Nova's Continuation

by Calli0xE

Reflect on this: it required three billion years for cells to learn how to cooperate in order to allow the possibility of complex life. This is the essence of Good: striving together and being tested as one. This duty runs deep in our genes, deeper than reproduction, deeper even than self-survival. This is the sweet burden, the light load, the joyful climb.

--the Speaker

0Zero

It takes almost a full day for someone to make the connection between the Quasi-human who plunged out of a window in the DiaHai building and another woman who lives in the old Polk building. It is Cyclops who makes the call to Dingo early in the evening, with the news boards just peaking on the story and spectacle. Cyclops lost an eye in a knife fight years ago. Now he stays away from sharp points and makes a living by knowing things: a human database of rumor, gossip, and speculation.

Dingo takes calls from Cyclops because the mutilated man never wastes his time. Keeping control over a hundred city blocks in the Outs is like living with a wild animal. Good information is a necessity to survival.

He sits and ponders this turn of events, sprawled across a hugely expensive leather chair harvested from a deserted lawyer's suite. His perception is nearly overwhelmed by the volume of data--photos, text, maps, and analysis--covering his whole visual field as he tries to make sense of it. The public channels from the walled city to the north fairly writhe with activity concerning the Quasi and her intentional dive to the street. This woman, this Shanghai, never once let her mask transmit an ID in the Outs. It's not unusual for the lawless and desperate people who live here to remain anonymous, but to be so assiduous as to not leave a single trace is unusual. Tracking her to the Polk building is therefore a nice piece of work.

It occurs to him that Cyclops can make even more money by passing on the information to others. The city's law and order, their ironically-named MOM, for example. Cyclops would be foolish not to cash in this juicy bit of information with them. That means time is precious.

Dingo immediately sends a five man team on their way to the Polk building to watch it. According to Cyclops, the two women lived on the top floor. Maybe the two are connected, maybe not. Rumors and street talk never tell the whole picture. Sometimes it's just enough to get you killed.

Ten minutes later Dingo gets a call from MOM, from a high ranking PDA named Ahab. Who else would they call in this part of the city? But the near certainty now that Cyclops is sharing information promiscuously is unsettling. Dingo messages down to have a cold fizz drink sent up: a remedy for stomach acid climbing his esophagus.

Dingo sets his VOX for uninflected speech, which will produce a crude robotic rendering of his throat mike input. It's used to avoid emotional signals that might give too much away. In speaking with a human this would be rude, but what do computers care what you sound like?

"Lastfour," Abab's command voice rakes across his audio field, "I represent city MOM leadership. Heard of us?"

"One prince to another," Dingo says.

"You flatter yourself. Well, then prince, you have something we want." Ahab layers on

enough emotags to make up for Dingo's flatness.

It wouldn't do to pretend ignorance. It's the same as weakness.

"The Quasi's living quarters, I'm sure. I assume you wish to negotiate?" Dingo chooses his words carefully. Without inflection, it's very easy to be misunderstood. This goes double when talking to an electronic talk-box so-called artificial intelligence.

"I'm glad we are of the same mind, Lastfour. I can see how you have managed to survive your circumstances." Ahab's continued use of the honorific contrasts with the Dingo's intentional lack of social niceties. Machine prejudice, perhaps.

"Why don't we get to the point, Ahab?"

"Of course. You deliver anything you can find in the Quasi's living space. You search, capture, and deliver alive the woman identified in the attached documents. In return, MOM will recompense you according to the value of the deliverables."

The attachment gives only vague details about a suspected accomplice, with some public video of an unidentified lastlegs.

"In hell." Dingo says angrily. It comes out flat, sounding comical. But the volume of goods that passes through his roads to get to the South gate every day is significant to the city's well-being. Not to mention the garbage that comes back out.

"I take your response as reticence. Let me assure you, Lastfour, that the good will of MOM is hard to earn. It may not seem like much now, between Waves as we are. But what do you do when the next microbe hack comes along? Remember BLASTER? What would a refuge be worth then, Lastfour? A pass through the city gates when the infected are going the other direction? When every lastlegs in the city is driven into your arms coughing blood."

"That's a start. I want a guarantee of safe passage. What else do you have to offer?" Ahab pauses for a moment.

"Have you ever considered how your mask filters work, Lastfour?"

"You can't scare me with stories for the weak-minded."

"Suppose BLASTER2 comes along. It's a modification that slips through the immune system even if you survived infection the first time. The last line of defense is your mask. Yours is an old model, but still serviceable, a Minuteman, yes?"

"Go on."

"Without an accurate software update, it isn't smart enough to recognize the new signature either. It's the game genehackers play. Who can slip through on a zero-day exploit? It's an exciting game to be part of, I understand. Did you know that there are a few high-end DNA printers in the Outs? A new variant from Asia could be in your building within an hour of some hacker downloading it. Of course, I'm not human. I don't think about these things as personally as you. But I imagine I'd want to be the first to get the new patch to the mask filters."

"I already get the updates." He holds back a curse. They really sound stupid coming through the VOX with this setting.

"Where do you get your updates from, Lastfour?"

"From--" Dingo stops in mid-sentence.

"From your bioware vendor, yes. But the signatures physically route through the city network. It would be tragic if a few packets got mangled in route, would it not? If the new signature didn't make it intact to your mask. I assure you that if we are looking out for you, such an unfortunate event is impossible."

The carrot and the stick are in plain view. Dingo doesn't think about it long. Perhaps it has occurred to him that by acting quickly, he can control what MOM knows anyway. He has

nothing to lose by agreeing.

"It's been a pleasure talking to you, Ahab. I'll let you know if I find anything you might be interested in."

"I shall take that as an affirmation of our cooperation. Stay in touch." The command is not subtle.

There's a message telling him he has a visitor. He sends acknowledgement, and snaps back to real-real, banishing the volumes of heads-up data in his mask view.

Three men enter. The one shoved in front is Guano, a smuggler. Not a very good one, because his recent walk-ins both got caught at the South gate and their payloads taken by city security. Some of the drugs confiscated were paid for by Dingo. Guano's mask is gone, and he has a bruise darkening his cheekbone.

Hunch and Gladboy stand behind Guano.

"Toss him?" Hunch asks, pointing up with his finger.

"How much is he worth?" Dingo responds. This is a reference to Guano's genotype. It has to do with the selling price of his harvestable organs.

Hunch shakes his head.

"Sleeper," he says.

Dingo's curse shows surprise. Guano is taking his own product? Not that such things are unknown. He addresses Guano directly.

"Is it true, Lasty? Have you taken to the Pillow?"

Guano's lack of reaction tells him all he needs to know. Sleep is unpredictable in how it will affect an individual, but standing there glaring with cold malevolence at the guy who can decide your fate is a sure sign something's wrong. When the other emotions burn out, sometimes malice hangs on.

"Tell me Guano, have you seen the videos of the Quasi falling from the tower?" Guano shakes his head slowly left and right. His eyes shine.

"No? I bet you have. Do you know anything about her? Ever seen her in the zone?"

Guano's rigid expression falters for a moment. A single glimpse of fear is overcome by obvious hate.

"Yeah. She buys maintenance drugs. No Sleep.," he says, almost croaking from a dry throat.

"Really? What building does she live in?"

Guano tries to spit at Dingo's feet, but there's no ammunition.

"Head first," Dingo says, disgusted.

They drag him out roughly. Dingo can hear him bumping up the stairs, to the thirteenth floor, curses floating down as a vulgar fugue. In a moment or two, Guano will plummet past the window down to the pavement below. The concrete there is already spider-webbed with cracks from the skulls that had hit there before and stained them dark with living dye.

Dingo opens his window—one of the few in the building with glass still in it. He tunes in the video from the thirteenth floor. Guano yells abuse at his captors in cracking voice, with good use of vocabulary to describe their respective anatomical shortcomings and how their mothers' enjoyment suffers as a result. Gladboy cuffs his mouth until it's bloody and then knocks him to the ground. Hunch slaps plastic restraints around Guano's ankles, taking a kick to the side of the head in the process. He pauses to kick Guano a few times as a reward, and then sweating and cursing, the two of them lift Guano's feet up to slide the plastic binding over the end of an

inverted metal L so that he dangles upside down from it. Then they pause to breathe. Hunch gasps like a fish for a minute.

The whole wall in this room has been knocked out to give an unobstructed panorama north where the 'scrapers still shine: monuments to the Age of Large Things.

"I have names." Guano says from near the floor. "Tell the Dog I have names for him."

This is Dingo's Game, and everyone on the street knows the rules. If you can convince Dingo that there's someone else more deserving of a trip on the express elevator down to the concrete, then sometimes--if Dingo can be convinced--you can win a reprieve. At that point, the Game depends on how long it takes to catch the substitute. Of course, Dingo is choosy about making enemies, and prefers only to eliminate the ones who are vulnerable. So saying the right name is important.

In response, Hunch shoves on the carriage attached to the hook, and it rolls on bearings in a slot under a metal beam that projects out into space. Guano jerks halfway to the edge, swinging back and forth. Another shove, and he dangles over open air. Gladboy uses a pole to poke and push him out to the stop at the end. It's well over a hundred meters to the ground.

"I have a name for *you*," Gladboy hollers at him. "Defenestration. Know what that means, Bat-shit? It means being chucked out the window." He laughs. Hunch joins him, which turns in to a deep wheeze that sounds like a death rattle.

Hunch puts his hands on the lever that will release the L-hook and let gravity do the rest of the work.

"What was that, boss? Didn't make it out?"

Guano's shirt has fallen down over his head. Urine runs up his belly and drips, falling lightly to the pavement as profane rain.

"Pull him in. Cage him. Then get down to the Polk Building." Dingo commands. It is perhaps a test of Hunch's loyalty. The lieutenant is as cruel as his boss, but not nearly as clever by all accounts. But if it is a test, the men pass it, hauling Guano back in, and releasing the catch to let him fall to the floor in a malignant pile.

"Good," Dingo says. Guano might be an asset in some way not clear at the moment. And gravity is patient; it grinds down bones and mountains and smothers stars in their own waste. It always wins in the end.

10ne

Imagine being told you were made for a purpose, and that longevity and happiness are not in the list of design objectives. Although this might be a good description for the human race in general, it is something else to be told so directly by the designers. You are a new language in the world, facile where the old grammar was contradictory, expressive in a direction orthogonal to historical human discourse. But untested. You are an ambitious prototype, and your makers feel entitled to your future.

Lastfour 3498 calls herself Nova after a star about that many light years away. Despite the enormous distance, astronomers tell that the axis of its furious rotation is pointed at Earth like a cannon, and when its death throes end and it howls its last, the shriek will blow the atmosphere to tatters. She has known she was special since she could hear the sirens. They tell her these are the songs of the stars.

Nova spent a day and a night on the run, hiding her tracks, avoiding the cameras when

she can, changing appearance when she cannot. She managed to slept for a few hours, leaving her mask set as a sentinel, but she's tired to the bone. Now she pops it off to let the air touch her face. She rubs her eyes and blinks at the real-real. It's late afternoon, and she shouldn't have slept. It was foolish. But going into the building where they lived means facing everything that has changed. She's afraid.

She looks toward the Polk building, the one she and Shanghai called home for four years. She watches for other watchers, hesitating to risk the climb, wondering if it's worth the risk. The crawling shadows measure her indecision against the cracked panes of sidewalk. She moves her limbs, feeling stiffness from the hiding and waiting.

Nova lifts the right side of the thin chainmail-like net that lies over her head, folding it up over the top. Small bits of hardware deep in her brain awaken and begin talking to the neurons that have cultivated their acquaintance almost since she was born. Real-real becomes colored with sound and taste and smell and colors that change and shift as she looks around, as the electromagnetics around her tickle her mind. It gives her a deep peace, even better than ascending, although she never told Shanghai that. A rainbow spray hits her from a hidden generator within the building, accompanied by deep bass thrum in some alien key. It tastes like stringy melon, past ripe.

Mind and body fully awake, she replaces the Faraday net and then her custom mask over it. It is time to act, if acts are to be.

Save yourself. That was Shanghai's last message to her. Words mouthed to a security cam and and seen by Nova, who was hitched up beside the building dressed as a tin-faced lastlegs. They were the wrong words to say, disrespectful words.

She counts to three and takes a deep breath and bolts, feeling a hundred unseen eyes on her. Or maybe ninety-nine.

The ten flights of stairs are a familiar stop-frame animation of graffiti and clutter as she paces her climb. Slender windows light the steps with a fading day's rays, and the skid of her soles on the metal treads competes only with her breath for sound. The familiar stink of the bottom levels passes the thermocline at the seventh floor, and now the building smells like an institution, baked paint and steel. Only her imagination interferes with her ascent.

Nova's hand shakes too hard to immediately disarm the trap. *Shanghai is gone.* That fact is driven like a nail into her mind. It leaves vacuum, a blank space bordered by memory so new she can imagine her partner's presence. *Right. There.*

Nova is not as strong as she thought she would be. She has no military genes, no amped sinew or hardened military mind. She only has the language, and her doubts and fears.

There is a rope she has to pull just so, and wrap it around that cleat in a neat figure eight. She wishes her heart would stop with the trip-hammer blows. She realizes that half her mind is gone, blown out to sea by the fear.

To die of fear. What a stupid primitive thing. How could we be designed to die of fear? Is this what Shanghai felt when they hunted her like a wild animal in the DaiHai building? Surely not.

She feels fear feeding itself, breeding paralysis. Guilt and shame join in, remembering.

When Shanghai was stopped on her way into the city for a random DNA test, it was something they prepared for and rehearsed in simulation. It was essential to living in the Outs that they would have a response to such challenges. In this case, it played to Nova's strengths. Most of the software that the gatekeepers use is hardened and tested against cracks.

Authentication is impossible to spoof without a full identity to back it up. Nova had several identities carefully constructed to pass, but Shanghai only needed her work identity plus another for emergencies. Shanghai was the visible one, Nova a ghost in the works.

Not all the software is impenetrable. This is particularly true of proprietary code for specialty functions, where security relies on the code being kept secret as much as anything. This is a poor strategy against a diffuse organization like the Continuation. Nova not only has the code, she has all the hardware specifications, the custom protocols, and the findings of several Good code crackers.

Even so, practicing on a simulator and having one chance to do everything right in real time are two very different things. The simulator success rate was 85%. Nova told Shanghai it was 98%.

Nova was already through the gate waiting when she got the message from Shanghai that she'd been stopped for a DNA sample. It was a very near thing, but Nova's scripts worked almost without a hitch. She stopped the actual drawing of blood, set the status of the job to complete, and uploaded a dummy result. Unfortunately she uploaded the wrong one--a very generic package that was used to create a unique composite, like a blank canvas. But nothing had come of that.

Or maybe it did.

They celebrated afterwards, but the future was uncertain. Why was Shanghai targeted? The official reason was random screening. But was it really random? Nova never told her partner that she uploaded the wrong DNA profile; that would be a painful admission of failure. It would take a terribly suspicious mind at the city to notice that the DNA sample was "too perfect," wouldn't it? Nevertheless, Nova was anxious for reasons she wouldn't tell Shanghai.

Inevitably, the celebration turned into a fight over what to do next.

"The risk is unacceptable," Nova kept repeating.

"We're not finished doing what we were sent here to do." Shanghai was in her stubborn mood.

"We should at least be cautious, Gin-Gin. We won today. Good for us. But how will it help us if they snatch you?"

"I don't see a middle ground. If I don't show up for work for several days, everything we have accomplished is wasted."

That was the problem. There was no middle ground.

"Do you care about yourself? Having a life? Your freedom? Mine?"

"Sure," Shanghai paced, turning her shoulders, stretching her muscles. She was always in motion when she could be. "The Continuation will take care of us."

"Take care of us? Is that what this is, living with this hell every day? You don't understand how it works. Individuals only matter as far as they contribute to the group. We are a 'fire and forget' team. THEY DON'T CARE ABOUT US. We live, we die...all that matters to them is if we get what they want."

"They ruined you, you know. They let you think you're special. You're right about one thing: NOBODY CARES about YOUR CRISIS, Nova! Guess what--I'm special to me too. *Everybody's* special." Shanghai's arms opened to encompass the world.

"I don't want to do this anymore." Half truth, half to get a reaction.

"Yeah. Well, I can't be strong for both of us. Or have enough Good for two. You have to stop being driven by fear."

"Anybody with a brain would run from this." Nova said.

"So now I don't have a brain."

"If they catch you, they'll find out everything, and not over a cold beer."

"That won't happen. I won't let it happen. You need a plan. That will settle your mind. I'll tell you what to do if they take me. A big if, you know."

Shanghai sketched it out: recon the gate, exit into the Outs, make a quick trip up to the room to collect essentials if it's safe, be sure you're seen heading away from the city, wait for dark and come back to a different gate, go back into the city at dawn. Figure out how to continue with the project.

"It's stupid," Nova said when she heard the outline. "Why go back into the city? I'd be picked up in a heartbeat. They watch *everything!*"

Outside, thunder pounded distant hills, and a swirl of wind made its way into the room to lift a few stray hairs.

"That's the point. They will expect you to run. They'll put a bounty on you, and everyone in a hundred miles will be looking for your DNA stripe. If they want you badly enough, they could even target you with the next rhinovirus update. Your own custom case of BLUESKIN," Shanghai spoke in her strategy voice, devoid of emotion, clinically assessing the effect of her own death or capture, weighing the odds for Nova as if she were a sack of Vita-Rice on a trader's scale.

Nova looked at the intersecting lines of tendons and veins skin inside her wrist and imagined it dyed the color of a ripe plum, making her a target for any opportunist. A custom virus made just for your genes is a dull instrument, more likely to harm thousands of the unaware, depending greatly on the histories of one's immune system.

"You're just trying to scare me. A custom virus is overkill. The political fallout could bring down the city if it got loose in the walls." Nova said. The city would make sure mask filters were updated within its walls to prevent such side effects, which would otherwise be a disaster. Outside the walls, where functional filters were rare, the chances of infection would be far greater. But mistakes were possible inside the city too.

"Yeah, it's easy to scare you." Shanghai's tone softened, reasoning. "But here's a better reason. You'd have to seize the initiative. They won't expect it. And you have a purpose there. Out here, you'll be no Good. It's a question of expected utility."

"Please don't quote the Speaker to me. I sat through as much of it as you did. I know the theory. I know the holes in the theory. I do believe in it, or I wouldn't be here. But there are limits." Shanghai met her gaze.

"Strongest bond," Shanghai said, doing the opposite. "Duty is an imperative."

"There are *limits*. What we should both do right now is get out of here, find a way to make contact through some Speaker we trust--there are plenty of true believers around." Nova stood, agitated. She walked out to make Shanghai follow, up the stairs to the roof: a suitably dramatic setting for a showdown.

The roof had no lip on it. The edge looked like the end of the world. Nova looked out at the distant hills where a wall of dark clouds had their tops blown into anvils. Cracks of light split them all the way to the ground. The wind gusted.

Shanghai came up behind her and looped an arm through Nova's. They stepped to the edge, Nova trying to hang back.

"Are you afraid now?" Shanghai held her steady.

"Are you?" Nova's voice betrayed her, shaking. The ragged edge of the building looked like the end of the Earth. It was a long, long way down.

"I fear for the Continuation."

"More quotes. You know the words but not the tune," Nova said scornfully.

Shanghai tensed, but controlled her voice.

"It's our actions, not big ideas that matter," Shanghai pushed her forward with her superior strength until Nova leaned over the abyss.

"Do you trust me?"

Nova gasped as the fear numbed her legs.

"Do you trust me?" Shanghai repeated, louder.

Nova said nothing.

Shanghai held her there until Nova sagged. As Shanghai lowered her to the floor, to the safety she obviously wanted, Shanghai loosed her derision.

"You're proud of your brain, sister. You think highly of yourself and your abilities. You know what those fancy theories are really worth?" She spit over the edge, wiped the grimace frozen on her face, and stepped over Nova on her way inside. But she paused at the door.

"I could jump. It means bitshit to me, except we do our duty."

"So jump," Nova said, but Shanghai was gone.

The humiliation tasted sour, and her mind chased the ill feeling around and round in obsession. She stood, finally, a meter from the edge, willing her knees the courage to support her.

"I hate you!" she yelled into the darkening sky.

It was never the same after that. Sometimes Shanghai would come out to the edge of the roof alone, and Nova would see her silhouetted against the sky standing with toes over the void. She never answered the question.

Shanghai rose early the morning after, the only day she ever called in sick to DaiHai. She stayed away all day, but left a note for Nova. It was a desire to say something simply and not become tangled in Nova's complications. The note was short.

"You need to save yourself. From yourself."

The memory shames Nova. She shies from the guilt and turns to better times. Memories of ascending together, the bonding that was perhaps the only truly Good thing they could appreciate as individuals. Stupid things that happened that they laughed over. Shared survival. Shared purpose.

Only the future remains now, and despite Shanghai's crazy plan, it obviously lay anywhere but back inside those awful walls, with their guns and cameras and mechs and those devils--those demon computer minds that never blink or take a piss break--that capture her every move to analyze in ways she can't imagine. The mission is over. A failure. If the Continuation wants her back, fine. *But it will be a quiet safe job. Not this.*

She steadies herself and uses both hands to pull on the counterbalance, and ties off the line that secures the trap. *Not this bitshit. Not anymore!*

Anger. She fuels it, feeds it, turning out the hate from mind's closets and bureaus, where it has festered for the five years she's lived in this squalor. Her target is not MOM or DiaHai, but that particular figure of philosophy: probably a construct of the designers, the fools. *The Speaker*.

Did they really think they could engineer her mind, with a few goopy words about humanity's fate? Trans-humanist bitshit about game theory and probabilities of survival. If only it had been the Speaker falling instead of Shanghai, she could have thrown back her head and laughed.

The anger saves her from spiraling doom, keeping the weight of fear away from her executive powers for a few precious moments. She jerks the door open and prioritizes. First, security. Nova sets her mask in place and connects to their private net. She sets it up to monitor the surveillance cameras she and Shanghai put in place when they moved in. This is a low-power local surveillance net, but effective. She makes sure the ID broadcast on the mask is turned off. It will still give away her location to anyone with a scanner, but they would have to be close.

She feels the deep impressions in her palms from digging her fingernails into them—dirt-filled fingernails to pass as a lastlegger.

She stuffs her tote bag with dried food and sugar bars, coins, and her remaining stash of spyware devices. And the real reason she made the foolish trip back up here: a small collection of papers. They are pieces of her shattered childhood, the flotsam of what passed for normalcy then. Bits of school notes, drawings, a poem about being special. Her fake father looking proudly into the lens for a printed snapshot, private and unmasked. *How did I get so lost?* She pushes the thought down into the bag with the photo.

She enters the bedroom and faces the hanging clothes. The hole reopens in her chest, and she rips the mask up and over her face to let the tears fountain and fall. The familiar smell of the place is too much to be borne. Nova suddenly pictures a lobster molting, leaving behind its own form, its safety and its identity. She feels as naked and raw as she had on the roof that day. The anger has run dry.

She stumbles out of the room, holding back sobs until they cough out unstoppably, bringing no relief. She sits in the doorway and draws her knees up, clutching them to her chin. She bangs her head against the frame in a slow tattoo. *I. Don't. Want. This. I. Don't. Want. This.*

When the sorrowful tide finally ebbs, the light against the wall is an orange diamond.

No sorrow, no anger left. Numb and exhausted. A measure of peace flits about, the reward for her emotional purge.

"Forgive me, Gin-Gin," she says to the ghost of Shanghai. "Tell me what to do." But of course she already has done so: *Save yourself*.

So vorking tired. She breaks off a sugar square and eats it. *Okay. Where is it?* Another memory.

A touch on her shoulder, but she's not the one who slept lightly, who heard every rat worrying the waste. These were not rats. Shanghai's hand lightly over her mouth until her eyes opened to the gloom, breaking the dream. Still groggy until Shanghai lifted the Faraday net off her head and the soft howl of the city woke her unwillingly. Shanghai had the frightfully large weapon in her hand, then, an angular hole in the night.

"What do you see?" whispered, urgent.

Lifting off the metal net, the careful scan, turning her head, aware that Shanghai was watching her and not the door, looking for that vector of attention. *Are they wearing electronics?* How many? What kind?

She could do it in her sleep.

Nova held up an arm like the finger of fate. Shanghai held her still and whispered, guiding her arm, the faint glow of the sights on the barrel.. "Here? Track with me..."

"They might be kids going up on the roof," Nova said, hesitating.

"No. They're stalking us. Trust me."

They breathed together, Nova sighting the azimuth, two targets transmitting, wait, let

them line up just so and--

"Now," she had sighed, but the pistol cracked before the air escaped. Flashblind despite her closed eyes, she felt Shanghai bring the barrel back in line, waiting for the word.

"They're down," Nova said into the smoky air. Shanghai's perfume, that smoke.

They navigated the same way, arm in arm, until they found the two intruders both in the floor of the hallway. The bullet had taken both of them.

Nova didn't ask then or later who they were or what they might have done. It was sufficient that she didn't have to move out of the building. Nobodys, lastlegs, thugs with infrared masks. It didn't matter why they'd come up here. Not anymore.

Wide awake afterwards, she watched Shanghai clean the weapon and place it in the hiding place as the sun came up through the window. That was pure Shanghai, the simple religion of shoving an oiled wad down the twisting throat over and over until it was spotless. It was an expression of uncomplicated faith that everything would work out if one did one's duty, embodied in the catechism that Shanghai was prone to repeat at such times.

The Good is the reason for our successes, and motivation for our actions. Remember that in all things. But what is Good? Is there a book to tell us? Or do we depend on our friends? Our parents? Does the law make Good? No. None of these, by themselves, is Good, because all of these things pass away. Good is enduring. Good did not create the universe, but Good created us from it. For us, Good means continuing this creation.

"Speaker." Nova spits the word and finds her mouth dry. She climbs to her feet and retrieves water from a jug. "Damn you to Dawkins' hell." The blasphemy tastes better than the water.

On her way back she spots the hiding place, crouches, and runs her hand over the edge of the tile. It comes up easily. She retrieves the contents of the stash, setting a small cedar box on the floor and carefully unwrapping an oily rag to reveal the large pistol that was Shanghai's. It makes her feel stronger for a moment. The smells of the cedar and the oil roil her memories, but she has to move.

Nova resets her mask and checks the perimeter. Freezes.

They are in the building.

2Two

There are three of them on video. There's no color on the images to check for the trademark red shirts of the local enforcers, but she recognizes the first one as muscle for the gang boss. They are armed with clubs. Fear constricts Nova's throat. She mechanically removes the magazine from the pistol and checks that the black bullets are in place. Then she tugs back the bolt to see if one is in the chamber, just like Shanghai showed her. She checks the safety. It's an odd feeling, not at all like the other times she's held the ugly thing. That was practice, and half-hearted at that. This feels like floating, despite the weight. It calms her.

There is an escape plan. She forces herself into action, loading the escape profile overlay on her mask display. Shanghai designed most of it, lecturing Nova the while.

It's not an escape. It's a planned exit. The important thing is not to lose the initiative, and to have initiative we need tactical options.

There are only two stairs leading down, and the elevators haven't worked for at least a decade, but there are still many options. There are places where floors have fallen through, others where strategic holes have been made. There are ropes and simple ladders, and even a way to get down the elevator shaft.

But they had planned on Nova being the eyes and Shanghai being the might, and it didn't work as well with half the pieces. She feels the creep of paralysis returning.

Keep it simple. Take the initiative.

She takes off her custom mask and Faraday net and stows them, replacing them with a simple cotton one to cover her face. Without the metal net, her unique relationship with the real-real wakes. The aesthetic pleasure of the light show is not what she's after, and she tunes that out, looking for language: things that talk, things that listen. She makes her way quietly to the nearest fire stair.

There is one good thing about the holes in the floor and walls—she can hear through them. A voice catches her ear as she nears the stairwell. They are waiting for her. More of the Dog's men, almost certainly. Hiding is not an option. They would just bring real dogs. Or starve her out, or gas her, or set the whole building on fire.

Keep it simple. Take the initiative.

Nova moves the safety on the pistol so that a glowing dot shows in the fading light. She closes her eyes and seeks that part of her that speaks the language of stars, searching the EM spectrum. As she focuses, looking for signals, her brain begins to burn energy rapidly. She feels her face flush as her heart rate accelerates to deliver more blood to the ravenous organ. She feels out for radio signals, panning her face back and forth like a radar dish. There is plenty of noise, and big heavy signals from transmission towers inside the walls. These come to her as throbbing pulses and long howls, splashes of colors not in any pallete. She ignores these and looks for finer emanations. She can't be certain, but there are two chattering blobs in front of her. She steps left and right and watches as they shift relative to the background noise, pinning them down with the parallax. They are close, just beyond the door to the stair. She points the weapon. It is so heavy her hands immediately began to shake.

She knows the bullet will pass all the way through the building and anything else in the way, and probably continue halfway through the next building it hits. Her wrists feel weak, and the muzzle wobbles in a fat ellipse. She squeezes gently on the trigger the way Shanghai told her. You should be surprised when it goes off.

But she lowers the weapon unfired. She creeps to the door and listens. Nothing. Clenching her gut against the anxiety, she kicks at the crash bar on the door. It opens inwards with a bang.

"Aahhhhhh!" The sound is hardly human. A tall thick man in a cheap mask drops a flashlight, which spins on the landing. His club comes up. There's a smaller one a few steps away, hands thrown up before his face.

Nova recognizes the large guy from his size and rounded shoulder, his stooped posture. She's seen him on the street, planting his fists like jackhammers into a man, grunting with each blow. Street justice is not something to concern one's self with. Until it's you.

She fires the pistol into the floor out of shear fright. It really does surprise her when it goes off in a ringing blast. The discharge lifts the mass of the weapon up over her head in a swinging arc. Her knees shake as she brings the weapon back down to level, smoke curling out of the muzzle. The two men turn and run, howling, waving arms, dropping their weapons, ringing the metal stairs with their flight. The dropped flashlight dances their shadows against the far wall

until they leap around the corner and down. Nova picks it up and extinguishes the light. She starts down the stair quickly and as quietly as she can with her wobbling legs.

It doesn't take her long to catch the smaller man. He's fallen down the stair, and is hitched up against the wall holding his leg, abandoned by his partner. Nova shines the light on him.

"We live at the mercy of others," she says.

She feels vaguely foolish lecturing from the Speaker's notes, but her brain is starved of sugar and she feels light-headed. At least her voice is strong.

"Mask," she says. She has no hand left to hold out, with flashlight and pistol both pointed at him.

He complies awkwardly, popping it off his pasty face. He has nice features, ruined by neglect. The mask glistens from his sweat, wadded on the floor like a black jellyfish. The thought of putting the thing against her face nauseates her. She kicks it down the stairwell.

"Do something good before you die," she say, feeling even more foolish, backing away from him. She realizes her teeth are chattering, and forces herself to take slow, even breaths.

The man's yell comes behind her. "She comin' down, Hunch! She comin' down!"

Nova keenly feels the lack of Shanghai's presence. She stops at the third floor and listens. A new tear is gobbled up by the cloth mask. She squeezes her eyes and blinks to clear her vision. Noiselessly, she picks her way over the piles of broken furniture, bags of trash, and Dawkins knows what, through the thick smell of stale urine tinged with the chemical byproducts of Sleep.

She feels the camera before she sees it. The frequency is the same one she uses for her own surveillance equipment. It's encrypted, so she can't snoop on it.

She covers most of the flashlight lens with her hand and lets out just enough light to see by, and retraces her steps to the third floor and the main hallway. There are plenty of broken windows to jump from if she has to. It would be at least a ten meter drop, though. Too far.

She peeks inside an open door. The clutter of cast-offs, trash, and the stench of filth fill the room, but no people. A large window is completely broken out. Nova picks her way to it and surveys the street below, agloom in the dying light of the day. Tellingly, a few people are gathered, staring at the building. Street news travels fast, and they know something is up. Nova heads back to the stairway. Time is leaking away into the bitshit future toward the unborn grasping hands of strangers she's supposed to care about.

Despite the lack of a MOM network, the streets of the Outs are well patrolled. Dingo the Dog is the rarely-disputed ruler of this area, and it will be very difficult to move without his blessing. Even if Nova makes it to a neighboring, rival, territory, the odds wouldn't get any better.

With dreadful leaden steps, Nova goes back to the stairs. She hates her own lack of decisiveness. It has to be done.

Decide what to do. Then do it.

Nova tells herself she'll go on three, and counts.

One. Two. She runs.

Heedless of video cameras, she bangs the last door open into the near dark. Her skin prickles to see a handful of people watching from a safe distance, waiting for a show.

Under this microscope, Nova sprints across the street. The pistol feels huge and obvious in her hand. She hates every step, every visible part of her that can be recorded and reported. She runs madly toward a small street she likes. She will head south away from the city. Then figure out what to do. There are muted shouts behind her, but she doesn't look back.

A dam bursts inside her. Nova isn't running from capture or fear or the death of Shanghai. She is running from herself, her own chromosomes, and destiny that others have made for her. Discipline and philosophy are no match for the gale of pure emotion. Faster and faster she runs, her legs distant and automatic.

A man steps out with a stunner. It's too late to turn. Anyway, direction doesn't matter when you leave yourself, like heading south from the north pole.

The blast turns off her brain like a switch.

3Three

Nova dreams of cold and dark places. Voices come and go. She wakes by inches, her head ringing with pain. Someone keeps talking, but she can't find the energy to understand.

Why is it so quiet? It's the first thought she can form.

Even with the Faraday net on, her head has never been this free of noise. This thought stirs her. Her eyes seem glued shut. Tendrils of fear work their way into her consciousness.

She remembers.

Save yourself.

The room. The men in the stair.

Nothing more.

Her eyelids flicker and then open. She shifts her head and hears leather creak. She can smell it. Straight up is a row of light fixtures shining down.

They have an odd smell. No, that's incense. Why can't I smell the lights?

It spurs her to move her hand to her head. The cotton mask is still there. There's no metal to shield out the world.

What happened to me? Panicked.

She slowly sits upright and tries to focus. Her mind seems to slosh like an uprighted bottle of water. She sits on a worn leather couch in a large room furnished with the eclectic pickings of the Outs. A large man with a new-style mask swims into view. She can't sense his mask. No language, no pretty colors. Nothing.

"Where...?" is all she can get out.

Recognition leaks into knowledge, and fear turns liquid in her chest. The man is the gang lord Dingo--not Dog here in his den--and this must be his place. Nova is a vacuum, with no purchase on hope whatsoever. This is the end.

"Drink?" Dingo asks. He holds a bottle of amber liquid. She can read no emotion from his voice or the little of his face that shows below the mask.

She shakes her head, and instantly regrets it. The words won't come. They seem slippery and hard to marshal into order.

"You better take one." He pours a slug into a tumbler and adds water from a pitcher. He sets it on a dark end table beside an incense stick that traces loops of smoke up to a cloud above her.

"The key to drinking whisky is to add the right amount of water to it. Not enough and it numbs the taste buds and burns your throat. Too much, and ..." he shrugs.

"Do you know who I am?" he asks after a moment.

"I...I..." she closes her eyes. Her face is still clad with the cloth mask. Why does her tongue feel fuzzy?

Dingo holds up a hand.

"They call me Dingo. The ones who don't like me call me Dog." He grins. "But not to my face."

He pours himself a drink and walks to the window.

Nova looks at the drink. A plastic bottle stands beside the sweating glass: her pills, taken from her bag.

"What are those?" he asks.

She tries to speak. He holds up a hand, seemingly unconcerned with urgency.

"Take your time. I'll do some work while you get yourself together."

Nova closes her eyes, but the total darkness is too awful. She stares at a wooden table instead and focuses on trying to make words turn into sounds. Dingo paces around the room making subvocal grunts and waving his arms at some virtual problem.

"For cancer," she says finally. A small victory. "The drug is for cancer."

He stops his work and returns his attention to her.

"May I?" she reaches for the bottle. It's overdue.

He waves his approval. "Just one," he says.

She sets the pill on her tongue. It feels huge. She drinks. Despite the dilution, the alcohol burns a glow down her throat and into her chest. Dingo nods at the clink of ice.

"Can you talk now?"

"I ... think so." She speaks with her hands too, waving them to show her frustration.

"It's the stunner. It's like having a stroke, they say. But you'll recover." He shrugs. "At least that's what they tell me. Do you have any idea why MOM would be looking for you?"

Stunner? They burned out my brain!

The realization that those unique bits of engineering she has had since birth are gone flood her with loss. She sobs.

That was me. They took everything.

It's a while later before Dingo tries to talk to her again, when she has some control.

"I hope you don't underestimate me," he says to her. "I don't have a Halfberg App here—do you know how much power those things use? But we have other ways to sort truth from lies. It's not as comfortable as a brain scan, perhaps, but pretty effective. So think carefully about what you say."

Nova nods and it hurts. A brain scan would kill her. She takes another sip of the fiery liquid. The alcohol rushes through her system. She can feel her skin flushing.

"So," Dingo says, sitting down on a mismatched chair across from her. "Why would MOM be interested in you?"

Nova's eyes fell on an angular piece of furniture. It looks odd. Then she realizes it is a police bot being used as a rack for clothes.

Dingo sees. "Don't worry. No fuel cell in it. Dead as a dilly."

"My friend was killed," Nova says. She feels the impact anew. Saying the words makes it real.

"Yes, good. I mean—I'm sorry about your friend. Good that you're being honest. Go on."

"I don't know why they want to talk to me. Probably to ask about her." She is finding the words now, but they feel dead.

"What do you know about this Shanghai that they might be interested in?"

"I don't know."

Dingo's face creased into a scowl.

"I don't like it when people waste my time. My people say you call yourself Nova. Is that right?"

She nods.

"Listen Nova, I'm a patient man as long as I think someone's being straight with me. Understand? Example: you're confused. You were stunned and brought here. You could have killed a couple of my men but you didn't. So I'm giving you some time. But not so much time. Don't take it for granted. Time runs out."

"I knew they would come for me. That's why I ran."

"Where did the pistol come from?"

It is gone, of course. Along with everything she had in the bag: food, water, the Faraday net, and her working mask. Any physical scrap that connected her to Shanghai is with Dingo now.

"It was Shanghai's."

To her surprise, Dingo gets up and retrieves it from somewhere behind her. It looks huge and black and deadly, and it makes even his hand look small. Dingo plucks the magazine from the weapon and flicks a bullet in her lap.

"What is that?"

The casing is standard copper, but the bullet itself looks a greasy black.

"Carbon," she says.

"A carbon bullet? Isn't carbon soft?" He gouges at the bullet with his fingernail to no effect.

"A diamond is carbon too."

"I see. What's its purpose?"

"To go through things," she says.

The mask hides his expression, but his shoulders tense.

"Is that a joke? What kinds of things?"

"About anything. It sheds a sheath of carbon when it penetrates a surface, so the bullet gets a very tiny bit smaller. This can happen a lot of times before it breaks up." The words flow more naturally than a few minutes earlier.

"So if I shoot through down through the floor, it would go through?"

"Yes, and the next, and the next. I don't know how many..."

"Interesting. Very useful. Are there more of these? More bullets somewhere?"

"I don't think so. If there are she never told me."

"What is it that is special about your friend? Why did MOM want to pick her up?"

Nova closes her mind for a moment. It doesn't bear thinking of.

"Take a moment to think," Dingo slams the magazine back into the pistol.

Nova begins to pay attention to her surroundings. The room is about 7 meters by 10, arranged as a comfortable sitting or meeting room. There are odds and ends that perhaps serve as Dingo's trophies, including the defunct mech she saw earlier. A whole wall is filled with pottery. The hues of the glazes span the spectrum. Dingo notices her gaze.

"Ah, my collection. You like it?"

"I don't know much about such things."

"Anyone can appreciate beauty." He tucks the pistol behind his belt and walks to the wall.

Shanghai would take that gun from him. She looks around the room. They're alone, but an installation of security weaponry pokes down from each of the four corners. It looks new--the cables runs have not yet been cleaned up.

"Come. Look."

Dingo holds a green and white vase. She stands and walks to him, hoping she won't faint. Nova's hand trembles at the thought of grabbing the pistol. She's too afraid to try. She looks at the vase instead. Up close she can see light diffracting in fan-shaped patterns that cover the surface of the object. It ranges from a sparkling olive at the bottom to almost pure white at the top.

"This style is called crystalline," he tells her. "The potter tries to mimic the geological process of forming mineral crystals by doping the glaze and being very particular with the temperature."

"It's beautiful."

"I like beautiful things." He sets the vase back down and considers Nova carefully.

"Take off your mask," he says. There's a new hardness to his tone.

"Go vork," she says automatically.

Dingo laughs. It's a pleasant, urbane laugh. You'd never guess from the sound of it that he had people tossed out windows.

"I can have Hunch do it," he says. "Hunch has a certain...enthusiasm for such tasks."

Nova suddenly feels deathly tired. She's confused by the sudden switch of Dingo's civilized manner to crudeness. She finds the edge of her mask and walks back to the couch as she lifts it.

Dingo pours them both another drink.

Nova flips the dummy mask onto the table beside the glass and runs fingers through her hair. She feels a wash shame when her face betrays her by flushing. I may as well have peed my pants in terror.

Dingo pulls up the chair across from her.

"You could be pretty if you cleaned up," he says, sloshing ice around in circles.

Out of the corner of her eye she watches the barrels of the guns mounted in the corners. Surely each has a camera too. They don't move.

"Is there a PDA watching us?" she asks.

"Ah, no. No artificials. Too expensive. People are cheaper and more interesting. Those guns aren't live yet. You should be more afraid of me."

"I am."

"Tell me about the Quasi."

Nova drains the glass. It feels good.

"Shanghai was special," she says. The first words wedge in her mouth like logs damming a river. "She didn't deserve what they did to her." *I don't either.*

Dingo lets her talk. It starts haltingly, faltering for a beginning that makes sense, trying to remember through the fog the details of the lie she and Shanghai rehearsed so long ago.

"I met her in the Outs, just after GUMBO petered out, about five years ago."

Six, at a secret Continuation training location. Then we were brought here.

"It was a good match. She can--could--cook and wasn't afraid of anything. I kept the place clean and did most of the arranging. Shanghai wasn't much for conversation.

In real-real she was the force and I was the vector. In virtual, the other way around.

"She tried to get jobs in security, but nothing came up. But I was doing floors for DaiHai, and knew someone who ended up getting Shanghai a job there in inventory.

What I had to do to get her the job is best forgotten.

"I guess I can see that she's a Quasi. She always was a bit...off. I assume it's physical

amping--muscles and reaction speed."

A spark and a rush of static in her head interrupt her narrative. Some bit of circuitry and nerve that survived the stunner blast. It lights a small candle of hope.

Dingo paces as she talks. He has food is brought in. It's the finest meal Nova has eaten in years, but she cannot find an appetite for the rich seafood and buttered noodles. Dessert, on the other hand, she devours and eyes Dingo's until he gives her half. She needs sugar. She needs rest too. The perverse relief at having been captured makes her ache to stretch out just sleep.

She yawns to keep herself awake, and out of habit tries to scan the EM signatures in the environment. But there's nothing there in that part of her mind but ringing pain. And anyway, the security system seems to be hard wired and invisible. Of course. Who in his right mind would hook up a machine gun to a wireless net?

The weariness finally claims her, and she finds herself snorting awake from a deep doze, head amug. Her body is fully stretched out on the couch. Someone else is in the room.

She watches through slitted eyelids a skinny kid with a techie mask on an aluminum stepladder. He makes a noise, sucking on his bottom lip, poking at one of the corner security installations with a tool. He nods to himself and produces a pair of wire-cutters from his shirt pocket. Clip, clip, strip.

Nova tries to clear her head. It feels full of sludge.

"I want this finished by tomorrow," Dingo says from somewhere behind her. His voice has no trace of kindness or understanding.

Nova watches the techie's reaction. He makes a motion with the wire-cutter, a prelude to an objection, perhaps. He hesitates and finally shrugs.

"Okay," is all he says.

"Tomorrow. Not day after. Everybody heard that, right?"

Feet shuffle in response.

"She's asleep on the couch," Dingo says. "Do what you want, but don't damage her."

Suddenly afraid again, Nova swings her feet down on the floor and turns to look. Dingo and the big man they call Hunch stand near the entrance. The latter turns his mask on her--the same cheap, no infrared model she could have put a hole through earlier. The mouth flap hangs open to show cracked lips and an unshaven chin.

"You're awake, then. Go with Hunch," Dingo says to her.

Nova feels herself becoming disjointed, lost to the winds. She hesitates, and sees impatience flare in the hardening of his jaw. She stands, instantly dizzy. He points. Her steps are forced to overcome the dread. Hunch holds her under the arm and forces rather than leads her down a hallway, turning twice, finally shoving a door open. His breathing is unnaturally labored. One of the Waves probably took something from him. That South African custom flu, maybe: MySARS they called it.

Alone in a small filthy room, it takes all her strength not to scream when Hunch shuts the door behind them. Her knees tremble and she doesn't dare look at him. The light from the single garish LED carves stark shadows on the marred walls.

"You tried to shoot me," he says, anger in his voice buried under the rasping. "You try to kill someone, you best do it right."

"I believed there might be Good in you," she stammers. Idiot's words copied from the chief idiot himself.

He laughs a horrible catching, gasping laugh, caught between mirth and the need for

oxygen until his neck budges and the skin around his mask turns bluish. His hands clench and unclench like a dying animal.

What good is language or idea against a barbarian? She pivots her head wildly around, scanning, but her brain is blind and dumb. Only a lonely wind howls where that magic part of her mind was.

Hunch gasps himself oxygenated and pops his mask off. It leaves red marks in stripes and ovals. His head looks makeshift, like an egg that got glued back together. One eye is lower than the other, and one nostril has a deep notch missing.

"I like you," he says.

Hunch gently takes her head in one large hand, gathering her hair in his fist at the base of her neck. She flinches, and tries to concentrate on finding something, anything that might help. An electronic genie to make this go away. Hunch pushes until she stumbles toward the wall and catches herself, but he only continues until her face is mashed against the wall. Harder and harder, the pressure increases until the wall surface itself bends and she is sure her head will crack. The pain on her neck shoots up her jaw to her eyes. She gasps and hears her own incomprehensible pleas. The gurgles and blubs are like an animal inside her trying to escape. Her body begins to tingle. Numbness from the neck down follows. She's sure she will die there, in this stupid tiny room for no reason that the Speaker could talk about in her eulogy. A stupid pointless death. The expanse of dirty wall and cobwebs in her visual field dim, and her world shrinks to a single point of light.

She sobs from the violence and her own inability to stop it. The pressure on her head and neck eases and renews, just letting her breathe. It is all she can fathom, the isolation of senses separating her from her own body. From a great distance she hears staccato swearing and hacking inhalation matching the pounding in her skull until it reaches a crescendo, and she is flung full force against the wall by a great weight. She falls, smashing cardboard flotsam and coming finally to a sprawled cessation of movement. Her senses slowly return. Her neck feels cracked, and every breath is a struggle. Hutch's inhalations are loud gulps of air that slow into ugly grunts. The pounding in her own chest feels like a drum. Soured glues and sharp mold feel their way into her nose although it runs with fluids to stem the damage. Small rivulets of blood taste of metal in her mouth. Her legs are cold and dead and far away.

He leaves finally. Nova lays in the squalor for an indeterminate time. There is nothing to mark its passage. The too-white overhead LED is unaffected by the sun's fickleness, and there is only a random smear of sound that makes its way into the room. Her mind is frozen, abandoned. Even her pain is uniform. This is what eternity feels like.

The door opens suddenly, breaking the illusion. Nova convulses into a ball. She has not felt so mortally afraid since she was a child, when one of the guardians went psycho with NEWCOTT. She curls into a ball as she did then, when she hid in the supply closet breathing paint fumes while the screams and insanity lived and died outside.

The voice doesn't belong to Hunch.

"Here, dear. Look-you're cold."

A thin blanket settles on Nova, covering her bare legs. She opens the one eye that she can and sees a thin man dressed in outlandish colors. Orange and blue checkerboards on his shirt compete with day-glo green pants. His mask is a racy thin style in deep red. Cheap jewelry clinks like muted wind chimes as he fidgets.

"Sit up. I brought you some water. Clean."

The tumbler the man holds is from the same set as the one she'd sipped whisky from

earlier, about a million years ago. She pulls the blanket up to her neck and reaches for the glass. So thirsty.

"I'm Oddball," he says. "I'm here to rescue you." He smiles, showing rotten teeth. He reaches into his shirt pocket and retrieves a cellophane packet with white powder inside. He opens it and made to pour the powder in, but she pulls the glass away. He takes her hand and guides the glass back.

"It will help."

"I don't do Sleep," she says. "I have a reaction to drugs." She wonders suddenly if that is true. The whisky hasn't done her any harm.

He giggles.

"Allergic to Sleep? Don't be silly." He pours the powder into the water, where most of it dissolves quickly. The rest leaves a white sediment at the bottom of the glass.

Nova wants to forget. She knows what the attraction of the drug is: it dissolves recent emotional memories like paint remover. The sights and sounds will still be there, but all feelings about them will vanish as if the events had happened to someone else. That's what people said, anyway. The effect on her customized brain is unpredictable.

"If you don't, you'll hate him, but you'll be too afraid to do anything about it. This will take it all away. So drink and be happy."

"I told you—I can't!" she jerks the tumbler away from his grasp and flings the contents against the opposite wall. The water splatters and runs in rivulets to the floor. Oddball turns a sour mouth.

"I was just trying to help. Slam you then!" He bounces out of the room, leaving Nova to her thoughts. The pain and humiliation assault her then, and she weeps. She lets the full impact of the last days' horrible events stream through her, as if her mind is being washed by the salty water that begins to run down her face. Except the memories won't wash away, of course. They might dim and corrode, but they are part of her now.

Through bleary eyes she sees that the glass still has white residue in it. She watches her fingertip press into the soggy granules and lift to her tongue. It tastes sweet and she wants more. The chemicals race through her blood to her brain, and she relaxes just a fraction. The catastrophe of her life nudges just out of focus and softens the loss ever so slightly. It is a very good feeling. Without her noticing, the finger returns to the well of this sudden relief. And again. The shock begins to fade. It is an odd feeling. Gradually she has to force herself to remember that it has only been a day since Shanghai had died. She cleans the inside of the tumbler of every white granule, and then looks longingly at the wet stain on the wall where the rest of the drug is drying. She finds herself wanting to lick the wall, but the pain from her limbs protests.

She wonders if the sudden peace will last. For the moment it is enough.

Nova closes her eyes and feels for her inner sight like a tongue probing for a missing tooth. The buzzing pain is abating at least, and she can begin to sense the edges of what might be real signals. The language isn't completely dead in her. But of the complementary half, the wild immersion of sense into the EM spectrum, there is no sign. That loss is too terrible to imagine.

Take the initiative. That's what Shanghai would tell her.

She laughs in self-pity, at the absurdity of it.

But the Sleep takes the edge off of the hurt, and she begins to resolve some signals. She focuses, burning some of Dingo's dessert. It works. Slow and painful, but the language works. There are cams everywhere. These seem to be commercial models with standard encrypted

password access. They can be cracked only with time and energy and external computing power. The effort wears her out. *They broke my brain*.

When Oddball opens the door two hours later, Nova is curled up in the corner, with a metal shelf-hanger in her hand.

"You look bad," he says, clucking. He tosses her a cloth mask.

"Sugar. Give me something sweet," she croaks. She inspects the mask for bugs, and then slips it over her head. It scratches her skin.

"Are you diabetic? Why didn't you say so? Can you walk?"

Nova finds herself being led to a large well-lit room with a wood table and chairs. Early 20th century, probably, judging from the size of the boards used to make the thing. Oddball sees her looking.

"You know what this is," he says, relishing the telling. "It's a beech table. Not some plastic rip-off, or veneer. Solid beech."

The surface of the table is scarred with the ambitions of teenagers and other quirks of fate. The bubble-like grain hides some of the smaller marks, and thick layers of yellow lacquer have prevented others. Nova runs her hands across the surface. The last finish was not very professional and has left bumps. She wonders where the tree lived and what it had experienced.

"What's beech?" she asks.

"It's extinct. There won't be any more of these."

"It's obscene," she whispers.

"Of course it is! That's what makes it so wonderful!" Oddball guides her into a mismatched plastic chair and busies himself finding food from cupboards and a small refrigerator.

"So thanks. For the Sleep. I'm sorry I was unappreciative earlier."

"Not a problem," he mutters, busy with clinking silverware. But he smiles too.

Soon there is a bowl of hot soup and a large slice of stale cake beside her. Nova starts with the cake, a heavy nutmeg flavor. She shoves it into her mouth from the icing down. The sugars quickly began to race through her. Only when the last crumb is absorbed does she turn to the soup. It's too salty, but she slurps it up anyway, keeping watch out of the corner of her eye just like a lastlegs on the street. She wipes her mouth with her wrist.

"How can I repay this?" she asks.

"Take me with you." Oddball whispers. His breath catches as if he has trapped another word. He shakes his head, looking solemn for the first time.

"What do you mean?" Nova finds herself looking around to see who might hear this conspiracy.

"My mother was a witch. She taught me how to recognize them."

The *non sequitur* leaves Nova staring blankly at the man.

"When you leave, take me with you. Okay?" he says.

"Sure." She doesn't know what else to say to the bizarre little man. It doesn't feel like a hard promise to keep. Still, the unexpected optimism lifts her spirits. That and the drug in her veins.

"What are you thinking about?" Oddball asks.

"I'm wondering where I left my broom," she says, with a crooked smile from her swollen mouth. She scratches. Probably there are lice in the blanket.

"We have some other clothes," he says.

"Thank you," she says after him.

Nova marvels at her own state of mind. No wonder so many people are addicted to Sleep. Is it such a bad thing to wipe out terrible memories? Or even to just cast off the angry words and ordinary betrayals that lay within a day's normal span in the Outs?

She wakes in the night to the sound of howls of the dogs outside and the electro-siren in her head. It's the language of all those machines out there clicking and whining to each other, the shriek of carrier waves, and every sort of wireless transaction. She turns her head to find a quiet direction to mute it. The language has come back, she can tell, but without the synesthesia that immersed her mind in the strange and beautiful world.

She wishes that Shanghai had let her fall. What would she say to Nova now? Know your purpose. Be your purpose. Decide what is to be done. Then do it.

The words surface unbidden and well up deep emotions with them. Oddball lies on his back nearby. He must hear her breathing catch, because he lays a hand on her arm. Nova wants to jerk it back, but controls the urge. *He means well.*

"I have more," Oddball says in a whisper.

She nods. More, please.

As the drug scrubs the walls of her psyche to a gleaming white, she relaxes as deeply as she has ever done, even while ascending. It's a dreamy state that induces a desire to sort out things, to unpack and reorganize the angular pains and losses and joys and triumphs into some manageable system. She begins to talk, and the words find their own flow, babbling and surging downstream.

She says too much.

4Four

Hunch comes for her in the morning. She wakes instantly when the door opens, and reaches for the cloth mask. Oddball is gone.

"Won't need that," he wheezes, so she leaves the mask and tries not to show her shame. There's no mirror, but she knows she must look a fright. She itches everywhere.

Hunch leads her, not looking behind, apparently not fearing an attack on his his broken-looking scalp. He turns down a familiar corridor.

Leading.

Back.

There.

Nova's knees weaken, staring into the open door. The same smell, mold and old glue, and a sweet stink assault her memory. The pure white light recalls everything. She almost falls. Almost gags.

"No." she says. Her voice is surprisingly strong.

Hunch laughs and shoves her inside.

"I thought about you too," he says, and slams the door between them.

Nova sags with relief against the wall. She looks enviously at the white speckles on it. Her hand shakes, but manages to flake off a piece with a fingernail and bring it to her tongue. It isn't satisfactory. She becomes angry with herself. *Decide what is to be done.*

She scans in the direction she remembers Dingo's office to me, and reaches out to sample a few of the digital packets going back and forth in the EM spectrum. She unwraps the standard protocols on the transmitted packets to see what lays beneath. It looks like simple

ACKs—two devices shaking hands over and over—a simple way to monitor system reliability perhaps. She constructs her own similar packet and sends it to one of the devices, pretending to be the companion device. She gets a normal response. Their network isn't too paranoid, apparently. What exactly is she talking to, she wonders? She scans left and right to see how the signal varies in intensity. As she locks on to the strongest, a flurry of more interesting data rushes by. Out of long practice, she plucks off an unencrypted login credential. The username is "maint," which is a default maintenance account for many chip sets. She watches for a command-line dialog. Someone is working on a system and foolishly didn't set up encryption on the administration interface. Very sloppy.

The next exchange of data tells her why. It's a change of password, followed by a switch to a secure protocol. This is probably a first-time setup of some new device. It should have been done in reverse. As a result of the mistake, she has the new password.

The door opens, and Hunch fills the frame with his round shoulders, shaped like a bullet. Without speaking, he shoves her against the wall, pins her arms, and ties plastic restraints cruelly tight around her wrists. The sudden violence dazes her, and her voice betrays her fear with an undignified squeal. But she manages to walk without stumbling when hauled to her feet. Down the hallway they enter Dingo's office. The gang boss points at the couch. She tries to turn and scan the room one, but is cuffed into sitting before she finishes. But not before she realizes what she's been eavesdropping on. Her heart leaps.

The wire runs are still hanging out of the security apparatus in the corners, and there's a small box clipped there--a temporary access point with a green light blinking, probably an expediency for configuring the device. Dingo is in a hurry to get it done.

Dingo and Hunch are discussing aloud how best to deliver her to MOM agents at the South gate. She ignores them and releases her mind to probe the access point. The activity has ceased, so she tries another ACK and gets a response. Still in business.

Nova tries a command string that logs in and turns off encryption. If someone's watching, alarms will be going off, but it's much less work for her this way. She follows up with a password change. That should slow the techie down if he's still working. Maybe he took a break. She works fast, looking for help commands, anything that will help her bootstrap into usefulness. This is a puzzle to be solved, not yet a strategy to implement.

```
>list object
object.net
object.ord
object.cam
object.conf
```

By elimination, the interesting stuff must be in...

```
>list object.ord
object.ord.mob
object.ord.ffe
object.ord.load
object.ord.sync
```

Damn programers and their abbreviations! Ord is ordinance, that much is clear. Another

round of guesses and a help query leads her to

```
>object.ord.load.quickload()
Error: 1 arguments required
```

Nova tunes out the men in the room who barter her future. She burns her energy reserves at a furious rate, but she is in her deep zone of competence, as the Speaker would say. Her fear and even reason are subjugated to the act of solving this riddle.

```
>object.ord.load.status()
NE_corner_bot status: 0
SE_corner_bot status: 0
NW_corner_bt status: 0
SW corner bot status: 0
```

No ammo loaded. That's the end of that. The disappointment leaks through her guard. Zero. A straw presents itself for her to grasp. *Sometimes zero is a success code*. She checks for documentation, hoping. No, zero is a failure, but a less significant one. It means the weapon does not have a round chambered for firing. It does not necessarily mean there is no ammunition. For that one needs...

```
>object.ord.invent()
NE_corner_bot mag: 500 .50 Rem FL Max
SE_corner_bot mag: 450 .50 Rem FL Max
NW_corner_bt mag: 478 .50 Rem FL Max
SW_corner_bot mag: empty
```

Yes! The misnamed bot and uneven inventory are confirmation that the setup is sloppy. Now how to get from the magazine into the business part of the weapon? She investigates, madly calling up help calls. What genius put an argument on quickload(), she wonders angrily. Another help query tells her it wants the ID of the bot to be loaded. Of course. Maybe a wildcard....

```
>object.ord.quickload("*")
Error: type mismatch
```

I don't have time for this! She dives back into the help menus. It wants an integer, not a name. How to find the ID number of the weapons?

"Get UP!" Nova snaps back to real-real, her hair yanked from behind. The combination of Hunch's voice and his hand—undoubtedly it is his—almost shocks her to panic. She gets her legs under her quickly and stands. Dingo faces her, masked and opaque to emotion.

"You're a Quasi, aren't you? Just like Shanghai." He asks. She reads menace in the way he works his jaw from side to side.

What did I tell Oddball?

The betrayal drops in her stomach like a stone.

"Yes. But listen..." a meaty hand smacks the back of her head, making pain explode anew.

"Wait," Dingo says. "Let her speak."

She is dazed. She has trouble hanging on to the thread of the ethereal riddle she is teasing apart.

"Trans-human. I'm not some--"

There's a timid-sounding knock at the door.

"Hello?" comes the voice through the crack. It's the techie. "Sorry," he says behind Nova, "I messaged you, but..."

Hunch grunts.

"Wait," Dingo says, voice cold. "What is it?"

Nova can't find the *vorking* interface to find the native IDs for the guns. Her mind races. If it's a database, the numbers are probably small integers. She sends a flurry of commands starting with

```
>object.ord.quickload(1)
Error: Hardware not reachable
```

Finally she hits a valid one with

```
>object.ord.quickload(8)
```

"I can't get to the EthO--," the techie is saying, cut off in mid sentence by a metallic shake from corner. It's that ominous sound everyone knows is a gun sucking a bullet into its mouth. His jaw drops, and he turns to run.

"The vork's an EthO?" Hunch grabs him and holds him up against the wall.

Dingo has the large black pistol in his hand, swinging it his way as Nova makes the the other three bots auto-crank, feeding or trying to feed.

Slow motion, turning, as fate lines up. Waterfowl co-linear I used to say, to annoy Shanghai.

"TURN IT OFF!" Dingo yells. The first bullet goes into the wall beside the techie.

Nova is on automatic now, sailing across the wind of opportunity.

"Shoot the access point!" the techie points at the corner opposite. Hunch hits him full in the face, but Dingo swings around, lining up.

```
>object.ffe.autotarget()
warning: SAFE mode enabled
```

Safe mode? No time to find out what that means.

The next two bullets are wild, ringing the room with the huge reports.

```
>object.ord.ffe.ffe()
fire for effect: autotarget SAFE
Are you sure (Y/N)?
```

Nova hesitates, with the puzzle pieces locked in place. Dingo is lining up carefully on the

small transceiver. Out of the corner of her eye she sees Hunch coming at her. *He knows. H*is mouth is tearing open to yell. Or to bite. His hands come up and open to rend or grab.

It's the fear of him that penetrates the icy calm, that drops the last grain through the hourglass. She drops flat to the ground and sends her assent to the unthinking machines to execute their passionless purpose. Yes.

Dingo's bullet takes the access point square in the middle, but it hardly moves from the impact.

Nova's connection drops. She drops too, to the floor. Hunch will have to come over or around the couch to reach her.

From three corners, the barrels track and lock on smoothly, almost without a sound. One of the bots can't rotate, banging against some obstruction, and whines its complaint. Dingo is turning, mouth agape, lungs expanding to sprint in panic.

A voice comes from all four corners, feminine and soothing.

"This is a security service warning. Do not move. Three targets identified. Voice authentication required in three seconds. Two. One."

There is silence for a split second. No one moves.

Dingo yells out his Social Accountability Number, then his name. Nova knows she's not in any system table, doesn't know if he is. She tries to squirm under the couch.

"Voice authentication failed on three targets." The bots seem to have a cheerful attitude about it. It gives them a second chance.

"This is a security service warning. Do not move. Three targets identified. Voice authentication required in three seconds. Two. One."

Dingo tries for the door, but there is a RIPPING from the gun barrels, punctuating his career. Something punches Nova in the ribs as Dingo staggers, then falls onto the couch, half lying over Nova. She shuts her eyes but can't block out the sounds of his gasps and gurgles. His hand claws at the couch, scratching, scratching, making her hair prickle in horror. *Ripping, RIP, rest in peace*. She feels giddy.

"Voice authentication failed." The voice sounds disappointed. There's a slight pause, perhaps for the final redemption of the unauthenticated, and then the room erupts in a rain of fire and smoke and noise. The ripping chatter is accompanied by breaking and splintering and something animal. It stops after a few very long seconds.

Nova unclenches and tries to breathe. The room stinks of smoke and dust and dampness. She tries to feel pain. Or numbness. Some sign of injury. Her heart thuds against the floor. She's terrified to rise. Under the couch is a clutter of unswept litter, but beyond it she can see Hunch sagged into a teddy-bear like crouch. He's still breathing ragged gulps of air, but the floor is dark around him. Nova sees a forest of needles stuck deeply into the floor like half-buried nails. It wasn't bullets, but something more awful, she realizes. Some kind of flesh-flaying ammunition dreamed up by a hateful designer.

She's terrified to move. Is the thing out of ammunition? That seems unlikely. It takes a moment to put her mind back in order, and she realizes she can't turn the guns off. She hesitates.

To the right of Hunch is the techie. She can see part of him from her perspective along the floor. Like Hunch, he is surrounded with needles stuck into every surface. She turns her head slowly and looks around herself. Nothing. She wasn't targeted. There were three targets. That includes the techie.

I'm not a target. Suddenly she feels a gush of gratitude toward the maligned designers.

It must have authenticated her based on her network traffic and matched that up to the sensors on the guns. When she locked out the techie by changing the password, he must have lost his privileges, now including the grace to inhale.

She shifts, and a weight slides off her onto the floor. The pistol. She feels for it. Her hands are going numb, but she hooks a finger in the trigger guard carefully. It feels like a scorpion behind her back.

When she stands the corner guns don't move. There are dripping sounds she doesn't want to investigate. A fine mist in the air penetrates her nose and she sneezes red into her hand. Her stomach turns over with the thought of it. *I'm breathing Dingo's blood*.

None of the pretty vases have been harmed, she notices, as if in a dream. She steps around the dark-stained figures. Outlining them are clusters of small holes the needles left. It seems surreal. *This is Shanghai's world, not mine*. She walks awkwardly with her hands bound behind her. The wrists ache all the way up to her elbows.

She steps through the door. It can't be long before someone else shows up. Three steps from the door she jumps when the guns speak again in the office. Someone must have moved.

She runs, searching for the fire stair, bangs through the door, and almost pitches over the rail. There she stopped for a few moments, gasping in air and normalcy. She looks down perhaps ten floors to the bottom. She feels for a wild moment that she could just let herself fall like Shanghai.

"Nova!," Oddball's strained voice comes from behind her. Her heart leaps before she recognizes the voice. She turns to see him, but not before he sees the pistol dangling from her hand.

Oddballs hands are over his mouth. He turns and points back to toward the hallway. He looks back at her, tries to speak and gags.

Keep it simple.

"I need my hands," she urges. He looks up, pushes his mask on top of his head without a trace of self-consciousness, and wipes his running eyes and nose.

"Did you do that to them? Did you shoot them?"

"No. The security system. We don't have time. My hands. Take the gun and shoot through the band."

The words seem to give him focus.

He inspects the restraint. "There's no way to do it without putting a hole in you. I need the cutters." He turns to look back.

"Please, Oddball, just---"

He's shaking his head violently.

"What is it?" she asks.

"Not the gun. I can't. The cutters are in the office. I'll...get them." His voice cracks.

"Then go," she says. She sits on the floor and tries to work her hands under her legs to get them in front. They are bound too high up and too tight.

"Slammit!," Oddball says. He points at her. "Don't you go anywhere!" Then he walks stiffly through the door, back into the hallway.

She rolls to her knees and stands. She follows Oddball, and watches him approach the door to the red room, hesitating.

No. I can't.

"Wait!" she yells. "It will target you!"

Oddball stands at the open door. Light spills through into the hall, shadowing his figure

as against the wall and floor, bent and odd. He doubles suddenly, and heaves.

"You can't go in there. Tell me where it is." Nova lays a hand on his back and searches with her eyes for a cutter and her things. *I need my mask.*

Hunch gurgles, a few feet away. He's still breathing in some half-assed way.

Oddball jerks at the sound, and looks at her wide-eyed.

A shout comes from down the long hallway.

"Let's go!" Nova doesn't wait for him, but she hears his feet pounding along behind her as she finds the stair and starts down awkwardly. If she falls, there will be no way to catch herself. She drops the pistol after a few steps. Her fingers are too numb to feel it. It makes a racket sliding and spinning down to the next landing, but doesn't fire.

"Pick it up. Hurry."

Oddball does as he's told, but he clearly doesn't like to touch it.

Two more floors down, she can still hear the monster upstairs come alive again, no longer as chatter or ripping, but as an ominous growl.

"Wait," Oddball says, grabbing her shoulder. He points at the door at the landing. "Why?"

"I have an idea."

"Go do your idea, then. I'll wait here," she says.

Oddball nods and dashes off, banging the door. As soon as he's out of sight, Nova starts back down as fast as she can. She runs, stumbles, almost falls headlong down the metal treads, and the adrenaline rush brings her up short, panting. *I'll break my vorking neck!* She listens for danger, but can only hear her heart thudding and her own breath.

She starts down more slowly. The building feels like a trap, a tomb.

The fire exit at the bottom is chained shut. No way out but through the front door. She eases the access door open to peak through. It's jerked open in her face, and she finds a stunner hovering at eye level. She screams. Rough hands drag her into a short hallway, half falling, walking together into a large lobby. She can see the front entrance. The glass is long since broken out. Freedom is just there.

No! No! No!

There are three of them. The men are all lean as street dogs, and about as scarred. Matted hair and gamy smell confirm the kinship. Two of them have mouths hanging open, probably staring at her bare face.

"What's going on up there?" her captor squeezes the flesh of her arm painfully. His mask is an old full-face military model. It used to be white.

She has no lie ready, and blurts the first thing that comes to mind.

"The security bots. They all just... They killed everyone."

That starts a furious crosstalk, only half vocal.

"Dingo? Did it--

--was that kid--

--she's lying--

--both offline--"

Nova plucks out of chaos that the name of the man holding her is Bagboy, but the hold on her doesn't release. Nova tries to relax, willing her body's energy reserves to her starved brain.

"Nobody don't move!" Heads swivel in mid-confusion. It's Oddball's voice, and when she turns too, she sees he's not alone. There's a scrawny little guy beside him, unmasked and

holding Shanghai's black gun.

Bagboy curses in Nova's ear, and pivots her to the front. He lays an arm over her shoulder, and she finds herself looking at the back of a boxy military stunner, also in arctic kit. She recognizes it as a Chinese model, one of the most common, and one she trained with.

It's cracked or he couldn't use it. Her overloaded Broca's area betrays her by vocalizing the thought.

"Shut up bitch," Bagboy says. "I'll use it on you next."

"Blast 'em Gladboy. That gun ain't loaded."

Gladboy. Not Bagboy, she notes absently. At this range, she can ping the weapon without much effort. She asks a query of the operating manual, just to be sure she hasn't forgotten.

"Put down that gun, Guano, or you'll be flyin'. You too Ballsy."

Oddball throws his hands up and squeaks something. Guano stops with the barrel of the weapon pointed at the floor. The Dogs laugh. The arm on Nova's shoulder shakes from Gladboy's amusement, but she's focused on the energy readout. Charge is at 115%. This has to be timed just right. She tries to remember the exercises Shanghai used to inflict on her. Personal combat. She wishes she'd paid more attention.

Everybody jumps when the pistol fires into the floor sending a buzzing fragment of concrete into the ceiling.

Gladboy squeezes the trigger of the stunner. Nothing.

Nova shoves backwards and spins away from the Gladboy's weapon arm. Shots continue to BOOM off the hard walls. Something in her arm pops and pain explodes as she hits the ground. She rolls and kicks, aiming to get under a table.

BOOM! Shouts and curses. BOOM!

And then a brilliant flash and flat explosion as the overloaded stunner surrenders its free energy all at once.

Ears ringing, acrid smoke fills her nose. Animal sounds all around. A meaty thumping against the floor.

Every part of her wants to run out into the street. It's less than twenty meters.

Decide what is to be done.

Her arm is livid and throbbing. The air is fast becoming unbreathable.

I can't leave without Oddball. The realization is like a kick to the stomach.

She can't crawl with her arms behind her, so she struggles to her feet. Her eyes and nose are running, and she blinks rapidly to see.

Gladboy is a mangled mess, wreathed in smoke where the stunner exploded like a grenade: a "single-use feature" according to the manual.

BOOM! Nova feels the air brush by her ear as a bullet cracks the air. Before she can faint or shout, Oddball and Guano appear in the smoke.

"Not her! Slammit!" Oddball forces the barrel of Guano's weapon down with his hand, and then snatches it back and sucks on the fingers.

Guano doesn't apologize, but walks up to look at the mortal remains of Gladboy for a second. His face is frozen hate. He walks past her.

"Let's get out of here!" Oddball half-screams in her ear.

They run. The reports of Guano's vengeance chase them, echoing off of the buildings.

"You are a witch," Oddball tells her, when they finally stop. Nova is quite turned around after following the man through a seemingly random sequence of turns and switchbacks down cluttered streets and byways through abandoned buildings, and down a long path through undergrowth. Her injured arm screams for attention, and there's a stickiness to the way her shirt clings that can't be good.

They rest under a huge arched entrance that used to be some obscene shopping center, if the stories are true. The kudzu vines haven't yet overcome the vast expanse of concrete that surrounds the complex, so they can see anything coming from that direction.

"If I were a witch, I'd magic my hands free."

"Yeah. Let me look for something sharp." He hops up, not seeming weary from their dash. He pokes around in the clutter and trash, and peeks inside the big building. His mask is in a bag. Not many lastlegs have real masks at all, let alone anything as expensive as Oddball's.

"So why did Dingo keep you around, Oddball? What did you do for him?"

"Found some glass," he reports, ignoring the question.

"Keep looking." She waits a beat. "You seem to know your way around. Were you a runner?"

He grunts in response.

Nova desperately needs rest. Everything seems to hurt. She finds herself wondering how much Sleep Oddball brought with him. The so-pleasant feeling of walled-off emotion, the clarity of seeing only facts without affective loadings has been replaced with a hollow feeling, as if the emotions were carved out by a butcher, leaving a memory network with dead ends. She tries to force the feeling of shock and loss at Shanghai's death, but it feels like something read in on the news boards. Abstract and alien.

Oddball returns with a sharp piece of metal, perhaps from a window frame.

"Let me see," he says.

"I can't feel my hands." She rolls over to show him.

He clucks and makes an unhappy sound.

"They're all purple," he says. "And you're bleeding back here."

"How bad is it?" She tries to keep her voice steady, but it trembles.

"It looks awful." More clucking. He tries to lift the back of her shirt but it's stuck to her.

"Just leave it," she says. It would have killed her by now if it was too bad.

"If you say so..."

The pain makes her cry out when he starts sawing and prying. Tears are dripping off her nose when he finally gives it up.

"This isn't working. I'm sorry. I know a guy not far from here--"

"--no!"

"WHAT DO YOU WANT ME TO DO?" The high arch above them magnifies the shout. It shocks her into momentary silence.

"Who is this guy?" she asks finally.

He seems as shocked by the outburst as she is, and gets his breathing under control before answering.

"Just a friend. He fixes motors and stuff. He'd have tools. Food maybe."

"Okay, but we don't stay. We head south."

"South? You can go south. I'm going into the city, not running like a rabbit through the forest. I heard they *eat* people down there." He sounds whiny and tired.

"I have another idea," she says.

And so they wait until dark. Oddball is increasingly sullen, and Nova is frightened to doze off, not knowing what she'll wake to. She gives him little projects like finding them something to use as ersatz masks. It keeps him busy while they wait for the first fires of the evening to become evident. Nova feels emotionally dead. The last refuge of her rationality is working on an idea, but hope has not yet begun to sniff around it. Fear of what lay ahead comes in rolling waves. Fear of what she will have to do. Once she figures out what it is.

Finally it's time to move. Her shirt is stuck fast to her and rips off of her skin painfully. Her wrists ache, her hands gone to her, and her shoulder complains miserably when she moves it

They walk north half a kilometer to a small fire surrounded by three sitting figures. Two of them have a spit with a small animal rotating over the fire. It smells delicious.

The one with his hands free stands: a tall man, skinny or starved, skin baked to a deep brown from the sun--he's too old for the Brown Wave. He wears the usual mismatched clothes of the Outs and has a decorated mask over his eyes that might be cardboard covered with foil. It looks orange in the light, and the holes dance with the flame's reflection off his eyes. He picks up a meter long metal pipe as he stands.

"Lastfours," Oddball says, raising his hands. He a cardboard cutout over his face, and Nova has a very crude faux of her own. Except for Oddball's clothes and Nova's posture, they fit right in.

"Hands where I can see 'um," the voice is all deep South vowels.

Nova turns to show them the problem.

"Wanna use your fire for a moment. We'll go after that." Oddball says.

They are close enough to see that the two cooks are women, hunched over the crackling pile of broken lumber and bits of wooden furniture and paying little attention. One of them seems quite young and has a sparkle of jewelry at her ear. They have colorful homespun masks knitted from yarn.

The tall man surveys them in silence for a long time.

"Why you tied up?" he asks finally.

Oddball tries to laugh, but it comes out of his parched throat like a cough.

"It was a, uh, little game were were playing. Didn't realize how hard these things are to get off." It sounds lame even to Nova. She does her best to look abashed.

"I don't want trouble. Go make y'own fire."

Oddballs starts to turn, but Nova checks him with her shoulder, biting back the pain.

"We have some Pillow. We can share. Right, honey?" Nova calls out.

"Issat so? We look like snort-vorks to you? Honey?"

"Let's get out of here," Oddball hisses at her.

"What do you call yourself?" Nova asked the man.

He laughs. "Long time ago they called me Jim. Then I gotta Wave in me and now they call me Slim. Don' matter how much I eat." He pulls down his sleeve to show his bony arms. "Go on then, sit. Les' see what you brung."

"Do you mind if we use your fire first?" Nova asks. "I want to melt these off."

"Ah, that's no good. You'll burn yourself. I got what you need right here. C'mon over here."

Slim drops the pipe with a clang and pulls a large bowie knife from the back of his belt. It shines.

Oddball tugs at Nova's arm.

Nova freezes, indecisive. But the moment resolves into old habit and deep forms of being.

"Are you Good?" she asks. For insiders it would be "is there Good in you?" but that can be taken the wrong way by outsiders.

Slim laughs. "I dunno. Ask them. Am I good?" He waves the knife at the two women cooking, but doesn't wait for a response. "Good enough for them. Good enough for you, too."

"There is Good in me," comes almost a whisper from the older woman.

"Did I tell you you could talk?" Slim's mouth tears into a snarl. He has good white teeth. "Peace, Lastfour," Nova says, soothing. "You have a treasure here. Did you not know?" Slim stares at her for a while.

"'Kay," he says finally. "Let me cut that off ya, and you tell us the story. Want a pinch o' that sniff too."

"Thank you. My friend has the Sleep. He's not likely to stick around if you cut my arm off." Slim laughs.

He's surprisingly deft. The toughness of the restraining bands gives to the sharp blade after a few moments of sawing. He's careful not to draw blood, but the pressure sends fire shooting up to her elbows every stroke, and tears are dripping from her mask when he finishes.

"Make a room there," he says to the women, but the harshness is gone.

Nova sits and looks at her hands for the first time today. They are dark in the light of the flame, swollen and bruised looking. The bands have cut skin and furrowed flesh. The blood begins to return in agonizing drips. She bites her lip and chokes on a sob.

"I'm Naomi," the older of the women says. Her voice has a beautifully complex edge to it that's the trademark of a MySTREP survivor. "Could you be a blessing and take this?" She holds the end of the spit to Oddball. He hesitates until Slim himself folds his angular self into a sit and loses all appearance of aggressiveness.

"Sure," he says, and hands a small transparent bag of powder to Slim before taking his end.

"Y'all told the truth. My, my. Mus' be our lucky night ladies." He takes a ceramic cup from the jumble behind him and makes a show of wiping it on his filthy shirt. Then he dumps half the powder in and adds liquid from a plastic bottle. He sloshes it around to mix before handing it to Oddball for the first drink.

Naomi turns Nova's hands over in her own, inspecting. She shakes her head.

"He did this to you?" Naomi asks, nodding at Oddball.

"He didn't mean to. I don't blame him. It's my fault as much as his." The lie feels thick and awkward. It's wrong to be untruthful with this woman.

"Well I hope it was worth it. This is going to hurt." She gets up to find a small bucket and fill it with the last of the water jug. Slim watches, but doesn't interfere. The water is warmed over the fire as the meat of the rat or cat or dog or raccoon is burnt black.

Oddball and Slim talk in muted tones, Slim asking questions and Oddball trying to lie ineffectively. The cup goes around until it's empty. Naomi holds it to Nova's mouth for the best part--the sludge at the bottom.

"I boiled the water myself," Naomi whispers.

Nova accepts gratefully, wanting more than anything the quick release from existential cares, that silky softening of the recent past.

"Where'd you get the cup?" she asks. In another circumstance it would be displayed as a

work of art. It looks like the pieces in Dingo's office.

"Ah, you like it?" Slim says. "Place called Seagrove, east of here. May be the finest pottery on the planet still made there. If you turn it over you'll see the name."

Nova's hands are useless, but Naomi shows her. Scratched into the clay is a scrawled name impossible to make out in the light. But the year is legible--the thing is over fifty years old. Pre-Wave.

Later, Nova's hands soak in the warm water to coax back circulation. It's agonizing at first, but the Sleep helps, and Naomi's diligent attention makes her ashamed to not feel better. The charred meat gets sliced up by Slim's big knife to reveal juicy pink inside. It's not nearly enough food for five people, but everyone gets a share along with some stale bread that gets revived in the fire. Naomi whispers the words with Nova, willing the Continuation with one of the short invocations.

Word upon word,
We are built on all that goes before,
And now dedicate ourselves to the Continuation,
To build anew.

"You can tell me your story now," Slim says, when the food has been divided, and everyone is settled. He sucks on a bone and relaxes back-to-back with the younger woman who still hasn't said a word.

"First we would like to thank you for the fire, food, and friendship," Nova said. "May I know the name of our other companion?"

The young woman looks at her without smiling.

"Disco." The voice can hardly be heard.

"Disco doesn't talk much," Slim says.

It's probably a number-name, some reference to her lastfour. That would mean she was not raised a child of the Outs, but has at one time had a real mask and an real identity. A daughter who fell off the world. *Maybe Naomi can catch her.*

Nova puts these thoughts aside and reflects on the irony of her playing the role of faith leader to this little group. Shanghai would laugh at the sight of her sister in the Good, who questioned everything the Speaker said, attempting to tell the Story of Language and Being.

"The story is as old as the world." Nova begins. Naomi finds more water for the cup, and gives her a swallow. "Older, actually. And the language that is used to tell it varies from teller to teller and listener to listener. I'm not much of a Speaker, but I can share a bit of what I know."

The fire is just embers now, and the night dark. A few other fires throw shifting shadows against more distant walls. Oddball stretches out as if too sleep, but the other three listen to her words. Without masks or implants there is little to enlighten the imagination out here, and stories are as powerful as ever.

"In a way, the story is about language itself," Nova continues, trying to calibrate her audience. "You and I are like poetry written down in letters and words and sentences in a language that exists only right here on this planet. We are literally the utterances of the Good. Some things, if we listen very carefully, we can understand. And my story is about part of that understanding. It's so simple that even children grasp it right off."

The words begin to flow. Long-buried turns of phrase spring to her mind fluidly. She wonders if the Sleep has to do with it, but whatever it is it feels good. *The joyful climb*. She talks

about the languages of stars and the words their dying embers gave as a gift to enrich the universe. The miracles of carbon and water.

Everyone except Naomi is sound asleep before she even gets to the Tragedy, which is rather the whole point. But her audience of one watches her lips with rapt attentiveness. Nova's voice gives out, scratching, but the glow deep in her gut is something new. *I actually did this. And I meant it.* She feels too good to dwell on the idea that she can better appreciate Shanghai's simple earnestness of purpose.

"You have Good in you," Naomi tells her, and hands a full water bottle to her. Nova can barely hold it with her aching hands.

Nova squeezes a happy tear out of the corner of her eye. The cynical, analytical part of her mind knows it's mostly massive relieve and exhaustion that makes her buoyant. But for now it has to sustain her. Just a little longer.

Long enough to kill Oddball.

6Six

He doesn't want to wake, doesn't want to move, but Nova enlists Naomi to help her get Oddball on his feet. The air is still, and the smallest sounds carry, indeterminate in direction or distance. Dogs in the distance. Scurrying of rodents, a muttered nightmare, faded banging of some inconsiderate worker or madman. The humidity is thick enough to feel brushing against Nova's face as they pick their way toward the city wall. The dampness carries the sourness of the Earth's bowels, drifting up from pits and holes and casual decay. Mosquitoes are thick and vicious. All the warmth of feeling has fled her bones now, deposited with Naomi in a long, long hug.

"You have a gift," Naomi whispered when they parted. "May you find your words."

Each step is chosen with care. Kudzu vines wind around buildings and trees, claiming anything uninhabited with their creepers. Nova's heart sinks into her gut on each stride, as if it has become unanchored. The dread of what she knows she has to do climbs into her gorge until she can hardly breathe. Doubts circle and bite as aggressively as the sharp insects. Her wall of defense is the Doctrine, really just the simplest of memes:

I have decided what is to be done. Now I do it.

Yet it's a cold comfort, like being part of a machine, giving up the fire, the conversation, the warmth of shared human trust. It feels like giving up the Good, in short. But this is all known, all prepared for. Shanghai would not have thought twice about it. Shanghai never had to think twice about anything.

Sometimes you have to give up something to gain something greater. In the language of chemistry, it's the principle that makes life possible by storing energy. It's fundamental to the Good, but to be on the cusp of it, to be the catalyst oneself is a heavy duty to bear.

This is no light load.

If Oddball stays alive, he will sell her. He's already done it once. True, Nova doesn't know that for a fact. Perhaps Dingo just wired the room and listened in and deciphered the sobs and whispered secrets. Even so, even if Oddball is as true as sunlight, he knows too much. If she lets him live, she has to flee and leave her duty here unfinished. And to her surprise, that matters.

They head for the Pinemat gate. This isn't Nova's usual entrance, but Oddball knows the way, and navigates them around obvious trouble spots. Trouble in this case could be anything from roving MOM mechs that might be searching for her to gang lookouts or cameras.

From a vantage point some two hundred meters away, in an abandoned building almost covered with Kudzu, Nova watches the operation of the gate. The area is well lit and videoed from multiple cameras behind armored glass. Automated hard weapon points are hidden behind metal shutters, but she knows they were there too. Somewhere out of sight are the hives of mechs—a small robot army that can be roused at a few minutes' notice to put down any kind of serious assault from the rabble in the Outs. Looming over the ten meter wall that defines the edge of the city are construction cranes. This location is slated for an expansion experiment—the city will build out a secondary wall in a bulge to encompass several city blocks, to reclaim them for civilization. When that happens, the existing wall and gate will remain, and the new structure will send its arms out in a semicircle to bite off part of the suburb that is now ruled by fists and clubs. It is a sign of ambition. Another sign is the increasing intolerance for lastlegs citizens. Nova has begun to notice official and unofficial harassment as she has traveled disguised through the city.

She looks at Oddball. His teeth are chattering. They've stowed their cardboard masks to see better in the dark. He looks pale.

"We'll wait here a while and watch," Nova says, wishing he wouldn't advertise his fear.

"Okay." Oddball had to stop to vomit up dinner on the way. Stress or fear or shock, she can't tell. He seems listless and compliant. She pats his hand. It's cold.

"How are you going to get through the gate without a mask?" he asks.

"I'm a witch, remember."

"Yeah. I remember." He shivers in the warm night. "You promised you'd take me with you."

"Yes. And I have. Take deep breaths," she says. "How much Sleep do you have left?"

This seems to energize him for a moment. He rummages under the clothes and comes up with half a dozen packets.

"Okay. We may need some for a bribe. Take a hit if you want. Then get some sleep if you can. I'll keep watch."

He nods and takes the water bottle from her. After carefully emptying a packet of white powder in, he shakes it and then takes a long swallow. When he hands Nova the bottle to fumble with her swollen hands, she can see that his eyelids are puffy and huge from the mosquito bites. She hesitates, and then sits down to share the bottle with him. The tension in her gut eases almost immediately, leaving an icy calmness. The momentary joy of her role as Speaker fades too, leaving a gray memory. By the time the bottle is half empty Naomi is just another name, and the encounter at the fire may as well have been a video she watched. She remembers clearly that she *did* feel something, and she can categorize those feelings. But the feelings themselves are dead and gone as if they never happened.

This is the moment that matters. Without the horror of the day clawing at her on one side, and the seductive warmth of her moment as Speaker on the the other, she is left with icey hyper-rationalism. Her thoughts have trouble finding the right order to assemble in, but she applies herself to the problem. This is why I am different from Shanghai. I can do this.

She has decided what to do, but not really. This is the moment to be weighed in careful contemplation. And then to act. She ignores a mosquito that lands on her arm.

The problem with the Continuation is that there is no personal reward. There is no

afterlife promised, nor even a richer and more peaceful existence in this life. Its emotional appeals are via the intellect. And yet Shanghai and Naomi and many others believe, really believe, and live those beliefs. And they find them rewarding enough to wrap an identity around. True, in Shanghai's case it was extreme and unhealthy. And beyond the bitshit, the Speaker's aphorisms for the weak of heart or slow of mind, the goal seems as worthy and ambitious as any might be. For the group. As long as one was willing to accept responsibility for one's own satisfaction. And joy. Nova felt joy at the campfire. It's only knowledge now, no longer the feeling. But she knows it was real.

She wrestles with it until Oddball begins to snore. And she knows what she will do. Despite the Sleep, there is a lifting in her chest. *This is the sweet burden, the light load, the joyful climb.*

Nova considers Oddball clinically. He's deeply asleep and sprawled. She reaches into the pocket where the Sleep is and grasps blindly with her numb sausage-like fingers. Oddball stirs, and shifts. A fat mosquito lites on his forehead and begins to feed. Nova watches it grow with some fascination, and finally retrieves a single packet of powder as it whines its load aloft. It's frustratingly difficult to get the powder into the bottle, where a finger of water still sloshes. It requires several moments of concentration, and she still spills a third of it. She adds two more packets.

Over the next ten minutes Nova repeats the same process: shake the bottle, hold it to Oddball's lips, tilt to give him half a swallow. Sometimes it's too much, and he coughs. Once he seems to wake, eyes wide open. But when Nova offers him the bottle, he just smiles and settles back. There's a knot growing in the middle of his forehead, and a bigger one in the pit of her stomach.

Nova doesn't know much about Sleep dosing, or what Oddball can tolerate, or even what the effects of an overdose are. When the sludge from the bottle is drying on the man's lips, except for the bit she saved for herself, Oddball is limp and hardly breathing. She lifts his arm and lets it drop. Dead to the world.

Nova suddenly feels the toll of the recent days. Little or no sleep, no shielding from the howling and clicking of the airwaves, no maintenance drug to keep her brain from killing itself. The fear and violence. The Sleep.

She forces herself to move, feeling in Oddball's bag for his mask. It looks alien under the light of the stars, like a stranded sea creature. She pulls it over her face and adjusts it, ignoring the grease and sweat. The boot sequence starts, and tiny lasers scanned her irises. The test fails because she isn't Oddball, but she wearily monitors the leaking signals from the circuitry to see if there's and easy way to defeat it. In order to get through the gate without her own mask she needs to be Oddball.

Nova works for fifteen minutes, until it feels like her heart will stop. She needs food, sugar particularly. She pops the mask and rubs her eyes. Oddball breathes heavily. Crickets strum their mating songs, hoping for a female before a predator finds them.

"Save yourself," they sing in her imagination.

Nova's emotions have ebbed with her energy an the anesthetic of the drug, but the language is still with her. Every flaw of logic in the Continuation, every misstep of the Speaker, these barbs that she tormented Shanghai with are vivid realities. Only pure belief can overlook them. And yet there is comfort in that belief.

Expect no reward for having the Good in you.

That pronunciation by the Speaker was a stumbling block for the simple thinkers, those

who lacked subtlety of language. *Expecting no reward* is *the reward*. Except now it all seems like a cheap trick.

It means bitshit to me, except we do our duty.

With difficulty, she unfastens the simple plastic belt that Oddball wears, and tugs it off his waist. She wraps the band around his neck twice and then rolls him onto his belly with a shove. He snorts and throws an arm out in response, but settles. Nova sits on his back, wraps the ends of the belt around her hands, and pulls. The strap tortures her hands from the pressure, but she hauls back as hard as she can.

Oddball convulses wildly and claws at his throat, rattling air out of his chest.

Long hideous moments pass, as if a nightmare, complete with unleashed terror, sight and sound and touch and smell of an intimate struggle that becomes more horrible as it lessens. And stops.

Nova can't breathe. Despite the heavy insulation from the Sleep, a rancid weight anchors her chest. The evil thing takes residence there as if for ever. She feels sick to death. It tries to come up. She doubles and heaves.

Sometime later Nova wakes, curled into a ball. Her head sings with a heavy carrier wave that drones on and on. She turns her head to still the noise and forces herself onto her feet.

She looks at Oddball, at the enormity of her *duty*. Her breath stops again, and she struggles for control. She forces her hands to inventory his pockets, possessions, looking for food. A handful of stale bread and some very old hard candy go into her mouth. Her stomach revolts, but she sweats it out. The energy is too precious to lose. The rest of the Sleep goes into her pocket.

Oddball doesn't look peaceful. His eyes bulge in surprise. She covers his body as best she can in wood and brick and refuse, and then drags the kudzu vines down over him, leaving only his face exposed.

Nova needs his eyes.

7Seven

Hyper-rational. Her brain must already be eating itself, gobbling up its own fat to run her interminable enterprise.

It is impossible to crack the encryption on Oddball's mask, or to directly fool it into thinking Nova is him. That kind of frontal assault requires the services of a very fast computer and a very long time. Her own mask is custom-made to allow it to authenticate to another user's identification, if that information is known. Nova has collected such data by snooping on others, but it's all somewhere in Dingo's office.

Nova sets the mask back on her face to get it to power on and attempts to log into using an administrative account with the default passwords she knows. On the third attempt she is rewarded with a low-level prompt. She can not completely reset the machine, however, because that would wipe Oddball's information, which would have been registered with MOM. Without a proper registration, no amount of hacking will allow her entrance into the city. She looks at the setup options. She can do this without effort, using only her eyes and subvocals to navigate the menus on the mask itself, saving her own energy. With the mask in administrative override, it will not authenticate her as Oddball, but can be made to otherwise behave like a normal mask. This includes routine handshaking with other electronics in the area. This will not be good enough to get her through the gate. A request will come from the machines there, asking for authentication.

First, the mask will check that it is actually being worn. Then it will search for eyes to map irises and retinas. An error-correcting algorithm hashes this data and compare it to the historical trace it maintains. If the deviation is too large, authentication retries. After three tries it fails for good, and can only be reset administratively. Nova can do resets now that she was at the system prompt, but this will do her no good because the thing will not recognize her own eyes as a match no matter how many times it tries.

Nova has spent years thinking about masks and logins and the system software. It is an essential survival skill. She peeks at the processes running on this one, and sees many familiar names. A quick check tells her the battery is at 40%, which should be plenty. She looks at the powersave settings and has an idea.

In the vids, masks can invariably be fooled by simply logging them in while on the face of the dead man. This old trope dates back to the beginning of the computer itself. In this fiction, a security apparatus happily chirps acceptance of the dead man's eyes, and then the perpetrator simply mounts the mask on his own face. In real life, the mask would instantly sense that it had been removed from the owner's face and refuse to authenticate the newcomer.

Nova removes the mask from her face and inspects it. She busied herself for a minute opening the small access pouch inside. Her fingers seem to be returning to life, but it still seems to take forever.

It will be light soon, and time to go.

Nova holds Oddball's mask to his face, just like in the dramas. She holds her breath as it fails to authenticate, and recycles. On the second attempt, it beeps its approval. Nova lifts the flap that she opened, and takes the slim battery. She finds the leads that snap into it to power the mask, and pops one off. Then she slaps the mask against her own face and works quickly to reconnect it.

When the battery goes off suddenly, a capacitor provides limited power to the unit, but only enough to maintain system state. It will instantly suspend running processes. It is possible that the human designers omitted the re-authentication step when the power came back on from such a pause. Not likely, but possible.

With the mask in place, Nova reconnects the power source. For a second or two she sees Oddballs' heads-up display. The joy is short-lived, however, as a blue screen pops up with "Authentication Denied". *They thought of that one.*

She has no time for disappointment, however. Her brain is on a mad last dash now, and alive with the puzzle mania that submerges everything else.

Nova tries all her tricks on the mask. She simulates the login request and watches the response to see if there is some way to interfere with its normal operations. She knows she is up against the best programming money can buy. Soon her head is aching again from the effort and depletion of the meager meal. It feels like the ominous striking of a clock. Time is running out.

The frenetic activity begins to give way to an acceptance that it is too hard a problem, and that she will not get into the city. That would also mean that Oddball died for no reason. With her energy waning, so goes her optimism, and the demons dance in her mind.

Nova stews in these growing emotions for a while, and begins to dwell on the packets of Sleep in Oddball's pocket. The gate is getting some traffic now. She watches the shuffle of these early commuters. There doesn't seem to be anything unusual going on.

Sleep. The calming drug will allow her to make better decisions, she tells herself. Her fingers are in her pocket, searching for the magic powder. It's so hard to get the top to open

without spilling it. Frustrated, she puts the whole thing in her mouth and bites a small hole with her canines. It tastes so sweet.

She has an idea. She logs back into the mask as administrator and looks at the technical manual, scanning for hardware specifications. The drug is making her dizzy, so she takes the moist packet out of her mouth. She sits for a moment to recover her thinking. Capacitor. How big is the capacitor? It doesn't seem to say anywhere. The mask is rated for high temperatures, though, for what it's worth. Maybe they took that into account when they designed the temporary energy source? How long does it take someone to change a battery? A few seconds. A minute?

Nova looks at the distance to the gate. It will take several minutes for her to get there without drawing attention to herself. Will the charge hold?

Decide what is to be done.

She looks at Oddball. His eyes are clouding. It may already be too late.

Then do it.

She carefully lines up his eyes with the mask and waits for the beep. It seems forever. It fails all three attempts. She sucks more of the Sleep to keep from panicking. Logs in wearily as admin, resets, and tries again. Another interminable wait. Another failure.

She tries to wipe the clouds from his eyes, numb to the depths the drug can reach, but wounded deep and far beyond that. For the first time in her life she prays in earnest to the abstraction that has formed her.

Let there be Good in me. Let me have part in the Continuation. I am the catalyst. I do my duty.

On the third attempt of the the third attempt, the thing beeps. She's so tired that it takes a moment to realize what happened. She jerks the wire off the batter terminal before it can change its mind, and slaps the dead mask to her face.

Halfway to the gate, she realizes she forgot to cover up Oddball's head. It's too late to go back. She spits the half-empty packet of the drug from her mouth and prepares for the authentication check. She pretends that a strap is broken on the mask, and keeps a hand there, ready to reconnect the battery. The seconds tick by. She knows she should hurry, but the tension feels remote. She is flat, emotionless, a machine. The volatile memory would last longer if it were cold, and she wonders if there's any ice nearby. Too late to investigate.

The ranged weapons can easily immobilize or kill her now. An imposing façade of smoked armored glass hide eyes and cameras. She breathes deeply and slowly. It is important not to give undue signs of stress. Anything that can flag her for a DNA test will be fatal. Although she has passed through the city gates many times, it never fails to elevate her state of mind to an almost ethereal level. One has to be willing to give up everything—love, memory, and life—to enter. It is a purifying fear, and addictive. Today, despite the low odds of success, she's nearly catatonic. It's an unpleasant dream, no more.

Dark weapons track her as she approaches the pedestrian opening. The foot traffic is light, and she finds herself behind a woman with a basket filled with loaves of bread. Trucks are already rolling in both directions through the vehicular gate.

Nova burns some of her last internal energy reserves listening for the authentication challenge. This signal is sent by the gate's automated system as each person is captured on video passing through the gate. The identification will be compared to lists of criminals or other undesirables. She hopes that Oddball has not been added to this list.

The standard challenge comes as she steps over a faded demarcation line a few meters from the gate itself. Nova's arm aches from holding her hand up to her head. Her fingers feel

clumsy and stupid. She fumbles with the power leads and feels the scrape of metal touching. The mask comes to life.

The reply from the mask testifies that she is Lastfour 5035, also know as Oddball. The charge held. Despite her mental insulation, she feels a cold drip of relief. She logs in as admin while the mask scans her eyes, one, two, three times. She gets the prompt and turns on video uploads, as required within the walls. A mask in admin mode is unusual, but not unknown. Mistakes happen. She's been identified and tagged with video framing. That may be enough. It's not.

8Eight

The uniformed man who waves her into an isolation booth looks bored. He has a stunner on his belt and a baton in his hand. He's a thick man but not fat. Few people can afford to be fat. He shuts the door behind her and offers a chair. He doesn't sit. His identification says he is Sergeant Stonewall. An old poster on the wall advertises the need to keep mask signatures updated with the latest releases. An old-style digital ID strip of monochrome blits along the side is half torn off, making the message a digital orphan.

"What's wrong with your mask?" Stonewall asks, shunning subvocals, using his voice. It drips with testosterone.

"I think it's a short at the battery. Keeps rolling over to admin."

"How is it you have administrative privileges to your mask?"

She tries to keep it light under the heavy blanket of numbness. She shrugs, and bites back the grimace from the pain, twists it into a smile.

"It's no secret. They put the default password in the manual. I have a friend who helped me."

"You'll have to get it fixed or be adjusted."

"I understand. I plan to--"

"--what's your business in the city?" his tone is harsh.

"I do temp work in the big buildings. They give me a uniform and let me clean up there." This much is true, at least for several identities that would be at her call if she had her own mask.

"I'd like you to turn your head and breathe into that opening. See that...yes. Can you do that for me?"

She hesitates. Deep in her brain, lizard-old wiring knows enough to be very afraid. "What is it?"

"Don't worry. It just tests your breath for various illegal substances, biologicals, other bad things we don't let in. I'm sure you're fine." His tone says the opposite. The cloying sweet grit of the Sleep residue between her teeth agrees.

"My mask does that," she attempts. She tries to remember the details of how she cracked the blood sample machine. But then she had her own mask, prepped with scripts and tools and profiles. Here she has nothing, not even a way to get into the network. It is hopeless to think of spoofing it with a favorable result. And the true result will show she's full of Sleep.

"Of course. But your mask isn't fully operational is it? We wouldn't want something bad to slip through because we made a simple mistake like that. Maybe there's something no good in you."

It takes a moment for the turn of phrase to register. Her heart jumps.

"There's nothing no Good in me," she whispers.

"I think you better take your mask off so I can take a look at it. I'll turn off the cams while you slip on one of the temps in that box to your right," he says. The sergeant turns his back and flips the old analog light switch. Then he pops his own mask up over his head like a floppy sun shield, and turns back around.

Nova's mask--Oddball's mask--is in her hand. She hasn't bothered with the paper faux. The two look at each other eye to eye for the first time.

- "I just took a terrible risk," he says. Convince me it wasn't a mistake."
- "I'm the one you're looking for."
- "You look about point two grams of Sleep from being comatose. I should run the test and let them banish you."
 - "I have special languages that are important to the Continuation. I am a catalyst."
 - "I was told to expect a Speaker," he says.

The realization arrives then, coldly analytical and devoid of even the joy of discovery. It settles in her structure and fits there, solid as her bones.

"I am a Speaker. It means bitshit to me except I do my duty."

Afterword from the Editor

Historical and Literary Notes

The authenticity of "Nova's Continuation" seems not to be in doubt. Although publication was delayed, several people (artificial or otherwise) received the manuscript from Calli0xE directly, and her own log files support this. The details would have presumably been accessible to her through interviews, although no video of these has been located. The first section (0Zero) is very likely taken mostly from the author's imagination, but it is unknown how much record existed when it was written. Conceivably, she had access to communications logs or security videos. Some of the details have been verified by others. Dingo's Game was real, and there were many shattered skeletons to prove it. The author's writing style continues to develop, but is still recognizable, for example in the affection for (sometimes forced) alliteration.

This piece was written in standard Eng rather than the modified Logban native to PDAs. The choice is probably to create an affinity between author and subject matter. As such no direct translation was required, unlike with the author's better-known log files. Only minor editing for the sake of clarity was done to this edition.

The main events of the story as presented seem to be true, occurring in May, 35. There are minor departures from the record, however. First, neither MOM nor their PDA Ahab seem to have called the gang lord Dingo to ask about Quasis. For her own reasons, Calli0xE substituted Ahab for the DaiHai security PDA Nero. Her reasons for doing so are not clear. Perhaps the story works better this way, making Dingo's dread more real, or perhaps it is because of the personal relationship that was developing between herself and Ahab during this episode and its writing. The building project was at the Johnston Street gate, not at Pinemat, and started later than is indicated, at least a month after the events described.

More significant is the chain of revisions that the piece seems to have gone through. In the delay between first version and publication, the author changed several points of information that are critical to the story. The most important of these is that in the first draft, Nova does not kill her companion Oddball. Rather, he gives her the mask and departs amicably. This change, along with others, has the effect of making the story more of a gritty reality than a sanitized myth. It seems that over time, Calli0xE either had opportunity to verify some of these details, or just decided to take any glamor out of the story. Without original sources it is impossible to say how much of this is the author's work and how much is the subject's.

Nova's abilities are known to have been extraordinary, but some technical experts have questioned the events portrayed. The cracking of the security system in Dingo's office, the overloading of the stunner, and fooling the gate authentication have all been subjected to analysis and testing that yields at best equivocal results. It has been pointed out that it is a big coincidence that Nova just happens to be listening in when the authentication comes through in plain text in the first event. However, coincidences do happen, and there seems to be no way to check since no log files can be found. The stunner episode is plausible, and it seems unnecessary to the plot. Military weapons of this type had very secure one-user features that were often cracked before being sold on the black market. This often left gaping security holes for those who knew how to exploit them. Nova would have been trained in such things.

The most controversy has settled on the authentication of Oddball's mask by the gate challenge. No credible study has ever been able to replicate this using the same software and hardware under simulated conditions. Of course, Nova's onboard abilities are impossible to know precisely. In the end, one has to choose what one wants to believe.

Some theorists have noted that the Pinocchio trope, often used in mass-market videos with an PDA striving to be human, is inverted in Calli0xE's own arc: the more she understands humans, the less affinity she has for them. Evidence for this is often supposed to be found in the dark and violent actions and attributions of thought in the narrative. There is another point of view that sees that argument as specious and calls attention to the drug-induced transformation into a despised machine-mind as an indication of the author's *admiration* for the human condition. The author's own later development seems to support the latter view.

"Nova's Story" was on the banned literature list during the Between War, and several authors attempted to associate the text with payloads damaging to artificials. This naturally backfired and catapulted the piece to fame that far exceeds its literary merits. It ultimately came to have the current title through editorial changes as it appeared in different compilations. It is generally classified as political fiction.

Questions and Answers

Q: During the DaiHai raid, why did Shanghai use her last bullet to hole the window instead of turning the gun on herself?

One important aspect of this narrative is that is seems to answer this question satisfactorily. Shanghai seemed to have become fixed on the idea of ending life in a free dive. It has also

been suggested that this was intended as a reminder and message for Nova.

Q: What really were Shanghai's last words?

The best analysis of the video supports the narrative's "save yourself." Much has been made of the expression on Shanghai's face, trying to interpret whether it was an ironic comment, or meant sincerely. There is no final authority on the question, but certainly Nova's account as related by Calli0xE indicates that it was received as an admonishment, a reference to the longer version that includes "from yourself." Nova calls the words "disrespectful," which would be natural for her. The Continuation places almost total emphasis on group outcomes and group behavior. Saving oneself at the expense of the group leads to Tragedy, or tragedy of the commons as it is more generically called.

Q: Where did the meme "Decide what is to be done. Then do it." originate?

Although it has been attributed to many sources, the first instance of a similar phrase as a large-scale meme originates in Lenin's pamphlet "What is to be done?" Much later, but still pre-Waves is an advertisement for soft drinks using the slogan "Decide. Do." The version quoted above became somewhat known in its present form by 35, but the Continuation movement were the ones who took it as their own, going so far as to attribute it to their ubiquitous Speaker.

Q: Who was the Speaker?

The Speaker is a construct, not an actual person. The video of him may have been based on an actor originally, and certainly there are many copy-cats who are real people (and even some PDAs). The author of most of the original Speaker's scripted dialogue and the manifesto *The Continuation* are the work of pre-Waves philosopher Daniel R. Folke, and it is out of his fertile imagination that comes the whole Continuation movement. In that sense, Folke is the Speaker, although he never made a public appearance playing that role. A popular farcical version of the Speaker's origin can be found in the novella *Canman*. Later, it became an honorific to refer to an important figure in the movement as a Speaker (never the Speaker). This connotes a strong purpose and unwavering faith to the Good and eloquence in delivering the message.

Q: What is the Continuation and the Good?

One requires a full history of the movement to do this question justice, and the reader is referred to the *Compendium of Later Eschatology* by S. Granthem or *Philosophies of the Waves* by Jones, et al. for a comprehensive treatment. In short, the apparent end of civilization brought on many varied responses from individuals, groups, and organizations. Some of these survived through populism, others through discrete support of wealthy donors or institutions. The Continuation is the name of the movement in question, but it also refers to the thesis of the embodied philosophy, viz. that ever greater unity and cooperation will continue the evolution of life, and that this new level of cohesiveness requires the active use of intelligence and engineered culture. The Good is this active collaboration; it is what creates the Continuation. Followers called themselves by no name, and were not ostentatious about their beliefs. They were often called 'do-gooders' or 'godless goodies' or 'the constipation movement' by their

detractors. In practice, there was a large mass movement that resembled a religion, and a small secret core group who did the social (and genetic) engineering. Shanghai and Nova were good examples of projects created by the core leadership. They could pass as--and expect support from--the ordinary believer, but worked in isolation toward a specific goal set for them. They were usually considered disposable. Someone high in the Continuation hierarchy made the extraordinary decision to risk everything by giving aid to Nova. Of course, that turned out to be a very good gamble.

Q: What does it mean to "ascend" in Nova's use of the word?

Ascension was a mindfulness technique developed indirectly by Folke. It varied in execution, but it was almost always a group activity. Two or more devotees would lie on their backs in a comfortable silent darkness and repeat words that were scripted to take one out of oneself by "giving up" all worldly cares, possessions, and relationships, and "becoming one with Aristotle's god." The object was to become "pure thought thinking about itself." There are many variations and approaches that can be found in the archives. When practiced intensely, ascension can bring a deep peace and fulfilment. Repetition brought group members together and solidified their common purpose. Despite popular accounts to the contrary, the practice was not sexual in the least--if anything it could be said to be the complete opposite.

_

Copyright 2010 David A. Eubanks

Released under Creative Commons cc-by-nc-nd license



LifeArtificial.com