

*This showed up in **Tesseract 5**, edited by Yves Meynard and Robert Runté, one of a semiregular antho series put out by Tesseract Books of Edmonton (now engulfed and incorporated into Edge Books, of Calgary). It basically uses a failed relationship as a vantage point on global ecological collapse, through the eyes of a failed academic who's learned that quantum mechanics can be used for things beyond the usual parallel worlds and DVD players.*

*Denial, for instance...*

## Bethlehem

by  
Peter Watts

It was her own damn fault.

No. No, that's not right. But Christ, look at this place; what did she expect, living here?

A dried blood stain smears a meter of sidewalk, a rusty backdrop for broken bottles and the twisted skeleton of an old ten-speed. Everything is too big. All this jagged structure, so solid and visible, frightens me. I focus on the stain, search for some hint of its unseen complexity. I want to throw myself down through familiar orders of magnitude and see *inside*; dead erythrocytes, molecules of ferrous haemoglobin, single atoms dancing in comforting envelopes of quantum uncertainty.

But I can't. It's just a featureless brown blot, and all I can see is that it was once part of someone like me.

She's not answering. I've been buzzing for five minutes now.

I'm the only one in sight, sole occupant of a narrow window in time: all the victims have made for cover, and the monsters aren't out yet. But they're coming, Darwin's agents, always ready to weed out the unfit.

I push the buzzer again. "Jan, it's Keith." Why doesn't she answer? Maybe she can't, maybe someone got in, maybe...

Maybe she just wants to be alone. That's what she said on the phone, isn't it?

So why am I here? It's not that I didn't believe her, exactly. It's not even that I'm worried about her safety. It's more a matter of procedure; when your best friend has been raped, you're supposed to be supportive. That's the rule, even these days. And Janet is my friend, by any practical definition of the term.

Glass breaks somewhere in the distance.

"Jan--"

If I leave now I can still make it back before it gets too late. The sun doesn't go down for at least another twenty minutes. This was a stupid idea anyway.

I turn away from the gate, and something clicks behind me. I look back; a green light glows by the buzzer. I touch the grating, briefly, jerking my hand back after the slightest contact. Again, for longer this time. No shock. The gate swings inward.

Still no words from the speaker.

"Jan?" I say into the street.

After a moment, she answers. "Come on up, Keith. I--I'm glad you came by..."

\*

Five floors high, Janet bolts the door behind me. The wall holds her up while I step past.

Her footsteps trail me down the hall, stiff, shuffling. In the living room she passes without eye contact, heading for the fridge. "Something to drink?"

"There's a choice?"

"Not much of one. No dairy products, the truck got hijacked again. They had beer, though." Her voice is strong, vibrant even, but she walks as though rigor mortis has already taken hold. Every movement seems painful.

The room is dimly lit; a lamp with an orange shade in one corner, a TV with the volume down. When she opens the fridge, bluish light spills across the bruises on her face. One of her eyes is swollen and pulpy.

She closes the refrigerator. Her face falls into merciful eclipse. She straightens in stages, turns to face me, bottle in hand. I take it without a word, careful not to touch her.

"You didn't have to come," she says. "I'm doing okay."

I shrug. "I just thought, if you needed anything..."

Janet smiles through the swelling. Even that seems to hurt. "Thanks, but I picked up some stuff coming back from the precinct."

"Janet, I'm sorry." How else can you say it?

"It wasn't your fault. It was mine."

I should disagree. I want to disagree.

"It was," she insists, although I haven't spoken. "I should have seen it coming. Simple scenario, predictable outcome. I should have known."

"Christ, Jan, why are you still living out here?" It sounds like an accusation.

She looks through the window. By now it's dark enough to see the fires on the east side.

"I lived here before," she reminds me. "I'm not going to let the fuckers drive me out now."

Before. I follow her gaze, see a tiny dark spot on the sidewalk below. Families lived here once. It's April. Warm enough that kids would be playing out there now. There are people who think that somewhere, they still do. Somewhere at right angles to this twisted place, some place where the probability wave broke onto a more peaceful reality. I wish I could believe that. There would be a little solace in the thought that in some other timeline, children are playing just outside.

But that world, if it even exists, diverged from ours a long time ago. Three, maybe four years...

"It happened so fast," I murmur.

"Fold catastrophe." Absently, Janet speaks to the window. "Change isn't gradual, Keith, you keep forgetting. Things just cruise along until they hit a breakpoint, and zap: new equilibrium. Like falling off a cliff."

This is how she sees the world: not reality, but a trajectory in phase space. Her senses gather the same data as mine, yet everything she sees sounds so alien...

"What cliff?" I ask her. "What breakpoint? What's *breaking*?"

"What, you don't believe what they say?"

They say a lot of things. With perfect hindsight, they moan about the inevitable collapse of an economy based on perpetual growth. Or they blame an obscenely successful computer virus, a few lines of code that spread worldwide and turned the global economy to static overnight. They say it isn't their fault.

"Twenty years ago they'd be blaming alligators in the sewers," I remark.

Janet starts to speak; her voice erupts in a great wracking cough. She wipes her mouth with the back of her hand, winces. "Well, if you'd prefer, there's always Channel six's interpretation," she says, pointing to the TV.

I look at her, quizzical.

"The Second Coming. We're almost up to crucifixion plus two thousand years."

I shake my head. "Doesn't make any less sense than most of the stuff I've heard."

"Well."

Mutual discomfort rises around us.

"Well, then," I say at last, turning to leave. "I'll come by tomorrow, see how you're doing--"

She gives me a look. "Come on, boss. You know you're not going anywhere tonight. You wouldn't even make it to Granville."

I open my mouth to protest. She pre-empts me: "There's a bus goes by around eight every morning, one of those new retrofits with the fullerene plating. Almost safe, if you don't mind being a couple of hours late for work."

Jan frowns for a second, as though struck by sudden realization.

"I think I'll work at home for a few days, though," she adds. "If that's okay."

"Don't be ridiculous. Take some time off. Relax."

"Actually, I doubt that I'll really be in the mood to relax."

"I mean--"

She manages another smile. "I appreciate the gesture, Keith, but sitting around just wallowing...it would drive me crazy. I want to work. I *have* to work."

"Jan--"

"It's no big deal. I'll log on tomorrow, just for a minute or two. Should be able to download what I need before any bugs get in, and I'll be set for the rest of the day. Okay?"

"Okay." I'm relieved, of course. At least I've got the good grace to be ashamed about it.

"In the meantime" --she takes a wooden step towards the hall closet-- "I'll make up the couch for you."

"Listen, don't worry about anything. Just go lie down, I'll make supper."

"None for me. I'm not hungry."

"Well, okay." Damn. I don't know what else I'm supposed to do. "Do you want me to call anyone? Family, or--"

"No. That's fine, Keith." There's just a hint of caution in her voice. "Thanks anyway."

I let it lie. This is why we're so close. Not because we share the same interests, or are bound by a common passion of scientific discovery, or even because I sometimes give her senior authorship on our papers. It's because we don't intrude or pry or try to figure each other out. There's an unspoken recognition of limits, an acceptance. There's complete trust, because we never tell each other anything.

\*

I'm down in the real world when I hear her name.

It happens, occasionally. Sounds filter down from the huge clumsy universe where other people live; I can usually avoid hearing them. Not this time. There are too many of them, and they're all talking about Janet.

I try to keep working. Phospholipids, neatly excised from a single neuron, lumber like crystalline behemoths across my field of vision. But the voices outside won't shut up, they're dragging me up there with them. I try to block them out, cling to the molecules that surround me, but it doesn't work. Ions recede into membranes, membranes into whole cells, physics to chemistry to sheer gross morphology.

The microscope still holds its image, but I'm outside of it now. I shut off the eyephones, blink at a room crowded with machines and the pithed circuitry of a half-dissected salamander.

The lounge is just down the hall from my office. People in there are talking about rape, talking about Jan's misfortune as though it was somehow rare or exotic. They trade tales of personal violation like old war stories, try to outdo each other with incantations of sympathy and outrage.

I don't understand the commotion. Janet is just another victim of the odds; crime waves and quantum waves have that much in common. There are a million unrealized worlds in which she would have escaped unscathed. In a different million, she would have been killed outright. But this is the one we observed. Here, yesterday, she was only brutalized, and today it will probably be someone else.

Why do they keep going on like this? Is talking about it all day going to get any of us into a universe where such things don't happen?

Why can't they just leave it alone?

\*

"No fucking convergence!" she yells from the living room. The power is off again; she storms down the hall towards me, a frenetic silhouette backlit by the reflected light of distant fires. "Singular Hessian, it says! I worked on the chiasma maps for five fucking hours and I couldn't even get the stats to work, and now the fucking power goes out!"

She pushes a printout into my hands. It's a blurry shadow in the dark. "Where's your flashlight?" I ask.

"Batteries are dead. Fucking typical. Hang on a sec." I follow her back into the living room. She kneels at a corner cabinet, roots through its interior; assorted small objects bounce onto the floor to muffled expressions of disgust.

Her damaged arm exceeds some limit, goes rigid. She cries out. I come up behind. "Are--"

Janet puts one hand behind her, palm out, pushing at the space between us. "I'm okay." She doesn't turn around.

I wait for her to move.

After a moment she gets up, slowly. Light flares in her palm. She sets a candle on the coffee table. The light is feeble, but enough to read by.

"I'll show you," she says, reaching for the printout.

But I've already seen it. "You've confounded two of your variables."

She stops. "What?"

"Your interaction term. It's just a linear transform of action potential and calcium."

She takes the paper from my hand, studies it a moment. "Shit. That's it." She scowls at the numbers, as though they might have changed when I looked at them. "What a fucking stupid mistake."

There's a brief, uncomfortable silence. Then Janet crushes the printout into a ball and throws it at the floor.

"Fucking *stupid!*"

She turns away from me and glares out the window.

I stand there like an idiot and wonder what to do.

And suddenly the apartment comes back to life around us. The living room lights, revived by some far-off and delinquent generator, flicker and then hold steady. Jan's TV blares grainy light and faint, murky sound from the corner. I turn towards it, grateful for the distraction.

The screen offers me a woman, about Janet's age but empty somehow, wearing the shell-shocked look you see everywhere these days. I catch a flash of metal around her wrists before the view changes, shows us the twisted, spindly corpse of an infant with too many fingers. A lidless third eye sits over the bridge of its nose, like a milky black marble embedded in plasticine.

"Hmm," Janet says. "Copy errors."

She's watching the television. My stomach unclenches a bit. This month's infanticide stats crawl up the screen like a weather report.

"Polydactyly *and* a pineal eye. You didn't used to see so many random copy errors."

I don't see her point. Birth defects are old news; they've been rising ever since things started falling apart. Every now and then one of the networks makes the same tired connection, blames everything on radiation or chemicals in the water supply, draws ominous parallels with the fall of Rome.

At least it's got her talking again.

"I bet it's happening to other information systems too," she muses, "not just genetic ones. Like all those viruses in the net; you can't log on for two minutes these days without something trying to lay its eggs in your files. Same damn thing, I bet."

I can't suppress a nervous laugh. Janet cocks her head at me.

"Sorry," I say. "It's just--you never give up, you know? You'd go crazy if you went a day without being able to find a pattern somewhere--"

And suddenly I know why she lives here, why she won't hide with the rest of us up on campus. She's a missionary in enemy territory. She's defying chaos, she is proclaiming her faith; even here, she is saying, there are rules and the universe will damn well make sense. It will behave.

Her whole life is a search for order. No fucking way is she going to let something as, as *random* as rape get in the way. Violence is noise, nothing more; Janet's after signal. Even now, she's after signal.

I suppose that's a good sign.

\*

The signal crashes along the neuron like a tsunami. Ions in its path stand at sudden attention. A conduit forms, like a strip of mountain range shaking itself flat; the signal spills into it. Electricity dances along the optic nerve and lights up the primitive amphibian brain from an endless millimeter away.

Backtrack the lightning to its source. Here, in the tangled circuitry on the retina; the fading echo of a single photon. A lone quantum event, reaching up from the real world and into my machines. Uncertainty made flesh.

I made it happen, here in my lab. Just by watching. If a photon emits in the forest and there's no one to see it, it doesn't exist.

This is how the world works: nothing is real until someone looks at it. Even the subatomic fragments of our own bodies don't exist except as probability waves; it takes an act of conscious observation at the quantum level to collapse those waves into something solid. The whole universe is unreal at its base, an infinite and utterly hypothetical void but for a few specks where someone's passing glance congeals the mix.

It's no use arguing. Einstein tried. Bohm tried. Even Schrödinger, that hater of cats, tried. But our brains didn't evolve to cope with the space between atoms. You can't fight numbers; a century of arcane quantum mathematics doesn't leave any recourse to common sense.

A lot of people still can't accept it. They're afraid of the fact that nothing is real, so they claim that everything is. They say we're surrounded by parallel worlds just as real as this one, places where we won the Guerre de la Separatiste or the Houston Inferno never happened, an endless comforting smorgasbord of alternative realities. It sounds silly, but they really don't have much choice. The parallel universe schtick is the only consistent alternative to nonexistence, and nonexistence terrifies them.

It empowers me.

I can shape reality, just by looking at it. Anyone can. Or I can avert my eyes, respect its privacy, leave it unseen and totipotent. The thought makes me a little giddy. I can almost forget how far I'm slipping behind, how much I need Janet's hand to guide me, because down here in the real world it doesn't have to matter. Nothing is irrevocable until observed.

\*

She buzzes me through on the first ring. The elevator's acting strangely today; it opens halfway, closes, opens again like an eager mouth. I take the stairs.

The door opens while I'm raising my hand to knock. She stands completely still.

"He came back," she says.

No. Even these days, the odds are just too--

"He was right there. He did it again." Her voice is completely expressionless. She locks the door, leads me down the shadowy hallway.

"He got in? How? Where did he--"

Gray light spills into her living room. We're up against the wall, off to one side of her window. I look around the edge of the curtain, down at the deserted street.

She points outside. "He was right there, he did it again, he did it again--"

To someone else. That's what she means.

Oh.

"She was so stupid," Janet's fingers grip the threadbare curtain, clenching, unclenching. "She was out there all alone. Stupid bitch. Should have seen it coming."

"When did it happen?"

"I don't know. A couple of hours."

"Did anyone--" I ask, because of course I can't say *Did you--*

"No. I don't think anybody else even saw it." She releases the curtain. "She got off easy, all things considered. She walked away."

I don't ask whether the phone lines were up. I don't ask if Janet tried to help, if she shouted or threw something or even let the woman inside afterwards. Janet's not stupid.

A distant mirage sparkles in the deepening twilight: the campus. There's another oasis, a bit nearer, over by False Creek, and the edge of a third if I crane my neck. Everything else is grey or black or flickering orange.

Gangrene covers the body. Just a few remnant tissues still alive.

"You're sure it was the same guy?" I wonder.

"*Who the fuck cares!*" she screams. She catches herself, turns away. Her fists ball up at her sides.

Finally, she turns back to look at me.

"Yes it was," she says in a tight voice. "I'm sure."

I never know what I'm supposed to do.

I know what I'm supposed to feel, though. My heart should go out to her, to anyone so randomly brutalized. This much should be automatic, unthinking. Suddenly I can see her face, really see it, a fragile mask of control teetering on the edge of meltdown; and so much more behind, held barely in check. I've never seen her look like this before, even the day it happened to her. Maybe I just didn't notice. I wait for it to affect me, to fill me with love or sympathy or even pity. She needs something from me. She's my friend. At least that's what I call her. I look for something, anything, that would make me less of a liar. I go down as deep as I can, and find nothing but my own passionate curiosity.

"What do you want me to do?" I ask. I can barely hear my own voice

Something changes in her face. "Nothing. Nothing, Keith. This is something I've got to work through on my own, you know?"

I shift my weight and try to figure out whether she means it.

"I could stay here for a few days," I say at last. "If you want."

"Sure." She looks out the window, her face more distant than ever. "Whatever you like."

\*

"They lost Mars!" he wails, grabbing me by the shoulders.

I know the face; he's about three doors down the hall. But I can't remember the name, it's...wait, Chris, Chris something...Fletcher. That's it.

"All the Viking data," he's saying, "from the 70's, you know, NASA said they had it archived, they said I could have it no problem, I planned my whole fucking *thesis* around it!"

"It got lost?" It figures; data files everywhere are corrupting in record numbers these days.

"No, they know exactly where it is. I can go down and pick it up any time I want," Fletcher says bitterly.

"So what's--"

"It's all on these big magnetic disks--"

"Magnetic?"

"--and of course magmedia have been obsolete for fucking *decades*, and when NASA upgraded their equipment they somehow missed the Viking data." He pounds the wall, emits a hysterical little giggle. "So they've got all this data that nobody can access. There probably isn't a computer stodgy enough anywhere on the continent."

I tell Janet about it afterwards. I expect her to shake her head and make commiserating noises, *that's too bad* or *what an awful thing to happen*. But she doesn't even look away from the window. She just nods, and says, "Loss of information. Like what happened to me."

I look outside. No stars visible, of course. Just sullen amber reflections on the bottom of the clouds.

"I can't even remember being raped," she remarks. "Funny, you'd think it would be one of those things that stick in your mind. And I know it happened, I can remember the context and the aftermath and I can piece the story together, but I've lost the actual...event..."

From behind, I can see the curve of her cheek and the edge of a smile. I haven't seen Janet smile in a long time. It seems like years.

"Can you prove that the earth revolves around the sun?" she asks. "Can you prove it's not the other way around?"

"What?" I circle to her left, a wary orbit. Her face comes into view, smooth and almost unmarked by now, like a mask.

"You can't, can you? If you ever could. It's been erased. Or maybe it's just lost. We've all forgotten so much..."

She's so calm. I've never seen her so calm. It's almost frightening.

"You know, I'll bet after a while we forget things as fast as we learn them," she remarks. "I bet that's always the way it's been."

"Why do you say that?" I keep my voice carefully neutral.

"You can't store everything, there's not enough room. How can you take in the new without writing over the old?"

"Come on, Jan." I try for a light touch: "Our brains are running out of disk space?"

"Why not? We're finite."

Jesus, she's serious.

"Not *that* finite. We don't even know what most of the brain does, yet."

"Maybe it doesn't do anything. Maybe it's like our DNA, maybe most of it's junk. You remember back when they found--"

"I remember." I don't want to hear what they found, because I've been trying to forget it for years. They found perfectly healthy people with almost no brain tissue. They found people living among us, heads full of spinal fluid, making do with a thin lining of nerve cells where their brains should be. They found people growing up to be engineers and schoolteachers before discovering that they should have been vegetables instead.

They never found any answers. God knows they looked hard enough. I heard they were making some progress, though, before--

Loss of information, Jan says. Limited disk space. She's still smiling at me, insight shines from her eyes with a giddy radiance. But I can see her vision now, and I don't know what she's smiling about. I see two spheres expanding, one within the other, and the inner one is gaining. The more I learn the more I lose, my own core erodes away from inside. All the basics, dissolving; how *do* I know that the earth orbits the sun?

Most of my life is an act of faith.

\*

I'm half a block from safety when he drops down on me from a second-story window. I get lucky; he makes a telltale noise on the way down. I almost get out of his way. We graze each other and he lands hard on the pavement, twisting his ankle.

Technically, handguns are still illegal. I pull mine out and shoot him in the stomach before he can recover.

A flicker of motion. Suddenly on my left, a woman as big as me, face set and sullen, standing where there was only pavement a moment ago. Her hands are buried deep in the pockets of a torn overcoat. One of them seems to be holding something.

Weapon or bluff? Particle or wave? Door number one or door number two?

I point the gun at her. I try very hard to look like someone who hasn't just used his last bullet. For one crazy moment I think that maybe it doesn't even matter what happens here, whether I live or die, because maybe there *is* a parallel universe, some impossible angle away, where everything works out fine.

No. Nothing happens unless observed. Maybe if I just look the other way...

She's gone, swallowed by the same alley that disgorged her. I step over the gurgling thing twitching on the sidewalk.

"You can't stay here," I tell Janet when I reach her refuge. "I don't care how many volts they pump through the fence, this place isn't safe."

"Sure it is," she says. She's got the TV tuned to Channel 6, God's own mouthpiece coming through strong and clear; the

Reborns have a satellite up in geosynch and that fucker *never* seems to go offline.

She's not watching it, though. She just sits on her sofa, knees drawn up under her chin, staring out the window.

"The security's better on campus," I say. "We can make room for you. And you won't have to commute."

Janet doesn't answer. Inside the TV, a talking head delivers a lecture on the Poisoned Fruits Of Secular Science.

"Jan--"

"I'm okay, Keith. Nobody's gotten in yet."

"They will. All they've got to do is throw a rubber mat over the fence and they're past the first line of defense. Sooner or later they'll crack the codes for the front gate, or--"

"No, Keith. That would take too much planning."

"Janet, I'm telling you--"

"Nothing's organized any more, Keith. Haven't you noticed?"

Several faint explosions echo from somewhere outside.

"I've noticed," I tell her.

"For the past four years," she says, as though I haven't spoken, "all the patterns have just...fallen apart. Things are getting so hard to predict, lately, you know? And even when you seem them coming, you can't do anything about them."

She glances at the television, where the head is explaining that evolution contradicts the Second Law of Thermodynamics.

"It's sort of funny, actually," Janet says.

"What is?"

"Everything. Second Law." She gestures at the screen. "Entropy increasing, order to disorder. Heat death of the universe. All that shit."

"Funny?"

"I mean, life's a pretty pathetic affair in the face of physics. It *is* sort of a miracle it ever got started in the first place."

"Hey." I try for a disarming smile. "You're starting to sound like a creationist."

"Yeah, well in a way they're right. Life and entropy just don't get along. Not in the long run, anyway. Evolution's just a -- a holding action, you know?"

"I know, Jan."

"It's like this, this torrent screaming through time and space, tearing everything apart. And sometimes these little pockets of information form in the eddies, in these tiny protected backwaters, and sometimes they get complicated enough to wake up and brag about beating the odds. Never lasts, though. Takes too much energy to fight the current."

I shrug. "That's not exactly news, Jan."

She manages a brief, tired smile. "Yeah, I guess not. Undergrad existentialism, huh? It's just that everything's so...hungry now, you know?"

"Hungry?"

"People. Biological life in general. The Net. That's the whole problem with complex systems, you know; the more intricate they get, the harder entropy tries to rip them apart. We need more and more energy just to keep in one piece."

She glances out the window.

"Maybe a bit more," she says, "than we have available these days."

Janet leans forward, aims a remote control at the television.

"You're right, though. It's all old news."

The smile fades. I'm not sure what replaces it.

"It just never sunk in before, you know?"

Exhaustion, maybe.

She presses the remote. The head fades to black, cut off in mid-rant. A white dot flickers defiantly on center stage for a moment.

"There he goes." Her voice hangs somewhere between irony and resignation. "Washed downstream."

\*

The doorknob rotates easily in my grasp, clockwise, counterclockwise. It's not locked. A television laughs on the far side of a wall somewhere.

I push the door open.

Orange light skews up from the floor at the far end of the hall, where the living room lamp has fallen. Her blood is everywhere, congealing on the floor, crowding the wall with sticky rivulets, thin dark pseudopods that clot solid while crawling for the baseboards--

No.

I push the door open.

It swings in a few centimeters, then jams. Something on the other side yields a bit, sags back when I stop pushing. Her hand is visible through the gap in the doorway, palm up on the floor, fingers slightly clenched like the limbs of some dead insect. I push at the door again; the fingers jiggle lifelessly against the hardwood.

No. Not that either.

I push the door open.

They're still in there with her. Four of them. One sits on her couch, watching television. One pins her to the floor. One rapes her. One stands smiling in the hallway, waves me in with a hand wrapped in duct tape, a jagged blob studded with nails and broken glass.

Her eyes are open. She doesn't make a sound--

No. No. No.

These are mere possibilities. I haven't actually *seen* any of them. They haven't happened yet. The door is still closed.

I push it open.

The probability wave collapses.

And the winner is...

None of the above. It's not even her apartment. It's our office.

I'm inside the campus perimeter, safe behind carbon-laminate concrete, guarded by armed patrols and semi-intelligent security systems that work well over half the time. I will not call her, even if the phones are working today. I refuse to indulge these sordid little backflips into worlds that don't even exist.

I am not losing it.

\*

Her desk has been abandoned for two weeks now. The adjacent concrete wall, windowless, unpainted, is littered with nostalgic graphs and printouts; population cycles, fractal intrusions into Ricker curves, a handwritten reminder that *All tautologies are tautologies*.

I don't know what's happening. We're changing. *She's* changing. Of course, you idiot, she was raped, how could she *not* change? But it's as though her attacker was only a catalyst,

somehow, a trigger for some transformation still ongoing, cryptic and opaque. She's shrouded in a chrysalis; something's happening in there, I see occasional blurred movement, but all the details are hidden.

I need her for so much. I need her ability to impose order on the universe, I need her passionate desire to reduce everything to triviality. No result was good enough, everything was always too proximate for her; every solution she threw back in my face: "yes, but *why*?" It was like collaborating with a two-year-old.

I've always been a parasite. I feel like I've lost the vision in one eye.

I guess it was ironic. Keith Elliot, quantum physiologist, who saw infinite possibilities in the simplest units of matter; Janet Thomas, catastrophe theorist, who reduced whole ecosystems down to a few lines of computer code. We should have killed each other. Somehow it was a combination that worked.

Oh God. When did I start using past tense?

\*

There's a message on the phone, ten hours old. The impossible has happened; the police caught someone, a suspect. His mug shots are on file in the message cache.

He looks a bit like me.

"Is that him?" I ask her.

"I don't know." Janet doesn't look away from the window. "I didn't look."

"Why not? Maybe he's the one! You don't even have to leave the apartment, you could just call them back, say yes or no. Jan, what's going on with you?"

She cocks her head to one side. "I think," she says, "My eyes have opened. Things have finally started to make some sort of...sense, I guess--"

"Christ, Janet, you were *raped*, not baptized!"

She draws her knees up under her chin and starts rocking back and forth. I can't call it back.

I try anyway. "Jan, I'm sorry. It's just...I don't understand, you don't seem to care about *anything* any more--"

"I'm not pressing charges." Rocking, rocking. "Whoever it was. It wasn't his fault."

I can't speak.

She looks back over her shoulder. "Entropy increases, Keith. You know that. Every act of random violence helps the universe run down."

"What are you talking about? Some asshole deliberately assaulted you!"

She shrugs, looking back out the window. "So some matter is sentient. That doesn't exempt it from the laws of physics."

I finally see it; in this insane absolutism she confers, in the calm acceptance in her voice. Metamorphosis is complete. My anger evaporates. Underneath there is only a sick feeling I can't name.

"Jan," I say, very quietly.

She turns and faces me, and there is no reassurance there at all.

"*Things fall apart,*" she says. "*The center cannot hold. Mere anarchy is loosed upon the world.*"

It sounds familiar, somehow, but I can't...I can't...

"Nothing? You've forgotten Yeats, too?" She shakes her head, sadly. "You taught it to me."

I sit beside her. I touch her, for the first time. I take her hands.

She doesn't look at me. But she doesn't seem to mind.

"You'll forget everything, soon, Keith. You'll even forget me."

She looks at me then, and something she sees makes her smile a little. "You know, in a way I envy you. You're still safe from all this. You look so closely at everything you barely see anything at all."

"Janet..."

But she seems to have forgotten me.

After a moment she takes her hands from mine and stands up. Her shadow, cast orange by the table lamp, looms huge and ominous on the far wall. But it's her face, calm and unscarred and only life-sized, that scares me.

She reaches down, puts her hands on my shoulders. "Keith, thank you. I could never have come through this without you. But I'm okay now, and I think it's time to be on my own again."

A pit opens in my stomach. "You're not okay," I tell her, but I can't seem to keep my voice level.

"I'm fine, Keith. Really. I honestly feel better than I have in...well, in a long time. It's all right for you to go."

I can't. I can't.

"I really think you're wrong." I have to keep her talking. I have to stay calm. "You may not see it but I don't think you should be on your own just yet, you can't do this--"

Her eyes twinkle briefly. "Can't do what, Keith?"

I try to answer but it's hard, I don't even know what I'm trying to say, I--

"I can't do it," is what comes out, unexpected. "It's just us, Janet, against everything. I can't do it without you."

"Then don't try."

It's such a stupid thing to say, so completely unexpected, that I have no answer for it.

She draws me to my feet. "It's just not that important, Keith. We study retinal sensitivity in salamanders. Nobody cares. Why should they? Why should *we*?"

"You know it's more than that, Janet! It's quantum neurology, it's the whole nature of consciousness, it's--"

"It's really kind of pathetic, you know." Her smile is so gentle, her voice so kind, that it takes a moment for me to actually realize what she's saying. "You can change a photon here and there, so you tell yourself you've got some sort of control over things. But you don't. None of us do. It all just got too complicated, it's all just physics--"

My hand is stinging. There's a sudden white spot, the size of my palm, on the side of Janet's face. It flushes red as I watch.

She touches her cheek. "It's okay, Keith. I know how you feel. I know how everything feels. We're so tired of swimming upstream all the time..."

I see her, walking on air.

"You need to get out of here," I say, talking over the image. "You should really spend some time on campus, I could put you up until you get your bearings--"

"Shhhhh." She puts a finger to my lips, guides me along the hall. "I'll be fine, Keith. And so will you. Believe me. This is all for the best."

She reaches past me and opens the door.

"I love you," I blurt out.

She smiles at that, as though she understands. "Goodbye, Keith."

She leaves me there and turns back down the hall. I can see part of her living room from where I stand, I can see her turn and face the window. The firelight beyond paints her face like a martyr's. She never stops smiling. Five minutes go by. Ten. Perhaps she doesn't realize I'm still here, perhaps she's forgotten me already.

At last, when I finally turn to leave, she speaks. I look back, but her eyes are still focused on distant wreckage, and her words are not meant for me.

"...*what rough beast...*" is what I think she says, and other words too faint to make out.

\*

When the news hits the department I try, unsuccessfully, to stay out of sight. They don't know any next of kin, so they inflict their feigned sympathy on me. It seems she was popular. I never knew that. Colleagues and competitors pat me on the back as though Janet and I were lovers. Sometimes it happens, they say, as though imparting some new insight. Not your fault. I endure their commiseration as long as I can, then tell them I want to be alone. This, at least, they think they understand; and now, my knuckles stinging from a sudden collision of flesh and glass, now I'm free. I dive into the eyes of my microscope, escaping down, down into the real world.

I used to be so much better than everyone. I spent so much time down here, nose pressed against the quantum interface, embracing uncertainties that would drive most people insane. But I'm not at ease down here. I never was. I'm simply more terrified of the world outside.

Things happen out there, and can't be taken back. Janet is gone, forever. I'll never see her again. That wouldn't happen down here. Down here nothing is impossible. Janet is alive as well as dead; I

made a difference, and didn't; parents make babies and monsters  
and both and neither. Everything that can be, is. Down here,  
riding the probability wave, my options stay open forever.

As long as I keep my eyes closed.