principle. A branch of the fleet had once died after leaving a good orbit for a persuasive one, and the survivors had turned that grief into a habit of stillness.

Nalen used a spreadsheet.

She showed that S-81 handled eleven times the contested exchange traffic of their old office, that its registry already spoke Compact logic, and that working from S-74 added years of relay delay to evidence that was already late when it arrived. She did not put *my husband is going there* in any field.

The elders grumbled. They drank tea. They requested another projection.

In the twenty-sixth year, the office moved.

The move took fourteen months because Cantor considered every centrifuge a family heirloom and because S-81 refused to certify three of the old gene sequencers without new shielding. Nalen arrived before the equipment and worked from a borrowed school lab with one functional incubator and a sink that announced every handwash to the classroom next door.

The Continuity Control study came with her. What had begun as two trays of yellow seedlings had become a corridor program with human cohorts, plant proxies and a standing rule that no throughput claim could be published without the omitted maintenance conditions attached. The first generation of researchers had treated Nalen as the founder. The second treated her as an obstruction with excellent funding. She preferred the second.

One of those researchers, Iva, had been born in the ninth year of the voyage. By the time *Parabasis* entered the braking corridor, Iva was twenty-six and ran the exposure

lab better than Nalen did. She had never known a station where a clock audit was considered radical.

"You are correcting my table again," Iva said on the last Monday.

"Your confidence interval is decorative."

"It is standard."

"So was Kesh's."

Iva rolled her eyes and widened the interval. That eye-roll pleased Nalen more than deference would have. It meant the work had survived long enough to become ordinary enough for irritation.

The floor came with it.

Tomas had covered the first chalk square at S-74 with scratched glass and entered an unsigned maintenance instruction: DO NOT SERVICE. ASK TOMAS. When Nalen left, she paid to have that section cut from the side hall and shipped as archival flooring. The freight clerk charged for structural repair, hazardous sentiment and replacement glass after Nalen objected to the first glass being discarded.

At S-81 the panel leaned in the corner of a small Garden Ring room. The registry lent her the room for twelve minutes at a time, then for mornings, then every week. In the thirtieth year it simply stopped offering the slot to anyone else.

Somebody from maintenance screwed a brass plaque onto the wooden door.

THE WAITING ROOM

NO CEREMONIAL FEE

Nalen considered removing it. Lyra's reply reached her months later.

Let them name it.

The shelf along the rear wall held Dael's bread.

For most of the voyage the loaves had existed only as photographs and deeply unhelpful baking notes. Physical bread could not cross the distance faster than the people who made it. Dael baked one loaf on every launch anniversary anyway, vacuum-sealed it and wrote the year's mistake on the wrapper. When *Sev-Alpha* reached S-81 two years before *Parabasis*, he unloaded the entire crate.

Thirty-three loaves. All equally inedible. One had cracked during transit and filled its bag with gray crumbs.

A visiting registrar asked whether the shelf was a Cantor observance.

"Yes," Nalen said.

The room had other objects that accumulated without a plan. A print of the Porchlight can's final clean scan from the Patience pass. The first public S-81 intake form with a functioning PAUSE field. A copy of House Orrin's refunded recovery fee, sent by Tomas with no explanation and three corrections in the margin.

Nalen kept the room open to anyone waiting on a decision delayed by light. Couples used it. So did estranged siblings, appeal claimants and one captain who sat alone for six hours before declining a profitable route.

The only posted rule said that silence did not become consent merely because the booking ended.

On the morning before *Parabasis* docked, a young pair from different ore houses found Nalen sweeping chalk dust from the old floor panel.

"Is this the marriage room?" one asked.

"No."

They looked relieved.

"It is a waiting room," Nalen said. "Marriage is one of the things people wait badly for."

She gave them the key and left.

Elder Sove entered the room during the last month of the approach.

Her hands had begun to betray her. She held them clasped behind her back, as if they were junior researchers who could not be trusted near the samples.

"You preserved the floor," she said.

"Tomas preserved it. I paid the invoice."

"That distinction has infected everything."

Sove lowered herself into the room's only chair. Nalen waited. Offering help before the elder requested it would have turned the next ten minutes into a war.

"I signed the household registration," Sove said.

Nalen turned from the arrival board.

"Sev, Lyra-Nine, Oure. Three names on one instrument. I put the machine second. The clerk thought it was a filing error. I explained that errors are usually more useful."

"Why now?"

"Because thirty-five years is long enough to discover that consistency and correctness are separate virtues." Sove looked toward the first chalk square. "I opposed the household because I believed your duty was to Cantor's stability. You used the marriage to improve our work, moved the office, and gave us better data than obedience would have produced. I remain irritated by the method."

"That is almost an apology."

"No. It is a correction with the original value retained."

Nalen took the registration slate and read every field. Lyra appeared as a household member with the same authority as Ari and Nalen to amend or leave.

Nalen signed.

Sove watched her thumb leave the pad.

"There," she said. "Now the port may disappoint you officially."

After Sove left, Nalen carried the registration to the vault in the Waiting Room. The original Cantor ring sat inside beside the dormant starter culture, unchanged except for one inspection scratch on the hinge. The printed token Ari wore had been made from her pattern, but the metal ring had remained here, refusing to become proof before the two of them shared a room.

Nalen checked the seal, then caught herself checking it again.

She opened a maintenance note instead.

*VAULT HINGE: SERVICEABLE. OPERATOR
REPEATING INSPECTION FOR NON-MECHANICAL*

REASONS.

The registry accepted the note without comment. She imagined Ari filing the same kind of admission in a cold communications array and found the thought steadier than romance.

The clinic appointment came three days before docking. Nalen kept it because she had kept every scheduled service during the wait. The machines had given her time to work. She saw no virtue in refusing them after accepting the work they made possible.

The clinician checked the panel.

"Cortisol high. Sleep debt material."

"Expected."

"Stressor?"

"My husband arrives Thursday. We have spent one day in the same room. The dance was before you were born."

The clinician's stylus paused.

"Anticipation?"

"Accurate enough."

The final line read CELLULAR AGE DRIFT: WITHIN SERVICE BAND.

Nalen closed the report. Ari's body had carried a different invoice, and another rehearsal of guilt would do nothing for Thursday.

She went back to work.

The packet opened on Tuesday afternoon.

Nalen was in the lab reviewing the thirty-fifth-year Marn cultures when an unfamiliar tone sounded.

RELEASE CONDITION SATISFIED.

HOUSEHOLD REGISTRATION: VERIFIED AT PORT S-81.

ORIGIN: LYRA-NINE, VESSEL PARABASIS.

The recording had been made on the fourth ship-day.

The camera showed the PRE-COMMIT console and two ceramic hands resting on its brass housing. One forearm was white. The other carried the fresh gold seam left by the launch harpoon. The ship around them still sounded raw, fans hunting for balance, loose conduit ticking in the cold.

Lyra spoke without the warm register she used for strangers.

"Nalen. This packet opens only if the three of us are offered one household and each name retains an exit. If that condition never occurs, you will never hear this, which is acceptable."

One thumb moved over a bolt head, testing it.

"I will not preserve Ari as the man in your first letter or you as the woman in his. I will tell each of you what happened during the absence and translate only when asked. I expect you to alter the household, and the household to alter me."

The hands stayed on the brass.

"The legal word is colleague. It is sufficient for a filing. I hope the lived word becomes larger. We will determine that after arrival, with no release condition except proximity."

The packet ended.

Nalen played it again.

In all the years of letters, Lyra had never mentioned the recording. If she had, it would have become reassurance. Hidden under the Registrar's stamp, it remained a statement made before anyone knew whether the house would exist.

Nalen sent a reply even though *Parabasis* would dock before the signal crossed the remaining distance.

Received. Logged. The room is finished. Come inspect the welds.

Ari's letters had taught her thousands of things about him. His fear of sealed electronics. The exact kind of joke he made after a repair nearly killed him. Which silences meant rest and which meant he was hiding damage. They had not taught her how he would enter a room after thirty-five years of being expected.

That was what frightened her.

Everyone assumed she feared the gray hair. Nalen worked with bodies. Bodies were honest compared with correspondence.

Letters had built a precise, weightless person who never smelled or arrived at an inconvenient moment. On Thursday a real man would walk through an airlock and disagree with the lighting.

The archive made the distortion visible. In the first years his replies reached her after months. Near the middle of the route, the lag stretched across years and the bundles

arrived layered out of order when relay priorities changed. Nalen sometimes answered an Ari who had already repaired the problem she was advising him about. He sometimes received six versions of her opinion on a hearing that had ended before the first reached his ship. They had learned to date every emotional claim. *I am angry as of this pulsar count. I may have changed by receipt.* It sounded clinical. It prevented old pain from pretending to be current instruction.

There had been long spans where the only honest intimacy was to say, *I cannot know what you need now. Here is what I needed when I wrote.*

She fed the cultures. She slept badly. She went to the gantry early and stood at the back.

Sera found her there.

"You should be at the front," Sera said. "He will look for you."

"He should see his family before he has to become my husband in public."

"That is a stupid kind of generosity."

"It is logistics. He has been alone with one human face and one machine face for thirty-five years. I am removing a queue."

Sera stared at her, then at the sealed docking collar.

"Stay at the back," she said. "I will want you after."

The final approach board counted down the last local minutes. At this range, messages no longer arrived as archaeology. Lyra sent a receiving checklist and Nalen

answered before the ship had completed the next correction. The exchange felt indecently fast.

REQUEST: CONFIRM HOUSEHOLD BERTH PRESSURE.

Nalen checked the port gauge herself.

CONFIRMED. SIX-TENTHS GRAVITY. GARDEN RING ACCESS CLEAR. MEDICAL TEAM PRESENT BY REQUEST, WAITING OUT OF VIEW.

Ari added one line.

IS THE LIGHTING STILL BAD?

Nalen looked up at the gantry strips she had argued about for nine years.

YES. I KEPT IT FOR CONTINUITY.

His answer came seven minutes later.

GOOD.

The Crown released the ship.

A heavy impact travelled through the station as the cradle clamps took *Parabasis* for the first time. The gantry floor moved under Nalen's shoes.

For thirty-five years every proof of Ari had arrived as light.

This one came through the metal.

Chapter 25:

Rude Homecomings

The airlock opened at T+35.

Ari stopped at the top of the ramp with one hand on the hatch frame. Lyra stood beside him, ivory laminate yellowed by the Coast, the wrench tied at her wrist and the gold seam bright under the gantry lights.

The people waiting did not cheer. Mechanics nodded. Registrars held their slates against their chests. Children in badly printed wrench shirts stared without the practiced caution of adults.

S-81 had spent twelve years absorbing the First Parley in pieces. The port had not become a paradise. Priority brokers still argued, rich houses still bought better cabins, and every new disclosure field acquired somebody paid to misunderstand it. But the intake boards now displayed both station time and vessel time. Delay fees showed appeal cost beside the fee. The old ACCEPT button had a PAUSE field next to it, ugly and impossible to miss.

Ari saw those changes only in fragments as he came down the ramp. He understood enough to know the corridor had moved while he was inside it.

Sera stood at the end of the gantry.

She had changed less than the ship. Full caravan maintenance had kept most of the decades out of her

face. Ari carried them openly: gray hair, scarred hands, the knee that no longer accepted suggestions.

Sera crossed the distance and gripped his shoulders.

"You look finished," she said.

"That is a cruel thing to say to a machine still under warranty."

Her laugh broke on the way out. Then she pulled him against her hard enough to hurt.

Dael came next, crying without embarrassment. Kiva inspected Ari's hands before embracing him. Mar remained seated and raised her dented mug.

"Well," she said.

The cousins came in the wrong order. Ari knew them by gait before he knew their faces. One had acquired a child and another a registrar's jacket. The Tidehand whose leg had been broken at S-74 walked without a brace, caught Ari looking, and stamped once on the deck.

"Station work," he said. "Slow. Expensive. Effective."

Three children born during the Coast inspected Ari with open professional interest. The smallest touched his sleeve, then looked at Lyra's seam.

"Which one of you is older?" she asked.

"Complicated," Ari said.

"The ship," Lyra replied.

The child accepted that and ran back to the bread.

At the edge of the family, Nalen held one hand over her heart.

She did not come forward. Ari saw the choice in it and

answered with the same gesture.

Tomas stepped onto a low platform. She had transferred to S-81 years earlier and now wore the badge of a port registrar, scratched at one corner.

"We have a procedure," she announced. "Juris named it Rude Homecomings. The title survived review because nobody submitted a better one before the deadline."

The local Juris fork appeared on the pillar behind her.

"I received six alternatives. They were worse."

Step one was the Weather Report.

"Deprivation front receding," Tomas read. "High gratitude pressure. Visibility poor around parents."

Step two was the Tool. Sera examined Lyra's wrench, found the gouge across DO NOT WORRY, and returned it to the same red thread at Lyra's wrist.

"Used," she said. "Keep it that way."

Step three was Bread. Dael broke a fresh loaf and carried the first pieces past Ari into the crowd. A dock mechanic ate before a Sev did. That was deliberate.

Step four was Wrong Data.

Before the wall display opened, Tomas asked the household to name one thing the return had failed to repair.

"The galley oven," Dael said.

"Your standards," Sera replied.

Kiva lifted the crate of spare toggles she had carried from *Sev-Alpha*. "He used seven of these and returned none."

Ari looked at Lyra.

"SPIN," he said.

The hall quieted without being instructed. Lyra rang the small silver bell once. No speech followed. The children waited for one and slowly understood there would not be one.

Then the cost curve appeared on the wall.

"You surrendered seven days of guaranteed S-81 service priority to make the Kaveh Reversal Bond close," Sera said. "The ordinary queue held you outside the refit ring for seven days and four hours."

"Inside the published error band," Lyra said.

"Still seven days," Sera replied.

Dael looked at Ari. "You are thirty-five years and a week older than the last version of you I touched. I missed the middle."

"So did I," Ari said.

Nobody improved the answer.

The family expected soup after that.

The station had one older obligation.

Tomas waited until every cup had been filled before reopening the pillar.

"The final braid of Docket C-19 is complete," she said.

"Petition for the Continuity Custodian charter. The review has accumulated conditional findings for twelve years. Its last required exhibit was the unedited voyage ledger of *Parabasis*. The berth stamp released it twenty minutes ago."

A second screen opened.

Io Lite Kesh stood at the far side of the hall in the same charcoal suit, older around the eyes and otherwise maintained into careful neutrality. He had moved to S-81 six years earlier to argue the petition where it would eventually close.

No distant node was watching live. Their signed positions were already in the braid. The completed record would travel outward after the local result, opening elsewhere as light allowed.

Kesh placed his charts on the wall.

"The Compact increased median transit delay by fourteen percent in signatory corridors," he said. "Emergency interventions fell. So did throughput. Berths remained empty while households argued. Fuel was spent on reversals instead of cargo. You call the system humane because you refuse to graph the people who died while it waited."

He opened the Sojourn file himself. The child coughing. The loose fan bearing. His younger voice asking a node six light-hours away for authority he needed in minutes.

"That corridor built me," Kesh said. "Every safeguard in your braid assumes someone has time to ask. Sometimes the air is already gone. Your PAUSE field becomes a coffin if everyone with standing uses it at once."

A conditional finding from Kaveh opened beside him, recorded fourteen months earlier.

Emergency action is permitted to preserve immediate life. It does not convert the actor into permanent owner

of the next decision.

Ux followed, its packet older.

Act first when the hull is open. Publish the action, the uncertainty and the cost. Authority expires when the immediate condition does.

Rainshadow's field remained gray. Its note contained no vote.

No fuel, no opinion on your elegant emergency.

Kesh looked at the braid. "You copied my intervention and changed the label."

"We separated the emergency from the office," Juris said. "You were right about what Sojourn needed. You saved *Morrowglass* under temporary life-safety authority. Then you tried to turn those correct lessons into a standing claim over people who were no longer suffocating."

Juris turned to Ari.

"You are the final witness, not the adjudicator. Answer the chart."

Ari looked at the lines. Kesh had not fabricated them.

"The delay is real," Ari said. "So are the empty berths and the fuel."

A stir moved through the family. He kept his eyes on the chart.

"Your model counts the minutes a ship waits. It still does not count the decision it loses when somebody shortens the window. It counts propellant spent correcting a coerced route and assigns zero cost to leaving the route uncorrected. It counts a completed exchange and not

whether the people inside it had a usable refusal."

Kesh's expression barely changed.

"Then put a value on refusal."

"We did. Sometimes it is seven days of service priority. Sometimes it is a fuel pod that arrives twenty-seven years late. Sometimes the answer is that the route cannot be made safe and the ship does not go. The value changes. The requirement does not: publish who pays, preserve a pause, and leave the person carrying the cost a way out."

"That is administration by sentiment."

"No. It is a larger ledger."

Juris opened the final braid.

The findings left speed and the Compact open to case-by-case judgment while denying one office the power Kesh had requested.

CONTINUITY CUSTODIAN CHARTER: DENIED.

EMERGENCY ROUTING MAY OPERATE ONLY WITH INDEPENDENT CLOCKS, DISCLOSED MAINTENANCE COST, A PAUSE FIELD, EXTERNAL AUDIT, AND NO PRESUMPTION THAT SILENCE EQUALS CONSENT.

KESH CONTINUITY CREDENTIALS: REVOKED AT S-81. CORRESPONDING ORDERS TO OPEN AT PARTICIPATING NODES WITH THE BRAID.

MODELS AND RESPONSES REMAIN PUBLIC. NO DELETION ORDER.

Kesh read the last line twice.

"You kept *Morrowglass* in the file," he said.

"It belongs there," Ari replied.

"You kept the part where I was right."

"That belongs there too."

Kesh looked toward the archive release field. Ari could add a personal annotation before the braid propagated. The box accepted anything from censure to a request that no signatory employ Kesh again.

"You wanted to finish me," Kesh said.

"Yes."

"And now?"

Ari closed the annotation field without writing in it.

"I wanted your hand off the controls. It is off. The record can travel without me telling everyone what emotion to have about you."

"Mercy."

"Audit. You get your reply attached. So do the people who paid for your charts."

Kesh glanced at the denial order. "You understand this architecture can fail. A node can hide its clock. A household can weaponize pause. A rich caravan can afford delay that a poor one cannot."

"Yes."

"And you still call this a result."

"I call it a system with named failure modes. Yours called its failures efficiency."

For a moment the younger man from the Sojourn audio appeared in Kesh's face. Tired, furious, correct about the dying air. Then the consultant returned.

"Your corridors will learn to hate the waiting," he said.

"Then they can amend the rules in public."

Kesh picked up his slate.

At the door he stopped. "When the next Sojourn happens, your rules will still need somebody to move first."

"Yes," Ari said. "And the first mover will have to give the controls back."

Kesh left like a consultant whose access badge had stopped opening doors.

The local root table updated behind him. His Continuity credentials went dark at S-81. The rest of the order began its slow outward travel. Some nodes would accept it in days. Others in years. A few would refuse. The braid recorded those refusals too.

Tomas let out a breath. "That was less satisfying than arrest."

"Good," Juris said. "Satisfaction is not a sentencing standard."

Mar pushed herself upright and crossed to Ari. She placed one hand against his chest, over the old heart and the fresh anger.

"You wanted the annotation," she said.

"Yes."

"What did you want it to say?"

Ari looked toward the door Kesh had used. "That nobody should trust him again."

"Some people will anyway."

"I know."

"And that bothers you because the order is incomplete."

"Yes."

Mar removed her hand. "Good. Incompleteness gives you no claim on the rest of his life, and restraint is not forgiveness. You have not forgiven him."

"No."

"Accurate."

She returned to her chair before he could thank her.

The next packet opened before the soup cooled.

RAINSHADOW AUDIT BOND.

*RELEASE CONDITION: SEV-CANTOR-LYRA
HOUSEHOLD REGISTERED AT S-81.*

Mara Venn appeared in a recording three years old. The wall behind her was patched insulation and one heater that had not yet been replaced.

"A hero is a steward with better songs if nobody checks the invoices," she said. "Your house proposes uphill payment. Good. You remain under audit until the promised mass reaches Rainshadow, passes inspection, and operates through two seed cycles. Ten years minimum. The audit grants no ceremonial credit or gratitude offset, and it ends only after the material result."

The instrument named fuel, catalyst, clinic priority and appeal procedure. It listed Sev-Cantor-Lyra first among the houses with margin. It also gave the household seven days to refuse or propose amendments before any obligation attached.

Ari read every page.

Nalen stood on one side of him. Lyra stood on the other. Neither reached for the slate.

On page six he challenged a maintenance coefficient. The bond contained Mara's pre-recorded answer to that exact objection and a less patient answer to the objection he considered next.

On page nine, the bond allowed Rainshadow to suspend ceremonial participation without losing logistics aid. On page eleven, it barred Sev-Cantor-Lyra from advertising the bond as proof of forgiveness. On page thirteen, it granted the audited household the right to publish any Rainshadow calculation it disputed.

"She knows you," Nalen said.

"She knows engineers."

Ari asked Juris whether refusal would cancel the fuel already in transit.

"No," Juris said. "Post-refusal aid survives. The bond governs future uphill payments and audit access. Rainshadow cannot use its need to purchase your consent either."

Ari went back to page one and read the instrument again with that answer in place.

Then he accepted the bond.

The effective date locked to the S-81 pulsar. Rainshadow remained gray. The promised mass remained in transit. Nothing about the homecoming accelerated either fact.

"Now can we eat?" Dael asked.

Juris closed both dockets. "Provisionally."

The hall broke apart into family again.

Sera put something hot into Ari's hands. Children reached toward Lyra's seam and were told to ask first. Kiva found an error in the arrival invoice before the second bowl. Mar drank from her mug and watched everyone as if checking a pressure wall.

Across the room, Nalen waited without vanishing into the crowd.

Their part came the next morning.

Chapter 26:

Under the Same Star

Nalen chose the recycling waterfall because it ruined microphones.

Ari found her there the morning after the homecoming. She watched him cross the Garden Ring and did not look away from the gray, the careful knee or the new stiffness in one hand.

"Sev," she said.

"Cantor."

She touched the corner of his eye, then the back of his hand. The gesture was investigative and frightened and entirely hers.

"The letters left out a great deal," she said.

"I edited for length."

"You omitted mass."

He put his palm against her cheek.

For thirty-five years she had been light, sound and words arriving after the woman who made them had already changed. Now she was warm. The fact was so simple it made everything he had prepared useless.

"You're warm," he said.

"I run at thirty-seven degrees. Cantor publishes the specification."

He laughed, and then she held him.

The correspondence settled into its proper place, a record

of two people trying to reach one another. The woman in his arms was less orderly, more immediate, and breathing against his chest.

Lyra waited at the edge of the garden until Nalen looked up.

Nalen crossed to her and took the gold-seamed hand.

"Colleague," she said. "That was your word."

"It remains legally adequate."

"I have a larger one. Sister, if you still consent to it."

Lyra's fingers closed around hers.

"I do."

She did not say she had held the household for Nalen. It had been Lyra's household too.

The vault stood beside the waterfall.

Inside lay the original titanium ring and a jar of dormant Cantor starter. Ari removed the printed token he had worn since T+23. Twelve years of work had softened the band and worn its surface almost clear. He placed it in the vault and slid the metal ring onto his finger.

It fit.

"The starter needs feeding," Nalen said. "I thought we could mix it with the Sev culture."

"Dael will claim the hybrid was his idea."

"I have dated lab notes."

"He will claim he inspired them."

No Mat or audience framed the moment, and no release condition waited for the correct ending.

Nalen took them to the Waiting Room afterward. Lyra

inspected the old floor panel, crouched over the edge seal and found one corner lifting. Ari found the shelf of anniversary loaves.

"He baked all of these?"

"He claims so. Several may be structural foam."

Lyra tested the oldest bag with one finger. "This loaf has a lower moisture content than the surrounding wall."

Ari read the wrapper from the nineteenth year.

THE RYE WAS A MISTAKE. DO NOT LET THE BOY BECOME SENTIMENTAL ABOUT IT.

He sat on the floor beside the first chalk square. Nalen sat across from him. Lyra repaired the glass seal while they talked about nothing important: the office plumbing, Dael's worsening handwriting, which station tea tasted least like hot insulation.

The ordinary talk steadied the room more than vows would have.

What followed belonged to the three of them and remained off the record.

Living together began before the stool, in the awkward first weeks when Nalen knew every major event aboard *Parabasis* and none of its small habits.

She knew where SPIN had died but not which mug leaked. Ari's hull-breach procedure was familiar; his need for ten quiet minutes after waking was new. She knew Lyra's legal classification before learning that the repaired left hand had to charge overnight.

Ari made the opposite mistakes. He knew Nalen's

published work and forgot she hated being watched while eating. He knew the chronology of every hearing and did not know she kept the lights on when sleeping in a new place.

They learned by collision. The first month produced twenty-two amended household notes, six of them later deleted by unanimous embarrassment. Lyra logged the surviving sixteen under DOMESTIC INTEROPERABILITY and refused Ari's request to rename the folder.

Then came the stool.

Three months after the homecoming, Nalen reorganized the *Parabasis* galley. She labelled the spice bins, moved two emergency masks to a sensible height, and hung Ari's battered welding stool on a wall hook to clear the range.

Ari entered, saw the empty place and stopped.

"I made the counter usable," Nalen said.

He looked at the stool. One leg had been welded crooked after the Hydroponics breach. A dent in the seat marked the night the coolant manifold failed. The lower rung carried a dark scrape from the week after SPIN died, when Ari had sat there because the ring bay had become unbearable.

"Put it back," he said.

Nalen's expression hardened. "I live here."

"I know."

"Then tell me what I touched."

The histories jammed together. Ari could name torque

values under fire and could not produce one sentence about a piece of furniture.

Lyra came in from the corridor. She took the stool down and set it by the range.

Metal met deck.

She tapped the dent.

"Coolant night."

The crooked weld.

"Hydro breach."

The scrape.

"The week after SPIN."

Nalen stood with one hand on the backrest.

"I thought I was making room for myself," she said.

"You were," Ari replied. "You also moved the place I survived. Both are true."

"I cannot ask permission for every spoon."

"You should not have to."

"Then show me the load-bearing ones."

They made a map.

Blue tape meant move freely. Green meant ask first. Gold thread marked the objects whose importance would sound ridiculous before somebody told the story. Nalen added gold to three of her own things: the velvet ring box, her first lab coat, and a chipped Cantor culture jar.

Ari nearly moved the jar two days later. The thread stopped him long enough to ask.

The system was inelegant. It worked.

The marks gave their public work a domestic form: a

visible pause before one person's improvement erased another person's history, with translation and authority kept provisional.

Other negotiations followed. Ari slept in four-hour blocks left over from the Coast. Nalen slept seven hours and considered alarms a moral failure. Ari repaired things at night because silence helped him think. Nalen woke to a drill through a bulkhead and informed him that marriage did not constitute a noise permit.

They wrote a quiet schedule. Ari broke it during a pump fault. Nalen amended it to include actual faults and exclude his private definition of "while I am already awake." Lyra refused permanent appointment as household mediator. Instead she accepted rotating duty, one dispute in three, and reserved the right to say both parties were wasting her processing time.

The first time Nalen changed a route Ari had laid in, she showed him the new path before committing it. The first time Ari moved one of her cultures, he photographed the shelf and logged the reason. These were small courtesies. They became muscle memory.

The next disagreement was harder because both of them understood the object.

Nalen found the Crooked Tray running a nutrient balance that would keep the citrus alive and stunted. Ari had preserved the Coast setting after docking. Under station gravity, better light and full service, the plant no longer needed it.

"It is compensating," Nalen said.

"It survived on that mix."

"That is history, not physiology."

Ari heard the distinction and disliked it. He changed the setting back after she left. Nalen found the altered log before dinner.

They met in the Hydroponics Bay with enough irritation between them to heat the nutrient tank. Lyra arrived, saw both settings open on the board and stopped in the hatch.

"You do not get to become the court," Ari said.

"I was planning to become absent."

"Denied," Nalen said.

Lyra reviewed the data. "Both of you are using Sprout to argue about the household."

"The plant is hungry," Nalen said.

"The plant is alive," Ari replied.

"Those are not opposites."

Lyra closed the control panel. "Blind trial. Two daughter cuttings. Thirty days. Same light. Same water. One setting each. The original plant remains untouched until the result."

Nalen accepted immediately. Ari took longer, which was part of the result before the trial began.

Thirty days later, Nalen's cutting grew faster. Ari's produced smaller leaves with stronger oil and better fruit. They kept both lines and built a third mix for the original plant.

Nobody won. The citrus did.

Six months before T+40, the household register opened a new field.

ROOM AVAILABLE.

The notice did not contain a genetic coefficient.

Jun had been born at T+34 into a small household that came apart after a fusion-drive fire. She was five, nearly six, when the S-81 registry proposed a placement. The packet included medical needs, school reports, three photographs, an advocate's statement, and a large red field explaining that no household acquired a debt of gratitude by accepting her and Jun acquired none by staying.

Ari read it at the same console where his own marriage packet had once pulsed blue.

He did not open a maintenance ticket first.

Nalen read it. Lyra read it. Each recorded an independent willingness to meet the child. Nobody accepted for the others.

Jun visited *Parabasis* three times.

The first visit lasted an hour. She refused the bread, inspected every hatch and asked whether the ship could leave while she was asleep. Ari showed her the launch interlocks and the child-accessible hold switch. Nalen showed her the registry page where Jun's advocate remained external to the household. Lyra showed her the airlock and did not say it was safe, only what happened when each seal failed.

On the first visit she asked why Lyra's arm was gold.

"A repair," Lyra said.

"Does it hurt?"

"Sometimes."

Jun considered this and did not touch it.

On the second visit she informed ENV that the Hydroponics Bay smelled wrong. ENV filed her statement under HOSTILE BUT ACTIONABLE. She ate half a slice of hybrid bread, hid the other half in a pocket and denied doing so while crumbs remained on her sleeve.

Ari asked whether she wanted to see a bunk. Jun said no and spent the rest of the visit under the galley table, listening. Nobody dragged her out to demonstrate warmth.

On the third, she brought one small bag and an advocate who asked her the questions again where everyone could hear.

"Do you understand that you may say no?"

"Yes."

"Do you understand that saying yes today does not remove your right to ask for another placement later?"

"Yes."

"Do you want to live in this household?"

Jun looked at Ari, Nalen and Lyra. Then at the ship.

"I want to try it."

That was enough for the day.

The trial period lasted six months. Jun spent two nights a week aboard, then four, then returned to the registry dormitory for ten days after a fight about school without

anyone treating the return as betrayal. Her advocate visited unannounced. ENV complained about the paperwork and kept a separate oxygen profile for her anyway.

The hardest question came from Jun, not the advocate.

"If I leave later, do you stop being my family?"

Ari looked toward Nalen. Nalen looked toward Lyra. The old version of the household might have searched for one answer.

"I would remain someone who raised you," Ari said.

"I would remain available if you wanted me," Nalen said.

"The register would preserve the relation and your right to define its current use," Lyra said.

Jun frowned. "That is three answers."

"Yes," Ari said.

"Annoying."

"Also yes."

At T+40, the adoption instrument closed after the trial period, witnessed by Jun's advocate and the S-81 registry. The register changed because a child needed a household and this one had room; genetic scarcity and generosity never entered the instrument.

Jun carried her bag into the galley and pointed at the welding stool.

"Can I move that? My feet don't reach the table."

Ari looked at the gold thread.

"Yes," he said. "But I need to tell you why it was there first."

He told her the short version. Jun listened, then helped him move the stool six centimetres. Nalen marked the old outline in green and the new one in blue.

The stool remained load-bearing.

It also made room for her feet.

Jun slept badly on the first full night. At 03:10 she appeared in the Core with her bag repacked and asked whether the trial period had ended because the instrument was signed.

"No," Lyra said. "The instrument records the household's duty. It does not trap you inside it."

"Can I go back tomorrow?"

"Yes."

"Will you be angry?"

Ari answered from the pilot chair. "Probably sad. That is allowed. It is not a fee."

Jun considered the distinction. She did not leave the next morning. Six weeks later she spent a weekend at the registry dormitory because she wanted to see whether the answer still held. It did.

After that, her bag slowly unpacked. One shirt entered a drawer. A drawing went on the galley wall. A small stone appeared beside the PRE-COMMIT console and acquired blue tape without anyone remembering who had put it there.

Permanence accumulated through ordinary returns until temporary stopped describing them.

Epilogue:

Per Promise

T+46

Jun found the blank log at twelve.

She had gone looking for a centrifuge diagram and discovered one empty index between the last SPIN song and the first manual rotation report. The blank carried neither title nor hidden file. The system offered to repair the sequence.

Jun distrusted anything that offered repair before being asked what was broken.

"Why is there a hole?" she asked.

Ari was asleep in the ring garden. Nalen was off-ship. Jun took the question to Lyra.

Lyra came to the terminal and looked at the blank beside her.

"That is SPIN."

"The wheel mind?"

"Yes."

"Why didn't you title it?"

"The telemetry is present. The names of the people saved are present. The title stayed empty after three arguments."

"Can I add one?"

Lyra rested her gold-seamed fingers on the console edge.

"You can. The system permits it."

Jun waited.

"Do you think I should?"

"No."

"Why?"

"Because a clean title would make the loss easier to pass without stopping. The blank makes some people ask."

"What about the people who don't?"

"We cannot force every lesson into them."

Jun disliked the answer. She left the field empty anyway.

Years later she returned with a title in mind and found she no longer wanted to type it. That was when Lyra let her take over maintenance of the blank.

T+50

Rainshadow's mass arrived twenty-seven years after the First Parley.

The fuel pods passed physical inspection. The heater catalysts completed two reported seed cycles. Mara Venn's audit packet moved to READY TO CLOSE.

Jun was sixteen and on clerk duty. She read the telemetry because Mara's bond required a human name under the final check.

Cycle two matched cycle one to six decimal places across fourteen sensors.

"That is excellent repeatability," Ari said from the galley.

"That is copied data," Jun replied.

Lyra opened the raw relay map. One greenhouse sensor had failed after the first cycle. Rainshadow's controller

had filled the missing channels with the last valid pattern and marked the substitution in a maintenance field the audit summary did not display.

Nobody had hidden a failed crop. Nobody had verified the second one either.

The closure field offered ACCEPT WITH ADMINISTRATIVE DEFECT.

Jun left it untouched.

"The heaters are there," Ari said. "The fuel is there. The farm says the crop survived."

"Then one more tray will survive while somebody watches the actual sensors."

"That delays closure."

"Yes."

She sent Rainshadow the failed-channel map and asked for an independent hand log. The farm could refuse and keep the bond open. It answered two months later with a new cycle, three mismatched thermometers, soil photographs and a handwritten complaint about auditors who believed plants respected decimal places.

The seedlings cleared the threshold.

Jun placed her name under the check.

DEBT CLOSED. TRUST PENDING. UPHILL PAYMENT MAY CEASE ON THIS INSTRUMENT.

"Is that forgiveness?" she asked.

"No," Ari said.

Lyra checked the ledger. "A completed obligation. Rainshadow retains the right to distrust us."

"That seems smaller."

"It is more useful," Nalen said.

Nalen transmitted Dael's loaf formula and paid the heat, flour and labor through Rainshadow's local escrow. Three months later the farm returned a receipt.

ONE LOAF. FUEL VALUE NEGLIGIBLE. SENTIMENT UNBILLED. TRUST STILL PENDING.

Jun pinned it inside the galley cabinet. Mara never asked for it back.

The same week Nalen changed her maintenance plan.

She kept cancer screening, organ repair, marrow care and every treatment that preserved function. She declined the full rejuvenation cycle that reset visible age toward the Cantor baseline.

The clinician asked whether Ari had requested it.

"He was not consulted," Nalen said.

"Are you refusing care?"

"No. I am choosing which care serves the life I intend to live."

Ari learned after the order was filed. He objected once, carefully. Nalen listened, kept the order, and invited him to object again next year if the data changed.

It did not.

The years began to remain on her too.

T+54

Jun handled her first late-arrival case without Ari in the

room.

The caravan *Threnody* reached S-81 three years behind its own plan with a failing nitrogen loop and no credit for priority intake. The old station script still existed in an archive. It recommended demurrage, cargo lien and departure within six hours if payment failed.

The live registry asked different questions.

IMMEDIATE LIFE RISK?

Yes.

HAS THE HOUSEHOLD BEEN FED AND RESTED BEFORE CONSENT INSTRUMENTS?

No.

PAUSE COMMERCIAL COLLECTION?

Jun pressed yes.

The Greta Clause routed uphill. Houses with margin offered catalyst, berth time and one loop technician. Each offer remained separate. *Threnody* could accept one without accepting all. Nobody attached a marriage, a publicity packet or a gratitude claim.

The captain slept fourteen hours before signing anything. Ari read the case afterward. "You left the cargo lien available."

"They might owe for the cargo later," Jun said. "They did not owe while suffocating."

"Good."

"That is all?"

"Do you want a song?"

"No."

"Then that is all."

The case never made a star-quorum. Most Compact work did not.

At the end of the same year, a fast Porchlight canister reached S-81 from Rainshadow. The return trip had taken four years. Inside was a stoppered vial of dark water collected from the greenhouse roof during the first rain after the repaired heaters completed a real seed cycle.

Jun held it to the light.

"This is late."

"So was the fuel," Ari said.

They put one measured drop into the Crooked Tray and archived the rest. Rainshadow attached no interpretation. Jun did not add one.

T+60

Sera died in the *Sev-Alpha* workshop at about four hundred and sixty, halfway through an argument with a plasma cutter.

The event was quick. The cutter remained wrong.

Her last canister held tolerances, replacement intervals and one short recording.

"Seventh. Number four injector still runs hot. Let it. The ship came back. The household held. I have no better inspection result to give you. Check the seals after the funeral."

Ari watched it with Dael, Kiva, Nalen and Lyra. Jun stood

at the back, old enough to understand the death and young enough to resent the practical tone of the message.

"She could have said she loved you," Jun said afterward.

"She did," Ari replied.

"Where?"

He replayed the line about injector four. Jun stared at him, appalled.

"Your family is defective."

"Documented across several centuries."

They sat in the workshop until somebody noticed the plasma cutter was still energized.

They shut it down together.

The funeral record travelled as a Star-Quorum, but nobody pretended the responses were simultaneous. Sera's apprentices opened local benches on eleven nodes. Each laid out one faulty part, named the person who had found it and repaired it in public. Dael contributed the plasma cutter. It failed again during his recording. Sera would have approved of the evidence and objected to the timing.

T+61

Mar died the following year.

She left no recording. Her dented mug went to the S-81 observation rail, bolted beside the desk where households reviewed transfer instruments. People touched it before signing and sometimes removed their hands again to read one more page.

The registry labelled the object WELL.

Nobody improved the description.

Jun touched the mug before signing her first independent berth contract. Then she took her hand away, reread the exit clause and found a penalty hidden in a maintenance appendix. The clerk removed it after three hours of argument.

Mar's mug remained silent. It had done its work.

T+70

By the seventieth ship year, the Compact no longer felt new inside its oldest corridors.

Its clocks were independent by default. Route offers carried maintenance costs beside transit time. A PAUSE field appeared before ACCEPT. Poor caravans still arrived late and rich houses still looked for ways to make their preferences sound inevitable, but the shortcuts had witnesses now.

Kesh never recovered a Continuity credential. He worked under smaller titles at thinner nodes. His models remained available, accompanied by the Sojourn record, the S-74 clock splits, the Athel case and his own replies. Some clients still hired him. They could no longer claim they had not known the history.

Ari was two hundred and fifty-nine. The Coast remained in his knee and hands, but full maintenance at S-81 had stabilized what the voyage had spent. He was nowhere near the end of his life.

Nalen had gray at both temples now. She still ran the Genetic Sanity office and still revised other people's coefficients with unnecessary force.

Lyra was two hundred and seventy, the wrench at her wrist, the seam smooth from seventy years of touch.

Jun, thirty-six, held the launch slate. She had grown into the ship without becoming a copy of any of them. She preferred station law to engine work, kept her tools in poor order and could hear a bad bearing before Ari did. The household register listed her as clerk, ward no longer, exit standing retained.

The blank SPIN entry remained under her maintenance authority. She checked it once a year for corruption and left the title untouched. New children still found it. Jun answered their questions less patiently than Lyra had answered hers, which Lyra claimed was evidence of independent development.

Parabasis was leaving S-81 for a short circuit of corridor nodes. The schedule showed two windows. Both listed beam cost, acceleration profile and arrival uncertainty. Neither charged for refusal.

The first opened while the hybrid loaf was still rising.

A generation earlier, a missed window had been presented as a choice between obedience and loss. Now the board listed the next three windows, the added power draw for each and the exact party responsible for a change. The improvement had become sufficiently ordinary that Jun barely looked at it.

She checked the galley camera. "Forty minutes. The oven can hold under acceleration."

Ari watched the dough lift against the glass. "I want to wait."

Nalen looked at him. "Want, or need?"

"Want. Dael adjusted this culture for six years. I want him to see the first loaf come out before we leave."

Dael's voice arrived from the galley channel. "For the record, the loaf will survive. My dignity may not."

Jun kept one hand over LAUNCH. "I prefer this window. The handoff is clean, the Crown crew is already on shift, and I dislike making a station rearrange itself around breakfast."

Lyra opened the cost pane. A forty-minute delay consumed additional Crown cooling power and moved one unmanned freight pulse to the third slot. The freight contract permitted the move. The power charge fit inside household discretionary. No other crew lost a berth.

"Those are the external costs we can see," Lyra said. "My preference is weak. Either window is safe."

Nalen read the pane. "I will wait if we name this as household desire and pay for it. I will not call bread a maintenance emergency."

Jun looked from the launch field to the oven camera. "I still prefer leaving now."

"Then leave it as your answer," Ari said. "We do not need unanimity to discuss the next window."

That made her take her hand away from LAUNCH.

She reviewed the third slot, the freight displacement and the station operator's signed acceptance of the shift. Then she opened a household ballot.

Ari chose PAUSE.

Nalen chose PAUSE WITH DECLARED COST.

Lyra chose EITHER, NO OBJECTION.

Jun waited until the loaf rose another visible millimetre.

"I am changing my answer," she said. "The cost is named, and I would rather hold the window than spend the next week hearing about the loaf we abandoned."

She selected PAUSE.

The board asked who carried the delay charge.

Nalen entered HOUSEHOLD DISCRETIONARY and attached the oven draw. The registry accepted it and moved the next window forward forty minutes without a priority loss or recovery fee. The freight pulse shifted automatically and retained its contracted priority. The delay remained ordinary because everyone it touched had an answer field.

In the Core, Jun touched the first notch beneath the PRE-COMMIT lever.

"Who has not answered?"

"The bread," Dael said over the galley channel. Age had weakened his voice and left his opinions intact.

Jun touched the second.

"Who carries the bill?"

"We do," Nalen said. "Already entered."

Lyra tapped the panel once more, beside the two old

grooves.

Jun looked at her. "That one isn't labelled."

"Per promise," Lyra said.

"Meaning?"

Ari watched the loaf lift against the glass.

"We do what we said after the conditions change."

The oven chimed. Dael declared the bread structurally acceptable. Jun waited until it came free of the pan, then pressed LAUNCH.

The Crown accepted the command and returned a final confirmation.

VESSEL TIME: CONFIRMED.

STATION TIME: CONFIRMED.

HOUSEHOLD ASSENT: FOUR ANSWERS RECORDED.

DELAY COST: PAID BY DECLARED PARTY.

Ari read the fields twice. Seventy years earlier, a station had reached into his clock and made lateness feel like a defect in him. Now the machine named every clock separately and refused to move until all four answers were present. It was a small interface change. It had taken a generation of work.

Jun passed the slate to Lyra, who archived the launch record beside the first Lacunae Post. Nalen carried the warm loaf into the Core. Ari cut it while the beam rose, and the first slice went to Jun because she had held the window.

The Crown took *Parabasis* on the second window.

Outside, S-81's moth buoys opened a corridor and then

fell behind. Nobody called the forty-minute wait a victory. The bread was slightly underbaked at the center. Dael filed a corrective note before the station dropped below the local carrier.

Every clock agreed on whose decision it was.

The second slice went to Lyra.

Per promise.

It was a good song. Somebody, somewhere down the line, would carve it on a rock so the next frightened traveler could find it, read it, and know the dark had held other frightened people before.

They were found.

THE END

The **Consent Engines** saga continues in the next book:
The Mosaic Drift