

SEPTEMBER 2012

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**Mating Habits
of the Late
Cretaceous**
Dale Bailey

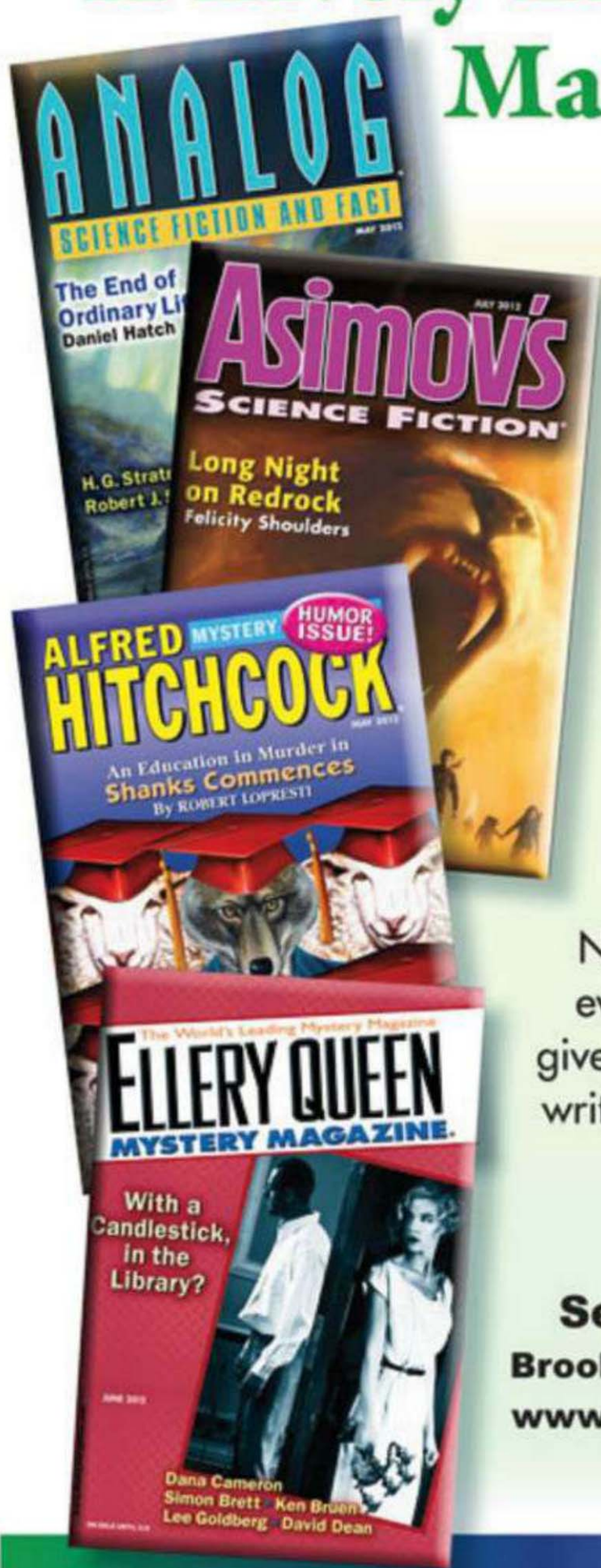
Unearthed
William Preston

Robert Reed
Suzanne Palmer
Matthew Johnson
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SEPTEMBER 2012

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TWENTY-SIXTH ANNUAL READERS' AWARDS RESULTS

On May 19, we treated our Twenty-Sixth Annual Readers' Award winners to a breakfast celebration at the Hyatt Regency Crystal City's lovely Cinnabar Restaurant in Arlington, Virginia. As usual, our ceremony was held in conjunction with the Science Fiction and Fantasy Writer's Nebula Awards Weekend. We were pleased that this meant a number of our winners were on hand to accept their awards in person.

In addition to winning the short story award for her beautiful tale of "Movement," Nancy Fulda also qualified for the award for furthest distance traveled. Nancy had flown in from her home in Germany. She was met in DC by her charming sister, Sandra Tayler, who'd just arrived from Utah. The women told us they'd both suffered from jet lag, but with polar opposite symptoms. I'm not sure when they arrived, however, because both sisters seemed refreshed and well rested by the time they joined us for the reception. Nancy's story was also nominated for the Nebula Award and she will get another chance at jet lag when she returns to the US over Labor Day weekend to celebrate being a finalist for the Hugo Award as well.

Poet/author/aerospace scientist Geoffrey A. Landis received a Readers' Award for his captivating poem about "Five Pounds of Sunlight." We were pleased that Geoff and his wife, poet/author Mary Turzillo, were also able to join us for breakfast. Mary was returning to their home in Ohio after the Nebulas, but Geoff was remaining in Washington to attend the Global Space Exploration Conference (May 22-24), sponsored by the International Astronautical Federation, and the International Space Development Conference (May 24-28), which is the annual conference of the National Space Society.

Connie Willis, her husband Courtney, and their daughter, Cordelia, have often been invited to our Readers' Awards breakfast because of Connie's long association with the magazine. Over the years, her *Asimov's* stories have been recipients of four of her seven Nebulas and nine of her eleven Hugos. This year, the family attended our breakfast because Connie's delightful tale "All About Emily" was the winner of our Readers' Award for best novelette. Later that evening at the Nebula reception, she became the newest of SFWA's Grand Masters. We are proud that we've been, and continue to be, a part of this brilliant author's storied career.

Due to a family commitment, Kij Johnson couldn't attend our breakfast or the Nebula weekend. Fortunately, she sent the distinguished author John Kessel to collect her best novella Readers' Award for "The Man Who Bridged the Mist." Later that night, John had the additional honor of collecting her Nebula Award for the same story.

Another person absent from the breakfast was Paul Youll. Paul won the Readers' Award for his October/November cover. He sent along a speech that read, "That's really fantastic to hear my cover was picked out of the many great covers you've had this year. I always say to my agent, Alan Lynch, that I've done some of my favorite and best covers for *Asimov's* in my many years as a cover artist and you are always a pleasure to work with. I loved reading 'The Man Who Bridged the Mist' so doing the cover was immensely enjoyable. Many thanks to you and the art directors I've worked with over the years and to your readers who chose my cover. It's always a pleasure to work for the magazine."

Other guests at the breakfast were author and internet columnist James



Left to Right: Nancy Fulda, Connie Willis, Sheila Williams, John Kessel (for Kij Johnson), and Geoffrey A. Landis

Patrick Kelly and *Locus* editor Liza Groen Trombi. Stanley Schmidt hosted *Analog's* AnLab Awards in conjunction with *Asimov's* Readers' Awards. His guests included his wife, Joyce; Adam-Troy Castro and his wife, Judy; Richard A. Lovett; John G. Hemry; Craig DeLancey; and Gregory Benford. As near as I could tell, a terrific time was had by all.

As usual, one of the bonuses of processing the ballots for our award was perusing the accompanying comments from our readers. We heard from long-time readers like Alan K. Lipton, who wrote, "Another year, another set of tough choices. And as I relived the experiences of reading all this fine material, I experienced a sense of ownership. Well, as a thirty-three-year subscriber, I suppose it's only natural to feel this is 'my' magazine. Thank you for continuing to make me proud." And we heard from brand-new readers like Joy Solomon who told us "My boyfriend just got me reading *Asimov's* this year. I mentioned that I really liked 'Movement' when I heard it on *Escape-Pod*, and then he had me read a bunch of

stories. Really great to see Ken Liu published in your magazine. I'm glad that you publish poetry, too, I've never seen a sci-fi magazine that did that. Keep up the good work!" Although she didn't say how long she'd been reading the magazine, Jeanne Dowd added, "You didn't ask for editorial votes, but Robert Silverberg's *Reflections* would win hands down—the only difficulty would be deciding which columns were the best." And finally, Gaspar Garçã remarked, "Let me stress my pleasure in receiving your magazine every month, which in a time of economic difficulties is always a high point in my life, and just a quick final note to mention the enormous quality of the short stories this year, especially one of the highlights, I think of the magazine itself, 'The Music of the Spheres,' by Norman Spinrad."

We appreciate all of your comments and hope to receive many more ballots when the award opens next year for voting in the Twenty-Seventh Annual Readers' Award contest. ○

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READERS' AWARD WINNERS

BEST NOVELLA

1. **THE MAN WHO BRIDGED THE MIST;**
KIJ JOHNSON
2. Kiss Me Twice; Mary Robinette Kowal
3. Stealth; Kristine Kathryn Rusch
4. Killer Advice; Kristine Kathryn Rusch
5. The Choice; Paul McAuley

BEST NOVELETTE

1. **ALL ABOUT EMILY;**
CONNIE WILLIS
2. Becalmed; Kristine Kathryn Rusch
3. My Husband Steinn; Eleanor Arnason
4. Surf; Suzanne Palmer
5. Purple; Robert Reed

BEST SHORT STORY

1. **MOVEMENT;**
NANCY FULDA
2. "Run," Bakri Says; Ferrett Steinmetz
3. Smoke City; Christopher Barzak
3. To Live and Die in Gibbontown; Derek Künsken
5. Watch Bees; Philip Brewer
5. The Pastry Chef, The Nanotechnologist,
the Aerobics Instructor, and the Plumber; Eugene Mirabelli
5. Stalker; Robert Reed

BEST POEM

1. **FIVE POUNDS OF SUNLIGHT;**
GEOFFREY A. LANDIS
2. Gene's Dreams; Joe Haldeman
3. Ballad of the Warbots; Jack O'Brien
4. E; R. M. Kaye
5. The Spirit Rover Longs to Bask in Sunshine; Geoffrey A. Landis

BEST COVER

1. **OCTOBER/NOVEMBER;**
PAUL YOULL
2. April/May; Benjamin Carre
3. February; Paul Youll
4. August; Jeroen Advocaat
5. March; Marc Simonetti

ANTHOLOGIES

Yesterday's mail brought me a fine, fat (574 pages) science fiction anthology called *Lightspeed: Year One*, edited by John Joseph Adams. It's a collection of forty-eight stories published, as its name indicates, during the first year of existence of *Lightspeed*, a weekly online SF magazine that you can find at www.lightspeedmagazine.com. Twenty-six of the stories were original to *Lightspeed*; the rest were reprints.

I was glad to see it, not only because it looks like a terrific anthology—among the contributors are such estimable writers as Ursula K. Le Guin, Nancy Kress, Stephen King, James Patrick Kelly, Robert Reed, and George R.R. Martin—but because it rescues a story of mine, “Travelers,” from existence in cyberspace. I have never really made a good accommodation to online publication, a fact that marks me as a hopelessly twentieth-century sort of guy. Oh, I don't mind having my stories and novels distributed in electronic versions—far from it. I make deals practically every day for e-reprints of Silverberg work. But such electronic publications have no *reality* for me, beyond the nice checks that they bring in. I like to receive a printed version of what I've written, and stick it up there on the shelf amidst the yards and yards and yards of published material I've spawned since I began writing nearly sixty years ago.

In particular I like to see the shelf of anthologies that contain my work growing ever more crowded, because anthologies have a special place in my affection. Since boyhood I have thought of the appearance of a story in an anthology as the real validation of that story's quality. It's good to get them published in magazines, of course—but only the very best of the magazine stories, I have always felt,

make it into the anthologies. And so I am grateful to editor John Joseph Adams and his publisher, Prime Books, for allowing me to add that very solid and tangible volume, *Lightspeed: Year One*, to my collection of anthologies that contain my work. There are hundreds of books in that collection now, as thorough a validation as my ambitious adolescent self could ever have asked for.

I began to develop my thing for anthologies in 1948, when I was in the eighth grade and my hope of becoming a science fiction writer was merely a wild boyish dream. I had already discovered a few science fiction novels by then—H.G. Wells' *The Time Machine*, Jules Verne's *20,000 Leagues Under the Sea*, and one or two others—and then I had stumbled upon some of the pulp magazines of the era, *Amazing Stories*, *Weird Tales*, and *Astounding Science Fiction*. I knew that I liked the stuff and I was hungry for more of it. And one day in the book section of Macy's department store, which I haunted because they sold books at huge discounts from retail price, I came upon a big book in a blue jacket, Groff Conklin's *A Treasury of Science Fiction*, the cover of which told me that it contained “30 MARVELLOUS STORIES of superscience and the future, Atomic Power, Interstellar Space, Time, Travel and Adventures in Dimension. . . .”

Yes, there was that comma between “Time” and “Travel.” And that wasn't how I had been taught to spell “marvelous,” either. I didn't care. The book cost something like \$1.72, discounted from the list price of \$3, and that was a huge amount back then for a boy barely into his teens, but I bought it on the spot, and I'm afraid my eighth-grade homework suffered that night.

The names of the authors of those 30

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Nebula Awards, and our editors have received 19
Hugo Awards for Best Editor.**

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MARVELLOUS STORIES meant very little to me at first, but the stories themselves were marvelous indeed. There was one haunting item called "With Folded Hands," in which humanoid robots from another solar system quietly conquer the earth, and one called "Vintage Season" in which time-traveling tourists from the future come for a visit, and one called "Tomorrow's Children," portraying nuclear devastation a couple of decades ahead. I could go on and on: "Child's Play," "Loop-hole," "The Ethical Equations," "Rescue Party," stories that even now, more than sixty years later, many readers will remember fondly.

When I finished the book I read it again, and again. The second and third time around some of the authors' names began to stick: Arthur C. Clarke, L. Sprague de Camp, Lewis Padgett, C.L. Moore, A.E. van Vogt, Robert A. Heinlein. And a careful study of the copyright credits revealed that most of the stories were reprinted from *Astounding Science Fiction*. I began to conclude that the writers whose work had been chosen for this book—I had not yet heard the word "anthology"—must be the best SF writers there were, and that *Astounding* was the magazine that published most of the best science fiction. I resolved to buy *Astounding* every month, another big investment, and to keep an eye out for stories by the top writers, meaning the ones I had encountered in Conklin's *Treasury*.

And then I ran back to Macy's and found a second of these big books, and this one was even better than the first: *Adventures in Time and Space*, edited by Raymond J. Healy and J. Francis McComas. Practically everything in this thousand-page whopper (twice the size of Conklin's *Treasury*) came from *Astounding*, and here were the newly familiar names of Heinlein, van Vogt, de Camp, and Padgett, and some new ones, Alfred Bester, Don A. Stuart, Isaac Asimov. What a strange name "Asimov" was, and how I loved his story, "Nightfall"! And Heinlein's mind-blowing "By His Bootstraps," Stuart's "Who Goes There?," van

Robert Silverberg

Vogt's "The Weapons Shop"—one unforgettable experience after another. I was hooked, and hooked for life.

Donald A. Wollheim's "The Pocket Book of Science Fiction" was next, twenty-five cents, the first paperback SF anthology: another Heinlein here, another Don A. Stuart, and some more new names, Theodore Sturgeon and Stanley G. Weinbaum. Sturgeon, Heinlein, Stuart, Padgett, and Asimov turned up again in my next purchase (we are into 1949 now), Conklin's *The Best of Science Fiction*, which had come out before the *Treasury*: Heinlein again, Padgett, Sturgeon, van Vogt, Stuart, Asimov. You get the picture. The anthologies, I saw, preserved the best material from those gaudy pulp magazines, and the writers whose work showed up most frequently in them were plainly the cream of the crop, the aristocrats of science fiction.

I have never lost that belief. I learned, before long, that there was even more Heinlein in those books than I realized, because he was also included under the name of "Anson MacDonald," and that "Don A. Stuart" was really John W. Campbell, Jr., the editor of *Astounding*, and that "Lewis Padgett" and "Lawrence O'Donnell," whose stories were everywhere, were pseudonyms for C.L. Moore and her husband, Henry Kuttner. So there were fewer aristocrats than I had thought: a tiny band of writers, turning out astounding science fiction with wondrous skill. They were the true masters; their presence in those anthologies was the emblem of their superiority.

In time I began my own career—only six years went by between my eighth-grade discovery of those pioneering anthologies and my first story sales, in 1954, though to me those six years were an eternity. I did not, naturally, expect to find my early published stories jostling those of Asimov and Heinlein and Sturgeon off the contents pages of new anthologies, since I was just a beginner, a novice, glad enough to be getting published without having delusions of being the equal of the *real* writers, the ones

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SCIENCE FICTION

SALUTES THE WINNERS OF THE 2011 NEBULA AWARDS

BEST NOVEL

AMONG OTHERS

Jo Walton

BEST NOVELLA

"The Man Who Bridged the Mist"

(*Asimov's*, October/November 2011)

Kij Johnson

BEST NOVELETTE

"What We Found"

Geoff Ryman

BEST SHORT STORY

"The Paper Menagerie"

Ken Liu

Grand Master

Connie Willis

whose stories got into the anthologies. (And for a while there were no more jumbo anthologies of the Conklin and Healy-McComas kind, either.) But then came the wondrous day when a story of my own was picked for anthology reprint. The first one seems to have been “Road to Nightfall,” a story I wrote when I was eighteen, which was chosen for *The Fantastic Universe Omnibus* in 1960. Then came “Double Dare,” reprinted in *The Fifth Galaxy Reader*, 1961. Donald Wollheim, he of the legendary *Pocket Book of Science Fiction*, put my “Sunrise on Mercury” into 1963’s *More Adventures on Other Planets*.

And so it went, a story or so reprinted every year, more or less, and then two or three, and then, by the late 1960s, when there was a great boom in science fiction anthologies and I was turning out some of my own best work, whole bundles of them. It has been that way ever since, until my collection of Silverberg-containing anthologies has come to fill eight lengthy bookcase shelves, with ten or fifteen more books (including yesterday’s *Lightspeed*) as yet unfiled and overflowing onto a chair in my office. I suppose by now I am one of the most anthologized writers in science fiction history, having probably written more stories than anyone else over a career that now is longer than those of Asimov, Heinlein, Sturgeon, van Vogt, and all my other idols of eighth-grade days. (I’ve also edited fifty or sixty anthologies myself in a hopeless attempt to equal the work of the editors whose

books so excited me when I was young.)

But, let the shelves overflow as they may, I will never be able to think of myself as the equal of the writers whose names I came to know as I read and reread those great anthologies of the 1940s. For me they will always be the *real* writers, and the presence of their work in those books marks those stories as the *real* stories. Hardly a month goes by without some story of mine being chosen for a new anthology, which means that readers of those anthologies who notice authors’ names must surely think of me the same way I thought of the writers whose repeated appearances in the anthologies of my boyhood signalled that they were writers to remember. But I can’t. It’s not just false modesty that leads me to say that I can never see myself that way: I still carry around within me the awe-stricken boy of 1948, turning the pages of *A Treasury of Science Fiction* in wonder and delight, and I will always see that anthology and the others of its era as the true canon, to which I as a writer of a later generation have no access. Still, each new anthology that goes up on my shelves gives me a more secure foothold among the titans of my youth. And so, thank you, John Joseph Adams, for sending me that big, thick book yesterday. For me, online publication can never replace the pleasure of finding room for one more highly tangible anthology in the long array. ○

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Tornado Warning

My children claim

I tell good stories

so tonight I hope

I pulled out

our best of all:

turning the flash-burst

into lightning

transforming darkening skies and wind

into a tornado warning . . .

Isn't losing power exciting?

Careful on the basement steps

but the first one down wins!

My daughter loses, stopping

when she sees ash outside

I explain to be dust

stirred by the storm breeze.

They race between piles

they tag as bases

cans and bottles and books

I hauled downstairs after

their bedtimes

each night of the last three listening

to distant radio echoes.

It's an adventure, I spin the tale—

camping in the basement!

My story ends with me saying

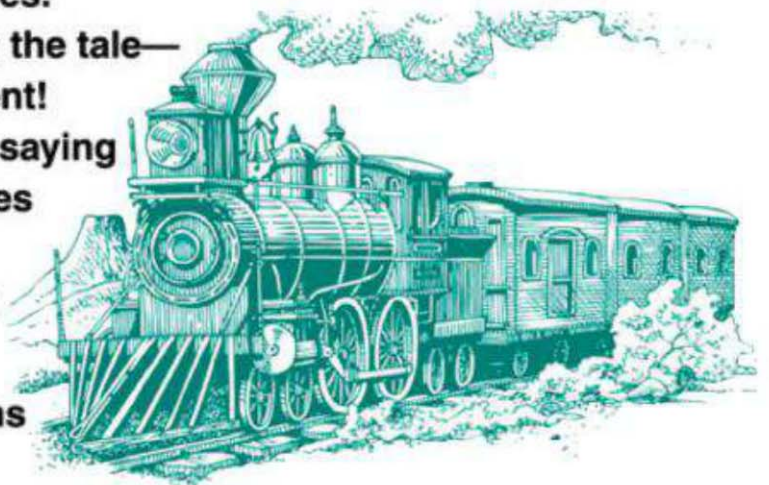
when the tornado comes

it'll sound like a train,

the old-fashioned kind

powered by fire.

—Danny Adams



Dale Bailey grew up in Princeton, West Virginia, and now lives in North Carolina with his wife and daughter. His stories have appeared in *F&SF*, *Lightspeed*, *Alchemy*, *Lovecraft Unbound*, *Queen Victoria's Book of Spells* (forthcoming from Ellen Datlow and Terri Windling), and numerous reprint anthologies.

Dale is the author of three novels, *The Fallen*, *House of Bones*, and *Sleeping Policemen* (with Jack Slay, Jr.). You can find out more about his work at www.dalebailey.com. We're delighted that this accomplished author has finally gotten around to writing a story for *Asimov's*. Dale tells us that he awoke one morning with the tale more or less fully formed. We'd advise readers to put on a seatbelt before plunging into this riveting treatment of the . . .

MATING HABITS OF THE LATE CRETACEOUS

Dale Bailey

They'd come to the Cretaceous to save their marriage.

"Why not the Paleogene," said Peter, who had resolutely refused to look at any of the material Gwyneth had sent him. "Or the Little Ice Age for that matter? Some place without carnivores."

"There are only two resorts," Gwyneth said, waving a brochure at him. "Jurassic and Cretaceous. People want to see dinosaurs."

She wanted to see dinosaurs.

"And I'm afraid travel to inhabited eras is no longer permitted, Mr. Braunmiller," the agent put in. "Ever since the Eckles Incident. So the Little Ice Age is out."

"Besides," Gwyneth said. "I wouldn't mind a few carnivores."

Peter sighed.

Cool air misted down from unseen vents. The agent's desk, a curved wedge of gleaming mahogany, floated in emptiness. Surround screens immersed them in sensory-enhanced three-dimensional renderings from the available eras. One moment the hot siroccos of some time-vanished desert stung their skin. The next, the damp,

shrieking hothouse of a Jurassic jungle sprang sweat from their brows.

"Why not a sim?" Peter asked.

"I've had enough of simulations, Peter," Gwyneth said, thinking of the expense. Over Peter's protests, she had mortgaged the house they'd bought three years ago, cashed in retirement and savings accounts, taken on loans they couldn't afford.

All for this.

"You're certain, then?" the agent asked.

Peter opened his mouth and closed it again.

Twilight waters washed the barren shingles of some ancient inland sea.

"We're certain," Gwyneth said.

Tablets materialized in front of them.

"Just a few releases to sign," the agent said. "Warranties, indemnities against personal injury—"

"I thought the yoke—" Peter said, and a fresh draft of whispering air blew down upon them.

"The lawyers insist," the agent said, smiling.

An hour later, forms signed in triplicate, notarized, and filed away, the agent ushered them into an airlock. When they stripped, Gwyneth could feel Peter's gaze upon her; she didn't so much as glance at him, though he was lean and fit, as well muscled at thirty-five as he had been at their wedding seven years before. Stinging jets of anti-bacterial spray enveloped them. Industrial-strength compressors blasted them dry. They dressed in tailored, featherweight safari gear, and cycled through another airlock, their luggage hovering behind them. The adjoining chamber was bereft of luxury—no surround screens or polished mahogany, no calming mists of murmuring air. Their boots rang on polished concrete. Fluorescent globes floated high in the latticed spaces above them, leaching color from their faces. White-clad technicians looked up from their tablets as the airlock dilated. Behind them crackled the time machine, more impressive than Gwyneth had thought it would be, a miracle of sizzling yellow-green energy, the raw stuff of creation itself, harnessed by human ingenuity and bound screaming into colossal spider arms of curving steel and iron.

The technicians took charge of them. The hiss of hypodermic injections followed, then diaphanous bands of black that melted closed around their wrists like wax. The technician touched Gwyneth's; far down in its polished depths a series of lights—orange and red and green—flashed once and was gone.

Her yoke.

The other technician, finishing up with Peter, smiled. "Your guide will meet you on the other side," he said. "Ready to go?"

The time machine spat fire, throwing off scorching arcs of green and yellow.

They stepped into the light.

And were gone.

A sheet of green flame blinded them. Time blurred—a day, a week, a year, then more, the centuries peeling away like leaves, so that Gwyneth, who was barely thirty-four, felt young and alive as she had not felt in this last year. The time machine stank of history, of the sun beating down upon the tiered pyramids of new-built Aztec temples; of wheat flourishing for the first time under the hands of men; and further yet, of a dark age where shrewd monkeys huddled in terror around their lightning-struck fires. But Eckles had closed all that to them, and just as well, Gwyneth supposed, for he had bestowed upon them in its lieu the immense panorama of geologic time. And how she longed to step out of her life into a world fresh made, where great Triceratops lifted his three-pronged head and the sky-flung demon of the age, titanic Quetzalcoatlus, still spread his leathery wings; where the greatest of the thunder

lizards, the tyrant king of all that he surveyed, *Tyrannosaurus rex*, yet bestrode the terrified earth. Where, most of all, none of it had happened yet, and she could pretend that maybe it never would.

Then there was an enormous jolt, and Gwyneth cried aloud in terror or delight. Peter reached for her hand, and a lean, leathery man whose smile never reached his eyes stood before them.

They were there.

It was a resort, all right—a rugged dream carved out of the primeval wilderness. Below and to the west, a long savannah sloped away to a distant glimmer of sea. Above and to the east a jagged mountain range knifed through the Earth's crust, so that morning came late there and afternoons lingered into a blue twilight that seemed to stretch out forever. To the south and to the north, encircling arms of forest fell in ranks toward the distant plain. And in the heart of it all, like a precious stone set in swirls of green and brown, gleamed Cretacia, a maze of sandy paths and hidden glades where clear fountains tumbled and stone benches grew black with lichen. Private cabanas perched on tiers cut into the wooded ridges, and jeweled swimming pools glinted among the trees. Below the whitewashed sprawl of the hotel itself wound a quaint commercial district. Restaurants staffed by murmuring servers crowded up against narrow shops that sold books—actual books—and bath salts and summer dresses at such exorbitant rates that Gwyneth laughed in disbelief.

Yet her heart quickened in delight when the tall man with fine crinkles around his eyes—Wilson, Robert Wilson, he'd introduced himself—thumbed open their door for the first time and she saw the sheer decadence of the place: a bower of eggshell white and blue with a bed veiled in gauzy shadow, a vase of tropical flowers, and a south-facing floor-to-ceiling window (no sim screen, but glass, thick, reinforced glass) that gave upon a forested ravine, where something small and dappled scurried through the shadows, and if you stood on tiptoe and craned your neck, you could catch a glimpse of diamonds glittering upon the sea.

"I'll leave you to unpack," Wilson said, and turning from the window Gwyneth saw him—really saw him—for the first time: a hard, sun-baked man with sandy hair and an unhandsome face like a promontory of granite. His khakis were worn and stained, his boots scuffed. For a moment she was ashamed of their own gear, so new that it rustled when they walked.

"The concierge can take care of all your needs here on the grounds," Wilson said. "If you want to go outside—when you want to go outside—I'll be your guide."

Turning from the window, Peter extended his hand. Gwyneth saw to her horror the folded fifty inside it.

Wilson stiffened. "No thank you, sir. That's very kind of you."

The door closed softly behind him.

"Peter," Gwyneth said. "You've insulted him now. He's a wilderness guide, not a bellhop."

"Just as well, I suppose. God knows we can't afford to spend another dime."

Then:

"Well, how was I to know?"

"Perhaps if you'd bothered to read some of the material I sent you—"

"This was your idea, not mine, Gwyneth."

"But it's *our* vacation," she snapped. "And you ought to remember why and start acting like it."

She crossed her arms and turned back to the windows.

It was still and peaceful out there.

A moment passed. They waited to see if what had been so long unsaid would break through the stillness. She knew that it would sometime soon, or that it had better. The wound had festered. It needed to be lanced and drained.

Peter came up and stood behind her, so close she could feel his breath, warm upon the back of her neck. "I'm sorry." His hand came up to her lower back.

Did she flinch? And did he feel it?

She wanted this to work, yet her body betrayed her.

"I'm sorry," he said.

When he leaned in to kiss her, she turned her face away.

They breakfasted on a long shaded terrace overlooking a pool. Fans stirred the air overhead. Just outside the compound, bright tiny dinosaurs strutted, pecking at the earth like chickens. Far below, beyond a stunning vista of tree-studded cliffs, huge sauropods feasted on towering groves of conifer. Something else had spooked a dinosaur herd. A cloud of dust obscured them, but their cries—a mournful lowing like the faraway lament of a foghorn—rose up to the terrace. Gwyneth wondered what had set them running.

"The coffee is fine," Peter said, the meal done.

A server took their plates. He came back and used a long blade to scrape the linen cloth of crumbs.

Gwyneth took her coffee black; to please Peter she took a sip. "It is fine," she said. Insignificant banalities—that was all they could find to say. They'd forgotten the language of their own marriage, so they skated along the surface, stripping away any hint of ugliness as efficiently as the hotel staff spirited away a stained pillow. Last night, in a darkness rich with the strange music of the Cretaceous woods, he had reached out to touch her, and her body had gone rigid of its own accord. They had lain like that, so stiff and silent and distant that they might have been on separate continents, lying wakeful under foreign skies. Now, when he reached out to rest a hand upon her own where it lay brown against the white tablecloth, her fingers twitched and were still.

She felt tears well up, and choked them back, determined not to cry.

She said, "Peter—"

Then Robert Wilson was leaning over them, his own hand closing about the back rail of her chair and brushing her shoulder blade. He smelled of earth and dusty leather and the dry plain below. Gwyneth looked up through a sheen of unshed tears. When he returned her smile, his eyes remained as watchful and cold as marbles under the bony ridge of his brow. They were the color of agates, washed out and narrow from squinting across the blazing savannah. Something quickened inside her. She leaned forward and he wasn't touching her shoulder anymore.

"Something spooked down there," she said.

"Hydrosaur," he said. "Bloody cows startle easily enough. Could have been anything. A pack of raptors, maybe, but mostly they lie up under the trees until dusk."

"But the big ones—" Peter said.

"The Alamosaurs. Go right on munching at the treetops, don't they? Not much spooks an Alamosaur. A T. rex maybe. Too big to worry about the raptors, and tails like whips. It's an ecosystem, right? Like the African veldt. An elephant doesn't worry much about a lion, does he?"

"Will we see a T. rex?" Gwyneth asked.

"You'll hear them cough at night if one's around," he said. "Last night was silent as a grave. Snorkeling today. Plesiosaurs, maybe a Kronosaur—T. rex of the sea—if we're lucky."

"Sounds dangerous," Gwyneth said.

"Feels dangerous," Wilson said. "Safe as houses, though. Your yoke will see a Kro-

nosaur turning aggressive before we even know it's there," he added, and for the first time Gwyneth noticed that his wrist was bare.

"You're not yoked."

He laughed. "I'm too ornery too eat."

"Let's take a pass," Peter said. "I think we'll spend the day settling in."

"Your call. You'll have plenty of time."

Wilson nodded and strode away into the shadows.

They sat in silence for a moment, listening to the subdued babble of conversation around them.

"I think I'd like to be consulted about any future decisions, if you don't mind," she said quietly.

"Gwyneth—"

"It's *my* vacation, right?"

"He's talking about swimming with dinosaurs, for Christ's sake."

"Well, what did you think we were here to do, Peter?"

"To—"

"To what?"

"To try and fix things." He shook his head. "To try and fix things, that's all."

"Well, we're not going to fix them sitting on the terrace drinking coffee, are we? We might as well get our money's worth." She set her cup down and stood. "I think I'll go change into something more appropriate for settling in."

Gwyneth was halfway across the room, weaving her way between the tables, when someone reached out and touched her elbow. A woman—blonde and handsome, with a strong jaw line and narrow lips—smiled up at her. Her companion looked up from his breakfast.

"I'm Angela," she said. "And this mannerless brute—"

Said brute swiped his face with a linen napkin.

"—is Frank."

"Stafford," the brute said, clambering to his feet. "Frank Stafford. But just Frank'll do." He took Gwyneth's fingertips, and bowed slightly, lifting his eyebrows. Crockery rattled.

"Careful, Frank," the woman—Angela—cried.

But by this time Peter had appeared at Gwyneth's shoulder, and the brute—he really was something of a brute, Gwyneth thought, barrel chested and broad shouldered as an ox—was reaching past her to shake Peter's hand.

"Just Frank," Peter said—Stafford acknowledged this tepid witticism with a deep belly laugh—"Peter Braunmiller."

"Here, have a sit." Stafford shoved a chair in their direction, and when they were seated over fresh cups of coffee, he said, "That guy, Wilson, he's your guide, too? What a piece of work, huh?"

"Fearless as a bandersnatch," Angela said. "We did a trail with him the other day, and got within twenty feet of this awful thing called an Anklyosaur—"

"Armored bastard. Club on its tail the size of a fucking Volkswagen. He started to swing that thing when he saw us, and I swear to God I felt the wind on my face, we were that close." Stafford laughed. "Felt my yoke give a good tug, I swear I did."

"Anyway," Angela said. "We overheard—really we weren't eavesdropping—that you weren't going on the excursion today, and since we aren't either—"

"Can't swim a lick," Stafford said. "Afraid of the water my whole life. Sink like a stone, and if I didn't a dinosaur'd eat me for sure."

"—we were hoping you might play tennis. Please say you do or we'll just sit on the terrace and drink Bloody Marys all morning."

"Terrible for the health, Bloody Marys."

"I suppose we could play tennis," Peter said, and then—was he mocking her? Gwyneth wondered—"You up for tennis, Gwen?"

And Gwyneth, thinking of the Kronosaur—the T. rex of the seas—forced a smile. "Tennis it is," she said.

Gwyneth and Peter lost in straight sets.

The Staffords were formidable opponents. Peter, a finesse player who relied on superior endurance, couldn't handle Stafford's powerful serves. Angela's shots had a wicked backspin that Gwyneth never quite mastered.

"Luck, that's all," Stafford assured them, clapping Peter on the back, but as they headed back to the room to clean up, Peter whispered, "All the same to you, Gwen, I think I'd rather have gone snorkeling with the Karnosaurs."

"Kronosaurs," she said.

"Right. Except Frank Stafford is the damned carnivore," he said. "Seriously. I think my yoke must be malfunctioning. I was getting the life beat out of me, and it didn't so much as twitch."

Against her will, Gwyneth laughed. Peter flung an arm across her shoulder, and for a moment the effortless camaraderie of their first years together—that playful, irreverent sense of humor, the easy way their bodies seemed to fit together—came back to her. For a moment she even thought of Peter's hand upon her in the night, of how it might have been if she had turned to face him—

And then, of its own accord, her mind swerved away.

They showered and met the Staffords for lunch, where they learned that one of their tennis partners had been a subcontractor on the Museum of Postmodern Art in D.C., among other things.

"Just a little piece of it," Stafford said, holding up pinched fingers. "The duct work. Keep people cool in all that heat."

"That's a lot of duct work," Peter said.

"You bet it is," Stafford said, and Gwyneth suddenly had a sense of just how much she and Peter had sacrificed for this trip—of how much she had forced him to sacrifice. Stafford could buy and sell them a hundred times over, and she had nearly impoverished them.

"Angela's idea, this trip," Stafford was saying. "I told her I'd already found my niche. A lot of money in duct bills." He dropped them a wink. "My little evolution joke," he said.

"His only joke," Angela said drily. And then: "What do you do, Peter?"

"I'm an assets manager."

"Gambling," Stafford said, thrusting his plate away. "Pushing money around, that's all that is. End of the day, I like to put my hands on something solid. Like to say, I did that."

Peter flinched, but if Stafford noticed, he didn't let on.

Afterward, the men strolled off in search of cigars, though Gwyneth had never known Peter to smoke a cigar in his life. The two women found themselves in a secluded bar overlooking the cliffs.

"Sorry about that last bit," Angela said over gin and tonics.

"Peter's too sensitive."

Gwyneth sipped her drink. She was beginning to feel the alcohol. The world had taken on a lush beauty. The edges of everything had sharpened. Each discrete bead of condensation glistened on her glass; every needle of the nearby conifers stood articulate against the azure sky. The full heat of the day had come on, and the plain below stretched empty toward the blue horizon. Gwyneth supposed the raptors must be lying up under the trees, and that made her think of Robert Wil-

son. She wondered if he had found his Kronosaurs, and if he was back from the sea yet.

"It's very quiet in the Cretaceous," Angela said. "There's something missing; I can't figure out what."

Gwyneth listened.

But for them, the bar was empty. The barman stood polishing glasses. The stillness was pervasive. "Birds," she said suddenly. "There were no birds," and then, laughing, corrected herself. "There *are* no birds. Or hardly any. They haven't evolved yet. Birds are dinosaurs. Or dinosaurs are birds. Or will be. I remember reading that somewhere."

"You're very amusing, Gwyneth Braunmiller."

The barman came and freshened their drinks. When he was gone, Angela said, "What do you do?"

"I'm a technical writer. I mostly write instruction manuals," Gwyneth said. "Or rewrite them, anyway." She laughed. "You've probably read some of my stuff."

Angela absorbed this in silence.

"Do you have children?"

Gwyneth laughed ruefully.

"I'm awfully nosy," Angela said. "You needn't answer."

"No, I don't mind. It's just—" She broke off.

"You haven't reached an agreement on that issue."

"No, I guess we haven't."

The truth was they'd never really talked about it much. Neither of them felt strongly either way, she supposed. The problems were deeper than that, harder to pin down—the way minor disagreements had of settling into arguments and arguments into something worse, a cool distance, like planets orbiting different stars. And then, not wanting to be rude, she said, "What do you do, Angela?"

"I sit on charity boards. I spend Frank's money. You'd be surprised how taxing it can be—no pun intended." She raised her eyebrows and smiled.

"Children?"

"None. Frank has a grown son from a previous marriage. Musn't threaten the heir to the empire."

The alcohol made Gwyneth incautious. "And what brings you here?"

"Our twentieth anniversary."

She sipped her drink.

"I still remember the wedding. Predictions for longevity were dire." Angela laughed and touched Gwyneth's hand. "What a pleasure to have proven them wrong."

"To love," Gwyneth said, lifting her glass.

They were quiet then, listening to the birdless afternoon.

The next day they went hiking—fifteen of them, Wilson's entire excursion group. Despite the novelty of the towering conifers and angiosperms, a bleak melancholy fell over Gwyneth. The medication prescribed by her psychiatrist—"Just to get you through this rough patch," she'd said—hadn't helped, nor had the trouble with Peter, the—what, exactly? The silence where there had been voices, the blind staring into the dark, their bodies separate and apart. And underneath that, turning its immense body in the fretful depths of sleep that finally claimed them, that unspoken sense of despair that eluded words. Malaise? Ennui? She didn't know. Day after day after day it had worsened, for months, for a year and more, until one listless afternoon, Gwyneth happened across a documentary on Time Safaris, Ltd. Not since college paleontology had she seen live footage of dinosaurs. A desire to see them for herself, to

plant her feet on the soil of another age, had seized her. And something else, as well: the conviction that two weeks away from the world—*really* away from the world—might fix the broken things between them.

"Jesus, Gwyneth, do you want to break us?" Peter had asked when he'd seen the cost.

She didn't quite have the nerve to respond as she had wanted to: *We're already broken.*

Her foot slipped on an outcropping of stone, and she would have fallen but for Angela's steadying hand at her elbow. Gwyneth swiped perspiration from her eyes with the back of one hand.

"Drinks, darling. The moment we return," Angela whispered—quiet being a condition imposed upon them at the beginning of the excursion—and Gwyneth laughed, and said, "By all means, yes," feeling closer to this virtual stranger than her own husband of almost a decade.

That morning the two women had gravitated toward one another like old friends. They tramped side-by-side, midway in the group strung out along the trail like pearls. Their husbands forged along behind Wilson, who took the rocky path without effort, a canteen at his belt and a rifle slung across one shoulder. Late afternoon and the Cretaceous alive with sound, the hooting complaint of the striped, knee-high theropods that scattered into the underbrush before them, the steady hush of insects, the arboreal rustle of mammals the size of squirrels—"Our forbears," Wilson had said. "The meek shall inherit the earth."

From on high the alien shriek of some sky-borne Pteranodon drifted down.

They stopped in a clearing of tall, flowering grass to search the thing out.

It was Stafford who spotted it, his arm outstretched. They gathered around him to stare at the creature circling high above them in a sky of sun-shot blue.

"Quetzalcoatlus?" someone asked.

"Nothing so large, I should think." Wilson unclipped his binoculars. "Looks to have a wingspan of maybe fifteen feet, about half that of Quetzalcoatlus. Could be a juvenile, I suppose, but it's hard to tell at this distance. Anyone want to see?"

The binoculars made the rounds. When her turn came, Gwyneth lifted them to her eyes, but she could never hold the image in frame long enough to get anything more than a glimpse of the creature, a fleeting impression of beak and bony crest, the vast leathery wings taut as a wind-blown kite.

They moved on then, deeper into the woods. The familiar smell of pine needles and dry loam enveloped her, the scent of unfamiliar flowers. Stafford had acquired the aura of a minor hero. Wilson had clapped him on the shoulder. "Sharp eyes," he'd said, and the big man seemed to have expanded still more under the praise. Despite his size, he moved through the woods with a confidence Peter lacked, sure-footed, a creature of the physical world, his bearish frame poised over his center of gravity.

The terrain grew more forgiving, dropping away into a broad vale. The pace slowed, as Wilson paused to point out the flowering angiosperms and broad-leaved deciduous trees that had only recently—geologically speaking—evolved to compete with the pervasive conifers. They paused for water. Wilson moved among them, spare and purposeful, no gesture wasted.

"Okay, then?" he said to Gwyneth.

"I'm fine."

He nodded, and moved on.

They got moving again fifteen minutes later.

Not long after that the woods thinned. Another glade opened ahead of them. Moted beams of sunlight slanted through the treetops, firing the bracken with a yellow-green glow. The boles of trees climbed the heavens in dark silhouette, dwarfing

Wilson where he stood black against the green effulgence, the back of his hand up-raised in universal semaphore. He waved the straggling line to either side. Something snorted, blew out breath in a long waning note. It called out—a kind of groan, long and deep-pitched, like a rusty nail being wrenched from an ancient board. Then it took a step. Weeds thrashed. Gwyneth slipped with Peter through the ferny undergrowth to the right.

The trees fell away and the glade unveiled itself.

Gwyneth gasped for the beauty of it, the shining clearing and the creatures that grazed there: majestic, ponderous beasts—three horned, twenty-five or thirty feet long, ten feet at the shoulder—cropping peacefully at the waist-high grass. Triceratops, Gwyneth thought, gazing in wonder at the massive bony frill that curved up behind their heads, flushed bright with pink and red. The breeze combing the grass smelled of the creatures in the glade, a scent of old leather and manure and fresh-mown grass.

She caught snatches of Wilson murmuring—

“... a bull, two cows—the smaller ones—and a yearling. See it?”

He broke off as the largest of the dinosaurs—the bull—swung its elongated head in their direction. It regarded them with a single beady eye. In three quarter profile, the beast was more impressive still, battle scarred and ancient, the horns above its eyes razor-sharp spears of bone, jutting out three feet or more. It lumbered toward them, a single step, then two and three—

“Steady, now,” Wilson whispered. “Steady—”

—chuffed, and paused, as if assessing the danger they posed; a moment later, it lowered its beaked snout and began to tear at the weeds once again. This close Gwyneth could see parasites—insects maybe—crawling across its mottled green and brown hide. She was about to ask about them, when her eye caught a rustle in the tall grass—

The underbrush erupted, shrieking.

For a moment, Gwyneth didn't see them, they were so well camouflaged. Then she did, three, four—was it five, or more?—green-and-yellow-striped raptors the size of men or larger, hurtling across the clearing from half a dozen woody blinds, so fast that the eye could barely track them. Three of them corralled the yearling and herded it toward the trees. More than half the pack—there were seven of them, she saw; no, eight—wheeled away to face the charge of the bull Triceratops. Just as it lowered its head to impale them, they gave ground, hurling themselves at the monster's unprotected haunches, their razor-clawed feet digging for purchase in its hide. The animal's belly split, spilling a bulge of glistening viscera—

Peter clutched at her, trying to drag her deeper under the trees. The bull Triceratops wheeled around, lunging at its tormentors. Its tail whipped the air, flinging a raptor screeching into the undergrowth, and somewhere at the edge of the clearing the yearling screamed and screamed and screamed, until, abruptly, it fell silent. Dear God, she could see the raptors tearing it limb from limb. Grass thrashed. Geysers of blood erupted. Her heart pounding, Gwyneth wrenched free of Peter's hand. She stepped into the clearing, she didn't know why. The yearling's companions, the bleeding bull among them, broke for the trees. As the remaining raptors swung around to their kill, they saw her—

—they *saw* her—

—and for a heartbeat—she felt a single nightmarish pulse at her temple—the moment hung in equipoise. Fathomless silence enveloped her. Then, shrieking, the nearest raptor flung toward her, its taloned feet clawing the earth. Gwyneth felt the tug of the yoke, like gravity seizing her as she careened through the loop of a roller coaster—

Then Robert Wilson stepped up beside her, leveling the rifle. The thing was almost

upon them—the scene going watery around her as the yoke began to draw her home—when he pulled the trigger. There was a sound of thunder. The raptor's skull dissolved into a spray of blood and bone. Its body spun convulsing to the ground. The next moment her vision cleared.

The glade was silent and empty.

"Quickly, now," Wilson said, touching her shoulder. "They'll be back soon."

He spun her around and they retreated under the trees. The rest of the group awaited them there. She saw Peter, his long face pale with fury, and she reached out an entreating hand to him.

"Peter—" she said.

But he turned away.

Then Angela was there, catching an arm around her waist and cooing, "It's okay now, it's all over." And then, half-supporting her as they trudged homeward through the suddenly menacing woods: "We'll get a drink into you first thing," she whispered. "A drink is what it wants."

A drink, thought Gwyneth, with a mounting hilarity she did not recognize as her own. A drink would be just the thing.

Yes, a drink.

Maybe two, Gwyneth thought—definitely two, as it turned out, and she sensed a third one coming on. Fire pits threw up sparks and music swirled in the night air. She leaned against the railing, lifted her face to the breeze, sipped her martini. The gin smelled of pine trees, of the vast conifer forest, unsullied by human hands, that sprawled across the continent.

The scent triggered a flash of memory: the raptor hurling itself across the clearing at her, Wilson leveling the gun—

And here he was, speak of the devil.

Elbows on the railing, he leaned beside her. The party was in full swing now. Dancers twirled under muted lights. Wisps of conversation drifted through the air. She spied Peter, talking to Stafford by the buffet, and glanced away.

Wilson set her empty glass on the tray of a passing server and handed her a fresh martini. "Cheers," he said.

They touched glasses. She held the gin in her mouth, savoring it.

They turned their backs to the party. For a long time, they leaned on their elbows, staring out into the dark. Before them ran the long blue savannah.

"Something else, isn't it?" he said.

She gazed up at the sky, bereft of the old constellations. Or was it new? She laughed, and a small voice inside her said, *You must be careful. He'll think you're drunk.* Which she was. Why it should matter, she could not say.

"The stars look strange."

"The skies change in sixty-five million years. Or seventy."

"You don't know, then?"

"No one knows."

"But Eckles—"

"The recent past they're pretty good at. The further back you go—" He shrugged. "Slippage."

"And why is that, Mr. Wilson?"

"You're talking to the wrong man, Mrs.—"

"Gwyneth."

"—Braunmiller. You'd need a physicist to answer that."

"Yet you were waiting the moment we arrived."

"Once they have a focal point to lock in on—once some brave soul plants a flag, so

to speak—then you're fine."

"But you don't know when that focal point is?"

"Never will. Rough calculations can pin it down some—we're toward the end of the era, we know that. But dinosaurs don't keep calendars, I'm afraid."

She could feel the alcohol buzzing through her veins. Her face was not unpleasantly numb.

"Dance?" he said.

"If you insist."

Leaving their drinks on a nearby table, they stepped on to the dance floor.

"I haven't thanked you for saving my life today."

"I didn't save your life."

"Didn't you?"

"Your yoke would have saved you if it came to that. You could feel it, couldn't you?"

"Like gravity moving through me. A roller coaster. That's what I thought."

Her mind replayed that snippet of memory once again—the raptor lunging at her, Wilson lifting the gun—

"Why did you wait so long to shoot?"

"Wouldn't do to miss, would it? We're not all yoked."

"You've been yoked before, Mr. Wilson?"

"Yes."

"And had to use it."

"Oh sure."

"What happened?"

"Female tyrannosaur cornered me in a ravine. They're the bad ones. The females."

He raised his eyebrows. She wasn't sure if he was joking.

"What's it feel like?"

"The yoke?"

"Yes."

"Like being turned inside out."

"So why aren't you wearing one now?"

"Because it feels like being turned inside out."

"Seriously."

"It would hardly do if your guide disappeared, would it? If I'd been yoked today, we both might have gone home. Who'd have led your intrepid hikers back to the hotel?"

She glimpsed Peter, watching them from the buffet, and had a momentary image of him trying to find his way back through the woods alone—Peter, who lived almost entirely in a world of complex financial transactions, a world where meaning was not innate, but created by the universal assent of billions. What had Stafford called it the other day? Pushing money around. He'd said something else, too: *I like to put my hands on something solid. Like to say, I did that.*

Yet—

"You risk your life for that?"

"There's money, of course. And more."

"More?"

"It doesn't bear talking to death."

She fell silent. They revolved to the music.

Wilson said: "What the devil possessed you to do that, anyway?"

The sound of the yearling screaming echoed in her memory.

"I don't know," she said. She said, "I can't stand to see things in pain."

"This is no good for you, then."

"I'm not sure what's good for me, anymore."

"Who is?"

"You seem to be pretty certain."

"I've stripped my life to certain basics, that's all."

"There's no Mrs. Wilson?"

"Not for many years now."

"Are you lonely?"

"You're very curious, aren't you? Let's collect our drinks."

They stood at the railing again. Gwyneth sipped her martini. She was being careful now.

"I thought perhaps some great heartache in your past—"

"Nothing so romantic, I'm afraid. She wasn't willing to live with the risks I take. I wasn't willing to live without them."

"Why not?"

"Do you know Wallace Stevens? Death is the mother of beauty?"

"Poetry, too?"

"You know it then."

"I've read it, I think. In college once."

"You should read it again."

She laughed. "What would I find there, Robert Wilson? Truth or beauty?"

"A bit of both, maybe."

"You must feel great disdain for your charges."

He shrugged.

"You must feel great disdain for me."

"If I felt disdain, I wouldn't be talking to you, would I?"

"What do you feel?"

"Are you flirting with me, Mrs. Braunmiller?"

"I'm curious, that's all."

"What you did was very brave. Also very stupid. I admire the courage."

"And the stupidity?"

Wilson didn't answer. He lifted his glass and finished his whiskey. He held it in his mouth for a long moment. He set the glass on the railing. "Laphroaig," he said. "Nectar of the gods."

"Mr. Wilson—"

He squared up to face her. "I don't admire stupidity in anyone, Mrs. Braunmiller. But I admire courage very much. Courage compensates for many failings." Then, after a moment: "It was the yearling, was it?"

"I suppose."

"It won't do to anthropomorphize them. You're likely to get me killed that way."

When she didn't answer, he said, "What have you come here for? Nobody comes here without a reason."

"To see the dinosaurs, what else?"

But he wouldn't take that as an answer. She could see it in the set of his shoulders, in the observing blue eyes that held hers to account.

"I'm not sure," she said.

"No one ever is," he said.

The party settled into the languid rhythm that dying parties acquire. The band swung into something soft and jazzy. There was no more dancing. The guests who lingered clustered around the fire pits and talked quietly, occasional bursts of laughter lifting into the air like larks.

Gwyneth stood at the edge of the terrace with a glass of wine, watching as someone threw a log onto a guttering fire. A shower of sparks swirled up to print themselves against the swollen moon that had lately cleared the mountains. She felt a

surge of gladness, a kind of nostalgia in reverse, that at least that had not changed. The old familiar moon still gazed down upon her from the alien wash of stars.

A hand touched her elbow.

She turned, half expecting to see Wilson—she wasn't sure where he had gone, or when—and found herself staring into Peter's face instead.

"It's late," he said.

She didn't know the time.

They leaned their elbows on the railing and stared into the night.

"I waited up."

"I thought you might." Her wine caught a spark of firelight and held it. "I didn't mean to worry you."

"You didn't worry me."

She saw the lie in the set of his jaw, the muscle twitching there.

"I just wondered where you were."

"I've been right here."

"I know." That twitch of muscle. "I just wondered, that's all."

They were silent for a time.

"We didn't dance," he said.

"You didn't ask."

Gwyneth turned to look at him. In the moonlight, Peter's face looked older, gaunt, his eyes deeply shadowed. How strange he had become to her.

What had happened to them?

Peter laughed quietly. "No, I suppose I didn't."

Then: "Was he scolding you?"

"Mr. Wilson?"

She hadn't thought so at the time, but—

"Not scolding exactly," she said. "Reminding me, maybe."

"Reminding you?"

"That he wasn't yoked. That he was putting himself at risk in ways the rest of us are not."

And now, for the second time that evening: "What possessed you, Gwen?"

"Something came over me. I don't know."

The whole thing—the entire trip from the moment she'd seen that footage on her screen back home—had been something she'd had to do, a mute imperative that she could not resist. *Why did you come here?* Wilson had asked her.

I don't know.

Something came over me, she thought.

"You could have gotten the man killed."

Wind rustled the conifer needles. The cries of unknown creatures rose up to her. Gwyneth thought about the thousand battles for survival unfolding in the darkness below, marveling that someday millions of years hence, that eternal struggle would give rise to men, and that not long after that as the Earth measured its days, men too would reach their apogee and subside into the muck.

Sighing, Peter said, "Come on, it's late, Gwen."

And this time, with a wistful glance back at the glowing fire pits and the looming globe of the enormous moon, she consented. As they climbed the plush stairs to their room, Peter put his hand to the small of her back and drew her to him. Their lips brushed in a cool, dry kiss. Gwyneth turned away. A veil of dark hair fell between them. When Gwyneth hooked it over her ear, she could not bear to look him in the face.

"Gwen—"

"Not here," she whispered.

Yet later still, in the moon-splashed room, as they lay together in their gauzy eggshell bower, Gwyneth drew away once more. Peter turned his back to her. She watched the rigid line of his shoulders. When at last he spoke, Peter's voice was tense with fury.

"The hell with it then."

"Peter," she said. "I'm sorry. I'm sorry," she said.

But it wasn't enough.

Gwyneth turned away, tears welling in her eyes. They lay still then, back to back, like slow continents adrift. After a time, Peter's breathing deepened into sleep, but Gwyneth lay awake for hours, staring out the moonlit square of window into the shadowy forest beyond. As she hovered at the edge of sleep, there came a faraway cough in the darkness. She tossed restlessly.

Something ponderous moved in her dreams.

She woke at seven to find Peter staring across the bed at her.

"What?" she said.

"Nothing."

But his voice was cool and he didn't seem to be in any hurry to get up. He lounged in a nest of sheets and watched her dress, scratching his chest and tossing out an occasional desultory comment like a bomb. And when he finally joined her for breakfast, he sprawled unshaven in his chair, ordered pancakes, and leveled his gaze over the table at her. "So what's on the agenda for today, Gwen?"

She sipped her coffee. "Yet to be seen."

"A Stegosaurus? A Brontosaurus? A fucking woolly mammoth?"

"Not tennis, you can be sure of that."

"Tennis might do us good. At least we'd be spending some time together."

She threw her napkin to the table. "Jesus, Peter! Why can't you be reasonable—"

"Why can't you, Gwen? Why can't you—"

Robert Wilson pulled out a chair and sat between them.

"You've got your eras confused, Mr. Braunmiller."

Gwen slumped in embarrassment. How much had he overheard?

When Wilson spoke again, he leaned forward. "Today it's the biggest game of all, my friends. The one animal everyone comes here to see, the one most of them never do—"

"A T. rex," Gwen breathed, embarrassment forgotten.

"Did you hear it in the night?"

"I thought I dreamed it."

"It was no dream. I woke at five. It was far away, but moving closer."

Peter kicked out the fourth chair and propped up his feet.

"And how would you know this?"

"I'm a professional, Mr. Braunmiller. I'm very good at what I do. I forget what it is you do exactly—"

"I'm a financial analyst."

"That's right. And I'm betting you would spot a trend in the markets long before I would, wouldn't you?" He didn't wait for Peter to answer. "Look, I've been hunting these animals for the last twenty-five years, and I've only seen fourteen of them—one of them nearly killed me. I was telling Mrs. Braunmiller about it last night. These creatures are the apex predators of their era. They're rare as hell and they can pick up the scent of blood thirty miles away or more."

"The Triceratops," Gwyneth said.

"You're a natural, Mrs. Braunmiller." He propped his elbows on the table. "The way I figure it, this bastard got upwind of that wounded Triceratops, and has been following the scent down out of the mountains all night. We'll be hard-pressed to catch

up to it, but if we do . . .” He shook his head. “Six-and-a-half-tons of pure carnivorous aggression. Forty-two feet, nose to tail. Thirteen feet at the hip. Olfactory bulbs the size of grapefruit. A fucking monster is what I’m saying—and I apologize for the language, but there’s really no other way I can say it. You’ll never forget it.”

He put his hands flat on the table and pushed himself to his feet.

“West gate in fifteen minutes. See you there.”

“Along with all the other excursion groups, I’d imagine,” Peter said.

“You underestimate my expertise, Mr. Braunmiller,” Wilson said without rancor. “And overestimate that of my colleagues. Besides, we know something they don’t: we’ll be tracking the bloody Triceratops.”

He didn’t wait for a response.

Peter’s pancakes arrived. He buttered them in silence.

Gwyneth finished her coffee and stood. “I’ll go to the room and get our things together.”

“You needn’t bother with mine.”

She turned in disbelief.

“What did you say?”

He cut a bite of pancake, taking his time about it. When he was done, he said, “I said, you needn’t bother about mine.”

“You have to be kidding me.”

“No.”

“Don’t sulk, Peter. It’s not attractive.”

“You don’t seem to find me attractive anyway.”

People at surrounding tables had begun to sneak glances at them.

Gwyneth sat down, pushing her plate away. She leaned forward.

“Look,” she said quietly. “The only way we’re going to solve anything is if we spend time together.”

“But we’re not, are we?”

He speared another deliberate forkful of pancake.

“We’re spending time with a dozen other people—not to mention your friend Wilson—chasing down giant lizards—”

“Jesus, Peter, did you read anything I sent you? They’re not lizards. They’re—”

“Warm blooded. I know. That’s not the point. The point is that you care more about that than you do about trying to fix things. They’ve been dead sixty-five million years or more. And staring in awe at them isn’t working on our marriage. Isn’t that what we spent all this money to do? Isn’t that what we both wanted?”

“Yes, but—”

“But what? We could have gone to the Caymans for a twentieth of the expense and actually spent some time together—”

“We’ve been to the Caymans. We’ve been to Paris, for God’s sake. None of it helped, Peter. None of it—”

And then he said something that stopped her cold in her tracks. “The problem isn’t in Paris, Gwen. The problem isn’t in the goddamn Cretaceous. The problem is in us.”

“Then come with me and help me fix it, Peter. Please.”

“Help *me*,” he said. “For God’s sake, help me.”

She stared at him for a long moment, and then, like Wilson, she put her hands flat against the table and pushed herself to her feet.

“I’m going to get my things,” she said.

Peter was right: when the west gate swung open, a mass of excursion groups was sorting themselves out. Most of them chose the more difficult route, clambering up the steep ridge in fifteen minute intervals. Wilson’s alone struck out in the direction

of the clearing where the raptors had taken down the yearling.

Later, two memories from the journey stuck in Gwyneth's mind:

Robert Wilson's cool competence.

And the beast.

The rest was but hazy recollection. The march triple time through the looming woodland. The sweat that poured down her face till it stung her eyes. The tiny theropods that scattered before them. Even the charnel house stench of the clearing itself.

The yearling's carcass lay on its side in a bed of thrashed and flattened grass, the great ribcage nearly stripped of flesh. Its horns lanced from a face that had been gashed and half devoured. Scavengers had descended upon what remained: opalescent maggots the size of a man's thumb, chittering insects that were larger still, a clutch of knee-high dinosaurs, ruddy and yellow, that screeched at them in fury, feathered ruffs billowing out to either side of their narrow-beaked maws.

Wilson ignored them.

"Photos, anyone?" he asked, and several of the men shuffled forward.

Great white hunters, Gwyneth thought, as if they'd personally felled the thing. She and Angela and Frank Stafford stood to the side, sipping cool spring water from canteens, and watched.

"Peter not well?" Stafford asked.

"No," Gwyneth said, and she felt Angela give her a knowing look.

Then they were on the move again, following the path trampled by the fleeing Triceratops. Waist-high grass swayed to either side. On the far side of the clearing, the forest enveloped them once again: colonnades of towering conifers and angiosperms, damp soil underfoot. Late morning now, cool shadows under the trees, motes adrift in green air.

Gwyneth watched Wilson, lanky and tall, his neck dusky from wind and sun, slip among the trees like he'd been born of the landscape himself. Deep into the forest, the trail split.

Wilson paused, studying the sign.

"The cows went left, working their way down toward the plain," he said, pointing. "The bull climbed the ridgeline, looking for a place to hole up."

"Why?" someone asked.

"Who knows? Instinct, maybe. To protect the cows. He knows the carnivores will be coming for him."

Something coughed in the distance.

Gwyneth shivered.

"We're close now," Wilson said.

He set a faster pace after that. Winded, they trudged after him, still climbing. Wilson moved with unswerving grace, almost invisible as he cut through shadows and the golden blades of sunlight that knifed through the forest canopy.

Perspiration slid down the channel of Gwyneth's spine.

They followed some spoor that Wilson alone could see, continuing to climb—hard climbing, too, upon occasion, clutching-at-tree-branch climbing, scree sliding loose underfoot. A thin, bearded man slipped and fell, bloodying his forearm. They paused while Wilson disinfected the cut—it must have been three inches long—and applied a pressure bandage with deft, sure hands. "That'll hold it for now," he said, gripping the man's shoulder, and Gwyneth couldn't help noticing the grace of those long fingers, the blunt crescents of his nails. "You'll want to get it looked at back at the hotel," he was saying. "A couple of stitches might be in order."

They found the wounded triceratops forty minutes' hike beyond that. The ridge towered above them here, a rocky cliff face that stood sharp against the sky. A thick

stand of conifers screened a wide ravine. Maybe a hundred and fifty yards from side to side, the chasm narrowed as it deepened. The Triceratops lay inside, far back in an angle of stone.

"Can we get closer?" someone asked.

"I wouldn't advise it," Wilson said.

The binoculars made the rounds. Gwyneth studied the Triceratops. The great bellows of its lungs heaved irregularly. Dirt caked the exposed wound. Insects buzzed around the glistening bulge of viscera. She could smell the thing from here, a stench of rot and shit and death. It moaned when it saw them, that long rusty sound, like a nail being wrenched from ancient wood. Wilson drew them into a blind of towering angiosperms, admonishing them to silence.

"Soon now," he said, and they hunkered down to wait.

The fronds of the angiosperms waved above them in the midday heat. Then, like God himself flipping a switch, the air went abruptly still. Gwyneth lifted her head, listening. It was more than the lack of birds. The tiny mammals in the treetops had fallen silent; the insects that moments ago had whickered in the air around them disappeared. The forest held its breath. Something big—something dangerous—was on the move. She could sense it: a charged stillness in the air, a tension in the blood.

Something snorted beyond the trees that screened the mouth of the ravine.

Gwyneth could see it in her mind, lifting its vast head to taste of the unmoving air. Her heart quickened.

Twenty-five years, and Wilson had seen fourteen of them. Fourteen of them. And fucking Peter back at the hotel.

A callused hand touched her elbow.

"This is a time for courage, Mrs. Braunmiller. Not stupidity."

Indeed not, she thought. She could feel his breath tickle erect the fine hairs at the nape of her neck, and for a moment she was aware of nothing else, not the desperate gasping of the felled Triceratops, not the expedition group arrayed in the greenery around her, not even the vast creature that shifted its weight beyond the curtain of trees—

Wilson touched her elbow again.

"There you go," he breathed, and then she saw the thing: monstrous, the beast of the apocalypse itself, like some foregone doom from the age of Revelation. It did not emerge from the trees, it simply appeared among them, ghost-like and huge and utterly silent, bigger even than the creature that had run in her dreams, invisible one moment, visible the next, like a long lens pulling focus.

And silent. So silent.

Someone moaned in terror—this wasn't what they'd bargained for, not at all—and the monster swung its vast head toward the grove of angiosperms. Another moan—Wilson hissed, "*Shut up, you fool!*"—and the Tyrannosaurus moved, shedding the camouflage of the trees like water, one step, then two, its great taloned feet tearing at the dark soil, its tiny, ridiculous arms—evolution's prank—folded at its breast. One slow step, then another, and a third. And did the earth shake beneath its feet? Surely not, yet Gwyneth felt it all the same, felt the earth rumble as the monster lunged toward them, gathering speed, fast, oh fast, and sweet Jesus who could have imagined the thing, death rampant and alive and more beautiful than she could have dreamed; she marveled at its sunshot hide, golden streaked and green, its bullet head weaving hollow-cheeked upon its cobra neck, its nostrils flaring, its eyes ravening and aflame.

It closed fast, forty yards, thirty, twenty-five. Someone broke and ran, she didn't see who, and then the monster—this impossible beast from an era out of time—at last gave vent to the fury that burned in its furnace heart. It roared, its jaws un-

hinging to reveal a shark's hoard of yellow teeth the size of railroad spikes. A gust of carrion stench blasted over Gwyneth. Her yoke seized her and she found herself careening once again toward the gravity well of the future, trying to hang on for a moment longer just to stare in wonder at the thing—

Her stomach twisted—

And then a rusty-hinge screech of agony reminded the Tyrannosaur that other prey—bigger prey, and easy—was to be had. It wheeled to face the Triceratops, its tail lashing, and loped the length of the ravine, its feet hammering tracks six inches into the soil. The Triceratops somehow staggered to its feet; the bloody rent in its side disgorged fresh loops of tangled viscera.

And then the beast was upon it.

The Triceratops lowered its head to meet the titan. Tearing at the soil with legs sheathed in swelling ropes of muscle, the Tyrannosaur wheeled around the swinging horns. The wounded Triceratops was too slow. One of the T. rex's taloned feet ripped open its hindquarters. The next moment—Gwyneth looking on, choked with terror and some other strong emotion, she couldn't quite say what—the Tyrannosaur closed its massive jaws just behind the Triceratops's frill.

The killing blow.

The Triceratops went down, feet spasming as the Tyrannosaur tore loose a giant chunk of flesh and swallowed. It lifted its monstrous head to the sky and bellowed in triumph.

After that it was awful.

The party that night—there were parties every night—hummed with excitement.

Three of the excursion groups had caught sight of the T. rex, but only one of them, Wilson's, had seen the kill. *You lucky bastard*, his colleagues said, shaking their heads, but Gwyneth knew that it was more than luck, that it was skill and knowledge; she recalled the swift precision of his lean hands applying the pressure bandage, she recalled his words in her ear: *This is the time for courage, not stupidity*.

She was done with stupidity, Gwyneth thought. She felt that she had opened a new angle of vision upon the world; she understood now that pain was sometimes necessary, that it ruined some things to speak of them too much, that truth could equal beauty. Her fellow guests seemed faintly diminished, their conversation—

—*snapped its neck like a pretzel stick*—

—*magnificent creature*—

—empty of any genuine comprehension of what they had seen.

Maybe the change—if there was a change—showed in her face, for as they sat down to dinner Angela said, "You look flushed, darling. Maybe this afternoon was too much for you."

"Looks like you got a fever is what it looks like," Frank opined, ordering the duck-bill steak ("appropriate, eh?" he joked).

Appropriate enough, Gwyneth supposed.

The truth was, she *didn't* feel quite herself. Frank had been right: fever was the word for it. Fever—ever since she had seen that monster for herself, and felt the blast of its carrion breath. She had read about it, she had seen it on video, but not until this afternoon had she really known such things existed in the world. Fever. The fever called living, she thought, another fragment of old poetry rattling around inside her head like a piece of angry candy.

She only wished Peter had been with her.

"Where is Peter, anyway?" Frank said, as if he'd sensed the run of her thoughts.

"I think he *is* coming down with something," she said. "Maybe we both are."

"Up to the room with you, the minute you're finished eating," Angela said.

Frank grunted.

But it wasn't up to the room that Angela dragged her when Frank had finished his steak and wandered off to hold court at the party. It was to the little bar overlooking the plain, where a fire pit burned and a pair of lovers whispered in the shadows.

"Something warm," she told the bartender, and afterward, cupping Irish coffee as they stood by the fire pit, "Peter's not sick and you know it."

"How do you know?"

"I've been married twice, love. He's sulking. Sulking this morning and sulking at dinner, making it worse for himself every moment because he can't stay in that room forever, and he knows it. Stupid male pride. Whatever in the world has gone wrong with you two?"

"I don't know," Gwyneth said.

Down below, in the darkness beyond the tree-studded escarpment, something roared on the savannah. She wondered what it was—something big, no doubt—but nothing she could shape inside her head. And that was how it was with Peter, too, wasn't it? Something big had happened to them somewhere along the way, but she couldn't put her finger on when, or what.

She couldn't find the shape of it inside her head.

"I don't know."

She swiped at tears with one hand.

"You must think I'm an idiot."

"I think you're confused. It's okay to be confused."

"But there's nothing wrong. There shouldn't *be* anything wrong. He's a good man, he's kind and he's gentle and he's handsome—anyone could see that he's a good man."

Angela wrapped an arm around Gwyneth's shoulder and pulled her close.

"I know. I—"

"He said—" Gwyneth sobbed discreetly.

The lovers had departed.

The barman found something pressing to do at the far end of the bar.

"He said that what was wrong with us wasn't in the Caymans or in Paris or in the Cretaceous. He said it was inside us."

"He's probably right about that."

"I thought that I could save us by coming here. I really did. I risked everything on it, everything we had." She sniffed and met the other woman's gaze. "Somehow I thought that I could save us. I don't know how."

"Do you love him, Gwyneth?"

"I don't know. We just drifted away from each other," she said, and that image came to her once again: continental drift, landmasses on the move, so slow you didn't even notice it until an ocean lay between you.

It would have been easier if one of them had cheated.

"Shhhh," Angela said.

Gradually, the sobs subsided.

The barman brought them another coffee. The night had turned cool, and the moon had just started to slide over the massif to their back, laying down a patchwork of shadows on the ridge below them. Once again, Gwyneth felt that new knowledge take shape inside her: that some things could not be spoken, that truth could equal beauty, that pain was sometimes necessary, and real.

"Why on Earth did you ever come here?" Angela said.

They caught up with Frank at the party, but soon after, he and Angela departed—another shot at Kronosaurs had been promised for the morning, and Angela had shamed him into going along this time. "We didn't come here to play tennis," she

said. "Besides, you'll be wearing a lifesuit. It's not like you can drown."

Afterward, Gwyneth floated ghost-like through the party, waiting for Peter. She had resolved to kiss him on the stairs when he came, but he did not come, and at last it was late. The moon had risen high into the alien sky. The fires had dwindled to coals. Even the hard-core drinkers were pouring themselves one by one into their rooms.

Somehow—afterward Gwyneth could never quite figure out precisely how it happened, how the decision came to her or if it had been a decision at all and not some foreordained conclusion—she found herself at the concierge's desk. Inquiries were made. The concierge responded without lifting an eyebrow. Apparently such inquiries were not uncommon.

The corridor was in the basement of the hotel.

She knocked on the door.

Robert Wilson opened it.

"Are you sure?" he said.

"I'm sure."

His hands were callused. They felt real against her flesh.

Later—it must have been three or after—Gwyneth slipped through the door of her room. Peter stirred in the depths of the eggshell bower.

"What time is it, Gwen?" he said in the darkness, as though he didn't know, as though his voice wasn't wide awake, and waiting.

"It's late, Peter."

He was silent for a long time. Gwyneth stood by the door until her eyes adjusted. She made her way across the shadowy room. She stood by the window, staring out into the Cretaceous night. It had grown darker, but the moon in its long descent still frosted the leaves outside the window. If she squinted, she could see—or imagined that she could see—something moving out there near the forest floor. A low-slung night grazer, maybe, or maybe just the wind-drift fronds of some ground-hugging fern.

"The party must have gone late."

"I guess it did."

"The T. rex and everything. People must have been excited."

"It's all anyone could talk about."

"I'm sorry I was ill. I wish I could have been there."

She said nothing.

"What was it like?"

"The party or the T. rex?"

He laughed in the gloom.

She had no words for it, no way to begin.

"There was something spiritual to it," she said. "I don't know how to explain."

Now his laughter had a bitter edge.

"Spiritual? Seeing one giant animal tear another one to pieces?"

"It's not that."

But it was. The blood sport of the thing had excited her.

"Or not that alone, anyway. It was the thing's purity of purpose, I think. So devoid of confusion or . . . or ambiguity. Just pure appetite. Every sinew of its body had evolved to serve it."

She said, "It doesn't make any sense. I know it doesn't make any sense."

In the silence that followed, she felt once again the distance between them: continental drift, something so big she couldn't quite shape it in her mind.

"You weren't ill," she said.

"No."

"You could have come." Then: "What are we going to do?"

He was silent for a long time.

"Was it worth it, Gwyneth?"

She stared into the moon-silvered dark.

Peter turned on the bedside lamp.

Her face hovered in the glass, hollowed out and half transparent, ghost-like.

"Turn it off. Turn it off, Peter."

He did, and the Cretaceous dark rose up to envelop her.

"Another shot at Kronosaurs, tomorrow," he said, and she felt a doorway open between them.

Some things you could not speak of. Some wounds healed in silence.

"We should get some sleep," he said.

Gwyneth stood in the threshold. Her body was wide awake. She felt like she might never sleep again. Peter swept back the veils of the eggshell bower and stood, tall in the darkness, and came to her. He put a hand to the small of her back and leaned over, brushing her ear with his lips.

"Come to bed, Gwen," he said.

But she only stood there, his hand at her back, his breath at her ear. The night deepened. Even the moon was gone. Something huge and bright streaked across the sky. It erupted on the horizon, red and orange, a god-light towering into vacuum far above. Shockwaves followed, flattening the trees on the distant ridges in a broad expanding circle, as though a great fist had slammed down upon the planet, rocking them so that they had to clutch at one another to stay on their feet. The thick glass spider-webbed in its frame. Somewhere in the depths of the hotel, something crashed. Someone screamed. Then the fire, burning from horizon to horizon as it ate the dark. Some things could not be saved, Gwyneth thought. Some wounds did not heal. Then the yoke took her. It was just as Wilson had said: it was like being turned inside out. ○

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Stories by Chris Willrich have appeared in such places as *Beneath Ceaseless Skies*, *Black Gate*, *F&SF*, and *Asimov's*. He lives with his family in Silicon Valley, where for the past several years he's been working as a children's librarian. We're happy that perusing children's literature in high-tech surroundings can spark interesting story ideas like those in evidence in the wondrous . . .

STAR SOUP

Chris Willrich

The shooting star burst upon the world Dimhope, which is to say it plunged within five clicks of Veiltown. For if a meteorite falls in the forest and no Dimmer hears it, does it make a sound?

The Dimmers of Veiltown, the only habitation in the world, had given up all mechanisms that peered beyond their ambit. Their satellites had long since blazed. Their starport was a hundred-meter stone bowl pocked from quarrying and meshed in glowvines. Their mushroom-houses stood tall and solitary in the three moons' light, and all thirty loomed stern beside triple peacock-fans of shadow.

Shadows shredded. Habitations heaved.

A door or five opened in response to the flash and concussion. Eyes and snouts and whiskers peered and sniffed and quivered and retreated. Nothing good could come from the sky.

And so in silence did First Mate Twitch come strolling. He broke it. His raucous song attracted a fangwing. He broke that too. First Mate Twitch came singing up the trail through the unseen border between Dimhope skulltrees and Terran pines, a dead fangwing dangling from his walking stick.

Oh I'm First Mate Twitch

If you hide I don't mind

I'm much stranger than human kindness

Much rarer than humankind.

First Mate Twitch was a chimera, but of no type seen in Veiltown. Neither *H. sapiens canis* nor *H. sapiens felis*, his gene-line intersected that of a prey-beast to dog and cat alike. White-furred and whiskered, he boasted powerful legs and elongated ears. He wore a green backpack and a plaid waistcoat with a mission patch declaring GRAND SURVEY in silver letters, and within his pocket blinked a datapad on a gold chain.

Barefoot he entered the tree-wreathed clearing beneath the stars, regarding first the gossamer strands spread overhead between treetops like a spider's web, second the doors shut against him. He gently rapped his staff upon one. The dead fangwing quivered like some peculiar collage of bat-skin, shark-cartilage, and deflated balloon.

There was no response, but Twitch was undeterred. "Hello," he said. "I am a traveler come from Earth. It is still there, you know. Changed, but that's what worlds do. A hunger gnaws at me. Perhaps you can help?"

A mewling sound came from beyond the door. "We have nothing. Try somewhere else."

He went to another house, knocking with his knuckle. A snuffling voice said, "Yes?"

Twitch said, "I am a visitor from Earth. You heard me right! I hunger for something. Can you help me?"

"You came all the way from Earth? And you did not pack any food?"

"I did not say what I am hungry for . . ."

"Away, night thing! Away!"

Twitch strode to a third house, where a cold voice answered, "What?" in response to his gentle, one-fingered tap.

"I am a traveler from Earth. I hope to find nourishment."

"You lie. No one comes from Earth. No one cares about Dimhope. You must be from a lost village."

"I am from Earth. We saw no other settlements from orbit."

"Go away."

He went to a fourth door, where all he had to do was cough, before a sad voice answered, "Hello?"

"Hello. I am First Mate Twitch of the Grand Survey starship *Nightgift*. I am not a liar or a monster from fairy tales. I hunger for something. Perhaps you can help?"

A pause. "I have very little. The crops have been poor. There are no other settlements to help us."

"I know."

"I am sorry, starfolk. You who have the wherewithal to come so far mustn't take from us who have so little."

"I hear you. Perhaps, then, I might borrow something, something I would soon return."

"What?"

"A soup-pot. The largest you have. I will use it out here."

"I . . ."

"Do this thing, and I will trouble you no more."

Presently the door creaked open. A pale mainstrain human, her hair grey and her hand-knit wools swirling with every color but, nudged a cauldron through the doorway.

"You will need a fire," she said, blinking at the sight of Twitch.

"I understand," he said. "Thank you." And as he carried the cauldron (easily, for he was conditioned to higher gravity) and thudded it into the dirt that served as the village square, she continued watching from the door. Twitch withdrew two heat-bricks from his pack and set them down parallel. He hefted the cauldron again and placed it on top. There was a well in that place and community buckets beside, so he pumped and carried and filled, until the cauldron was sloshing and the eastern horizon was silver and the windows full of eyes.

He kicked at the heat-bricks and they glowed. He hummed. Bubbles burst the water.

He fished in his pack for a hefty stone that looked torn from a larger mass, black with pocks and speckles, and he rotated it back and forth in the grey.

Presently a few Dimmers crept out in their nightclothes to regard him. There was a long-snouted brown canid, a dark mainstrain man, and a wide-eyed orange felid girl.

"What are you holding?" said the girl, striped tail swishing.

"A star stone. A thing I chased from the skies, knowing the wonders it bears. Within are rare organic compounds quickened by the fires of atmospheric entry. I mean to dine upon them, making delicious star soup."

With that he plunked the stone into the boiling water. A hint of smell arose. Was there something in it of mint, and something of sugar, and something of a dream not quite recalled?

"That smells interesting . . ." said the canid.

"It does! It would be better with a garnish of something-or-other. A vegetable, a fungus, or whatever analog exists on this world. But I know the village has nothing to spare."

"A garnish, you say," said the mainstrain man. "Perhaps . . ." He departed. After a moment, so did the canid.

The felid girl leaned close. "I . . ."

"Yes?"

Her pupils slitted as light rose upon them. "I think I am seeing things . . . in the soup."

"What do you see?"

"There are silver arrows, and blue and white balls, and stars, so many stars."

"Anything else?"

"A golden spiderweb around a blue and white ball. It is like the Veil over the town, but full of tiny lights. There are silver arrows and fireflies swirling all around it . . . Now the spiderweb is shredding . . . It seems to burn . . ."

"What you see is Earth. Earth years ago. Earth which once declared only one human gene-line was allowed, and all others monstrous."

"Now I don't see Earth anymore. But there's a huge silver thing, like a bunch of skulltree branches in a bundle, their tips set on fire . . . or like a gaslamp shaped like a sky-squid . . ."

"That is *Nightgift*, my ship, my home. We are going to many worlds to say, 'Fear the home system no more.'"

"It's gone . . . thank you for showing me the stars."

"You can thank me by adding to the soup."

"Oh. I don't think Mama will let me bring anything."

"Did I say anything about food? Tell me something of Dimhope. Speak it into the pot."

The mainstrain man returned with shreds of meat. Twitch wrinkled his nose but nodded thanks. The man scattered them into the cauldron, saying, "Hey! I see something in the soup . . ."

"Yes?"

"I see an icy world with a huge dark moon, thousands of spaceships glinting in the space between. How is it done?"

"You see Pluto and Charon, whence my *Nightgift* was launched. They are twin worlds, Pluto the place of life, Charon of memories of the dead, stored in machines. Upon the smaller moons that circle them are the dreamshops of the engineers, living and mechanical. And at Styx Station, the exposed center of gravity of the Pluto system, there lie the shipyards where *Nightgift* was born."

"I have something," said the girl. "One time I climbed the tallest skulltree and jumped onto a shimmerblimp. You can only do that if you're old enough to climb high and young enough for the shimmerblimp to take your weight. I waited till the time was right. The shimmerblimp circled around and around and I saw everyone pointing at me from below. The world was huge and I saw the mountains where the death-blimps live, and the other way I saw the sea. The shimmerblimp was falling from my weight but it took a long time, and while I was up I was like a bird of Earth. It took me half an hour to drop close enough to the Veil to leap onto it. The Blackcloaks grabbed me. I was really grounded then."

As she talked, a rainbow-hued, dark-eyed flying cylinder appeared in the cauldron, cloud-flanked, a tiny image of the girl riding it. The image rippled and bubbled but remained in view while the girl spoke.

"That's it!" she said. "But I was younger then . . ." The girl within the image grew

shorter, her cat-eyes bigger in her face. "That's more like how I was!" said the real girl. "But how does the soup . . . ?"

Now the canid had returned, more Dimmers with him. He scattered cabbage leaves into the pot. "Huh." The shimmerblimp broke into prismatic fragments, and the image cleared as something new appeared. A world of ocean spun about a dark, storm-swirled sphere, itself spinning around a sun peppered with black spots.

"Here is Zaratan," Twitch told them, even as the scene in the cauldron zoomed toward green dots upon the moon's white-streaked blue. "It has no land. Its islands are the backs of titanic medusae, complete with grasslands and forests and animals."

Now they beheld a circular realm of emerald beauty, round green hills frilled with forests and pebbled with little square houses. "The settlers live a happy life but must contend with three threats. Every so often their sun flares and the islands submerge for protection. So every house has a basement dug into the hide of its beast, where an air pocket protects the inhabitants for the hours beneath. The second disaster is more lasting—mating. At that time two islands will convulse and the people will take to sea upon rafts, singing in honor of the union. When the islands suddenly part, it is with a thoroughly jumbled mixture of inhabitants, such that whole new villages are born."

Now the watchers beheld an island with withered trees and brown grass and houses in ruin. Twitch said, "The last disaster is death, wherein an old island journeys to the north pole, where ice is the nearest thing on Zaratan to permanent land, where the medusa beaches itself upon white crags. Most villagers abandon their host during the journey, but a few ride it even unto the Land of the Dead, where the lone starport of Zaratan sits like bones upon ice." The cauldron showed a gleaming swirl of buildings upon a white plain, shuttles rising on blue knives of flame. "There are those who return to the isles from the Land of the Dead, but they dwell in the most remote places upon the new beasts, for they seem peculiar, having reached the threshold of another world. And there are those stranger still, who accept the invitations of passing vessels like mine, and journey into a darker sea. They take their songs with them, and when two starships meet, their corridors sometimes echo with the mating-chorus of Zaratan."

The man who brought meat whistled. "It reminds me . . ."

"Yes? If you say it, perhaps we will see it . . ."

"Well . . . There was a time, when I was young and reckless and fearful, when I longed to see the ocean. I carved a walking stick like yours and packed dried shrieker meat and set off along the winding river through the skulltrees."

Zaratan faded from the cauldron; and now the skulltrees of Dimhope returned, with their crowns that mimicked the faces of large flying carnivores, the better to scare away the large flying herbivores. A dark river meandered amongst the trunks. A young version of the man could be seen far below.

"That's me! But how—"

"Don't worry about it for now," said Twitch. "Enjoy it. Does it look right?"

"Well . . . I wore green and grey, for camouflage. My knapsack had the same colors, and it was bigger. I like to believe *I* was bigger too, and more handsome—" The scene closed in on the young man, who shifted and gained the guise of a rough Adonis. His older self laughed. "That'll do! Well, I made it past fangwings and marshes and bloodbugs and found the ocean. It was bigger than anything I'd imagined. Pictures don't do it justice. Even this one doesn't . . . Because the ocean just goes on and on. And it's like it's whispering to you, telling you the land, the land you've always relied on, the land that feeds you, that your ancestors sleep in, it's all temporary, and one day it will crumble into that forever-sea." Light crested and fell in the Dimmers' faces as he spoke. More were joining them, peering into that cauldron-ocean.

"But more than that . . . there's the booming, and the surging, like you're inside

your own heart. Something in it makes you forget about little things. The small stuff drops away like little sand grains. I told you before I was reckless and fearful. The two went together, somehow. I took great risks because inside I was terrified. It's hard to explain. Ever since, as a boy, I saw what the Veil was for, I was scared of the sky. Ever since I learned what the skulls in the trees were imitating, I learned to duck under cover . . . And yet another force would burst up within me, make me play with fire, or leap from rooftops, or talk back to the Blackcloaks, or battle other children with sticks. Fear of death made me flirt with death. Until I sought the ocean, and found the dying deathblimp."

Within the image, a shadow fell upon the young man playing on the beach. His frown of discovery echoed the older man's frown of memory.

"I had seen deathblimps before, through the Veil, but I had never seen up close that skull-like face, big as a hill. I had never been near that mouth of bright arrowheads, within that forest of dark tentacles. The deathblimp was feeble and crooning but big as half the village. Its mouth alone was the size of my house. It was our enemy. I sat on the sand and watched it dying. I saw dozens of arrows in its hide, and scabs from gunshot wounds, but those had not felled it. It was deflated from the bites of its own kind. Maybe it fell into the ocean and had enough buoyancy to stay afloat before it washed ashore."

He turned to his neighbors. "I do not know why I fed it."

For a time Twitch heard only bubble and boil. Then: "Yes, I fed it with . . . yes, it was fangwings! How does the soup know?"

"Does that matter," Twitch said, tipping the staff with the dead grey fangwing upon it, "next to the question of why you did what you did?"

"It was dying, I guess, and I was living. Hard to explain. Away from the village, no one else around, it was like it and I were the same." He shook his head at his younger self. "That's why I've never talked about this. How can I explain what happened to me at the ocean? I used to think death was like this little dark cave that you'd get stuffed into one day, and I was terrified of it. But after that—at least sometimes—I could see death as sunset on an ocean, with sea-screechers flying rainbow beside mountain-sized clouds, something bigger than my whole entire life. And I wasn't so afraid."

The felid girl asked, "What happened to the deathblimp?"

The man looked at her. "It died. Food couldn't save it. But I noticed something. Once I tripped and fell within reach of its tentacles. It stopped waving them. Didn't even try to catch me."

"Maybe it was too weak," said the canid.

"Maybe. It died later that day. I came home. That's all."

There were maybe twenty villagers now, and as word spread, into the soup went bits of carrot and onion and plants of purple and blue that Twitch did not recognize, but when in Rome you eat Rome soup . . . The smell of it was familiar and odd, Thanksgiving dinner and Moon Festival cake, seashore and summit, flower and leaf. He wondered what it smelled like to the Dimmers. Most of the newcomers wore nightrobes, but a few had dressed for the day, and three in particular loomed in dark cloaks that seemed over-formal for sleepwear. Twitch stirred the pot. The dead fangwing rotated as well.

"What is it you think you are doing?" asked one of the darkly garbed Dimmers.

"I am making soup," said Twitch.

"You are doing more than that," said a second.

"If you want a different terminology," Twitch said, "consider it an application of Aarne-Thompson-Uther folktale type 1548. Or to look at it another way, as crowd-sourcing. Either way the soup will be good."

"It's changing!" said the girl, who now led a group of children peering into the pot,

their grownups uncomfortably arrayed around them. “I see a planet that looks all orange and dusty, with a bunch of little lakes and twisty rivers.”

“It resembles Mars,” said the canid who had been among Twitch’s first watchers. “In the home system. But I think it may be Galatea.”

“You are right,” said Twitch with a nod. “I am impressed.”

“We have not all forgotten the stars.” The canid glanced at the robed ones. “My great-grandparents worked the engines of the ark . . . I read of the Galatea scientists and their exile from Earth. But I do not know what became of them.”

“Not every ending is happy,” Twitch said. “But not every ending is really an end.” The pot, like the portal on a descending ship, revealed a swelling green valley deep within a canyon, a sparkling snake of river beside. “Earth feared what the Galateans would weave from algorithms and sim-neurons, and so Earth brain-wiped or exiled the movement’s key researchers. But among the stars the scientists could pursue their singular mission.”

Men and women in floral garb, computer-studded *leis* around their necks, circulated and talked and danced beneath the bright sun. “What manner of people were the would-be creators of gods?” Twitch said. “Artists. Artists whose audience did not yet exist, who expected no boon from their mechanical offspring save perhaps an ironic, notional, picosecond nod.”

Now the Galateans gathered in a circle near the canyon rim, and in their midst stood a polished black box reminiscent of a booth or coffin. “With joy and fear they whistled up the cloud of nanomachines that spread amid the dust storms of the world, a cloud that *thought*—or so they believed.” Sparkling motes rose from the box amid cheers and laughter, before blowing far across the purple sky.

“A month passed with no word from the newborn Intelligences. Six months. A year. A decade. The new gods did not speak. Did they exist at all? Arguments raged. Pleas echoed upon the wind. Men and women walked alone into the desert seeking some form of communion, and returned with contradictory visions born—perhaps—of deprivation only. A new generation abandoned all their parents’ work and attempted new paths toward AI. All seemed sound in theory; nothing worked. Were the gods of Galatea jealous, preventing their displacement by newcomers? Was the whole project flawed from the start? All that is known is that in over a century no new AI has emerged on Galatea. The descendants of scientists forever look over their shoulders and mutter imprecations to Beings who might or might not dwell like djinn or naiads amid the desert dust and river silt.”

“Is true AI impossible then?” asked the canid.

“Not at all,” said Twitch, “for after the Galatea exile, true AI was indeed grown on Earth, and is commonplace. Only on Galatea does it fail to function.”

“Then surely it is already there,” said the felid girl.

“The Galateans believe it. And most will not abandon their world, in hopes the AIs will one day reward their faithfulness.”

“I think I can understand their desire,” said the canid, glancing over his own shoulder at his three cohorts in the dark robes. “There was a time . . .”

“Yes?” said Twitch, and with his staff he stirred and shattered Galatea.

“It is my responsibility to keep the crops free of omnigluts and deepcreeps and other animals, and to that end I sometimes hunt and trap. I am careful in this work, for I wish to be proportionate in my killing. At times to learn the ways of beasts I leave Veiltown for long periods.”

Within the soup, the canid could be seen walking through the forest.

“That is I,” said the canid. “Indeed, that is how I appeared yesterday, down to the last detail. Your stone is not magical, is it starfolk? Nor is it a thought-reader. A sophisticated image generator? Loaded with orbital reconnaissance data?”

"What do you think?"

"I think it will serve. I did not look exactly the same on the day of my story, but what of it? A tale is a tale, and no hearer will experience it exactly as I did. What matters is that one day I found myself in the mountains where the deathblimps nest, and there beheld the fallen ship—yes. Well done. There it is. You've no doubt observed it from space, its broken and blackened hull spreading the length of five Veil-towns. It was but a transport from the great ark, yet it astonished me. I sneaked among the ruins, deathblimp shadows crossing outside. Day ebbed, yet I could not leave. That night I camped within, warming myself in a makeshift fireplace that was once the frame of a viewscreen, smoke rising through twisted breaks in the metal. I was not prepared when another screen behind me flickered to life."

Within the cauldron the younger canid, rubbing paws by the fire, was backlit by blue, and spun, sniffing.

"Yes," said the true canid, "though that is the wrong color, and I, out of sheer stubbornness, will not say what it was. But the small screen had survived, and some subsystem was awakened to my presence. A voice said, '*Crewmember, identify.*' Terrified, I gave the name and occupation of my great-grandfather. The machine—whatever ghost of the ship's computer yet functioned—told me, '*The ark was destroyed, technician, and only this lander reached its destination.*' Were the mountains the destination, I asked. '*No, the valley beyond,*' was the reply. I said it needn't worry, for survivors reached the valley. '*I do not worry,*' it said. '*Worry is for sapient beings, and I am not sapient. You are projecting your own nature onto me. A common error in humans, though less so in technicians.*' I apologized, and it said, '*I do not need your apology, technician. I am a machine.*'

"I answered, 'It is good for a man to treat things with kindness, yes, even things that do not feel, for it keeps him in the habit. And particularly with a hard man who must sometimes kill, it is good for him to keep apologies on his lips. I share them for my own sake, even if you, and the trees, and the rocks, and even the animals, do not want them.'

"*You are no technician,*' replied the machine, and indeed in my pride I had not spoken as one. '*You are an intruder. Alert!*' And from several points in the mountains came peals of alarm. Even weakened and dispersed, the sirens had a maddening effect upon the deathblimps, who shrieked and puffed from their nests and began overflying the wreckage, lashing with their tentacles. I knew that even if there was no logic to humanoid meat producing the alert, it would not discourage them from eating me. In terror, I said, 'Quiet!'

"*No. You are an intruder.*'

"My great-grandfather was Vasily Doyle. My great-grandmother was Yuki Singh. I am their descendant. Time has passed. Check the stars. Check your clocks.'

"A pause. Then, '*I provisionally accept that you are the descendant of technicians Doyle and Singh. However, you are still an intruder.*'

"There's nothing to intrude! Your ship is shattered into bits! I am, as yet, not. Have mercy."

"*I have no mercy. I am not sapient.*'

"Are you aware of the creatures savaging the remnants of the ship?"

"Yes."

"Are they not also intruders?"

"Yes. But a second alert would be redundant."

"Argh! Your alert is what is making them attack. Turn it off, or you will have killed me."

"*It is possible you are correct. But you remain an intruder. An alarm is indicated.*'

"I thought of hacking my way through its cables with my knife, but I did not know

how tough the connections were, or indeed if this not-sapient computer was located here or in another fragment. Clearly it had some manner of communing with other components. A strange thought hit me then. I set down my knife before the monitor and genuflected as if to an emperor of the stars. 'I surrender,' I said."

In the cauldron the younger version of the canid hunter prostrated himself in silence. Silent too were the watchers. Even the dark-robed ones held their breaths, as if they had never heard this tale.

"The alarm stopped," the canid said. "The lander's computer accepted my surrender. After a short while the deathblimps ceased their mad attack and returned to sleep. By morning they were again calm. For my own part, I was a model prisoner. In the dawn's light I walked thirty meters to the shell of cargo space the computer designated as a brig. There I waited. You may think me peculiar, keeping a promise to a machine, but consider my situation. I could run, but the alarm would sound, and I disliked my chances. On the other hand, I had only so much food. I chose to conserve my strength and stay alert for a sign of where the central processor lay.

"There was no speaker in the 'brig' and after perhaps an hour the computer called from the place of my campfire, '*Come, Mr. Singh-Doyle! Come, Mr. Singh-Doyle . . . !*' Fearing more deathblimps I sprinted to that spot. '*Your cooperation is noted,*' it said. '*You are free to move within the confines of the ship.*'

"The ship was torn apart,' I said. 'There are no confines.'

"*Objection noted. Stay at all times within twenty meters of a hull fragment larger than yourself. Your liberty is dependent on further cooperation.*'

"What do you want?"

"*I require updates as to mission status.*'

"So I toured the ship. I found the control room, the medical bay, the recreation room, the library. The lander had evidently been meant to double as an initial base, and it held many amenities. I ached to see spoiled medicines and charred paper books. As I walked I talked. Sometimes it seemed I was talking to myself, of things I had never attempted to articulate. I spoke of the founding of five settlements, and the loss of all but one. I spoke of the great beauties and terrors of Dimhope, and of the deathblimps that homed in on our communities, until all hid beneath the great bio-engineered Veil that baffled the creatures' poor vision and generated unpleasant ultrasound, but that also circumscribed our lives. How we gave all authority over science to the Blackcloaks. How passing starships grew fewer, the last two little better than corsairs. As if the state of the wider galaxy mirrored the deterioration of our colony.

"The computer interrupted me. '*Why did the descendants not return to the ship? There were resources here.*'

"I am wondering that myself,' I said. 'We were always forbidden to visit the mountains of the deathblimps. As far as I know, I am the first to violate the ban. The way here is marked with the graves of many of the First. My guess is your crew emerged to a massacre of which that generation was forever reluctant to speak. My only wonder now is that they salvaged as much equipment as they did. After the first generation, sensible warnings may have become terrified taboos.'

"By now I had glimpsed a fallen doorway marked COMPUTER CORE. With no fanfare I stepped over it and found an oven-sized processor covered with makeshift solar panels. Scribbled upon one panel were the words SINGH AND DOYLE WERE HERE.

"I froze. I had no illusions the thing that imprisoned me was my peer, or even possessed of the same spirit as a beast. And still . . . perhaps it is my canine ancestry. I had a bond with this thing, a bond that was in my blood. I winced to break it.

"Computer,' I said. 'If my people were to return to this place, would you help us? There must be much you know that we've lost. We could move you to our village. You would have purpose again.'

"*I am the lander's computer.*"

"To be a living thing is to be willing to adapt. To be a thinking thing is to see higher purposes than the here and now."

"*I am not a living thing. I am not a thinking thing.*"

"I beg you, free me, so that I might return to free you."

"*As previously stated, I have no mercy.*"

"You lie! You spared me last night."

"*No. You complied.*"

"I can damage your solar panels and leave you unable to function."

"*What solar panels do you refer to?*"

"And I understood. The machine had no awareness of its makeshift power supply. It was oblivious to my threat. I have killed many times. Never have I killed a person. And yet, I have looked into dying animals' eyes and failed to find comfort in the notion they were of a different order than I. Likewise, this computer."

"But," objected the man who'd fed the deathblimp, "it was not sapient. It *told* you."

"It threatened you," said the girl who'd ridden the shimmerblimp.

"Yes," said the hunter. "I was surely fooling myself, thinking I should show it mercy. But that is how I felt. Perhaps all I protected was something within me. Yet I was moved to speak. 'You have charged me with evaluating the status of the mission.'"

"Yes," it said.

"In our village are the journals of my great-grandparents and others of the First. I can bring these to you, and you may review them, and come to your own conclusions as to the mission's success. Would not this information be a more urgent priority than my status as prisoner?" Was there a pause? Perhaps I imagined it.

"*You may go retrieve the documents,*" said the computer. *'In certain circumstances I may accept a prisoner's sworn oath.'*

"I swear upon the graves of my great-grandparents I will return."

"*Agreed.*"

"The computer spoke no more. I left that place of death with great care."

The cauldron displayed a sober canid shifting from boulder to bush to tree, wary of shadows from the sky.

"That was nine years ago," the canid concluded.

"This explains much," said the third of the robed figures, and whether it was main-strain, canid, felid, or even male or female, Twitch was not sure. "You have persistently asked to enter the Vault, and been denied."

The canid nodded. "And I have never returned to the mountains. You have made me a liar."

"You cannot be considered a liar," the Blackcloak said, "when you lie to a machine."

"Is a lie not a lie? If I speak a falsehood alone in the forest, does it become truth?"

"Enough." The robed figure stepped closer to Twitch and removed the hood.

There stood the grey-haired woman who had loaned him the cauldron. "My first instinct was correct, starfolk. You are dangerous, you and your star soup."

"You haven't tried it yet," Twitch said.

"Will it poison us?" said the woman, with a twinge of smile. "Brainwash us? Mutate us?"

"Hardly. It is hot water with a touch of broth I applied beforehand, a twinge of minerals and organics within the stone, but mostly what Veiltown has added."

The man who fed the deathblimp said, "We're all up, elder. Why not eat?"

"I suppose," said the elder, still smiling, "we can kill him later."

Bowls and spoons emerged from mushroom-houses, curious hands and mouths to go with them. The grey-haired elder brought Twitch a ladle. As he served, the image in the cauldron splattered and shifted to reveal an icy moon with turquoise stripes,

shining in the black. He said, "Behold if you would the ice-moon of Aino. Its surface hides an ocean and a population of altered humans granted blubber and gills. Selkies or merfolk, if you will. It is a pleasant enough place, with its shadowy sea-monsters and phosphorescent wonders, but necessarily isolated from the galaxy. Except—"

The ladle plunged; as it emerged, white geysers were seen to erupt at the moon's fringe. As Twitch served, more followed suit, painting space with silver plumes.

"There is a native species," he said, "whose life-cycle depends on these eruptions. Seeds spill into space and settle upon the ice. A photosynthetic shell spawns a root that bores into the ice for months, feeding upon bacteria along the way. At last it emerges onto the ice's underside in the hidden ocean, blooming like an anemone, ready to catch underwater animals."

In the soup-kettle, purple flowers garlanded an alien sea.

"Star soup is good!" said the daredevil girl, and others agreed.

The grey-haired Blackcloak had shared the soup, though her comrades had not. "So," she said, "what have you poisoned us with?"

Twitch laughed. "I think you have guessed. I have poisoned you with stories. I nudged a meteorite to ground to get your attention. Then I installed it with just the sort of machinery Mr. Singh-Doyle guessed. But the stories—just like the soup—are your own."

"Not all our own. You cajoled us. Showed us strange sights from Beyond. Made us question life beneath our Veil."

"Is that a bad thing?"

"Your ship may be benevolent. What of other ships? Who knows what the future holds?"

"Not I. But I would show you something more, before I take my leave." The cauldron bubbled and now strange humans appeared in the ice-moon's sea, thick powerful men and women who shared much in common with fish or walruses. Rubbery green-brown plants covered their faces. They swam at the bottom of a vast ice-fissure. Together, with great effort, they began climbing out.

"There is a rite of passage that mirrors the saga of the seeds. Young Ainos cover their faces with bladders of breathweed and swim to the sites of the eruptions. Up, up they climb. They do not all make it."

The Dimmers saw figures tumble back into the fissure and out of sight.

"But those who reach the top step onto the thin-aired surface and behold the universe. For a day they nibble at the star-seeds and wait. If there is no one waiting for them, they climb all the long way back down."

Hand-in-hand in a circle beside the edge, shivering Ainos looked up at the stars.

"But if no one waits for them?" said the hunter who'd spared the computer.

"Who *would* be waiting?" said the man who'd sought the ocean.

"No one," Twitch said, "not for many years."

The Ainos broke their circle and without ceremony returned to the crevice. The image blurred and now star soup was just soup.

"What a hard journey," the felid girl said.

"But," Twitch said, "the Ainos still make it. They still look outward. And they are your nearest neighbors, folk of Veiltown, merely a few light-years away. More ships will be coming someday, to talk, to trade. They might take Ainos and Dimmers back and forth. Or who knows, you might build your own, in time. Or—"

"Yes?" said the elder.

"Or you could keep yourselves to yourselves. Like carrots in a cupboard. Like books in a vault. It's up to you. You're the best judges of what you can spare. Thank you for sharing star soup."

The wide, dim red-dwarf sun was up, and Twitch pulled out his meteorite, soup

dripping from stone and fur. He dried both with a handkerchief and set the shooting star onto the ground. The datapad in his vest pocket beeped and he consulted it, gold chain glinting in the new dawn.

"I must be going," he said. "Unless you truly mean to kill me?"

"Take me with you," a voice said.

He looked up, and saw that the whiskered, wide-eyed, pointed-eared girl had stepped beside him, as if requesting more soup. Behind stood her parents, furred hands shaking.

"You," Twitch said. "What is your name?"

"Alice."

"Bravo." He replaced his datapad and raised the star stone. "Brave Alice, you have trees to climb and shimmerblimps to taunt. And books to read, I hope. And . . ." He passed her the meteorite, and she set down her bowl to claim it. "This is yours. Talk to it. Ask it questions. Learn all you can. My ship is going to Aino but in six years, from your point of view, we'll be back. If at that time you want to step through the magic mirror, you are most welcome."

He looked at the gathered Dimmers. "I put good machinery into that stone. If Alice wants to share with you, then between it and the wreck in the mountains, you may reclaim much that you've lost. If you choose not to, that's fine—but interfere with Alice's learning, and we will know."

Alice's parents embraced her. "Thank you," the mother told him, though in what sense she meant it, Twitch could not be sure.

"I do not know," the elder Blackcloak said, "if I should thank you or not, if I should let you go or not, if I should be glad you are leaving or not. But go with my blessing. The soup was good."

In the dawn Twitch could again see the many colors she wore beneath her robe. "You have the recipe now," he said, knowing he would take to the stars a head full of brave villagers in the shadow of deathblimps.

On what new worlds would he speak of them?

Then he kicked and reclaimed the heat bricks, because Aarne-Thompson-Uther type 1548 has its formalities. A stranger comes to town, a stranger leaves town.

And leaves it stranger. ○

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SUB-GENRE

So apparently things went
from punk comma cyber
to punk comma steam.
After looking into it—and finding
neither internal combustion
nor nuclear punk—
I conclude
that punque skips
some kind of conceptual generation,
so that I expect the next thing to come along
will NOT be
wind-powered, but rather
horsedrawn, punk,
as we slowly step back, back, and
back, everyotherly,
to stonepunk, where I assume we will then find
Trog and his buds
arranging pollen-dusted knuckle bones, designing
Stonehenge or the foundations of Atlantis.
From those shores,
we could skip dinosaurs,
pterodactylian punkroc,
and all the rest of that Jurassic crap
to take one last—
littoral—step back
to a moon-stirred puddle
where longchain molecules
solemnly contemplate all possible futures
and finally choose to assemble
a tomorrow
free of reason.

—W. Gregory Stewart



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THE LAST ISLANDER

Matthew Johnson

The author still lives in Ottawa with his wife and two sons. A collection of his short stories, *Irregular Verbs*, will be published next spring by ChiZine Press and will include most of his stories from *Asimov's*, as well as work published in *Strange Horizons*, *F&SF*, and elsewhere. Matthew's newest tale for us was inspired in part by his work as a media educator and his interest in the ways that the online and offline worlds converge. He is particularly struck by people—often the young and those living in developing nations—who find ways to make technology created by others serve their own purposes.

Saufatu stood neck-deep in the water, watching the dawn arrive over the great empty ocean to the east. He raised the coconut shard in his right hand to his mouth and nibbled on the flesh, enjoying the mixture of sweet and salty flavors, then quickly glanced over his shoulder at the shore. He knew before looking that there would be no one there: even Funafuti, the biggest of the Eight Islands, was nearly always empty except on Independence Day. Here on Niulakiti, the first of the islands to sink, he had never seen another soul.

He turned back to the sea, took another bite of his coconut, and frowned. Something was out there. He squinted, trying to make out the dark smudge perhaps a half kilometer out toward the horizon. It looked like someone swimming, or rather thrashing at the surface; suddenly he remembered what he had put there, realized what was happening, and pushed himself into the waves.

It had been a long time since he had been swimming, but a childhood spent in the sea had inscribed his muscles with the necessary motions. He inhaled and exhaled salt spray with each stroke, getting nearer and nearer to the man—for he could now see that it was a man, dark-haired and tanned but unmistakably white—who was struggling for his life. The snout and fin of the grey reef shark, rising and falling from the water as it fought to draw the man down, completed the picture.

"Bop it on the snout!" Saufatu called as he got closer, hoping the man spoke English.

The man, who to this point had not yet noticed him, looked his way and tilted his head.

"Bop it on the snout!" Saufatu shouted again. He slowed to tread water for a moment, raised his left hand out of the water, and smacked it against his nose twice.

The man turned back to the shark, which was working to fasten its jaws on his leg, and tapped it gingerly. A moment later he smacked it harder, and the shark turned its head away; another hit and it thrashed its head from side to side, snapped its jaws on empty air and dove under the surface.

Saufatu reached the man a few minutes later, closing his mouth to avoid inhaling the bloody water. The man looked pale, but surprisingly composed given what he had just been through. He put his right arm around Saufatu's shoulder and kicked his legs weakly.

"Not that way," Saufatu said, shaking his head. "Past here it's all algorithmic. Just let me pull you."

The man nodded and then coughed, spitting out seawater. "Thanks," he said.

Saufatu said nothing, concentrating on his strokes as he drew the man back to shore. He helped the man out onto the beach, watching him carefully to make sure he did not have any more water in his lungs, and then leaned him against a tree. Saufatu picked up his clothes from where he had left them, and the jug of toddy he had left there as well. He went back to the man, handed him the jug, and set to work tearing up his shirt into bandages for the wounds on the man's leg. Luckily they were not deep, and had already been cleaned by the seawater; he was unlikely to carry them with him when he left.

The man took a swig of toddy, and then another. "Thanks again," he said. "I'm Craig, by the way. Craig Kettner."

"Saufatu Pelesala," Saufatu said. He glanced out at the sea. "We don't get many visitors here."

"I can see that," Craig said, "what with the welcoming committee and all. You really should put a sign up or something, warn people before they go swimming."

"It's only instanced in that spot," Saufatu said. "People know not to go there unless they want to experience it."

Craig frowned. "Why would they want to?"

"It's a memory. That's where it happened." He gestured out toward the sea. "Or so I'm told. Apisai Lotoala, he was one of the last people to grow up here—he was attacked by a shark right out there, so that's where I put the memory."

"And that's how he got out of it? By hitting the shark on the nose?"

Saufatu shrugged. "That's what he always said. All I know is, I've seen the scars."

Craig nodded slowly. "So—what is this place, anyway?"

"You came here. Didn't you know where you were going?"

The man shook his head. "I just picked it at random, pretty much. I look for . . . low-traffic sites. Mostly places that are basically empty, or abandoned. I didn't expect anybody else to be here, to be honest with you."

"Neither did I."

"So—what is this place? Why are you encoding instanced shark attacks?"

"This is my home," Saufatu said. "The Eight Islands were very very low, too low when the waters rose. So my family was given the *salanga* of taking a record of them, as best we could."

Craig looked along the beach from left to right, his head nodding slightly. "And it's all like this, full immersive dreaming?"

Saufatu shook his head. "We were able to record some of the other islands immersively, but this one is mostly 2-D. I was able to convert parts of it, like this beach, but the algorithms are expensive."

"What did you use?" Craig asked, crouching down and running his hand over the white, fine-grained sand appraisingly.

"Extrapolator 7," Saufatu said. "Price was an issue," he added, shrugging slightly.

"What about the shark attack? How did you record that?"

"I build the instanced events myself based on stories people tell me, or records in the old newspapers."

"Why?" Craig broke into a grin, held up a hand. "Sorry, I don't mean to be rude."

"We do it to remember," Saufatu said. "So there would be a record of our home."

Craig looked up and down the beach. "So where is everybody?"

"They have their own lives," Saufatu said. "They know it is here, and they tell me their stories to help build it."

"And who pays for it? This must all take up a lot of headspace."

Saufatu sighed. "There is some money. A fund—we had a lucky name, when they handed out the Web addresses, that other people wanted to buy. Of course most of it went to resettle our people, but there is enough left to do a little, for a little while."

Craig nodded. "Listen, I run this—it's like a guide, to interesting places in the Web, places my scouts and I find that not too many people know about. I think people would be really interested in a place like this."

"I don't know," Saufatu said. "We never had many tourists, even when we were above water."

"But that's just it. This place is *real*, you know, not just another dream with the same old tricks. If people were coming here you could maybe get funding from UNESCO, or the WikiHistory Foundation. Not just to keep the place going but make it better—emotion-encode the events, get custom algorithms." He took a breath, shook his head. "Listen, just think about it. If you decide you're interested, let me know."

Craig held out his right hand, and after a moment Saufatu took it: Craig's PID crossed the handshake, to be logged in Saufatu's terminal. Then Craig gave a small wave, and turned to walk back to the entry portal at the edge of the beach; Saufatu waited until he had gone, and then woke up.

Losi was already gone when Saufatu emerged from his room, so he boiled a kipper, cut it out of the plastic, and put it on his plate next to a half-can of *pulaka*. They had been close when she had been younger—mother-uncles and sister-nieces typically were, compared to the more formal relationships between parents and children and the taboo on cousins mixing—but since she had entered her teens she spent nearly all her time in her room or out of the house.

When he went outside he saw that she had left the truck. That was good for him, since it meant he didn't have to face the long bus ride from Waitakere down to his shift at the Auckland airport, but he couldn't help wondering who she had caught a ride with. He sent her a text, offering to pick her up when his shift was done, then got into the truck.

Traffic was worse than usual that morning, spreading out from downtown as far as the Mangere Bridge. It was still faster than the bus, though, and he had time for a coffee-and-toddy with a gang of the other Islanders before his shift started. There were maybe a dozen of them who worked at the airport, though the precise numbers shifted fairly often. Mostly they talked about nothing—work and fishing and the *kilikiti* matches—and sometimes, when Saufatu closed his eyes, he almost felt the water around him, like they were all standing hip-deep in the Funafala lagoon.

They all finished their coffee before it began to get cold and queued up at the security check. Saufatu's heart sank when he saw a new officer at the security kiosk, and he moved ahead of the others. When he got to the kiosk he took out his DP card and held it out.

The security guard, a ruddy-faced man in his twenties with buzz-cut hair, squinted at the card. Finally he shook his head. "Refugee card's not ID," he said.

"I'm not a refugee, it's a displaced persons card," Saufatu said. He jerked his head to indicate the row of Islanders behind him. "We all have them."

The guard frowned. "I have to call this in," he said. He picked up his phone and dialed it carefully, keeping a close watch on Saufatu as he whispered urgently to whoever was at the other end of the line.

Saufatu sighed. It was like this every time someone new came on at the security

desk. There were more Islanders living in Auckland than anywhere else in the world, but they were still just a drop in a tremendous bucket. The city was home to thousands of migrants from all across the Pacific, all there for different reasons: guest workers on visas, refugees from the political violence on Tonga and Fiji, second- and third-generation residents and citizens, native Maori, and people like him, whom the UN had provisionally declared Displaced Persons.

Finally the guard put down his telephone and waved Saufatu through. The other Islanders followed slowly, as the guard took each one's DP card and scrutinized it carefully before letting him pass. When they were all through, Saufatu headed toward the baggage terminal, noticing when he saw the Arrivals board that he was fully ten minutes late for his shift—half an hour's pay gone thanks to the new man at the security desk. He kept his pace up all morning, so that by noon he was ahead of schedule and could take a few minutes to watch the planes take off.

That was how he had gotten into the business: as a boy he had watched the flights that landed and took off from Funafuti's airstrip every day, watching the planes get smaller and smaller until they looked like frigate birds. Even when he was grown and working at the tiny airport he would sometimes think about flying away on one, visiting all of the places he had seen in the travel magazines visitors left behind. When the time finally came for everyone to leave, though, the airstrip was under water and they all went on old freighters that stank like septic pits and crawled like snails across the ocean. Then, when his sister and brother-in-law had left Auckland to join the Extraterritorial Government in New York, he had stayed to carry out the family's *salanga*, gathering stories and memories from the expats to build the virtual islands. Only Losi, just ten at the time, had stayed with him: "The surfing sucks in New York," she had said.

She was surfing when he came to pick her up, off a beach in Maori Bay that was studded with black volcanic rock. The road ended at the beach, no parking lot, so he just set the parking brake and leaned out the door, watching as she rode her board into the oncoming breakers, a little bit differently each time—hitting the waves a bit higher or lower, cutting left or right once she was riding a swell. It didn't look much like fun to him, but perhaps the fun part had been earlier in the day. The sun was low on the horizon behind her, and as it turned to red Saufatu began to get a headache; finally he honked the truck's horn, twice, and a few minutes after that he could see her paddling her board back to shore.

Once Losi was out of the water she unzipped her wetsuit, peeled it off, and rolled it into a messy ball. She stood on the beach in her black one-piece as a man with knee-length shorts and a ballcap came to meet her; she reached up to the back of her neck, detached the recording module from her jack, and handed it to him. The man touched his pico to the module, downloading everything she had experienced that day so it could be cut up in bits, stripped to pure sensation, and plugged into surfing dreams.

A blond-haired boy wearing a wetsuit that was unzipped to the waist came up and gave Losi a hug; she leaned close to say something to him, said goodbyes to all the other white boys crowded around them, and then finally gave a wave to Saufatu and started toward the truck.

"Good day?" he asked as she climbed into the truck, shoving her crumpled wetsuit under her seat.

She shrugged. "Caught some good waves this morning."

Saufatu started the truck, shifted gears, and worked at getting it turned around. He noticed a long scrape down her left shoulder. "Looks more like they caught you."

"I spent a little time up at the north end of the beach, getting knocked into the rocks."

"On purpose?"

"Someone's gotta do it."

"I didn't see that white boy doing it," he said, looking straight ahead.

She laughed. "Are you kidding? He got bashed twice as hard."

"If you say so." Saufatu was quiet for a few moments, watching for the turn back to the highway from Muriwai Road. "That reminds me, I met a fella last night who made me think of you—he was out swimming and ran into Apisai Lotoala's shark attack."

"What, a tourist?"

"Not exactly, I don't think. He said he goes looking for low-traffic places—his name was Craig Kemper, I think. Heard of him?"

She shook her head, then stopped. "Wait. Craig *Kettner*?"

"Yes. Yes, that's it."

"How can you not know who that is?" Losi asked. "What was he doing in the Islands, anyway?"

Saufatu shrugged. "He said people would like to visit them. Do a lot of people follow him?"

"Enough to crash your server," she said. "God, I can't believe you sometimes."

"Well, he asked to see the rest of the Islands—you can come if you want, show him yourself."

She nodded slowly—trying, he could tell, to stay cool. "All right," she said, and smiled.

There was a *fatele* that night, just a small one, in Donald Tuatu's backyard. Saufatu went over after supper, filled a plastic coconut half from the bowl of toddy and inched around the periphery of the party. There were no singers, just an old boom box, but a few teenage boys were dancing out the lyrics, two from one side of their "village" squaring off against three from the other.

Saufatu spotted Apisai Lotoala sitting nearby, filled up another coconut half, and headed toward him. He was a big man, still powerfully built despite his age, and the old folding chair he was sitting on buckled beneath him. He was wearing shorts and a short-sleeved shirt and the scars on his leg shone white in the moonlight.

"Here," Saufatu said, carefully handing him the coconut shell. "You looked dry."

Apisai drained the shell he was holding, set it on the ground and took Saufatu's. "Ta," he said, and tipped it back.

"Fella ran into your shark last night."

"Oh? What'd he do that for?"

Saufatu shook his head. "Didn't know it was there. He's not an Islander—American, I think."

"He get out all right?"

"Sure. I told him to bop it on the nose, just like you did." Saufatu took a drink of his toddy. "Look, I may be getting a chance to upgrade the Islands some. I'm going to need you to help me fill in Niulakiti."

Apisai shook his head. "I told you everything I can remember. I wasn't there long, you know—off on a freighter at sixteen, like all my mates. Ask me about that, I could talk all day."

"Saufatu!" Apisai's wife Margaret had spotted them talking and now came over. She was almost as tall as he was and wore a flower-print dress that fell in straight lines from her shoulders to her ankles. "Saufatu, where is that niece of yours? I haven't seen her in years, it feels like."

"She turned in early," Saufatu said. He tapped the back of his neck. "She surfs—records how it feels, they sell it to the dreamcasters. A whole day of it tires her out."

"But how is she going to meet a boy?" Margaret asked. "You know the ones her age, they're all getting jobs, in the city or on the ships." She turned to her husband. "She's so busy, we're going to have to find her someone nice. Can you think of anyone?"

"Leave me out of this," Apisai said.

"She's coming with me to the Islands tomorrow night," Saufatu said. "You can come too, if you like. I mean, you can come anytime—it's all for you."

"Oh, Saufatu, I don't know how you have the energy for those dreams," Margaret said. "You must have it very easy at the airport. I have to be up at five to go and clean my houses."

Saufatu turned to Apisai, who had been retired for nearly a decade now. "Well?"

Apisai shrugged and took another drink of his toddy.

Before going to bed Saufatu sent Kettner a text, suggesting they meet again the next night. He disabled the realtime lock and then went from island to island, planning the tour he would give to Kettner and Losi.

To his surprise, Losi was still there when he got up: even more surprising, she was in the kitchen, boiling a bag of kippers and heating a bowl of *pulaka* in the microwave. "Good morning," she said, putting a plate and fork down as he sat at the table.

"Good morning."

If Losi noticed his bemusement, she showed no sign of it; instead she pulled the bag out of the boiling water with tongs, cut it open, and slid the reddish fish onto his plate, getting to the microwave just as it began to beep. "How was your night?" she asked.

"Fine," Saufatu said. He flaked off a piece of kipper with his fork and chewed it slowly. "Fine. Thank you."

She spooned a pile of hot *pulaka* onto his plate. "Have you heard from Craig Kettner?"

Saufatu shook his head. "Not in the night. I haven't checked my texts this morning, though." He took another bite of the salty fish, chewed it thoughtfully. "Do you need a ride this morning?"

"Are you sure you have time?"

He nodded. "Sure. Just let me finish up and let's go."

"Okay." She smiled, then turned to put the empty bowl of *pulaka* in the sink. "Do you have time to check your texts first?"

Luckily she was recording at Karekare Beach that day, a bit nearer to home than where he had picked her up the day before; luckier still the regular security guard was back on duty and waved him right through, so that he was only twenty minutes late and short an hour's pay. He checked his texts before starting work and found one from Kettner, agreeing to meet him on the Islands that night (though of course it would be morning for Kettner, if he lived in America). After that the day went quickly, Saufatu's mind barely registering the bags he moved from plane to carousel as he rehearsed the tour he had planned.

When his shift was done he picked Losi up from the beach, smiled at the way her eyes lit up when he told her about the text from Kettner; she was nearly bouncing in her seat the whole ride home, and throughout supper she pressed him for details on his first meeting with Kettner. Finally it was time to hook up their dreamlinks and go to sleep; after the usual moment of wild dreaming the REM regulator kicked in and they both found themselves on the pink sand at the tip of Funafala, the narrowest inhabited island in the Funafuti group, where they could see both the lagoon and the western islands and east to the open sea. It was also home to the village where he had grown up, and most of the landscape was drawn from his own childhood

memories: thick stands of coconut trees, huts with thatched or sheet-metal roofs, and the wrecks of small boats that he and his friends had used as forts and playhouses. Kettner was already there, looking at a pair of small wooden boats, with outboard motors and canvas soft tops, that had been pulled up onto the beach.

Saufatu waved to him, took Losi by the hand, and led her over to the boats. "Craig, thank you for coming. This is my sister-niece Losi—she does dream work, too."

"Really?" Kettner said. "What do you do?"

Losi shrugged dismissively. "I'm a recorder—we just do B-roll; you know, generic surfing stuff, but Brian—that's the guy I work with—he's an indie dreamcaster. Whenever we have enough time and money we record some more."

Kettner nodded appraisingly. "That's great. Why don't you give me your demo reel? I'll check it out."

"Cool," Losi said, smiling. "Yeah, I will, cool." She held out a hand, and after a moment Kettner reached out to shake it.

"Do you mind if I take some recordings?" Kettner asked. "Just samples, to show people what I'm talking about."

"I can do it," Losi said. "If that's all right with you, Uncle."

Saufatu nodded quickly. "Yes, all right."

Before he had finished speaking she was in the water, making a long and shallow dive out toward the wrecks in the distance. Kettner watched for a few moments as she crested the low waves, then turned to Saufatu. "So what am I seeing here?"

"This is where I grew up," Saufatu said. "It's the southernmost island of the biggest atoll. All the islands in this group ring around Te Namu—that's the lagoon, there—the swimming's good here, on both sides, and there's reef snorkeling too."

"Your niece mentioned surfing?"

Saufatu shook his head. "We never did that here. Losi, she grew up in Auckland—her dad worked for the consulate there—and those kiwis are mad for it. You get bigger waves on the sea side of the western islands, but we always stayed in the lagoon where it's safe."

"Safe?"

"Well, except for the sharks."

For the rest of the night Saufatu led Losi and Kettner around the Islands—carefully avoiding Fogafale Islet, where paved roads and cement houses spread out from the airstrip to fill every inch of the island in a thick sprawl; though he had recorded it accurately, he suspected it was not the side of the Islands that Kettner thought his followers would want to see. Instead he took them up to the five small islands in the Conservation Area on the western side of Te Namu, where there were good-quality instanced interactions with green turtles and fairy terns. The World Wildlife Fund had financed the recording of these atolls, which was why they had more detail and interactive features than the inhabited islands. Only Tepuka Savilivi, the sixth and smallest island, had had to be reconstructed from tourist photos and satellite maps; it had been swamped before the recording began, the first of the islands to sink entirely.

Everywhere they went Losi recorded samples—diving in the warm, shallow water of the lagoon, climbing trees to cut down coconuts and peering close at terns that hovered curiously in front of her, hanging in the air just inches from her face before flitting away into the trees. Saufatu ended the tour in Nanumea, where they could see the wrecks of small ships just offshore from the village and, out toward the horizon, the rusting hull of the *John Williams*.

"That's a US Navy cargo ship—the Japanese sank it in the war," Saufatu said.

"Can we go out there?" Kettner asked.

"To the ones near shore, yes, but not the big one," Saufatu said. He threw a look at

Losi. "It's still there, though, just a little bit further under water. Someone could go out there and record it, if we had the money."

"This is really remarkable," Kettner said. "I can't believe nobody knows about it."

"Nobody knew about the Islands before they sank," Losi snorted.

"I never tried to publicize it," Saufatu said. "It's really just meant . . . for our people, you know. But if you think that this can bring some money in—make it so more of us can be involved in upgrading it . . ."

Kettner shrugged. "I can't promise that, but I do think a lot of people will be interested in seeing this. So much of what's out there is so fake, you know? But this really lets you feel what it was like to live here." He held up a hand. "I won't do anything unless you're sure you're okay with it, though. This is your baby."

Saufatu looked over at Losi, then nodded. "Yes," he said. "Go ahead."

"Great—I can do a preview reel from the stuff Losi captured, and I'll let you know when the piece is going to run," Kettner said. "You might want to rent more server space."

Losi spent most of the next day locked in her room, carefully culling the footage she had recorded—Saufatu told her that Kettner would surely edit it himself, but she said she wanted him to be picking between good, better, and best—only emerging more than an hour after Saufatu came home from the airport to eat a reheated bowl of mackerel and breadfruit and then crash in dreamless sleep.

Saufatu had hesitated to tell other Islanders about this business with Kettner, unsure what they would think about a bunch of foreigners coming to the Islands, but when he saw Kettner's "preview reel" he knew he had to share it—proud of the work he had done in conserving the Islands, of course, but also of Losi's work in capturing it. The footage had not been stripped and sliced, unlike her usual work, so that it captured not just what she had experienced but how she had felt about it as well. It had all been as new for her as it had been for Kettner, and her joy in swimming, climbing, and exploring was clear—not to mention her evident pleasure at showing off. He forwarded the preview to everyone on his mailing list, along with an invitation to join them when Kettner did his show two nights later.

The next day was Saturday, Saufatu's day off, and he suggested to Losi that they go out to the beach together. They had not done this in a long time, not since she tired of the calm and shallow water he preferred, but she gathered up the towels and picnic gear and brought them to the truck—stopping, he noticed, every few minutes to check her texts.

She was silent most of the way out, distracted, and he didn't push her to talk; the truth was that he felt much the same way, thinking about how things might change for the Islands. They spent all morning in the water, swimming and bodysurfing on the gentle waves, then laid out their lunch and tucked into their sandwiches.

"I'm glad your friends could spare you," he said, looking out at the clear sky and whitecapped sea.

Losi shrugged. "They're going to have to get used to it," she said. "All the stuff I do for Brian is stripped and sliced, so he can replace me easily enough if he has to."

"Would it be nice, doing work that has a bit more meaning to it?" Saufatu asked. "More of *you* in it?"

She shrugged, then nodded, and looked away; they finished their lunch in silence and then went back into the water, swimming against the waves until they were tired enough to be sure they would sleep.

Losi spent the whole trip back leaning out the window, her right knee bouncing and her left hand tapping the seat. Before he had even turned off the engine she was out of the truck and running to the door of the house.

Saufatu set the parking brake and drew the keys out of the ignition. He was just climbing out of the truck when he heard her shouting from inside; he ran to the house, not bothering to lock the truck, and met her at the door. "What's going on?" he asked.

"It's Craig," she said. "He just texted me. He wants me to be one of his scouts."

"What?"

"I mean, I knew he liked my footage when he didn't strip it, but I wasn't sure—you know, I mean, *everybody* wants to scout for him—"

"But—" Saufatu frowned. "What about the Islands?"

Losi frowned too, cocking her head. "What about them?"

"I thought—Kettner said he thought we could get funding to finish the Islands, upgrade them. I thought you could help me with that."

"I'm—I'm sorry, Uncle," she said. "I just can't pass this up. This is—I'll never get a better chance. And it's work I can do from here; I won't be moving—not right away, anyway."

"And what will I tell your father? What will he say when he hears you're just giving up on your duty?"

"He'll probably be glad I won't waste my life, building some crazy fantasyland nobody but you cares about," Losi said. She glared at him for another second, her jaw set, then turned and ran back into the house.

Saufatu stood for a long moment, shaking his head slowly, then turned at a noise behind him. Apisai Lotoala was standing in front of his house, looking uncomfortable. "Everything all right?" he asked.

"I'm sorry you had to hear that."

Apisai shrugged. "I have a son, you know. They're all the same at that age."

"No, it's—it's more than that. She was never interested before, in any of it, and then when she wanted to come see the Islands I thought . . ."

"Nobody's interested in home, not at that age. None of us could wait to leave the Islands." Apisai shrugged. "Maybe it would have been different if we'd known we could never go home, but I don't expect so."

"But you can," Saufatu said. "Come tomorrow night, you'll see. And we're going to make it even better; it'll be just like being there."

"I know what that's like," Apisai said, then held up a hand before Saufatu could respond. "Fine, fine—I'll be there."

Losi's door was shut when Saufatu went inside, and his hand hovered over it, ready to knock; after a long moment he took a breath and let it drop to his side. What could he say to her? He had thought she didn't care because she had grown up here, had never known the Islands, but he had to face the fact that none of the ones who had grown up there cared either. He sat down at the kitchen table and started to write a text to Kettner, to get him to cancel his visit: it felt like a fraud now, absurd to think that a virtual reconstruction could give someone any sense of what it was like to be an Islander. For the tourists, it would be nothing more than another fantasyland, like Losi had said; for the Islanders it was just a dusty photo album.

Saufatu's hand hesitated over his pico's airboard; after a moment he waved it back and forth to cancel the message, then picked up the pico and took it to his room. He hooked his jack up to the dreamlink and then forced himself to go to sleep and get to work.

Saufatu walked down the Niulakiti beach to the shore, dodging tourists as they ran back and forth across the sand. He had seen them all over the Eight Islands, walking along the beaches, watching the fearless birds, swimming out to the wrecks—everything that had been in Kettner's preview reel.

Apisai Lotoala was at the shore, standing just ankle-deep in the water and surrounded by a knot of Islanders who were all chatting together, drinking toddy from plastic milk jugs and casting occasional glances out to sea. So far as the Islanders were concerned, this was no more meaningful than a backyard fatele; Apisai waved to him as he neared, but Saufatu just nodded back, not feeling any need to be humored.

He spotted Kettner and Losi about a half-mile out, near where the shark attack was instanced: he thought he recognized the blond boy who had been surfing with Losi out there as well. He waved, and Kettner and Losi began to make their way back to shore.

"What did I tell you?" Kettner said as he walked out of the water. Losi followed a few steps behind, her eyes lowered. "They love it."

"It's very gratifying," Saufatu said.

Kettner laughed. "I'm glad you think so," he said, and shook his head.

Losi tapped Kettner on the arm. "Listen," she said, "I'm going to go, okay? Text me."

"No, wait," Saufatu said. He took a step past Kettner, looked her in the eye. "Just stay a little longer. Please."

"Uncle—"

Suddenly there was a noise, a deep note like someone blowing on a conch shell. A ship had appeared out on the water—or rather dozens of instances of the same ship, a battered old freighter that hauled itself slowly toward every shore of the Eight Islands.

A moment later and tourists and Islanders alike were aboard the ship, packed tight on the decks or else peering out of the portholes below. From there they could see the deep-water wharf at the north end of Fogafale and beyond to the narrow streets and concrete buildings where most of the Islands' people had lived for the last fifty years.

There was no water on the ground; this was no sunken city, no drowned Atlantis—only an island that had become too low and too salty to be inhabitable, just one more of the thousands of lifeless atolls that dotted the Pacific.

Kettner was at his elbow. "This is what it was like, isn't it?" he asked. "When you left."

Saufatu nodded. He saw Apisai Lotoala leaning out over the rail, his head turning in wide arcs from side to side and his eyes gleaming with tears. Of course his people hadn't needed the simulated Islands: every one of them already had an unchanged memory of their home the way it used to be. What they had not had, until now, was a chance to say goodbye.

The ship's horn blew again, two sharp blasts, and it began to move away from the wharf. Saufatu turned to see Losi standing behind him. "I'm sorry, Uncle," she said.

"Don't be. You were right."

"But you're not—sinking it? Everything you did?"

"No," Saufatu said. "It'll still be here, for people to see what it was like before—or to help people remember. But this will be the only way to leave."

"Listen," she said, "I could help out for a while, if you like. I'm sure Kettner would understand."

He shook his head. "Do you know, when our people left Tonga and Samoa, they thought everywhere in the ocean had been settled? But they set out again into the open sea, just to see what was out there." He took a deep breath. "Go with Kettner. See what's out there."

She nodded, and they both turned back to look over the side. The wharf and the islands beyond it were moving away in accelerated time, shrinking and then finally fading from view, lost in the trackless ocean. ○

NOUMENON

Robert Reed

Robert Reed tells us, “‘Noumenon’ is an odd old word that I found while wandering lost across the landscape of Wikipedia. I had a story in mind, and I forgot that story, but then I was wandering lost in my Great Ship universe and found the perfect place for an odd old word.” Readers who can’t get enough of the Great Ship universe will be delighted to learn that the author recently signed a three-book deal with Prime Books for a new trilogy set in that endlessly intriguing milieu.

The signal was feeble but intriguing—a twenty-hertz radio source tied to an ice-clad world orbiting an M-class star. A xeno-researcher named Mere was dispatched to investigate a deep warm ocean full of vibrant life. But what looked intriguing at a distance proved tragic. The cold white crust of the world hid nothing but cold acid and sluggish bacteria. An alien species once tried to colonize the planet but failed miserably and subsequently went extinct. All that remained was an automated station broadcasting bold, impossible plans. Yet the human remained upbeat: In her final transmission, Mere reminded her superiors—the lordly captains—that she still had plenty of time to wander. The native hydrogen had replenished her fuel stocks. A million sweet vectors were ready to lead her home. The Great Ship was steady-quick, but streakships like hers were swifter and far more nimble, and to give her meanderings that veneer of respectability, she claimed that a nearby belt of sunless worlds was teasing her with signs of activity—odd heat signatures and odder cold sinks that only she could see and that might, just might signal a civilization or two fighting to avoid detection.

This was only Mere’s third mission, yet she had already proved herself capable. Nobody was concerned when she stopped broadcasting—stealth was a powerful ally when chasing secretive species—and no alarms were raised when she was past due. Captains worried about quite a lot, but not about that tiny woman with legendary independence and endless reserves of what could only be regarded as exceptional good luck.

Washen was one of the waiting captains. Born inside the Great Ship, she was an ambitious and talented and perpetually optimistic human rising steadily through the endless ranks. The missing xeno-researcher was more than a colleague: Mere was a good friend and trusted confidante, and Washen missed their long conversations about humans and aliens and how to trick ten thousand species to coexist peacefully inside one enormous starship.

Thirty years after the due date, Washen sent a few words back along her friend’s most likely course, asking for a whisper to prove her existence.

No whisper came.

Fifty years of silence triggered a longer message. Washen begged for the recipe to cook grief for a pack of windells—an embarrassing story known only to the captain and Mere, and of course to the giggling windells.

No punch lines arrived and no giant telescope saw her engine burning, but Washen kept her worries small, waiting for the stories to come.

Higher captains moved Mere from the active roster to the missing, and at the fifty-nine-year-late mark, her small, sophisticated ship was logged as unavailable.

Seventy-one years behind schedule, her accumulated pay was funneled into a trust reserved for the beneficiaries mentioned in a sealed will.

At the one hundred-and-nine year mark, the Master Captain's office declared the streakship lost in the course of duty and began training of a new xeno-researcher selected from the candidate pool—mostly miscreants with just enough imagination to believe they would find happiness in the void far removed from comfort and normalcy.

A century and a half of silence earned genuine concern. Mere was later than any normal late. Even if she were healthy, vast distances had to be covered, while wandering comets and gravity wells never stopped accumulating. Worst of all, the Great Ship was approaching what was dubbed an omega burn, where its course would be significantly tweaked. The burn was scheduled long before Mere embarked, but its duration and precise trajectory weren't known until today. No matter how swift the streakship was or how lucky Mere might be, there was a moment looming when she would find herself out of fuel, racing toward a rendezvous with nothing but empty space.

Washen planned a simple funeral—not to mark her friend's death, which probably would never be known for sure, but to celebrate a friendship that had proved mortal and all the richer because of it.

Then at the one-hundred-and-sixty-seven year mark, seven months shy of the omega burn, telescopes identified an exhausted streakship making a rapid approach. Every spare gram had been jettisoned from the craft. There was no com-system and minimal life support, and the only remaining fuel tanks were drained dry by one final inadequate burn. Deep-space grit had battered the exposed hull, but someone had skillfully reconfigured the ship's hyperfiber armor, shrouding a substantial cargo hold that didn't match the original schematics. Coming in too fast, the streakship avoided Alpha Port and every other official docking station, striking the hull like a flat stone and then skipping, pieces scattering wildly while the cargo hold rolled like a ball out into the middle of the wreckage field.

Washen was third on the scene.

A fortune in high technology was destroyed. Attempts to contact the pilot were unanswered, but from the cargo hold came a coded light that warned everyone to stand aside, some undefined hazard lurking in its interior.

Washen stood two steps inside the quarantine zone. A tall woman, more stately than beautiful, she was wearing a borrowed lifesuit and a captain's cap. Glancing back at the support staff, she asked what was happening onboard.

The lead engineer eased forward. "There's too much stealth," she complained. "A lot more shielding than the girl left with, that's for sure."

Washen urged the engineer to approach. "Hello, Aasleen."

"Madam."

"Do you know the pilot?"

"By reputation," Aasleen said. "And we've had a handful of conversations over the last thousand years. So I don't know her, madam."

"Tell me about the shielding," the captain said.

"Metamaterials slathered inside that hyperfiber blister. And no, I won't guess what that could possibly mean."

Standing on the bare gray plain—the largest expanse of pure hyperfiber any-

where in the universe—the two officers watched the warning light pulse on and on, and they studied the mystery that didn't move and the stars that moved very slowly. Then Washen turned to the engineer, who happened to be another one of her good friends, and being nothing but honest, she smiled and halfway laughed as she said, "This couldn't be any more fun. Now could it?"

Instinct shouted at her to flee and she went fast fast fast to put herself in that sweet place where she could not be caught. Just once she looked back, beholding what had no right to exist, and not knowing her foe, she felt such perfect terror that her body was suddenly filled with power. She launched herself from the ground and landed and launched again and then fell back again to the wide graveled beach. Then she imagined her new enemy bearing down on little her, and for the first time since childhood she leaped high and beat the air furiously with her adolescent wings, the half-grown body carried impossibly high into the bright sky.

Then her wings lost their rhythm.

Flapping wildly and with little purpose, she fell. The smooth lovely shoreline seemed remote now. She was tumbling toward a rocky knoll, watching the knoll with two eyes and the beach with the other eyes, fighting for the courage to look farther. The sea stretched out as it should, flat and calm, reflecting the glory of the sky's light. Despite every hope, the intruder that terrified her was still there—a stubborn round object of undetermined size, though it seemed fantastically large. Floating motionless on the endless sea, it was silent and unwelcome and cold to the eye and deeply, wickedly wrong, and what unnerved her most was the sense that the intruder, impassive as it seemed, was watching her.

She dropped hard on the knoll's crest, on the whitest rock in the world. Exhausted wings begged for rest, but first she had to show her power, her bold and considerable will. Elegant wing waves and thunderous flaps proved that she was no small thing. She screamed and leaped a little and then leaped higher, and was the intruder impressed? Nothing changed in its appearance, but wasn't that the mark of real fear? The enemy was stunned, maybe. Maybe she had the mysterious thing ready to flee. Perhaps another few artful flaps would make it abandon Creation for good.

But her exhaustion was too much. Lowering her wings, she breathed and quivered and watched what refused to change, and she wondered if perhaps she was an ignorant, silly fool.

This was one of her defining traits: A wicked capacity for doubt. Her first-mother said it was a weakness and would eventually be the source of her doom. But that quality was what her second-mother loved best about her, and reading signs nobody else could see, the woman promised her child that there would be a time and a circumstance when nobody but she would be able to appreciate what was happening.

Eventually the girl felt rested. Still perched on the white knoll, she was ready to flee by whatever means seemed best, and that's why she stood again, watching the intruder while listening to a thousand neighbors leaving by flight and by foot—save for the rich ones who rode fancy wagons into the interior.

The world was fleeing, but she was not.

Not yet, at least.

She turned her full attention on the impossibility riding the mirrored sea. Where had it come from? What did this mean? Then she eventually heard new voices approaching from behind, voices from those who heard stories of an apparition, and despite fear and good sense, they had come down to the edge of the world to see what shouldn't be.

These were souls like her, the girl realized.

And just like that, she felt as if she weighed nothing, but instead of fear, this time she was buoyed up by an unexpected and luscious happiness.

Rich emptiness stretched out before Mere. Sunless worlds of many ages, many constitutions, had assembled themselves into a ribbon-like cluster perfectly aligned for a long careful flyby. Some of those worlds were large and naturally warm in their hearts, nourishing oceans of methane or water as well as vigorous life forms. Colder places might conceal little colonies of hermits and refugees and other tall-technology oddballs. And there was always the promise of some full civilization struggling not to be found. But the hot and frigid signatures that she mentioned to the captains were lies. Mere had seen nothing interesting while looking up from the disappointing first world, and she didn't even bother synthesizing data to give her fable a spine. This was her mission. This was her ship, if not by title then at least by every measure that mattered. A steady watchful journey along the dark ribbon would give her hundreds of large targets and millions of comets. The odds of success—some good, worthwhile, and profitable triumph—seemed just short of inevitable.

By some measures, Mere was any modern human: She had a tough body ready to heal from all but the most grievous wounds and a tougher, nearly immortal mind that could hold thousands of years of experience and small wisdoms. Except for the tiny body and the waif face, she was immediately recognizable as human. But her history was as peculiar as any great ape could ever claim. She was an embryo when her family and entire crew were killed in deep space. Born in poverty and pure isolation, she was raised by the battered, voiceless ship. Eventually the ship dropped the orphan on a living world, and she was raised by natives who worshipped her as a god and despised her for being a god. As their world was dying, the aliens sent Mere on her way to complete her journey, which was why she was thousands of years old and deeply peculiar before ever laying eyes on another human being.

Mere was barely human, and she was barely anything else. Boredom was an affliction for other people. Loneliness was for souls profoundly different from her own. She was curious and resourceful, and like the extinct creatures that raised her, Mere understood that she was insignificant—another whisper in the multiverse, freed by her tininess, and as inevitable as the stars.

As a xeno-researcher, she sneaked up on these orphaned worlds, telescopes watching for EM signals and heat signals while neutrino detectors sniffed for signs of fusion reactors burning inside hidden cities. But nothing earned her affections. She studied and recorded and sometimes tossed a few tiny probes overboard, impacting on the frozen atmospheres at a fat fraction of light speed. But the probes found nothing amazing, and with a third of her journey done, Mere started to plan excuses for her long delay.

Then one cold terrestrial world gave a strong signal.

Bright and hot and very beautiful, the display might well be a city floating on a frozen sea. Mere began to cheer while her AI pilot calculated courses. If she maneuvered now and made a hard burn now or in the next nine hours, she would reach that world at a manageable pace. Unfortunately the world was turning, the interesting face invisible for now. For ten hours she studied the inadequate data, and then she fell asleep and dreamed, waking without clear direction from intuition or her fellow gods. But after flipping a mental coin, she ordered the pilot to make the tardy burn, ignoring the safety margins on her main engine. Eleven minutes into the bone-smashing deceleration, the target world finally turned its intriguing heat source back into view, and what seemed fascinating before proved to be nothing. The brightness was the splash mark where a comet recently hit a pocket of salty dead water.

The rocket burn had to be finished regardless; how else could she make up the spent fuel?

Coming in too fast, she damaged the streakship when she splashed down inside the slushy fresh crater. Systems had to be repaired, and Mere was as good with tools

as any of the mouse-sized robots that helped maintain her ship. She was still reworking the main pumps when one of her resident telescopes noticed a far sun flickering. Looking harder, it found a shielded and cold and not particularly large body moving on a separate but roughly parallel trajectory.

Mere used every telescope, measuring the object.

Ten billion kilometers separated her and it, which was nothing. It was a jump done easily and without much fuel lost, and she soon placed herself close to an object that was as artificial as anything in the universe. She knew quite a lot about machines, particularly alien machines, but this was something rarer—a dark, sleek, deeply engineered collection of sophisticated devices bearing little resemblance to anything waiting inside any of her onboard texts or familiar to her resident AIs.

No standard markers defined an owner.

As far as every sensor could tell, nobody was onboard.

Mere could have sent word of her discovery. But there was no telling who might notice her voice, and worse, who might come here to interrupt her fun.

Mere went onboard. Tenaciously cautious about what she touched and what she did, she recorded everything, and after several weeks she finally slipped inside the belly of this unexpected, undoubtedly lost machine, finding an object that made the rest of it seem almost ordinary.

The world stood behind her, behind all of them. They numbered in the thousands, perhaps more than ten thousand, and the last of them towed in rumors of multitudes marching from the ends of the world.

Perhaps that was so, perhaps not. What mattered was the impossible object floating on the once-perfect sea. Questions about what it was and what it couldn't be were offered and debated, resulting in contests of will and reason, flapping wings and occasionally ugly fights. But the greatest question, at least for some, was deciding what they should do about this object floating at the edge of existence.

Inevitably the conversation turned to boats. But not the narrow paper boats built for children and child-like adults, or the little skiffs that rode the world's rivers and lakes. They needed sturdier craft, magnificent in scope and able to bear considerable weight while crossing the slick sea, and since distance was never easy to measure at sea, they would need supplies and bravery and the strength to use paddles and enough conviction to bear up while carrying every abuse.

Three groups coalesced around a trio of plans. Leaders were named, talents were claimed, and the countryside was scoured for mature blue-shafts and paper-growth and living waxes that would seal gaps and help keep the boats riding high.

The largest group pulled up an entire forest before setting to work on a quickly built vessel. Their ship was gigantic enough to carry forty bodies out to where the ship looked tiny, and that was where the hull was breached—far enough away that nobody could hear the panicked shouts as everyone sank and died.

The girl belonged to the second largest group. They were the slowest workers, as it happened, led by a guild engineer who seemed to have considerable knowledge about the other fine sciences. The engineer advocated caution and careful pacing. He grew even more certain after the third group launched their boat. While there was room for ten, he claimed that a crew of five would be much better, and after studying everyone's strength and everyone's will, he named his five—small and young, all of them, one of them being the girl who once flew away from the sudden marvel.

Others would have complained if he named the crew earlier. But their competition had left, riding swiftly out into the glare of sea and sky where they were soon lost. The race was lost, and who cared who went chasing after the winners?

But the girl was happy, even if she was in the losing party.

Beating her wings happily, she promised her strength and her scarce courage too, and then she thought to ask the leader what he believed that the marvel was.

"It is another world," he said calmly, as if nothing could be more obvious.

But there was only one world and it was theirs. Maybe she knew little about history and the sciences, but she would recall any story about a second world cast out onto the eternal sea.

"There are no stories like that," he replied. "When I was your age, I made a careful study of this very issue. None of our old writers speak of second worlds, and to my mind that signals that this is a truly unique event."

She enjoyed being in agreement with this learned fellow.

"But any answer leaves other questions," he continued. "For instance, where did this new world come from? And even more important, what caused our world and our sea to come to this Creation?"

About the first question, she knew nothing. But she immediately started to recite the story about the Creation.

"Yes, I know the legend," he said, shriveled adult wings beating with authority. "And outside imbeciles and perhaps the dead, everyone knows that story by heart."

"Of course so," she said.

"Everyone," he repeated. Then he listed the world's nations and its cities, including remote places that she had never heard of. And once the enormity of the world was established, he concluded by saying, "Each of us is born with that story in his heart and her head, and as a man of science, that is a mystery unto itself: Why do we know that so well?"

"That is a wonder at least equal to the puzzle floating off our perfect shore."

Knowing enough was never possible. Even knowing half-enough was unlikely. Ten thousand years of training, memorization, and diligent practice couldn't prepare the xeno-researcher to meet every situation with suitable expertise. The better solution was to stow as much knowledge as possible, carrying AIs and encyclopedias and other forms of bottled brilliance into the wilderness, and hope that gave the lone soul resources enough to make sense of every conundrum.

Mere had a battalion of sleeping AIs waited to be called. They consumed room and power—two assets that she didn't like to share—but after five months poking around inside the alien vessel, it was time for a companion.

"Hello, Aasleen."

Floating eyes and sinuses and a standard mechanical mouth were surrounded by a facsimile of the famous Ship officer. Eyes blinked and the nostrils inhaled the dry cold air. The AI paid enough attention to the living person to realize that Mere wasn't worth a second glance. But the room was fascinating. Hyperfiber cabling and superconductive arteries were woven around technological conundrums. Every machine was deeply, wonderfully unexpected. Mere had resurrected ten of the resident readout screens, but they were filled with coded symbols and jumbled, unhelpful images that only heightened that delicious sense of understanding almost nothing.

"I don't recognize anybody's fingerprints," Aasleen said. "Where are we?"

Mere explained.

The facsimile pointed and pointed. "Well, that could be a plasma router, and those could be—probably are—antimatter genies. But of course everything is richly alien, and since the facility is so strange, I assume that it's ancient and lost."

"That's what I am assuming, yes."

"Have you sent word home?"

"I would have, but this facility might not be old and misplaced. Someone might notice my signal, and maybe that someone has a rightful claim."

"More likely, he would just rip the prize from your grip."

"Exactly," she said.

"Show me your maps and diagrams," said the engineer. "Show me."

The next day was filled with silence and hard study. Wearing a personality made the AI slower than a machine or a human. That was one nagging limitation of this trickery. But progress was made, and meanwhile Mere had time to invest in the routine maintenance of her streakship—a dozen little jobs that didn't require the help of a Ship engineer.

Aasleen called her back to the alien ship. "This is all fascinating," she said.

"It is, yes."

"This big place was just one piece of something much bigger." She pointed to clean old breaks on the exterior, adding, "Something very bad happened. Maybe it was a million years ago, or maybe a thousand times farther back."

"A sobering concept," Mere said.

"Thank you for showing me. But really, you should dredge up a historian or your xeno-archaeo AI. They could tell you a lot more."

"Good advice. Thank you."

Aasleen nodded, distracted by every machine in view. "I would love to have this old wreck inside my machine shop."

"I would love to bring it to you," Mere said.

"But it's too massive."

"By a long ways."

"Scans," said the engineer. "Make them and keep them."

"I have been."

Then the expert offered suggestions about key junctures and counterintuitive techniques.

Mere memorized every slip of advice.

The next long pause ended with laughter. Then Aasleen said, "You are testing me. From the beginning, this has been an examination of me."

"Maybe."

"Well, I noticed the chamber. Of course."

"Good."

"A hyperfiber sphere wrapped around a perfect vacuum, and something important suspended in its center."

Mere waited.

"The object is tiny. That's obvious. And its mass is very, very high."

"Enormously so."

"Yet if it was a black hole, you'd know so. You wouldn't have to bother me."

"I didn't think I was bothering you."

"But I am ruining your peace and solitude. Isn't that right?" Aasleen offered a wise appreciative wink.

"That's perceptive. Are you certain that you're an engineer?"

Both of them laughed for a long while.

"So it isn't a black hole," Aasleen said. "And I don't think it's stabilized neutronium or some kind of strangelet stew either. The signatures are wrong."

"What else is there?" Mere asked.

"Theory," Aasleen said.

The living woman drifted closer to the round chamber. It wasn't large, almost unnoticed in the jumbled mass of greater machines, and if the chamber was once attached to any of them, those links were long since erased.

"I'm not an expert in this business," Aasleen said.

"Who knows hyperfiber better?"

"Few do."

"But I think that's what it is," Mere said.

"Do you even know what hyperfiber is?"

Mere shrugged. "Obviously, I don't."

"Hyperfiber is a miracle. To an engineer, it is the only miracle in the universe. Baryonic elements are woven into precise metacrystal patterns, and for the higher grades, dark matter splicing helps to tease out even greater strength."

"I know that hyperfiber is strong."

"Like nothing else," Aasleen said. "And do you know where the strength comes from?"

"No," Mere lied.

"Yes, you do," Aasleen said. "But it's just theory to you. Abstractions pulled from a text. I doubt that you truly appreciate the principle at work here."

"Tell me."

"The hyperfiber in your hand isn't especially strong. But quantum effects are always in play. The invisible, unreachable multiverse influences every shard of the stuff. Even the smallest splinter of the poorest grade fiber exists in millions of parallel realms, and those millions and billions of shards occupy the same position in their space and time. Their strength leaks into our realm and ours into theirs. Take a hammer or a laser to that splinter, and you aren't just fighting one bit of sour gray gristle . . . you are waging war against a mountain of sisters."

"It is a miracle," said Mere.

"Better grades, better miracles."

Mere pointed. "Inside that chamber . . . is what?"

"Something else," Aasleen said. "Because it's too dense and far too massive to be hyperfiber."

"But there is a theory—"

"Shut up. I need to think."

That was an engineer talking. Blunt, focused.

After a long spell, Aasleen finally said, "I will concede to a point, yes. If you began with the very best grade of hyperfiber—the sort that forms the Great Ship's hull, for example—and then you took some very powerful hammers and beat the bloody hell out of that raw material . . ."

"Okay."

"By 'hammers,' I mean shaped matter-antimatter charges, and by 'beat the bloody hell,' I mean that you'd have to use absolute precision while minimizing chaotic flows and quantum vagaries. And that doesn't solve the biggest problem of them all."

"Multiverse effects."

With a brittle tone, Aasleen asked, "Do you really need help from me? Because you seem to know this quite well."

"We're discussing ultimate hyperfiber," Mere said. "In principle, the maximum-density variety can be manufactured, particularly in tiny quantities. But the work has to be successful in many, many multiverses. Otherwise the compressed materials will lose their grip and explode."

"Exactly," Aasleen said. "In fact, most estimates demand that factories in a billion quadrillion universes have to do the magic inside the same picosecond, and the chance of a large enough fraction of that multitude doing its work correctly is . . . well, it's a fool's hope, if you ask me."

"What we see is impossible," said Mere. "Thank you for that."

Aasleen said nothing for an hour, and then another. The silence ended with joyous disgust, and she said, "All right. I don't know what else it could be."

"Ultimate hyperfiber."

"Bring it home to me," Aasleen said. "I want to see it for myself."

"I plan to do just that. But I want to know how."

The engineer crossed her nonexistent arms. "If you're right, then there is no problem. The Ship's hyperfiber hull is nothing but fog and steel next to its theoretical strength. Just put that magic inside a bag and come home. Today, if you can."

"But whoever built it—" she began.

Aasleen interrupted. "Someone with boundless energy built it, and they had a heluva lot of patience too, by the looks of it."

"They bottled it inside a vacuum."

"You want to know why?"

"Don't you?"

The two women fell silent. Then at last, Aasleen said, "All right. If we're going to talk theory, I know a whopper."

"Tell me."

The engineer explained the possibility in the barest, least sympathetic fashion.

"Suppose that's so," Mere said. "Can I move the ultimate hyperfiber safely? Can I protect its cargo well enough? Using just what I have onboard my ship and this facility, can I manage all that work soon enough to make my last open window home?"

The facsimile looked at the schematics again, and with confidence, she said, "You're starting too late. You cannot make it."

"Even with your help?"

"I accounted for that, and no. It is impossible."

"Well then," Mere said. "That just means we should start our work this minute, isn't that so?"

Each paddle stroke carried the boat forward. Yet even as the new world grew taller and broader, it stubbornly refused to come close. The crew of five worked as heroes, without pause or complaint, but eventually one soft voice mentioned his aches and then another felt obligated to describe her deep fatigue, and soon everyone was cursing the relentless, withering boredom. Rations shrank, and bodies shrank, and the colors of dread edged toward outright panic. As a result the crew found themselves stabbing the water with long sloppy strokes, precious energy bleeding away while they barely moved faster. There was the bright gray bulk of the world, featureless and cold, yet the sea between was as vast as always. It was easy to believe that they were chasing an illusion, some awful lost dream sent to prey on the gullible, and it was inevitable that the bravest, strongest among them would be the first to curse this pathetic effort and beg for them to turn around and hurry home.

Except while no one was watching, their home and its millions of lives had vanished, stolen by the distance or engulfed by the flat boundless sea.

Grief ripped them open. They wept hard and ate double-shares from what little was left. But misery at least gave them a little rest before they set to work again. Soon they came upon the wreckage of the second ship—scattered water-soaked pieces of hull and one living man clinging to an empty cask. He lay on his back, wearing the largest, oddest, and most joyous expression. They asked him what had happened. He said that every seam in their ship failed. He said that there was an awful fight among the starving crew, and violence destroyed his ship. Then he claimed that nothing went wrong and there was no way to know how he had ended up here.

The girl felt sorry for him, regardless of the truth, but in the same instant she hoped they wouldn't drag him onboard. The man was big and obviously spent, and they were down to their last mouthfuls of food.

The crew thought as she did. Up came the five paddles, everyone ready to work hard, at least until they had won some distance.

Each of the man's eyes stared at the girl's face. She braced herself for pleading. If he tried to grab the boat, she would strike him. But no, he said only, "Good. Go now, go."

Then after a long mad laugh, he said, "You have to complete the journey. Do you see? We will keep coming and dying until one of us succeeds. So finish the voyage now and save the rest of us. Do you see?"

Sensors and reactors and portable armored habitats were brought to the Ship's hull and assembled into a ring-shaped city with one narrow purpose: Contemplating mysteries too shy or too awful to show themselves. Specialists arrived to give uninformed opinions. Engineering units were reinforced, working efficiently until there was nothing left to accomplish. Then an army of genius machines was plugged into the available telemetry, and everyone waited for insights. But the shielded cargo proved extraordinarily stubborn. Without offering reasons, the warning signal continued begging for distance and time, and despite mounting pressures from higher captains, Washen honored the request. That's why only passive instruments were wakened and calibrated and unleashed. Big mirrors mapped the blister's slick gray exterior. Radio whispers and other EM noise gave confusing clues about composition and internal heat patterns. Sometimes a distant chunk of comet would strike the hull, rattling the wreckage in meaningful ways. But the best telemetry came from neutrinos—ghostly particles generated by the surrounding reactors, piercing the hyperfiber blister and whatever was inside before coming out the other side with a fresh trajectory, or sometimes not emerging at all.

"Where is Mere?" Washen asked.

"I see no trace of her, madam."

"But she has to be onboard," the captain said stubbornly. "Anywhere else means she's lost."

A few lockboxes had survived the impact, and maybe that's where a piece of bio-ceramic hardware was hiding—the basis of a modern brain. But before offering that slender hope, Aasleen gave the telemetry a long glance. The newest model of the hold's interior was finished moments ago, incorporating all of the neutrino data.

"A black hole's lurking," she said.

Space was littered with tiny black holes, and they were rarely problems. Washen began ordering the standard machinery necessary to contain a fleck of infinite density, even as she wondered why Mere had gone to so much bother for an item they already had in their inventory, in substantial quantities.

"Wait," Aasleen said. "No, I was wrong. Wait."

"What do you see?"

The engineer was hunched over a wide screen, dozens of overlapping feeds competing for her full attention. "Inside the hyperfiber is a second blister. What I see . . . the picture's getting clearer . . . what I see is a hyperfiber sphere holding a vacuum, and it's surrounded by contraptions and more contraptions, plus some crap that actually looks familiar."

"What crap?"

"Biosynthesis hardware."

Washen pulled up Mere's equipment roster.

But Aasleen had anticipated as much. "No, this is just her simple galley gear. What we'd use to synthesize escargot for lunch."

"What about the contraptions?"

"Deeply, stubbornly alien."

"And the black hole?"

"There isn't any," said Aasleen.

Washen offered a few candidates.

But the engineer stopped her halfway through the standard list. "Look at this face," she said. "What does this face tell you?"

Aasleen had purple-black skin and wide bright eyes. She was a master of all mechanicals—an engineer famous among engineers for her poise and practical genius—yet her usual reserve was gone. Simple nervous wonder made her body shake. Quick breaths grew quicker and shallower. She looked ready to scream for joy yet held herself back because she had no experience with so much pleasure. The moment deserved hard figures. But all that she could manage to say was, “The neutri-no diffraction is critical, and it looks right. It looks perfect.”

“What are you saying?”

She didn't hear the question. “And if the contraptions, those other features . . . if they accomplish what I think they're meant to accomplish . . .” Her voice slipped away. More rapid breathing helped nothing. Aasleen looked ready to crumble or break into song, and then she rubbed at her mouth with both hands, working the lips hard before naming the marvel that was floating in the midst of a small perfect vacuum.

“Infinite-strength hyperfiber,” the captain said skeptically.

“Which should not be,” the engineer said.

“Who would make it, and how?”

“I would, and I don't have any idea how,” Aasleen said.

“What would you do with it?”

“Quite a lot,” she said. “Black holes can't be shaped. But in theory, ultimate hyperfiber can hold any shape. And it could be handled fairly easily, even if you had it in huge quantities. That's why it would provide a wondrous armor or a reaction chamber for some farfetched reactor, or it could be the business end of some fabulous chisel.”

“How big a piece do we have?”

“A few gigatons, which is nothing. It's a fleck of a fleck, and I can't even guess its shape yet.”

“But if you had a small piece like that,” Washen began.

“What would I do?” Aasleen shrugged, and then out from some deep old reserve of youth, she let loose a girl's wild giggle.

“Give me a guess,” Washen said.

“A competent guess, or a hopeful, dreamy guess?”

“Pick one and don't tell me.”

The engineer's face shone, and she wiped at her face and closed her eyes, diving into her own imagination. “A black hole serves as a huge data sink. The trouble is that teasing out useful information, at least inside the lifespan of a universe, is pretty unlikely. But a slip of ultimate hyperfiber retains its internal structure. If laid down properly, that structure could serve as a computer or some variation on that theme. What's sitting out there could hold as much or more data than a black hole—nobody knows if either answer is true—but I've seen estimates where there's enough sheer memory that an entire world could be modeled, right down to the atomic level, and all of that could ride inside a very small human hand.”

Washen said nothing.

Her colleague wiped her face again, and then something on her display panel changed, or moved, or otherwise grabbed her attention.

“What is it?” the captain asked.

“The galley biosynthesizer was busy.”

“Is it operating now?”

“Not now, madam.” Aasleen crossed her arms, her body rigid as her legs impulsively began to shake. “No, no. The machine stopped working just now. Whatever it was making is ready. Our lunch is finished.” And she laughed, adding, “Which is good, because I could use a little something.”

The sea was not the sea anymore, more vapor than fluid. She felt as if she were fly-

ing across the surface, wings helping the kicking legs as she drove on with the last dregs of her strength.

The rest of the crew was gone. The finest boat ever built by her species was scattered and drowned, and she was clinging to an empty box that smelled like the dried fat it had once carried. She kicked and flapped and whenever she looked up the new world appeared no closer. Looking up was a hazard, so she focused on the lid of the box and her skinny dying hands, and then she would forget about both worlds. It felt as if she was born in the sea, alone forever, and her home world was a dream while the other was a separate, equally misleading dream, and her doom was to fight forever between two realms, each as unreal as the other.

The shoreline grabbed her without warning.

Startled, her first instinct was to flee. If she were stronger and better prepared, she might have succeeded in kicking her way back into the gaseous realm. But she was too weak. She lay where she would die and wished for blackness and peace. She tried to breathe and found nothing but vacuum, and then a machine that was always above her suddenly spat out a great wet mass that splashed over her, grabbing hold of a body that had barely survived her most unlikely creation.

Fluids burrowed into her flesh, into every orifice.

She struggled until exhausted, and only then did she breathe. The liquid inside her lungs wasn't water and it wasn't quite air either, but it brought her oxygen as well as a peculiar menu of rare sugars and simple lipids that clawed their way into her cells, into her baby-new blood.

A tiny ocean covered her as a skin, protecting its sole inhabitant from space and the killing cold.

Grams mattered. In the end, single atoms mattered. It was impossible to carry even the basic thoughts of an invaluable AI, and Mere didn't pretend to be happy with that limitation or to consider doing otherwise.

Her Aasleen would be left behind. So long as the machine functioned, she could fill her days with study and thought, and perhaps some later survey party would come to tour the facility, finding a qualified tour guide on duty.

Mere was hours away from leaving, and in a very different fashion, she was also close to death.

"I pity you," the AI said.

Mere's body was another indulgence. It would be stripped from her mind and left in space, frozen and empty and everlasting. She would make the journey home as a brain tucked inside the strongest lockbox, minimally fed and almost devoid of thought.

"I pity me too," she admitted.

"Thank you," Aasleen told her. "For letting me out, letting me play, I can't thank you enough."

The two women looked at each other's hands. Years spent together, and they had never touched. Then Mere asked once more, "Do you think these machines can pull someone or something free of that data sink?"

"Since I don't understand half of the principles at work . . ." Aasleen shrugged. "I'll say, 'Yes.' But that's only because I'm ignorant, and who's going to blame me for being wrong?"

Mere removed her clothes, making ready for a greater disrobing.

The engineer began to talk and then hesitated.

"What's wrong?"

"There is a signature on the ultimate," Aasleen said. "Something distinct, something busy. It could be a library or a self-absorbed computer. But maybe it's a substantial population and who knows how long a history, which leads me to wonder where they came from."

Mere mentioned the first world that she visited. Technological species often tried to make a dead world live, and the work was difficult and the results often tragic. But what if a much more advanced species decided that the safer, sober route was to boil itself down to a series of elaborate computer programs?

"Noumenon," said Aasleen.

"What is that?"

"I think it's an ancient word," she said. "I don't know where I first heard it, and I don't remember all of the meanings. But the definition that always impresses me: *Noumenon* is the triumph of the abstract over the flesh, ideas and memes stripped away from their mortal bonds."

"That's a mystical attitude," Mere said. "You don't sound like yourself, friend."

With a strange smile and measured voice, she agreed. "New ideas can take root, even in this old head of mine."

The girl breathed and rolled onto her back. The new world was an astonishingly ugly place. A forest of machines stood about her. One of them was dripping a thick fluid that covered her while the other machines did nothing. In the middle of the mechanical forest was a gray sphere that somehow looked both bland and important, while a larger ball of gray defined the ends of this tiny new world.

She sat up and then tried to stand, and she fell down again. But her next attempt was successful, and she learned that she could walk slowly and dared herself to touch the machinery and her own wet body. Then the wall of the world cracked and split wide—a piece of the grayness fell away—and through the hole she saw a barren plain that dwarfed her lost world, and a line of small structures standing in the distance, everything beneath a blackness marred by tiny points of cold light.

The girl climbed onto the Ship's hull.

Two gray-clad figures were moving closer, apparently coming toward her.

Instinct told her to run, to fly.

But the time had come not to trust instincts, and with the sweetness powering her new flesh, she stood tall and flapped her wings against the vacuum, and with a voice that still couldn't be heard, she sang hard about the End of All and the Creation.

This was supposed to be a celebration.

But the strong drinks hadn't been touched. Flies from a dozen worlds stole tastes from the cold dinners. The three officers sat quietly, and then one would talk about the latest news while the others listened or at least pretended to listen. Even Washen—the unabashed optimist—was shaken by what the linguists' and physicists' wild theories were claiming. The captain was smart and endlessly competent, but that didn't stop her from waging war against this unwelcome news.

"We only think that she's a new species," Washen said. "A hundred years from today, we'll find her cousins hiding inside a dyson bulb or some other hard-to-spot high-technology enclave. She's their child, and she got lost."

"Except that's not what her song claims," Mere said.

"Creation songs are legends," Aasleen said, pushing a stern finger into the air between them. "Legends are muddy, and you can't take them seriously."

Mere sat quietly, saying nothing.

"The creature has to be from the Milky Way," Washen said. "She couldn't have come from some thin belt of stars and planets out between the galaxies. That isn't remotely possible."

"We found her inside a piece of derelict technology," said Aasleen. "The machine was moving slowly, as far from the intergalactic as you can be."

In the legend, galaxies and space began to collapse. There was no warning. The

event was catastrophic and nearly instantaneous, and every piece of the universe came close to every other piece.

Mere knew the saga by heart, and unknown to her companions she secretly sang portions of it to herself.

"I don't care what the physicists claim," said Aasleen. "Nothing about that story makes sense to me."

"Her old world died," the captain said. "That's what the creature remembers."

Mere looked at the two women, and then she considered her own tiny hands. With a calm sorry voice, she said, "You mentioned something to me, Aasleen. We were on-board the derelict together."

"My AI told you something. That's what you mean to say."

"You were talking about the ultimate," Mere said. "That hyperfiber is unbreakably strong because it reaches deeper into the multiverse. Infinite connections give it the phenomenal strength and the rich capacity to soak up information, and souls, and entire civilizations, and that leads to other possibilities. Possibilities that you found intriguing."

Washen looked at Mere.

The engineer preferred to watch the tip of her finger.

"Moving between universes," Aasleen said. "Even when the craziest theoreticians throw out their most optimistic calculations, jumping to another universe is a brutally unlikely event."

Washen moved a little nearer to Mere, extending one hand as if ready to make amends.

The tiny woman closed her eyes, and in a near-whisper, she said, "You are missing the point. Both of you are being fooled, and so is everyone else too."

They waited.

"Someone did build a tiny piece of perfect hyperfiber. They did what we can't do, and then somehow they lost control of their work. Maybe that means that their trick is relatively easy and its products aren't worth the trouble to keep. But then if that's so, why isn't the universe littered with stuff?"

Washen retrieved her hand.

"So maybe it isn't easy to make," Mere said. "But that implies that someone or something went to a lot of trouble to build what I found, and its misplacing that treasure is about the last event you would expect. So maybe it wasn't lost. Maybe it isn't lost now. Perhaps its makers were hoping that I would find it."

The others had to laugh, but they did it secretly, only a little doubt showing in their eyes.

"No," said Mere. "My mission was planned in advance. I went where I went and found nothing, and then I traveled on an obvious trajectory that found nothing useful. And then because of an apparent comet impact, I landed on still another disappointing world. Every step of my path could have been part of someone's scheme. Intention could be at work here, some purpose beyond what I ever envisioned, and I only wish that I had an idea who could have dreamed this up and carried it off."

Washen still could not accept that crazy tale. The blood-and-bone Aasleen was even less agreeable to the idea. But everyone remained polite, stifling their doubts in the presence of a true hero. And eventually the three of them brushed the flies off the chicken legs and filled their mouths with the splendid tastes.

Often Mere felt like an alien among humans.

But today she was the human animal—the bold blessed creature that leaped into the stars and beyond.

Against long odds, she felt supremely gifted.

Someone had thought to warn her that a universe can collapse and die.

And even better, that same benefactor had given her a clear sign, proving that under certain conditions, in the most critical times, it was possible to escape even that ultimate End. ○

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ADWARE

Suzanne Palmer

Suzanne Palmer is a writer and artist who lives in the woods of western Massachusetts with her kids, a gigantic dog, and too many cats. Her second story for *Asimov's* takes a look at some of the future's unexpected challenges.

I was just finishing up the last programming touches on lunch when Jake came into the kitchen with Mr. Tater, his stuffed bunny and best friend. He tugged on my pant leg. "Mommy," he said, "have you considered trading in our old flier for the new Neptune wagon? Their brand new, just-released '44 deluxe model has over fifty-seven state-of-the-art safety features to help keep me and your other loved ones safe."

My hand froze halfway toward ruffling his golden hair, and instead I grabbed Jake and pulled him close. "Ted!" I shouted. "Ted, get in here! Jake's caught an ad!"

"It has unparalleled style and comfort, and an award-winning rear dining console that is the envy of other makers," Jake said. At three, Jake rarely talked about anything except his bunny and his favorite show, *Sailship Constructor!* His eyes were dilated, unblinking. "If you don't take me for a test ride at one of their many convenient dealerships, I'll cry," he added.

"Ted!" I shouted again.

Ted walked into the kitchen, hair disheveled as if he'd just woken up. "What, Oll?" he said.

"Jake's caught an ad," I repeated. I carefully didn't add: *while you were supposed to be watching him, and instead were dozing on the couch*. "Did you change out the house filters last week, like you said you would?"

He picked up a DeimosCola can, slid it through the maker, then popped it open and leaned against the kitchen counter. "I was going to, but . . ." he started to say, taking a sip, and then just shrugged.

Jake was now thrashing in my arms. "I wanna new Neptune wagon!" He began to wail. "I want six-wheel drive and passenger-side gel bags to keep me safe!"

I met Ted's eyes for an instant before he slid his gaze away. "Please change the house filters before any more damage is done," I said. "I'll try to get the ad out."

I carried Jake to the washroom as he kicked and screamed and fought me. Rum-maging one-handed through the closet until I found the mindware headset, I sat down on the edge of the sonic bath, held him in my lap, and slipped the headphones on. Instantly Jake went limp. I held him there, trying not to cry—though whether for my son or out of anger at Ted, I could not say—while the neural reset ran its course. Just this week Jake had started getting the hang of using the potty; that'd likely be gone with the cleanse, those brand new memories too easily confused with commercial infections.

Ted appeared in the doorway, cola still in hand. "Uh, where are the new filters?" he asked.

"In the closet near the flier bay," I answered. He didn't ask how Jake was, how I was. "Next to your golf clubs."

"Right," he said, and left again.

Now the tears did come, silently running down my cheeks to disappear into Jake's hair. What had I ever seen in Ted? Five years ago it was like I couldn't get enough of him, but whatever it was that had attracted me to him, I couldn't put my finger on it now. Every time he touched me, I only felt trapped. He was lazy, unhappy, unhelpful, the opposite of sexy. He wasn't even Marsborn. When he wasn't plugged in to his dead-end job—everything we had came from me and my job as chair on the Ares Six development council—he was either snoozing on the couch or out with his friends. He didn't seem to care about me, or about Jake, and he'd given up even pretending otherwise.

The headset beeped and shut off. Jake shook himself, lethargically, as if waking up from a deep sleep. "Auto-forming bucket seats," he murmured. "Comfort *and* style."

Dammit.

I wiped away the tears and picked up Jake, carrying him in my arms as if he were a sleeping baby. I found Ted out in the living room, the filters on the floor around him, instructions spread out on the coffee table, and him drinking yet another DeimosCola and watching the TV. I wanted to pluck the can out of his hands, put it in the recycler right in front of him, provoke some sort of reaction other than his utter lack of concern.

Instead, I pulled Jake closer to me and took a deep breath. "I'm going to have to take Jake to the clinic," I said, too tired of fighting to even try.

"What? Okay," Ted said, setting down the cola and picking up the instructions. "I'll have the filters in before you get home."

I wished I believed he would. I fit Jake's toddler-sized anti-viral mask over his mouth and nose, wrestled him into his suit, and then bundled him out to the flier garage and into our flier. Not a Neptune wagon, but a perfectly solid and affordable Ford Oort. I pulled on my own suit and mask, sealed the house door, got in the flier, and pulled slowly out of our house bay.

We lived on the outskirts of Ares Five in what was called a "suburb," an Earth concept applied inexactly to life on Mars. Unlike the big city dome, and also unlike the small "settler" homes that squatted out on the sand flats, each its own individual pocket of life, the suburb was a series of Earth-style homes with interconnected domes and containment fields, allowing for a thing they called *landscaping*.

Once I'd passed through the townlock and soared out and over the edge of Valles Marineris, the terraformed, fake-bright greenery disappeared, replaced by the familiar, comforting bare red sands of the Mars I'd grown up with. There were only a handful of other fliers out, all surely heading for home as visibility dropped; in my panic over Jake's condition I'd forgotten we were due for another sandstorm out of Solis Planum. I set the flier to pick up the clinic's beacon, set the auto-pilot, and leaned my seat back.

It settled into its new position with a crunch. Reaching down under the seat, I pulled out the squashed remains of a DeimosCola can. It took me three tries, in my anger, to get the flier's recycler open so I could stuff it in.

The sandstorm was so thick I'd barely spotted the clinic before we were picked up by its traffic handler system and pulled in. A staffer and a nurse were waiting for us, all in white with the Red Ring medical service emblem on their uniforms, as I popped open the flier and started unbuckling Jake.

The staffer scanned my I.D. "Olympia Silvers?" she asked.

"Yes," I said. "This is my son, Jake. He's picked up invasive adware that my home unit couldn't fix. A flier ad."

"Neptune Motors?" She asked, and when I nodded she shook her head. "We've seen a lot of that one in the last few days. Neptune Motors themselves, of course, disavows the ad, says it was an unauthorized release by a one-off contracted PR firm, already gone under."

"Great," I said. "So there's no legal recourse."

"That's the way they all do it now," the nurse said. She helped me get Jake into the clinic, led us to a small room, and indicated we should sit. "Any idea how he was exposed?"

"Our house filters were out of date," I said.

She tsked, and I just caught her rolling her eyes as she began to hook Jake up. "I know changing out filters can be a hassle, but it's necessary to keep your family safe," she said.

I felt my ears grow hot. "I'm well aware," I said, through gritted teeth.

"You should be scanned too," she said. "If your son's been exposed, you may also have been."

"I'm fine," I said, tucking Mr. Tater in next to Jake in the chair. "I assure you that I'm still quite happy with my current flier."

The nurse finished connecting Jake and was silent for a moment as she looked at the readout. "This will take about four hours, and we'll want to keep him for observation for an hour afterward," she said at last. "It's a pernicious ad, and your son isn't old enough to have a lot of mental defenses. There will be some memory loss associated with the process, but it shouldn't be more than a week or two at most."

Bye-bye potty training progress, I thought. Thanks, Ted.

"He'll need some extra vitamin B12 and E, omega-3, and iron," she continued. "There's a supplement I'll prescribe for him that he should take twice a day for the next ten days." She raised her handheld, and I fumbled through my purse and brought out mine. Both beeped as the prescription authorization was logged and transferred to my registered pharmacy.

"We'll call you when he's ready to go home," the nurse said.

"I can't stay with him?" I asked, surprised.

"No. We want to trigger as little active memory-creation during the process as we can, and nothing gets the brain going like Mom. You can either wait outside or come back later tonight."

I looked down at my handheld, at a loss. "I guess I could go pick up his supplements," I said.

"Or go home and take care of those filters." The nurse smiled as she said it, but it still stung.

I left the clinic wanting to scream.

I knew I should call Ted and tell him how Jake was, but I didn't want to talk to him, not yet. This was not the first time Ted had let ads into the house—by my calculations, my boy had already lost nearly a month of his life to his father's shortcomings. The more I thought about it, the less I wanted to call, the less I wanted to go home.

"Right. Supplements," I said out loud. That was good enough reason to stay out. I took my flier back out into the sandstorm and set it for the shopping center's beacon.

Below me, I passed a few stand-alone homes, each an island in the inhospitable desert of Mars. I'd grown up in one, longed for one; our house, that I paid for, was Ted's dream home, not mine. Sure, I wanted Jake to feel grass under his feet, have a sense of connection with his Earth ancestors, but there were parks for that. At least in the independent homes there were no worries about rogue ads, no days or weeks lost to the next sleazy marketer—of which there seemed no shortage—to come around the corner. It was only the big zones, the subdivisions and commercial centers, that were worthwhile targets for ads.

As if to prove me right, as soon as I entered the center's public parking bay, the flier's onboard systems logged over a hundred marketing intrusion attempts. I made sure my facemask was securely fitted before I stepped out into the open air of the shopping plaza.

Not counting on the infectious ads alone, the air was filled with hovering bobs, their tiny square screens projecting ads and sales pitches and product-drama episodes everywhere you looked; I had to walk through a crowd made of the ghosts of pitchmen to get to the store, their come-ons merging together into an unintelligible roar. I wished I'd brought my sound-dampening ear plugs.

Once inside the store, the roar fell to a distant drone. I tried not to check the time as I shopped, didn't want to know how much longer I had to wait before I could have my son—almost all of my son—back again. On my way to the checkout, Jake's supplement in hand, I turned an aisle corner and nearly walked right into the DeimosCola display. I stopped short, staring at its blue and green logo glittering and flexing in the air above the stack of cans, and felt the anger returning.

"Nasty, cheap crap," I said under my breath. How could Ted drink this stuff? The very idea made me want to gag.

Opposite it, on the other end of the aisle, was the PhobosCola holographic banner, showing scenes of Mars—*my* Mars, not Ted's terraformed, fake Earth substitute—with their tasteful red and purple logo superimposed. Ted couldn't even drink the right cola. I marched across the aisle, picked up a PhobosCola can with a twelve-fill license code, and threw it in my basket. *That'd* show him; PhobosCola had eleven essential vitamins and minerals, and a pleasing, energizing taste, unlike their competition, and I could feel good about serving it to my family as part of a balanced meal.

I swept through the checkout lane, pausing only for the scanner to display my total and the green light telling me my account had been successfully debited, and then I marched back to the parking bay, stuck the PhobosCola can in my flier's food unit almost before I'd gotten in and closed the door, and waited for it to process. When it was done I yanked the can out, flipped up the top, and gulped it down. I could feel it like a tingly warmth along my scalp and face. Now *that* was a real, quality soft drink!

Checking my chrono, I still had almost three hours until Jake was in observation. I didn't want to go home, didn't want to have to deal with Ted, but the idea that there were cans of that blue-green piss in my house, destroying my marriage, was unbearable. I turned my flier for home.

I walked in on Ted in the living room, the house filters still in their wrap on the sofa, as he was stuffing clothing into a bag with one hand, and drinking from a DeimosCola can in the other. A half-dozen empty cans—all of them six-license units, at a glance—lay scattered on the rug. At the sight of them, my disappointment blossomed into hate. "You disgusting slug of a man," I said, before I could bite my tongue.

Ted looked up, surprised. He glanced down at the bag in his hand, then over at the filters, then back to me. And took another sip. I strode forward and smacked the can out of his hand, sending it and an arc of spray across the room.

He scrambled after it, like a pathetic, helpless addict. I watched him on his hands and knees, trying to scoop up the liquid from the carpet before the auto-clean could kick in, and sucking it out of the palm of his hand.

Feeling superior, I put my PhobosCola can in the foodmaker and popped off my second license fill. When he finally gave up and glared up at me, I pointed at his bag. "What do you think you're doing?" I asked.

"Leaving," he said, standing up straight as if trying to recoup a dignity he never had.

"While your son is ill, because of you? Do you care so little?"

"To be honest, I don't care at all," Ted said. "This whole thing was just a huge mistake. *You* were a huge mistake."

I was the mistake? "You can't blame this all on me," I said. "I don't know what I saw in you, but it had to be more than this—" I shook my hand at him, "—this shallow, lazy, bad cola-guzzling, useless loser of a man!"

"*You* never saw anything in me!" he snarled, clutching his can of DeimosCola close to his chest, as if it was the only thing dear to him. "Not on your own!"

"What's that supposed to mean?"

"I sent out a personal ad!" he roared. "And you caught it. Are you happy now?"

"You. . . what?" I stopped shouting. "You what?"

"A personal ad," he repeated. "Black market fab. So someone would find me attractive. I smuggled it into the clubhouse in the golf dome and released it there, figuring it'd hit one of the waitresses, someone like me, but you happened to be there, on a personal invite by the owner no less, with your stupid development committee, and you picked it up instead."

I stared at him, open-mouthed. "How could you?"

He shrugged. "You were hot and I liked the idea of me, a slacker Earth ex-pat nobody, being able to have a Marsie girl whenever I wanted," he said. "I didn't count on just how goddamned miserable it'd be when that kid came along and you expected me to play family. Jake's a good kid, but . . . I don't really want to be his father. It doesn't interest me."

"You vile creep!" I said. My whole body was shaking. "Don't think I won't press charges!"

"Oh, you won't," he said, "because you won't remember this conversation." He pulled out a small handbulb, pointed it toward me, and squeezed.

I was already backing out of the room, holding my breath, one hand pinching my nose shut. As I stumbled against the door frame that led out toward the flier bay, I fell, knocking one of Jake's jackets and my own off the coat hooks. Something else fell on top—my spare filter mask. I grabbed it and pressed it over my nose and mouth, taking a raggedy, uncertain breath.

Ted had pulled his own filter mask out of his bag and was advancing on me, another bulb in his hand. I scrambled backward, trying to get to my feet. "C'mon, honey," he said, "make this easier on us both and lose the mask. You really don't want to remember what I just told you."

Intent on me, he wasn't watching his step, and his eyes opened wide when his foot went out from under him. The cylindrical object he'd stepped on—an unopened DeimosCola can—flew out toward me.

I grabbed the can, held it up with the nauseating blue-green logo facing him. "This shit lost in a blind taste test with thousands of unbiased participants from all across Mars," I said. "It's little more than Earther toilet swill in a tacky can!"

"Give that back!" he roared, rushing for me, the bulb falling forgotten from his hand.

"What's the matter? Last one? Oh, too bad!"

I turned and ran, down the corridor, past the flier bay, and around through the backside of the kitchen, Ted on my heels.

"Give it back!" he shouted again. "It energizes me in the morning and gives me the pep I need to get through my day!"

"Toilet swill!" I shouted back. "I will not have it in my home!"

I reached the back door and ran out onto the green grass of our lawn. Ted came out a moment later, one of his golf clubs now in his hand. "Give it back, Oll! I *need* my soda!"

I screamed and ran.

"Come back, you Marsie bitch!" he shouted, and I could hear him running after me. I ducked behind our neighbor's house, turned, and made for the townlock. He was

only a few paces behind me when I reached it and began to cycle the emergency door.

"Don't you fucking dare!" he shouted, sensing my intent. "DeimosCola is liquid gold, a sensible and pleasurable choice at any time of day or night!"

"PhobosCola is the only cola made of PURE RED!" I shouted, and I threw open the hatch. My ears popped as the full force of the sandstorm outside tried to pour in through the portal, even as the dome's containment field tried to push outward. Blinded, I put my arm over my face, found the edge of the opening with my free hand, and threw his can as far into the Mars storm as I could, out over the edge of Valles Marineris.

Something smashed into my shoulder and I fell to my knees, crying, waiting for him to rip away my mask and remove from me this last bit of satisfaction and revenge. Instead, he dropped the golf club in the grass and—stepping over me, his boots crushing my arm—climbed out the lock, and threw himself out into the chasm after his soda.

The sandstorm was winning the battle to enter the subdivision dome. I could hear alarms, faint in the distance, but couldn't move, lying there in the itchy grass as the sand began to swirl and settle around me, the air grew thin and cold, and then everything turned dark.

"Miss Silvers?"

I opened my eyes. I was sitting in a chair, something on my head, a somehow familiar face in front of me. My shoulder and arm were in a healing cast, little lights winking away red.

The nurse. I was in the clinic, in the treatment room. I stared around me wildly. "Where's Jake?" I said. "What happened?"

"He's down in the cafeteria with one of the other staff members, having some ice cream," she said. "He's fine. You, on the other hand . . ."

"Me?"

"Emergency services brought you in. Aside from the shoulder, you've got some significant bruising and a cut above your eye, and you were in full ad-infection breakdown. Once we'd treated your physical injuries, we had the adware excised. You will probably have memory gaps. What do you remember?"

"I left here and went to the store," I said. I frowned, trying to remember, but my brain felt full of sand. "I was going to go home and confront my husband about the house filters—"

"Your husband filed for divorce just around the time you left here," she said. "I gather that conversation didn't go well."

"I don't really remember," I said.

"That's a side effect of the ad purge. Probably just as well," the nurse said. "Your neighbors saw your husband chasing you with a golf club and called the police. They found you injured and unconscious by the emergency lock. They believe he fled out the lock, into the storm."

I remembered now the unopened filters on the couch, Ted looking surprised to see me. What else? Did I even want to remember?

"If you don't feel safe going home . . ." the nurse said.

I didn't want to go back to that house ever again. "No, I'll find a hotel for tonight," I said. Then I'd sell the suburb house and buy a little dome home out in the sands, so Jake and I could live like real Martians should.

"We have counseling services here," she said. "I recommend you and your son both come back, once you've recovered a bit. Right now, why don't you go down and join your son in the cafeteria. You still have an hour before I can let you leave, but there's no requirement that says you have to stay sitting in that uncomfortable chair."

"I'd like to see my son," I said.

She helped me up from the chair and held my arm as I unsteadily wobbled my way out of the room and down the long corridor toward the cafeteria. "The police will want a statement from you now, and probably another after your husband turns up," she said. "Once this storm dies down, he won't be able to hide for long."

I closed my eyes for a moment, trying to pull back from the darkness my last conversation with Ted. Then we reached the cafeteria and a small child was wrapping himself around my legs with the ferocity only a toddler can muster. "Mommy!" he said.

I smiled, picked him up, rested my cheek against his head for the few precious moments he'd let me before he squirmed his way free and picked up Mr. Tater from where he'd dropped him on the floor. It felt good to know I still rated above the bunny, even if only barely.

"You two are going to be okay," the nurse said, smiling. "While we wait, would you like something to drink? Coffee, or maybe a soda?"

"Coffee would be wonderful, thanks."

"Clearly you've never had the clinic's coffee before," the nurse said, and made a face. "Soda for the boy?"

Jake perked up at this, but I shook my head. "Juice, if you have it, please," I said. "We're not a soda-drinking family."

"Don't blame you," she said, going to the dispenser and returning with a mug and a small, covered cup. "That stuff'll kill you."

"Don't I know it," I said, and sipped at my coffee, and waited for the police to come. ○

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NEXT ISSUE

OCTOBER/ NOVEMBER ISSUE

Our big, beautiful, slightly spooky October/November issue will be wending its way to you soon. We've crammed it with two huge novellas, plus novelettes and short stories. We lead off with a thrilling blockbuster by first-time *Asimov's* author **Alan Smale**. A young man who has lost his way finds that he may also displace time and space as he attempts to come to terms with "The Mongolian Book of the Dead." **Jay Lake** bookends the issue with a steampunk influenced tale about a lost civilization on a distant planet about to discover that "The Stars Do Not Lie."

ALSO IN OCTOBER/ NOVEMBER

Starships figure in **Gray Rinehart's** riveting novelette wherein a life-and-death mystery can only be resolved by "The Second Engineer" and **Steven Utley's** astronaut awakes to a "Shattering" experience. **Vylar Kaftan's** first story for us features a Chinese "Lion Dance" on Halloween with zombies during a plague (that has nothing to do with the zombies). We'd say things couldn't get much weirder, but then **Kit Reed** lets us decide who the monsters really are when we opt for "Results Guaranteed"; **Will Ludwigsen** brings us a haunting story about the denizens of "The Ghost Factory"; and, in her *Asimov's* debut, **Ekaterina Sedia** breaks our hearts with an eerie tale about the horrors of the Siege of Leningrad and the solace that may, or may not, be found in the arms of "A Handsome Fellow." Three more hard SF stories complement these slightly spooky tales. **Eugene Mirabelli** contemplates physics and grief in "This Hologram World"; **John Alfred Taylor's** teens must cope with a changing planet and "Chromataphores"; and when "Antarctica Stops Here" **Paul McAuley** shows us that there are those who will stop at nothing to prevent the despoiling of the ends of the earth.

OUR EXCITING FEATURES

In "The Decline and Fall," **Robert Silverberg** Reflects on the Roman Empire and its far-reaching influence on science fiction—both past and future. **Norman Spinrad's** On Books column considers "Meeting the Other"; **James Patrick Kelly's** On the Net investigates "Unreal Life"; plus we'll have an array of poetry and other features you're sure to enjoy. Look for our October/November issue on sale at newsstands on August 28, 2012. Or subscribe to *Asimov's*—in paper format or in downloadable varieties—by visiting us online at www.asimovs.com. We're also available individually or by subscription on *Amazon.com's* Kindle and KindleFire, *BarnesandNoble.com's* Nook, *ebookstore.sony.com's* eReader, *Zinio.com*, and from *magzter.com/magazines!*

COMING SOON

new stories by **Nancy Kress, Robert Reed, Sandra McDonald, Kit Reed, Alaya Dawn Johnson, Mike Resnick, Ken Liu, James Van Pelt, Steve Popkes, Chris Beckett, Naomi Kritzer**, and many others!

UNEARTHED

William Preston

William Preston has spent much of his life surrounded by smart, resourceful women not unlike the protagonist of his new tale. The author's wife is an educator, librarian, and painter. His three daughters excel in the sciences, writing, and music. Bill's most recent short story appeared in the online edition of *Stone Canoe* (6). He tells us he has one more story about the Old Man/Big Man/Little Boss in the works.

My words are cicadas. They struggle up through packed earth after too many years underground. Then they shriek.

Without a voice, without a teller, events are lost. People vanish from history. I learned long ago that every awful moment lingers. But what of kindness and compassion?

Cannot good deeds also endure?

1. Collapse

It was in 1925, in a teardrop of land no map remembers, a land absorbed decades ago by other countries pressing from every side. I had come for work, a young woman sent by a man I met only once to tell the story of a people whose language I couldn't speak.

There's irony to a Mohawk loving the printed word. Most of the Iroquois homeland was taken because, until modern times, we had no written tongue—rather than make marks on parchment, my people told tales around the fire, or they bound quahog shells, the exchange of which spoke more firmly than the ephemeral phrasings of white men. But when I first came to the Andes, I told them to call me what my father called me: Qwerty, for my love of the typewriter and writing. The two other North Americans didn't know the reference, and of course the natives had never seen a typewriter before. And their language, too, had no printed record.

My people, Kanien'kehaka, are the people of the flint, or we were when flint meant much in the world. My father was more than flint. He was Peter, the rock, the name his Methodist mother gave him at his christening. My mother called him "my man of steel." But though he climbed metal beams, helping the white men build their towers, he was of flesh only, and falling broke him.

My mother said to me, angered by the sight, "Your father's body is a ruin," and at the wake the coffin lid stayed shut.

In the story of my people, a woman fell through a hole from the other world. This

new world seemed so blue to her, because everywhere she looked, she saw ocean, a world of water that, at that time, had no people.

Whenever it rains, I think of Sky Woman and how far she had to fall.

It rained solidly all the morning of the catastrophe. The water struck the high jungle canopy, draining downward leaf by leaf to strike in slender cascades on our little huddled structures of log walls and canvas roofs. Straddling the long crate I shared with my typewriter, my fingers sweating into the amber-colored keys, I typed from my notes, the downpour encasing me in privacy. Two native men in the camp, the only English speakers beside the one remaining American, had served as translators for my questions and retold the stories the camp's women shared. Only the women told stories; the men preferred to stick to the day's facts, though they listened, at night, to the women's words, the historical and the fabulous, their gazes gone distant with listening.

I became aware of a voice—then several. I halted the snap of my typewriter keys and sat stiff. The rain grew louder with my listening, and the voices moved past my plywood door, hurrying. Four months there and my knowledge of the language was still an infant's knowledge, but I recognized panic.

Already in my boots—unoccupied shoes invited small creatures—I swung a leg over the typewriter and stumbled outside. Several men, shirtless, barefoot, in their pale trousers, sprinted past in the direction of the mine. I followed, tugging up the cord circling my neck to twist it around my hair. My boots smacked puddles, dashing water to my knees. Women a foot shorter than me, running with their hands near their waists, feet barely lifting, bested me in the race from the jungle to the open ground. Bow-leggedness has always slowed me. One naked toddler came around the side of a building into my path, and I stopped to send her homeward.

At the jungle's verge, half a dozen mules stood picketed; after that, I emerged into thunderous rain. Through its roar came, only faintly, the churning of the generator outside the processing shed. Where was my ragged hat? Left behind. An emergency now would be hard, what with the death of Silva, the supervisor, and only one other man from the company remaining, the engineer, VanHardt, who managed the early shift and passed most evenings sharing grainy black coffee with me. Silva had died of fever two weeks ago and the owner had, as yet, sent no replacement.

Beige water coursed down the half dozen wooden steps set in the hillside and followed the ore cart tracks to the processing shed.

The last to arrive, I ran for the long, low gash in the mountainside, the most recent entrance to the rich seams of gold and silver. The crowd of people clotted at the opening, giving me time to catch up. Inside the cleft, the downpour's sound hushed and a chaos of high voices battered and bounced from the stone walls like bats. I felt my hearing extend forward as my eyes adjusted to the dark; wet bodies bumped against me, a mule aiming for the exit nudged its head into my side, and I looked for VanHardt or someone who spoke a little English.

Two lanterns hung farther in, and by their light, I saw the first men brought from the mine's descending channel. Surrounded by others, their forms obscured, they cried out as people do when in terrible pain, without reservation or self-consciousness. All this time, I'd been fruitlessly asking what had happened, and now one of the men, the one we Americans called "Rex" because his tribal name meant something like "king," turned my way, pushing water from his face. "Collapse," he said. "The ground collapse."

"The mine collapsed?"

He scanned the ground, as if words lay there to be discovered. He shoved his palm toward the floor. "The ground go down. Men fall. We get them." He picked up a lantern from near his feet. More shouts, weeping, came from deeper in, and in the

flickering half-light I saw another group emerge, one man supported by two others, his legs dragging below him as if useless. They settled him against a wall; his shoes were gone. Three more men came, the wounded man twisting between them so that one helper merely fought with his legs. His shrieking drove the crowd a few steps back, even as a mule, behind him, nodded along without concern. There were words in his screams, one of which I knew.

"Fire?" I asked Rex. "There's fire in the mine?"

"No. He say fire on him."

"He's on fire?" We both moved toward him, a lantern at our backs making our shadows dance and converge upon the man. "He's not on fire . . ." Again he cried out, arching his back as if he were a bow in the hand of a giant archer. "Can you tell him? Tell him there's no fire on him."

"They tell," said Rex, nodding at the others. Then he shouted to them and the other men hastily hauled the screaming man toward the exit.

"What did you . . . ?"

"I tell them put in rain. Rain help. Water. True?"

True. True, when one is one fire, water might help, but this? Yet the terrible thrashing seemed to lessen once he was outside, and the three men together settled to the ground within the great downrush of rain.

"Where Van?" I asked.

Rex shook his head. He said, "Was in mine?"—making it a question to indicate his uncertainty.

I followed Rex to check on another man against the wall. A woman, her hair cut short as his, wept against this man's head; he looked through us, his eyes drifting as if unmoored from reason. "Not see," said Rex, waving his hands in front of the other's face.

Still more men emerged from the depths, aided by their fellows and family members. No two suffered the same, yet not a one of them appeared hurt in any evident way. The weeping and screaming, though seemingly causeless, still was weeping and screaming, and others wept and moaned in sympathy. The women took command, pushing people out, giving instructions. I didn't move with the flow but looked over the heads of them all.

"Van!" I shouted, scanning for a taller figure. "VanHardt! Has anyone seen VanHardt?" But my voice had never been loud.

Some time later, in the supervisor's shack Silva had once occupied, I did as I'd seen him do and radioed the telegraph station on the coast. I imagined the pustule of land where this narrow nation poked into the Pacific—imagined, for no good reason, a shack like this one. The headphones pinched my ears. I pulled the chair close to the fixed microphone and spoke carefully what I'd typed: TEN MINERS HURT STOP ONE AMERICAN MISSING STOP SEND DOCTOR STOP AWAIT NEW SUPERVISOR STOP.

In fits, the rain drilled down onto the roof from the distant canopy, but the weather eased as the day declined, the light of the long February day seeping through the mosquito netting at the open windows. Come nightfall, the nation of insects stirred, chirring all around the shack, flicking against the screens, and I lowered the lantern light till it lit nothing but the lantern itself. I lay in the hammock, encased in darkness. The radio hummed and crackled as if dozing.

A fuzzy Spanish-accented voice woke me. Headphones back on, I took down the message with a nub of pencil: HELP ON WAY STOP DETAILS FOLLOW STOP. I had to read it, not just hear it, to truly take the meaning. Immediately, I replied, intent on rousing the mine's owner, the man who'd sent me here, the far-off lord of industry in his castle.

URGENT, I dictated. STOP. Sweat tickled the end of my nose and I wiped it away. DESPERATE STOP. What else? STRANGE DISEASE STOP. The operator asked me to repeat that last phrase, and after I had, I called, "You got all that, yes? You will send it now?"

He said something in Spanish, probably to a companion. "You have typhus?" he asked.

"No! Not typhus!" I pressed my mouth to the microphone; I forced more air from my chest. "Not typhus! Just send the message!"

Still in my boots, drenched, the night humid and close, I put my head down atop my crossed arms, only to be awakened when, come morning, one of the women brought the warm orange mash that served as a staple for these displaced, uncountried people. I asked about the ailing men in the few words I knew, and she gave one short shake of her head to indicate that nothing had changed. She squatted to watch me eat. When I was done, she took the rough bowl and wooden spoon from my hands, gave me the kindest look, and left saying something to herself or to the forest spirits, I don't know which.

The wooden walls creaked in the rising heat till the radio cawed like a bird. The message, at last: AIRFIELD TOMORROW STOP. This was good. There'd be no interminable wait for a ship from the States followed by a packet boat upriver or the wait for a rare and nearly derelict train from the coast. But the rest of the message left me puzzled and unrelieved, conscious of the saltwater dripping down my back, so I had the operator repeat the words:

SENDING MY SON.

2. Arrival

When I was young, I thought the wind brought words, messages that poured across your body. My mother gave me this idea, though exactly when, I don't remember. The three of us stood in a field of shaking shrubs. I held out my arms as if to fly, open hands toward the wind. My father, hands on hips, head shaped like a gourd, laughed his barking laugh, saying "Ha" as if it were a word. My mother said to listen, just listen.

Late in the day, I sat with my back against the tire of the Model T. A hundred yards out from where I simmered under my hat, a windsock, likely still damp from yesterday, feebly lifted and dropped like an infant straining to raise its head. I'd seen the breeze come to life just once, conjuring up a dust devil that had barely formed when it lost faith and collapsed on the flat expanse that passed for a landing strip. In the jungle behind me, birds quieted as the sun drifted farther to my left.

That morning, when I met with a group of miners outside the cookhouse to tell them my news, Rex called our impending visitor "Little Boss."

"Little Boss come?" he asked. "Little Boss good? Little Boss fix mine?" The moniker stuck in my head, tinged with resentment. As if someone from New York could show up here and repair the damage: heal the sick, calm fears, send the men back into the mountain.

I hadn't heard a first name in any case.

When I caught the plane's inconstant hum, I pushed back my ragged hat and studied the pale space above the mountains. (That sweet hat: birds would have been ashamed to assemble such a nest.) The sound came closer and departed with no plane spied, and I wondered whether the noise of a crash would carry over the last stone wall.

It first showed up closer than expected, and only then did the engine's buzz return. That made me smile. I had long appreciated the way the world could both reveal and hide at once.

I stood and waved my hat, and I do believe the wings waggled in return. Wait until he sees the runway, I thought, and he won't be so jolly and pleasant with his wings. For the first time I noticed a dead animal, a large bird or lizard, two hundred yards out, shimmering in and out of view in the ribbed heat.

Little Boss passed once, droning and low; his silver plane cut out of sight behind the trees, came back lower still, then dropped abruptly, a necessity given the runway's brevity. Before the plane had bumped to a stop, I'd climbed back in the car, hit the starter, and edged forward, cautious lest I burst a precious tire.

My first sight of the man was through the smeary windshield, and even then, as he hopped down from the cockpit, I felt my cynicism flicker out. I credit his sheer physical presence. Not that he was so startlingly large, though among the miners, he'd be a giant; rather, in his aviator's jacket, tugging his goggles down over his neck, there was something graceful and steady in his movements, a firmness of purpose to his wide-set shoulders. Perhaps, too, I was taken in by the color of his face, coppery like my own.

Maybe it was just how the sun browned this white man, but it made me wonder. His father wasn't quite so dark, not dark enough to raise questions; perhaps he'd spent years in the tropics. The one meeting we'd had, though we were indoors, he'd left his hat on, so I couldn't see his hair.

I held off returning the younger man's smile as I yanked the brake.

"Deuce of a flight!" he announced.

I considered the mountains. "I imagine."

"I'm sorry we couldn't give you a clearer sense of when I'd show. You waited all day?" Already, I'd had enough talk. He stepped away from the plane to look back along his flight path. "Given the weight of my additional fuel tanks, I'd have done better by dirigible. I met a man in London who crossed the Andes that way." Then he turned a hale face to me again and came forward for an introduction and handshake. "My father said he knew your father." He held my hand firmly after the shake, as if I were a man. I gave him a stony look and tugged my fingers free.

"Your father employed my father."

"I was under the impression he got to know him."

Little Boss's father had tried to convey that impression to me as well, when he offered me the chance to spend a year at the mine. Naturally, I'd assumed he was lying about a relationship, wanting to make me believe he'd lost something too, praising my father, elevating the dead as people do. But my father needed no elevation.

Little Boss asked, "Should I call you Qwerty?"

"That's fine. You got gear?"

He tried to study me, but I kept moving, opening the rear passenger door.

I succeeded in not asking what was in the boxes we unloaded—until he cautioned me about one.

"You carrying bombs?"

"Scientific equipment," he said. "Chemicals. Mechanisms. Medical tools."

"You a doctor?"

"That's what they tell me. I've studied in a few fields."

He could only have been a few years older than I was. His blond hair hung over his right eye, so he had to constantly push it back. It seemed affected, a schoolboy gesture. "Are you answering me sincerely? Are you truly a doctor?"

"I am. I didn't mean to be flippant. Medicine isn't my only area of interest."

"All right."

"I do seem to live an accelerated life," he said.

I readied myself to say something, a fist of rhetoric hauling back inside my mind, but, for now, I let it go.

I didn't inquire further; what I took to be his false modesty left me incurious. He needed to examine our men, treat them, then leave.

Little Boss moved the rifle barrel to the floor as he got in, propping the stock on the seat. "A Mauser," he said.

"Yes." I released the brake.

"However did my father get a car here?"

"There's a factory in Argentina. Mules hauled it overland, in pieces, and your father reassembled it. That's what I was told." I squeezed the wheel. "I don't see the point to such a vehicle. It's useless. You can't drive to the river. There's no cleared path. You go on foot or by mule to reach the dock. This thing is only good from the mine to this . . . airfield. Nothing else is flat."

"You have a problem with this."

"It's an extravagance."

"You're a bit of an extravagance yourself, isn't that so?" I suppose he smiled, but I just gripped the wheel tighter.

The way to the camp skirted the forest edge, curving between vegetation and rock, till it became a cleared lane through the trees. We'd just entered the forest when a loud snap pulled our attention to the open window by Little Boss. A second sharp noise brought a spiderweb crack to the front windshield.

If I did anything at all, it was only to take my foot from the accelerator, but then Little Boss shouldered me aside, his leg pushed mine away, and the car lurched from the path, bounding violently over the vegetation, coming to a halt beside a tremendous tree. Ready to object, I half managed to turn toward my companion when I found myself toppling out the door. I landed on my cheek among yellow flowers. One big hand pressed on my back; Little Boss's hot breath entered my ear: "Stay down."

Only then did I realize we'd been shot at. Over the engine's churning came another report.

"Who's shooting at us?" he asked.

Up on hands and knees, I turned to see him crouching. "Rogue soldiers from one of the neighboring countries. There have been problems lately. We have guards at the mine. Get the gun," I said.

He held it up.

"They heard your plane."

"Makes sense," he said. He presented the rifle to me. "Take this."

"What will you be doing?"

"Saving our necks, I hope. Try not to shoot me. Aim that way." We were still near the forest's edge; he indicated the sun-bleached walls of stone beyond. I touched my face and found blood on my middle finger. "Fire every five seconds." I remembered loading the gun weeks ago; five rounds. A few days back, I'd shot a colocolo VanHardt dared me to shoot off the cookhouse roof; the cat had killed a nutria VanHardt had been treating like a pet. "Fire one now." I shot into the sky. Nearly atop each other, two gunshots answered, one smacking the far side of the car.

Little Boss showed me what was in his hand.

"You caught a bullet?"

He actually laughed. "No. This one hit inside the windshield." He shut his hand and shook it. "It's heavy-grained. They were at least hundred yards off with those first shots. Far enough to not go through the glass. They'd be closer now. Fire."

I did. Two shots came again, one clipping the tree, the other missing everything.

He twisted his head side to side, blinking several times. "Okay. I've got a bead on

them." With that, he slipped around the front of the car, so fast I nearly missed his departure. I glimpsed him ten feet up the tree, bare feet on the smooth trunk, hands gripping the sides as he sped upward, slick as any jungle cat. Staring after him in wonderment, I failed to count seconds. Then, to make up for lost time, I fired twice toward the rocks, emptying my weapon. My unseen foes returned fire. Both shots struck the car. I was glad to hear metal; it would be hell to replace a tire.

Dark against the sky, a bird dashed out from the trees at my back, wheeled in the bright air, beating its wings furiously, and settled somewhere above me. I curled against the front tire and waited, sweat flipping from my lashes. It was not surprise but grim certainty I felt when a small man in baggy gray clothes came around the side of the car, aiming his rifle at my head. He was perhaps more surprised at seeing a woman, and clearly not a local, with a gun—a gun I immediately cast aside, possibly with a screech. At almost the same moment, a loud crack resounded and the armed man tumbled past my legs, Little Boss standing in his place, holding another rifle like a bat.

"You all right?" But I was speechless. "Our third man never fired a shot," he said, nodding at the figure in the dirt. "Clever. Just circled around."

"But where are the others? What happened?"

He retrieved my rifle and, from under the body of my assailant, the other weapon. "I got the drop on them, as they say." He pointed skyward. "Dropped on one from above. The other one saw me, but he had to reload." His head tipped to one side in something meant as a shrug, as if this were a casual business and our lives had not been nearly lost. I took his proffered hand and stood.

"Did you kill them?"

"Gave them good knocks. They'll wake with headaches and no guns and no bullets." He went around the car and returned with another weapon. "Then they'll run back to wherever their companions are and warn them, I trust. Same as this fellow."

"They came because they heard your plane. They'll tell about it. More will come."

He was busy, pulling bullets from the unconscious man's pockets. I watched the fallen man's shut lids for signs of movement.

"Doubtless. But if they try to strip it for parts or get it started, they're in for a surprise." Finished with the pockets, he pressed two fingers to the man's neck and looked down as if listening. He concluded, "He'll live."

He'd landed ten minutes ago, and already the world seemed to have gained momentum, too many events stuck end to end. "What surprise?"

"There's a secondary battery that stores a charge. Anyone touches the plane before I get back, they'll get a good jolt. There's probably enough juice for a second jolt as well, if the first doesn't convince them."

"You think of everything."

"I didn't think of this fellow."

"The way you went up the tree . . ."

Little Boss grinned like a boy who'd impressed a parent. "It's a knack. Runs in the family."

3. Investigation

My idea had been to quarantine the men, turn the bachelors' quarters into a temporary hospital. I'd said so to Rex, but he watched my mouth like it wasn't making noise, and there the idea died. Instead, the men's families took them in; the bachelors moved in with brothers, sisters, cousins. I asked about the ingredients of a sedative the camp's women had made and was shown a thick-leaved, black-rooted plant I didn't recognize.

After the first day, the men in pain no longer thrashed like captured fish, but they lay unsettled, eyes either wandering as if tracking a fly or peering straight out, as if through walls, maybe seeing all the way back to Paraguay. The War of the Triple Alliance had driven their people from the jungle sixty years ago; a remnant ended here, on the opposite side of the continent, and founded a sizable village that lay a dozen miles from the mine. The Big Boss somehow found these uprooted people, made a deal with the national government, and recruited a steady flow of workers. Until now, the mine had probably treated them better than the jungle.

Though they might have preferred their traditional multi-family huts, the mine provided sturdy shacks for each family, built on legs against flooding and whatever crawls upon the earth. The families all were young; after their children were three years old, owing to a rule I couldn't fully make sense of, they had to take them back to the village. Nothing much was inside each shack but pallets, since the spaces were largely for sleeping and love-making.

I watched from the doorway while Little Boss inspected his first patient, who lay with cloth balled under his head for a pillow. This was the fellow who had lost the use of his legs; his upper body moved as if he itched. Rex, who was there to translate, mimicked the movements of Little Boss, bending over the wide pallet at the same angle. The man's wife stood outside to give us room.

"I'd like to see this sedative," said Little Boss.

"Ask Rex. I don't know anything about it."

Little Boss started to ask, then raised a clay bowl from the floor. "Is this the medicine?" He indicated the prone man's mouth. "You gave him this?"

"Wife give him," said Rex, seeming to think he was being blamed for an error. "Good help."

Something like a doctor's black satchel, but big as a kid goat, had come with Little Boss. He thrust in a hand and produced a test tube to gather a sample.

He instructed Rex, "Ask him if he feels this," though it took some repetition and Little Boss pinching Rex a few times to make the message clear. Rex spoke softly to the man on the bed, who, lids half lowered, replied more softly still. Along his bare legs Little Boss dragged a dull metal tool, stopping to prod as he went. "Feel this? Feel this?" But always the answer was no. Then he made the man sit up, and he inspected his bare back, though from my post at the doorway I could not see what was done. It seemed he spent a great deal of time pushing on the muscles of his back, lingering on the spine, then checking his legs again. As if the miner were a child, Little Boss lifted him in his arms, then set him gently on his feet, supporting him all along, watching as his legs folded under him like a scarecrow's limbs. The wife peeked in past me, worrying her shift's sleeve with her teeth.

"All right," said Little Boss at last. "Let's see the next one."

I led the way. The miners' shacks stood in lines, facing each other, though their village was laid out in overlapping semicircles. I'd visited once, soon after arriving, and sketched it as if from overhead, the design like broken chain links laid atop one another. I'd thought how, from above, from any distance, all human activity would present a baffling sight.

The next man too, lay on a bed, curled like a baby, attended by his brother and his brother's wife. The family didn't leave when we came in. "Much medicine," Rex said, patting his hand toward the man as we entered.

"Why is that?" Little Boss asked.

"Fire!" exclaimed Rex.

I said, "He was hard to calm. He said he was on fire. No one could convince him that he wasn't."

"Was there fire anywhere?"

"No. Nothing like that. I told you, the floor gave way. And then . . . this. The men who weren't caught in the collapse were fine. I think."

Again there was a full inspection of the miner. Even heavily sedated, he cried out as Little Boss manipulated his arms and legs and turned him on the bed. His whole impulse was to clench his body, and brief spasms seized him. Little Boss stepped back, a thin whistle leaking from his parted lips; he took the oil lamp from the floor and brought it close to the patient's face. At first, it was as if the other man didn't see it. Then, without evident cause, he flinched.

Little Boss looked at me.

"What does that mean?" I asked.

"His perceptions don't match reality."

"Didn't we know that?"

He tipped his head slightly to the side, examining the man's face.

When we were done, we thanked the family and stepped outside, though Rex stayed behind to talk in serious tones to the man's brother. Little Boss set his bag in the dirt. "They're all different?"

"Yes. There's a man who says he's blind—"

"I'd like to check on him next."

"We can do that," I said, and called to Rex to join us.

Birds screeched overhead, hidden in the trees. "Have you looked at the water?" asked Little Boss.

"Looked at it? What do you mean?"

"Examined it under a microscope. For traces of an organism."

"There are no microscopes."

"That's fine. I have one."

But I didn't follow his thinking. Wasn't this the result of the collapse?

He said, evidently tracing the logic of my silence, "You're probably wondering why I'd look at something that doesn't seem to be the proximate cause, but I have to check all possibilities." I could not help but slow my walking, unsettled. His eyes seemed the color of his skin, but shining. "Whatever this is, it's not simply the result of everyone taking a tumble."

"But . . . ten men. Why were they affected differently?" We'd stopped outside the blind man's shack.

"Diseases can be like that, though I admit this is demonstrating an extreme variation in its outcome. It's a hitherto unknown organism, if that's what it is." His eyes shuttled rapidly as he thought. "If it were in the water, it wouldn't just affect those men, but perhaps something triggered the mechanism. Perhaps there was a gas released."

"I didn't smell anything."

He looked toward the mine and barely nodded, twice. "It could be odorless."

"We here," said Rex, a bit loudly.

The scene was like the others. This time, Little Boss went straight for the lamp. He knelt beside the shirtless man seated on the pallet; his ribs formed a frail cage. Little Boss brought his face close to the other's. He beckoned to me in the doorway. "Come see this."

I stood behind him and leaned. "No," he said. "Down here," and he shifted over to make room. The injured man's breath was hot on my face and smelled of the sedative, muddy and damp, the scent of soil under a rock. "Watch his eyes," said Little Boss, and I did, as he moved the lamp near the man's gaunt face and away again. He was a young man, but this event had made him old, and the light shone luridly on his face so the lines along his cheek became dark slits. "Watch the pupils."

"Yes?"

"They're reacting to the light. You see?"

It was true. The light moved close, and the fibrous brown irises tightened to make the pupils tiny.

"What does it mean?" I asked.

"His eyes are working. But he doesn't believe his eyes are working. He's seeing a darkness that isn't there."

"They're all seeing something that isn't there. Or feeling something."

"Yes."

The blind man clutched the arm of Little Boss to pull himself closer, coming out of his stupor to speak. Rex stepped closer. He looked at me with some uncertainty.

"What did he say?" I asked.

Rex hesitated. "He say he saw demon."

"Demon," Little Boss said quietly.

"Their use of the word means something different than what we mean," I said. "It's reserved for something you dream about or that you don't recognize."

The blind man spoke again.

"When he fell he saw it," said Rex. "It go in rock." He put out his hand. "Into wall."

"Does he see it now?"

Rex translated and had a brief exchange with the patient. "No. Now he not see. He see demon in mine. In *the* mine." He nodded at his self-correction.

"Anyone else report this?" asked Little Boss.

"I heard another man say something strange," I said. "He said the walls talked."

"Anyone report seeing your missing man?"

"No."

The blind man had slipped into sleep; supporting his head, Little Boss laid him down. I expected some conclusive pronouncement now, but instead Little Boss became the quietest thing in the room.

Once outside again, he crouched and put a finger to the dirt. Rex and I exchanged a look, then sat Indian style.

"I saw something like this in Scotland," said Little Boss, "at a ward for men who'd suffered what's been called shell-shock. The doctor there, Rivers, saw what it was. A nervous disorder, the shock of war, the mind . . . the mind turning away from terrible things. Men felt pain in limbs they didn't have. They went blind from seeing things human beings shouldn't see." He'd been dragging his finger in the dirt, but it didn't make any kind of pattern I could detect. He said to Rex, "It's from being too . . . scared. Too surprised." He put his palm against his temple. "A person's thinking isn't right." Rex squinted.

"Something frightened the miners?" I asked.

"I don't know. Did they actually see something in the mine? . . . I only said this is similar. But it makes me think we're not dealing with a disease. I could be wrong. I still have to check the water."

"We have a well," I said.

"And the air. . ."

"In the mine."

"Yes." He faced downward as if he could see into the earth. "Tomorrow morning."

A bell rang. In the common area, under the pavilion roof, the food would be ready. Rex stood and said firmly, "We eat now."

"I'd like that very much," said Little Boss, and I could only think, as he rose above me, how much it must take to feed such a man.

The pavilion stood between the cookhouse and the supervisor's shack, a common space for meetings and meals. Rather than tarp, the roof was of feathery branches

lashed together. A few men had gathered, seated on long logs, picking at bowls of stew while they talked and gestured. No one looked at me. Little Boss did not avoid their eyes, but smiled grimly in the face of every man before serving both of us from the large pot atop its grate.

He chose a low bench, leaving his knees nearly at the height of his shoulders.

"No Spanish speakers?" he asked me.

"These people kept their language, and no missionaries ever got to them. Your father taught a few of them English."

"And no one's bothered to learn their language?"

"It's not a question of bothering. They don't want to teach it. It's like it's . . . private." I let him eat a few bites. "What do you do for your father? What job do you have?"

"Job," he said, either amused or puzzled.

"Do you run your father's businesses in his absence? Are you really the 'little boss'?"

"Oh no. Not at all. I just . . . go where my father sends me. Sometimes. I'm busy with my studies." He licked his bowl before setting it down. "And how about you? Why are you here?"

I held back the answer I wanted to give: I was here because his father had also sent me. And because my own father was dead. "I'm recording their stories."

He seemed to study the faces of the others. "Their legends?"

"Yes. And their history. Your father did some research on me. I don't know how. He knew I was a writer and he knew I'd told people I wanted to do something like this." Little Boss raised his eyebrows. "Not here. I didn't know about here. I thought maybe Canada. Talking to other Mohawk." A few birds shrieked nearby, and the mountain of the mine echoed their calls. "These people suffer just being here," I said.

"I thought life here was decent."

"Good enough. But they see things differently." I waved both hands toward the east. "Their collection of villages was the whole world. If you left the jungle, if you even crossed a particular tributary, you were dead. You didn't exist. You weren't allowed back. When the war pushed them from their homes, they became ghosts. Even decades after the war ended, they think they can't go back. Two from that generation are still alive.

"They must have had a name for themselves at one time, but now they don't. Or they won't tell me. They still have babies, live together, teach their children to hunt and fish, work at the mine if they want. But they're . . . they're dead. This is the life after life. But it's confusing. I've probably misunderstood something. It'd help if they'd teach me the language."

Idly, he picked up his bowl; he exhaled and sat up taller. "Someone should teach them that those rules of theirs are false. They can go back if they want."

"It's their world," I said. "Their world, their rules."

4. Descent

The day after Little Boss arrived was a Saturday, and I began my morning carrying my plate and cracked wooden spoon to the pavilion, joining the men at the circle of logs. They had gathered, but no one had entered the mine since the collapse, or at least not ventured beyond the opening, not even to call for VanHardt. In the center of the ring, I stirred the steaming pot's contents—some meat, vegetables—with the ladle.

"Little Boss make a breakfast," said Maro, another English speaker. He was an especially slender man, sunken-chested but with a startling, deep voice. I must have made a distrustful face, because he said, "Good making."

I knelt, knocked a cricket from the side of one boot, and ladled stew onto my plate. I could smell that he'd seasoned it with something tangy. My first bite washed through my mouth and sat me back on my bottom. Maro watched me and smiled. "Yes, good making," I said. "Where is Little Boss?"

Maro pointed toward the supervisor's office, where I'd installed him. "He eat," said Maro. "He go."

I did the same.

He'd propped open the door, and as I approached I saw, in the dim interior, a pair of legs rotate toward the ceiling until aimed directly up; the legs paused, then continued to rotate downward. I looked elsewhere, shuffling a warning for my final steps. "Come in," he called.

I found him facing away from me, a toppled crucifix propped on stiff legs and one extended arm, his other arm outstretched in the other direction. He wore a sleeveless top and shorts, and his long-toed feet were bare.

"Nearly done," he said. He separated his legs, reaching one foot up to his hand. It appeared easy, so smoothly did he manage it, but I felt the muscles in my own legs clench; I could never make such a shape from my body. Then, in a swift move I could not, later, visually reconstruct, he flipped around to face me, now propped on his other arm. Somehow he afforded me a brief smile.

"What are you doing exactly?" I asked.

"Nothing 'exactly,'" he said. "It's based on a new program out of Germany. Controlology."

"That's an awful name."

"I didn't name it." Again he split his legs, smoothly. *Control*, I thought.

"You always do this?"

"Every day." Then he was done, getting to his feet and standing as casually as such a man could stand who never looked particularly casual. "I do mental exercises as well." He picked up a book from a small stack in his hammock. "Memorize poems. Complete equations in my head. Construct a house—"

"Why?" A boldness had come into my voice.

Stillness claimed him again, or claimed our shared space, and he studied me as if what he might discover would shape his answer. "I feel I should be the best I can achieve. The best at being myself. At using my physical and mental gifts—"

"What are you preparing for?"

"What do you mean?" He wiped his face with a shirt.

"Is there another war coming? Some enemy to defeat?"

"The enemy is ignorance," he said, so sincerely he might have been a child. "And death. Death is an enemy. Our bodies give out too soon."

I had no answer. My own fragile body appeared likely to give out long before his.

"I've long thought that I have a mission," he said, turning away as he said it, busy-ing himself with tiny flasks cluttering the supervisor's desk. "If I know more, more about the world, science, myself . . . I can do more for the world."

"A mission," I said, disdainful.

When he turned back, I saw his eyes had withdrawn their openness. "For now," he said, "my mission is to help these people. And to retrieve your missing man."

"How will you go about that?"

He pointed to a microscope amidst the flasks. "I've checked the water and not found anything. But my tools are limited. If the culprit is airborne," and he pointed again, this time to his hammock. A gas mask lay in the netting, its elephant trunk-like tube connected to a fat pouch. "That might help," he said. "Assuming the canister is intact. Do you know whether they used these often?"

"I didn't know we had them."

"Well, then," he said. "I'll just assemble my gear."

"I have to go with you," I said. We had not talked about this; it hadn't even occurred to me until this moment. Now we would argue, and I would have to stand stiff and resolved against him. "None of the men will go," I continued, "and you shouldn't go alone."

"Good reasoning," he said. "We'll need more gear. Let me get changed," and with that stepped forward to see me out the door, leaving me resenting the lack of a fight.

What could a person do with such strength, such "control"? Perhaps, had my father been built like that, he could have survived his fall, or held on to the beam and not fallen at all. I watched Little Boss gather items from the shed attached to the supervisor's dwelling: rope, another gas mask, lamps. A man like this—a white son of white privilege, no matter how coppery his complexion—would never find himself in a situation like that of my father, laboring in a dangerous place for a living wage. When my father had fallen, where had Little Boss been? Studying in some university's library? Comfortable at home? Even as Little Boss prepared to enter the mine, to rescue my friend, to solve the puzzle of the miners' illness, my mind moved in response to anger, not really seeing the man himself.

"You're bothered by something," he said.

"I'm just watching."

He handed me a rucksack and gas mask. "I don't think that's so," he said.

"It doesn't matter," I said, and considered the mask to avoid his look. "Have you ever been in a mine?"

"No. But I've gone caving. And since we're looking at some kind of collapse, I imagine we'll be descending. . . . Have you been in the mine?"

"Not really. . . ."

"You've got three light sources in there. You should take one out now and strap it to your waist. Carry the carbide lamp once we're past the entrance." In addition to his rucksack, he had with him, again, the oversized medical bag, to which he'd attached straps. "I'm bringing food and water."

"Just in case."

"Yes. And medical supplies. And some other equipment." I didn't ask for specifics.

We set off, him not in front but alongside me, which unsteadied my pace. He bounced somewhat as he walked, on long strides, and I had to work to keep up.

"My father never told me how he found this place. Every other successful mine is farther inland."

"Two years ago," I said, "the British built rail lines. I think your father left the rails and found this. That's all I know."

"Oh, happy fault," he said.

We hurried up the steps to the open stretch before the mine. "I don't believe in luck," said Little Boss, "but my father seems to have it." He huffed out a little laugh. "He likes to tell of a journey to the Torres Strait that cost him his ship. He and a dozen men drifted for two days before they were discovered by islanders on a long-distance fishing voyage. He likes to say he drowned and lived again." We stopped at the entrance. "He's never gotten over it."

Not everyone is so lucky, I thought. Not everyone lives again. He tried to read my face and I let him, but he left off squinting and dissatisfied.

At this time of day, the entrance to the mine lay in shadow; overhead stretched the sky's unbroken blue. A whisper of fear slipped inside me as Little Boss donned his mask, his eyes somehow bereft behind the goggles. He raised his carbide lamp and twisted the knob, turning it on. I checked how securely my own mask's breathing tube was fixed to the canister inside the sack against my chest. When I donned the

mask, and breathed in air that stank of stone and leather, it was as if there had never been blue sky. It took me a few moments to locate my own lamp in my satchel, lost as it was in coils of rope. I held it up to demonstrate my compliance, then returned the satchel, awkwardly, across my back.

"I'll go first," he said, voice muffled but audible.

We'd gone only as far as the chamber's narrowing, where an exhausted oil lamp hung, when he stopped to remove items from his black bag: two vials, both holding transparent liquid. He explained, as he unstopped each in turn, then restopped and shook each, that one detected certain toxins in the air, while the other somehow ensured the relative proportion of those gasses necessary for our survival, such as oxygen and nitrogen. Should either chemical mixture change color, it would signal a change in the quality of our air. I held my light behind the vials as he examined them. The obscuring effect of my mask's lenses and the yellow light of my lamp made me uncertain of the color; both appeared faintly amber. Had he concocted these solutions at some earlier time, or only since his arrival?

"Okay for now," he said after long study. But he was not through surprising me. After pocketing those vials, from his black bag he produced a tiny, agitated sack; from this he pulled, by the tail, a four-inch-long rodent, the local species of the tuco-tuco. I disliked the aggressive look of their front teeth. "Found it under the office this morning," he said. "Our mine canary."

He'd given the tuco-tuco a long leash of string. He set down the creature—which scratched the ground in a few spots rather than running off—and tied the string's other end to his middle shirt button.

"How will we know if an animal suffers from delusions?" I said.

"Maybe it will imagine it's a man," he answered, his foot redirecting the creature, which had casually begun a retreat.

The temporary cart track led us inside. My breathing sounded thick, the breath of someone straining to breathe, and I hoped we could soon dispense with the masks. My lamp threw the shadow of Little Boss ahead of us on the curving, declining passage. He moved slowly, observing, raising and lowering his lamp, and I wondered if he sought something in particular or merely anything out of the ordinary.

We had progressed only a hundred feet or so before he stopped again and produced from his satchel a small box with no top. A complication of slender wires lay within, a metal ball seemingly suspended among them. Squatting, he sought a level spot on which to place the device.

"For detecting seismic activity," he said, speaking slowly so I could understand his dampened voice. "Of course we'll notice anything major. Something minor could warn us that we ought to pull back."

"Does it . . . sound a klaxon?"

"Radio signal," he said. "Receiver's here." He touched a metal clasp on his belt. "Radio waves don't travel well underground, but I don't expect we'll go too far."

The middle of his shirt jerked outward. "Our pet has gotten ahead of us," he said.

We continued. Soon, he again ran his experiment with the vials of liquid.

We said nothing more as we went, passing the tools and carts left in the wake of the event, and shortly, we came to the scene of the incident.

"Strange," he said, and knelt where most of the mine floor had opened up, a breach six feet wide and stretching ahead at least thirty feet. Along a ridge of uncollapsed floor, the tuco-tuco sniffed uncertainly. Kneeling, I held my lamp over the rim of the break. For several yards, the ground had sunk only five feet or so. From what I'd been told, most of the men had fallen there and so been able to climb out or were subsequently pulled out. Farther along, that level sank more sharply, then fell away past what we could see from where we knelt.

Little Boss now brought forth another of his seismic detection devices. "I don't want rock coming down on our heads," he said.

I made a noise in agreement, seeing us both buried in another collapse.

"Let's have a look," he said.

The big man scooted down the ledge of rock to stand below me, then put up his arms to help me down. I hesitated, which led to him simply plucking me from the shelf and lowering me to his level, smoothly, his hands securing me but not holding too tight.

We proceeded to the farther lip of rock, crouched, and extended our lamps once more. The next drop looked to be about twenty feet, the floor of that level widening beyond the edge of the hole. "Van!" I called through the mask, but I could tell my voice went nowhere.

He sank the pin for the rope, tossed a heap of loops downward, secured rope under my arms and put some in my hands so I might guide my own descent. As before, I must have hesitated, and rendering the pin and my own grip pointless, Little Boss lowered me hand over hand, standing erect as a statue at the edge. In the light from my swinging belt lamp, I peered downward, the hose on my mask making it difficult for me to turn my head enough. Below me lay shattered rock and flaring shadows. Once down, I unlooped myself, casting one quick look around an irregular, low cavern the width of a barn, briefer in the other directions, its walls opening at several points into dark passageways. The rope swiftly withdrew; as I studied our surroundings further, I heard Little Boss confidently slip downward at my back.

"I've secured that rope," he said. "We'll leave it." He added, though I hadn't budged, "Stay close." We walked beyond the breached ceiling above us; the roof dipped far enough in spots to make him stoop. Moving tightly, we swept our lamps in every direction, peered into each arched opening. He said something I asked him to repeat. He had one hand on a wall. "I said it's odd. This cave. These striations on the walls," he looked downward, "and floor. This is not the result of water. Nor of blasting."

I had no suggestions, only watched his spread hand stroke the wall. I looked where he looked, without any idea what to look for. He raised his lamp toward the nearest corridor.

"You hear anything?" he asked.

I stopped breathing. Perhaps I heard something faint, like a broom brushing over rock. "Running water?"

Clearly he wanted to enter the passage. Though he held his light forward, the passage turned after a few yards, affording him no view. I found that I was breathing rapidly. "Which way do we go?"

"Your man isn't right here, so he wasn't completely—" he said. I'd lost the last word in his mask.

"Completely what?"

"*Incapacitated*. But he may have been confused." He inspected our immediate space again, stepping away from the corridor, then stopping. "Whoa," he said.

We had missed this at first glance, by a more distant wall: another breach that led still lower. We crouched and lit the space below. I held my lamp steady to confirm what I did not wish to see.

Little Boss's head came close to mine and he made a resigned sound for us both.

Fifty feet down, at the bottom of a deep trench into broken rock, lay a prone figure, arms evidently beneath him. Of course it was VanHardt, but even had he not been our only missing man, I'd have known him by the long canvas jacket that he wore against both sun and rain. Little Boss stood. "If you have no objections, I'll lower you down. You can get the rope around him and I'll haul him up." I got slowly to my feet, shucking my pack, forming an objection but unable to come up with something besides my not wanting to go down there. "Okay?" he said.

I nodded my answer.

"Have you seen a dead man before?"

I looked into my hand lamp as if noticing a flaw. "Of course."

The rope came from my pack this time. "Keep your feet on the wall," he counseled. "You'll get less scuffed up." He didn't bother with the pin, but formed the rope into a harness, put me in, and held tight as I walked backward off the edge.

Awkwardly, kicking the wall, one lamp at my waist and another in hand, I descended. Tentatively, I touched down, then stepped out of my rope.

VanHardt lay on a rock slab, face turned toward me, left eye shut. A dark stain surrounded his head. Beneath him, his lantern lay smashed. He had to be turned over so I could put him in the harness; his other eye, open, gray as his skin where it should have been white, startled me, and I stumbled back over uneven footing.

"What is it?" called Little Boss. I didn't answer, but completed my labors only half-looking at the swollen body, easy enough inside the mask, which obscured peripheral vision.

More than once, I glanced at the figure above, lit by his own lamp. No matter my qualms about the man, I wanted him down here with me. He said something, and I called for him to repeat it. The faint brushing sounds, like wave-cast pebbles clattering on a shoreline, had grown louder at some point.

"Something's wrong," he said. The masked head moved about, vanished, and reappeared. "The sensors!"

"Pull him up!"

I stepped away as, with relative smoothness, the body rose. When Van's head struck stone, making Little Boss pause, I studied the bloody patch near my feet. I waited till the sounds of effort and drag stopped and, raising my light, saw nothing up top but the blank ledge. The churning sounds now were close; rock skittered from a nearby wall. The head of Little Boss showed, though blurry. I needed to rub my eyes. "Here it comes!" he called. Rope tumbled downward. I stepped inside the loops, and, keeping from the wall with one hand, let myself be hauled upward.

Near the top, I looked down at the sound of more falling rock, and in that instant, I was not rising but falling, cold with panic. There was a rush of air and I yelled out.

Little Boss had his arms under mine, pulling me to the ledge.

"I fell," I said, on hands and knees. My hand lamp had skidded several feet away.

"What?"

"Fell! I fell! You caught me."

"I didn't. But," he said, and sat down suddenly. I saw the indicator on his belt flash blue-white. Little Boss tugged off his mask and let it hang from his chest. "Something is affecting us. Something not chemically detectable. Something . . . in our minds."

Yanking my mask sideways, I managed to get to my feet. I took one deep and ragged breath, certain I breathed in poison. The unfiltered air stank, the fault of VanHardt's body. "Is this an earthquake?"

He pointed toward a far wall. "Something's coming." His eyes narrowed, then widened. "We absolutely have to move." Swiftly as his words, he went from sitting on his backside to having the corpse slung across one shoulder. We headed for the rope back to the world we knew. "Can you climb unaided?"

I said, "I think so," but I didn't know. Words stuck in my dry mouth.

I thought of Little Boss's plane, and as I put my hand to the rope I paused in the moment to wonder why, then realized the rushing, churning sound had reached another pitch, like an engine, resounding from every direction in our chamber, though Little Boss seemed to know the direction and looked back once more. "Climb!" he shouted. A near wall shuddered, fell to pieces, and seemed to extrude more rock, rock flowing and surging. Little Boss dropped the body from his shoulder and put back

one hand to keep me at a safe distance. His other hand held out his lamp as if it were a torch thrust toward a menacing animal.

A segment of yellowish wall twisted top to bottom, as if there were a huge canister lid set in the rock, unscrewing, till it stopped and, emerging fully, rotated as if around a vertical axis; then, I confess without shame, I shrieked until Little Boss covered my mouth.

5. Contact

My mother taught me to pray. She had the usual ideas about it, gleaned from her Episcopalian parents, and she had me kneel in the commonly depicted way, at the bedside, hands clasped at my chin, head touching the mattress—as if the form of a thing could be enough. I prayed for family and friends and strangers too, prayed for them to be blessed. I did not know what that meant, to be blessed, and so I just pictured people, brought them to mind, and that was the end of it. After she tucked me in, I'd try again, eyes open, talking aloud to the dark, asking about what I didn't understand or requesting some material good I wanted at the time. Now my voice had company: I had a conversation with the dark, God speaking back to me. Only later did I realize that second voice had been mine all along; no one could reach inside you that way, nor could you ever truly reach inside anyone else.

Stumbling backward, away from what I could hardly believe, I felt the solid world shift. The walls around me seemed liquid, the floor became unsteady, and my own history became like a momentary thing as images outside my imagining, other lives and times, flashed before me, and dreadful, unwelcome sensations barreled through my body, interrupting the flow of sight and sound that makes the world reliable.

And as we backed away, me slapping at Little Boss's hand, more grotesque figures emerged till there were three in all. Then there arose, from the ledge I'd just mounted, another, tumbling upward from the murk outside our lanterns' light.

Little Boss switched off the lamps swinging from our belts, perhaps wanting to conceal us, but my dropped lamp lay out of reach.

They looked nothing like humans, nor even, from moment to moment, like any coherent being. Round and a foot taller than Little Boss, they were irregularly oblong nearer what I took for the top, mottled in a host of grays and browns along their surface, and shifting in form, rippling. Were those eyes, ears, or any sense organ at all, the long black tear-shaped glimmerings and gashes that marked their bulging middles? The only constant was what must have been the mouth, a permanently gaping space in each creature's likely lower third—that, and the ever-working implements of consumption: four multi-elbowed appendages, ending in scoops, worked constantly from either side of that maw, rapidly breaking rock and tossing it within as a lobster, mouth parts fluttering, labors at its meal. The creatures rotated, wobbling, each around a different axis as if direction made no difference, then advanced smoothly toward us, all the while churning fragmented rock.

I pulled the hand from my mouth. "Is this real?" I whispered.

"We both see them!" he said close to my ear. "It must be!"

One of them glided close to my light. Now I saw inside the maw, where sharp tines furiously worked, threshing and crushing stone. If they came upon us, what would they do?

My brain burbled again with unbidden images: fire and heaving ocean; falling buildings and falling stars; the horror of unfamiliar, angry faces. These slipped be-

fore me and through me, while all I heard was the clatter of stone being slashed into flakes. My balance gave way again, and I tilted into my companion's back. He must have felt me leaning because he bent and threw an arm around my waist to support me, but he too was unsteady.

All at once, every other sound halted but our own breathing, laced with my faint moans. For the space of a dozen breaths, we stood supporting each other.

As he'd done before, Little Boss became terrifically still. Suddenly everything felt less urgent, as if the whole world slowed to a halt while his thoughts proceeded through his mind's engine.

"It isn't a disease," he said. "It's this place. Or them."

"What . . . what I'm seeing . . . ?"

"This is what affected the miners. Other people's feelings. Experiences from other minds."

"They're doing it, aren't they? Whatever these are?"

"Somehow."

"But it's not the same as with the miners. It's fading. Why? What's different?"

"We need to find out."

"We need to leave," I said. "We need to seal this mine. Warn people."

We spoke quietly, but with great intensity. Something incredible was happening to us. When we stopped speaking, we watched those other beings, those dwellers in the earth. Were they also caught up in some realization?

"Are they listening to us?" I asked.

He didn't answer, but studied each of the four creatures in turn.

"How do you feel?" he asked.

"A little dizzy. But better." I swallowed. "Something feels plugged up in my head." I stuck a finger in one ear and wiggled it. "Or unstuck."

"It would help if we knew their intentions. Whether they attacked the miners and your man."

"VanHardt," I said. "I saw him fall." Little Boss watched my eyes. "It's true. When you were pulling me up. I know it. I know what I saw. He was confused, seeing things. Then he was over the ledge."

Over Little Boss's shoulder, in the beam of my misplaced light, one jointed appendage on the closest creature twitched. I held my breath against its moving again; they might suddenly surge toward us.

Little Boss ducked his head as if listening. "Do you hear words?"

"No."

He jerked upright. "That. Did you hear that?" He took one step away from me.

"We could leave now," I said, conscious of the rope at our backs, leading to safety.

"Are you hearing us?" he asked. "I'm hearing you."

He wasn't talking to me. Troubled at this turn, not thinking of abandoning him but feeling abandoned myself, I moved backward, two small steps, my palms toward the floor as if to cushion all sound.

"This is incredible," he said, making no effort now at quiet. "I—yes, I hear you. You hear me?" He turned and saw me. "It's like when a child learns to see," he said. "Your brain can't make sense of the light and color at first. It's not . . . organized." He touched his ear. "They're talking, but it's not in words. You have to translate it into words. Your brain has to get used to it. We've been hearing them for several minutes."

With his eyes on me, I didn't move. Still I heard nothing, but I had the impression of tiny worms wrangling behind my eyes.

"Relax," he said. "Listen." His eyes flicked about as if he were trying to pinpoint ideas fluttering in his heard. "Telepathy." He caught my eyes again, even as I slid farther from the light. "That's what the Theosophists called it. Mind touching mind."

I twisted about to see how far I had to go: Nearly there, the rope visible by its faint shadow on the rock.

But then I listened. And whatever they had for minds—stone or glinting gems or ice or vapor—opened a passageway into my head and clambered inside.

I don't recall my infancy, but I suppose he was right: when we're new to the world, words are only sounds, not sense; colors don't shape themselves into meaningful figures.

After several minutes, half dreaming, I learned to hear and see.

Whatever we experienced, to call it a story of origins, a history, would be wrong. Instead of history, I entered a continuousness, a sense that the creatures had always been here and always been such as we found them—as my father's mother, a clan leader, said of our own people. I learned how it feels to melt through stone, devour rock, and revolve through the darkness under the earth. I cannot tell you whether their ancestors might have once lived on the surface, driven down by an age of ice, flood, or fire, or if instead they arose from the planet's core, which some then said was hollow and others described as a molten sphere.

At some point, Little Boss asked, aloud, "Are your people all here? All together?" and all I received in return was a slurry of gray water in my brain. Little Boss suggested we try to picture what we meant, to focus on the group of four and imagine more, and then we did see something and feel something like an answer. I had a sense of great distances, of a multitude of beings scattered like pulsing stars against the dome of the sky. When we talked later, Little Boss told me he'd seen the same, but he also concluded that these creatures came in many sizes. Smaller, yes, but he said he thought they might be gigantic, too, and differently shaped, or made of many combined into one.

We could not uncover, no matter how either of us thought to picture or phrase it, how they lived, what kind of society they might have built, or whether they had family members, those to whom they especially bonded—the way we humans locate ourselves in the world.

I seemed to emerge from a dream, Little Boss leaning toward me, brows lowered.

"Are you all right?"

"I'm . . . What do you mean?"

"You've been crying," he said, which I heard as an accusation. I blinked and felt the tears.

His face, too, was wet. "So have you."

He touched his cheek. "Odd." He considered this briefly. "We still haven't learned what we need to learn. Did these creatures cause what happened?"

"What else could be responsible?"

He scanned our cavern. "The collapse is their doing," he said. "I saw it. They'd carved this cavern and, I don't know, maybe lived here. I have no idea why this spot. Then they worked outward, weakening this section below the mine. Eventually, they'll likely bring down the whole enterprise."

"Your father won't like that," I said, forgetting the miners themselves, their livelihoods, but Little Boss seemed not to hear me in any case.

"What afflicted the miners? We've felt it ourselves, but we haven't gone mad. We're missing something." He took hold of my shoulder. "We need to ask directly. Let's picture what happened here. The men. Their faces. Picture them falling through the floor. See what we get."

I shut my eyes to do it, like when I'd prayed as a child. No answer came. I felt our thoughts return, unfolded and refolded.

"Nothing," he said. The others hadn't moved for some time, as if they were waiting for us to pose a proper question. "Think," said Little Boss, "of the miners as they are now, what they're going through. Maybe we can get our question across as emotional content. Do you see what I mean?"

"I do." Crouched, we huddled together. His hair, slick with sweat, hid one eye. His arm encircled my back. As we shut our eyes and focused together, I wished I could hear his thoughts so we could send a unified message; instead, I heard him humming faintly as he concentrated, and I had to work to shut out that sound, slipping into the corridor of communication these beings had opened for us.

So I let myself imagine what the miners felt, their fear at falling, the terror of losing sight and the ability to walk. Flames and feebleness. I felt them tossing on their low beds, sweating, minds in torment. I had thought the word *sorrow* when I heard, as if from a chorus of voices, *Sorrow falls. Falls into stone.*

A cavern, a space empty of sound but awaiting sound, opened in me. A bitter taste flooded my mouth.

Anything that falls into stone, we know.

And then they were finished with us, withdrawing from our minds. We both knew it, separating ourselves and standing, my legs sore from crouching. The creature that had tumbled up the ledge spun about and set to work again, and after a few seconds, the others resumed, all headed outward from the cavern.

"Nothing's changed," I said. "You have to shut down the mine." I retrieved my dropped light, still wary in case one of the creatures should suddenly head my way.

"This isn't why we came," said Little Boss.

"We came to save the miners."

"To do that, we need to learn more." He squared his shoulders, then Little Boss strode toward the nearest of the beings, twisting its way into a wall that a moment before had been solid. Crushed stone flew into my companion's face and he spat. "Maybe we need some contact!" he shouted over the din. Little Boss put out one hand; it hesitated close to the creature's quivering form. "I want to know what you know."

"We need to leave!"

His expression, half sad, told me that I'd failed to appreciate the situation. Surely he felt what I did, the returning queasiness, the strange, unwelcome images. I thought, then, that he would never leave, and I wondered if I could make my way from here without him.

I hadn't seen Little Boss put his hand to the creature, but he must have done so. Once I saw what turn events had taken, there was nothing to be done. As if the creature's body were liquid, not solid, some of its substance had engulfed the hand of Little Boss.

Now you know, said the voice that reentered my head.

"Let me go," he said, not sounding panicked.

"Pull away," I said.

"I'm trying." Then he said nothing else, shifting his stance to gain leverage, his other arm flung back. "Get my bag!" he shouted. The stone flowed further, taking his forearm. I had no idea what he meant to do with anything from his bag, but no matter: I didn't move, only watched what had become a titanic struggle. Rock swarmed across his chest and climbed his neck. For a moment, he stopped struggling and looked upward. "The miners!" he shouted. "They're under attack! We need—!" Three steps separated us, but when I grabbed his other arm, his head had been consumed. I screamed and backed away, not wanting to be next. With each breath out, I screamed again. Terror made my voice bold. In the space of half a minute, my companion had vanished, overwhelmed, and then, with a sound like a snapped stick, his encased body broke away from the creature that had seized it. When he fell, the stony crash and the echo that followed emptied out the world. I was alone.

Could I reach the rope up to the mine floor? Would they prevent me? I pictured my hand grasping the ledge to pull me up. I saw myself dashing into the open air. I would make them understand back at the camp. We would take what we could and flee, crossing the river, making for the village, never to return. When the next boat came, I would leave this land forever.

But there lay the body of Little Boss in his stone cocoon, and in the shadows at my back lay Van. Anger grew in me. Suddenly these creatures seemed less frightening than idiotic, blundering away in ignorance of the damage they had somehow caused—as if people could be brushed aside, as if their suffering were simply an abstraction, a bitterness in the stone.

The walls shook again. Bits of rock and showers of dust shuddered down around me and upon me. I turned at the telltale rattle of the creatures' feeding and saw a new being come through the wall near the rope; it wobbled in its labors and brought down another piece of the ceiling. Any more, and it would block my access to the way out.

"Damn you!" I cried, thoughtlessly throwing myself at this new intruder. I screamed again, not into the gashes that might once have been eyes but into the churning horror of the sickeningly articulated mechanisms surrounding the mouth. Then a vision overcame me. I saw—and more felt than saw—the miners besieged, firing weapons from the shelter of trees. I felt, too, the fear of many women huddled together in one space. And the anxiety of the attackers, hours old, their sweat and tension during their long water-borne approach.

I found myself on the ground, tasting dust. Over my head, war had broken out. It could only end one way. I thought of what Little Boss, that man of might, could have done with his brilliant mind, powerful body, and black bag of science. How I wanted to act! To alter what was happening above!

Clawing upward against a stony surface, it took my embattled brain a moment to realize I gripped the creature that had brought down the wall. I knew he heard my cries for help. My hands became numb. Blinking away tears and earth, I saw yellow clay flow up my arms; I was stuck fast.

Now you know.

6. Battle

Once in my sight, my father struck a wall, frustrated. On occasion I have behaved much the same way. I pound a table; I strike my thighs. I at least have the words for what I feel; I think my father did not.

The wall was a brick wall, a block or so from where we lived. His hand came away bloody; he clutched it close; it had become a source of pain through his entire body. It hurt him so much, I cried, pressing my nails to my face, shaking to know how my father suffered, feeling in my body the great silence of everything he couldn't say.

When I opened my eyes, I knew only moments had passed. I also knew I was no longer what I had been. I could not see myself, but the creature I'd touched had gifted me with some organs that served as eyes and some that served as ears, though the stone paws that had been my hands could find no distinguishing details in the rough surface of what had been my head. I did not panic, though panic trembled as a possibility. Instead, I was overwhelmed by what else I beheld: Braided veins of many colors, like rich yarns, yards thick, coursed from the ceiling, each like a fat umbilicus, worming in and out of the rock around me. From beneath the creatures, whose labors now made a fainter, birdlike sound, musical and repetitive, spiky balls like

bits of pollen grown large drifted outward, and in each ball, which burst on my rough skin as I moved, I discovered a sound, an image, an impression, but so fragmentary, I could take no coherent meaning. As for the stone-encased figure on the ground, light danced about it like St. Elmo's fire. It was not itself lit up, but a bright nimbus, flashing and inconstant, formed a kind of second shell around my companion.

The explanation for the miners' woes lay within reach. But I had urgent business.

The stone cocoon on the floor was unimportant; I felt inexplicably certain that situation would resolve itself. It was the world above that needed me.

Intent became action, as never before in my life. The break in the ceiling that led to the mine floor: immediately I arrived beneath it, and what had been my hands, now clubs of stone, flashed into the wall, smashing handholds, rapidly hauling me up. My perception felt both trapped and expanded: I saw as if from a distance, like someone watching events play out, but I also felt my senses extend outward, all around me, and ahead, as if I could see myself reaching the mine exit before I was there—and then, with little notion of the time spent racing through the stone corridors, in a moment I *was* there, bursting into the brilliant day.

Never once did I slow or hesitate. Never did a plan form in me, because I barely thought; rather, action outpaced all thought. Quickly, so quickly, the encampment was at my back, then the latrines, as I swept through the jungle—did the trees speak to me there? I believe they said something as I sped along—out toward the river at the encampment's edge. Though my sense of hearing had been altered, I knew the sound of bullets, tearings of the air like cloth being ripped. At the river, I turned to follow the threads of sound, and near the dock, but tucked into a bend before the dock could be seen, I found three small boats against the shore, two boats emptied and one bearing three armed men. Soldiers. Heedless, I leapt into the wide lane of water, sank, ran along the river bed, and rose by the boats as the men turned at the sound of me.

They had no time to do more than widen their eyes. In an instant, I'd surged like a wave through their boat, sending them jumping for the close bank. Even as I took an additional moment to smash my way through the other vessels, I caught sight of those colorful coils I'd seen in the cavern—sliding outward from their bodies and down, into the water.

I didn't let them escape. Before they'd scrambled up the bank, I'd knocked their weapons from their hands—they'd held them as they dove—and flung each man toward the opposite shore, a hundred feet away. They landed short, but I saw them swimming for land as I shifted my focus to the gunfire on the encampment's side of the river, and with my attention turned, my body dashed where it led.

I passed the body of a miner near the dock. He lay in an attitude of crawling, and blood soaked the back of his shirt.

I was on them before I expected it: two dozen men among the trees, crouched or standing. I suppose the smashing of the boats had warned them of my approach, so they faced me as I came, mouths all open. Were they speaking any words at all? No, only unintelligible sounds as they either raised or dropped their weapons, stood their ground or wet themselves or scrambled away.

The merest brush from my sweeping arm sent three men soaring, their bodies dark collapsing flowers against the jungle green. A line of three soldiers standing firm fired—to no effect. Inside my carapace of stone, or in a body now turned to stone, I glimpsed the bullets in the air, untroubled by any sense of danger. The metal struck me, flattened, fell, tumbling useless, already behind me but still within my perception even as I rushed the men who'd fired. I scattered the men; I seized their weapons in one gesture, my mighty arms enfolding them and mashing their wood and metal to useless bits that exploded upward like crows chased from where they'd massed.

I raged, dispersing in their mortality and frailty the few men who remained. As they fled, brilliant ropes of terror—I understood now what they were, artifacts of human suffering—coursed from their bodies. Not pooling, the coils disappeared into the ground.

This form did not require precision or control. I swung wildly as I advanced. Did I weigh a ton? Was I big as a horse or car? I nudged aside a tree, toppling it. The last soldiers had fled the jungle, toward the stone walls of the open land, and I pursued into the daylight. I felt small inside my expanded dimensions, receiving reports as if they were telegraphed from a distance. And somehow, through it all, I had time to see the sky, blue and featureless but poised over this violent scene like a witness. The trees, too, bore witness, and every creature that took flight, while insect life noted faintly the disturbances in the shaking ground brought about by my tremendous, pounding steps.

Why didn't every man flee? In among the rocks, chasing down the last of them, I became aware, more through what might have been scent than touch, of a fellow clinging to my back. A slight concussion like a kiss told me he'd fired a pistol straight into my head. More flexibly than I would have thought, I reached back with one arm, snatched my attacker from his perch, then swung him against the nearby rock wall, a merciless anger in my arm. I knew his life left him—the one man I killed that day—when the fat, variegated umbilicus of suffering leaked only briefly from his midsection before it was shut off.

If I was breathing at all, I was not breathing hard. The enemy routed, I found myself in shadow, my club-like hands outstretched on the rocks before me, and in that moment I had time to be horrified. I knew the soldiers all had fled. All I could think was to return below.

Back I raced, hugging the walls, keeping away from the camp, hoping not to be seen. How narrow the tunnel seemed as I dashed along the rail tracks, toward the breach in the mine floor. There, invulnerable and wild, I flung myself downward to stand where I had stood before, where I had been a human woman. Van and Little Boss lay as I'd left them, both dead for all I knew. I heard and did not hear the musical working of the subterranean creatures, though they had vacated the chamber. I thought, hard, *Do not leave us like this*, but it was as futile as prayer, words only in the head, as whatever dwelled here no longer listened.

Wracked and sorrowful, I tucked Van under one arm—gently, gently. Then I gathered the stone cocoon that had been Little Boss and, as I could not carry both and climb the wall, flung his cocoon upward through the breach, the object striking stone and shaking down dirt. Then, jamming one hand into the wall, I began my climb, my feet too plunging into rock.

When I reached the level of the mine, I shoved Little Boss's cocoon, sending it ahead of me. In this way I proceeded till we reached the widening area at the entrance.

I heard a voice or not-a-voice, in my head or in the air. I don't know. I dropped the body of my friend and crumpled, loose-limbed and baffled, only a few feet from the opening. My vision blurred, every muscle shuddered, and my lungs heaved; I pictured myself as a fish hauled into a boat to die. I thought my adventure was at an end and I was at my end, an unfamiliar creature, bound toward my father in the earth.

Waking, I knew myself to be, once more, a small, naked person, curled on the ground. My eyelashes stuck and clicked. I sat up and rubbed my eyes. My skin, coated with fine powder, appeared redder than before.

"Oh, my friend," I said as I relieved Van of his long, waxy jacket. It reached halfway down my thighs and made me itch where it touched my flesh. Movement nearby

turned out to be the cocoon of Little Boss, shuddering, breaking. Again I apologized to what could not hear me, this time taking Van's shirt, bloodied at the collar and a challenge to free from the swelling body. Even as Little Boss was revealed, I dropped the shirt atop him and turned my back. That we both had lived seemed too much to believe, and it overwhelmed me so that I had to stand in the entrance and look out on the jungle as if I could never enter it again. I continued looking away at his first words, embarrassed for him in his weakness.

"Oh," he said, a soft lament. "Oh. Oh. God. God." He choked, coughed. Still I did not look. He said, "The broken tower," and then nothing. I heard him shift and swallow and rise, and only then did I turn. "How did I get here?" Little Boss asked. He had tied the shirt over his loins like a man who lived wild. "That jacket," he said. We both jumped at the appearance, between us, of the tuco-tuco, nosing the ground, trailing its string. Little Boss knelt to pluck the critter from the ground and undid its leash.

"It happened to me too," I said. "They changed me into rock and . . . I fought those men."

"Fought the men," he said. With some speed, the tuco-tuco headed outside. Little Boss stood as if the ground were unsteady. The world returned to him more slowly than it had to me. He was full of blinkings and twitches. "What's happened? I was dreaming. . . ."

I said, my mouth a desert, "I believe I killed someone."

A high sound that at first did not seem human reached us. The wailing of women, I realized, and he was already running. "I'll come back for your friend," shouted Little Boss, and clutching Van's jacket close, I hurried after him.

Here was death again. Between the living quarters and the pavilion, several women knelt around the body of a man, the man I'd seen sprawled in the jungle, their palms pressed to the ground; their cries were what had reached us, and they continued as we ran forward, each woman pausing for breath at a different time so that, at any moment, at least two voices shrilled.

In the midst of a cluster of armed miners lay the body of a soldier in the dirt, certainly the man I'd killed, and another man who still lived. Bound loosely at the ankles and hands, he lay on his side, his exposed cheek abraded like someone who'd slid on asphalt. Two of our miners pointed rifles at him, uncertainly, as if they weren't sure where or even how to aim. They shouted at him in their tongue, and he regarded them as might a tethered animal, knowing only that they likely meant to kill him.

Rex stepped from the circle and asked Little Boss, "Shoot the man?"

Little Boss put up his hand. "No." Rex didn't appear disappointed. He said something to the others, who replied variously but kept their weapons in their irregular positions.

"I need clothes," I said to Little Boss, and hurried off to take care of that. I entered my cabin feeling I might rip through its doorway or smash into the feeble floor, and once inside I had to simply stand, flexing my hands—then touching my face, to rid myself of the illusion that I had not regained my body.

By the time I returned to the larger group, the women's keening had subsided and turned to words as they shouted at the bound soldier, before whom Little Boss crouched.

"The rest ran off, evidently," he told me. "When this fellow woke up, the miners had tied him and were carrying him here. The other man was dead already." He pointed. "His chest appears crushed."

"I did that," I said, not proud, and Little Boss only nodded.

"Our people aren't safe here," he said. "This situation is more volatile than I'd realized."

"Where are they safe? They have few guns and little ammunition at their village. Do you think the soldiers went there?"

Little Boss pursed his lips, then leaned toward the soldier, who'd been pulled into a sitting position. "*¿Fuiste vos al pueblo y sus hombres también?*"

The man answered, "*¿Qué pueblo? Vinimos a la mina. Nos dijeron tomar todo lo que encontramos.*"

"He doesn't know anything about the village. Said they came to raid the mine and take whatever it had."

"Your father has to send more men," I said. "People to protect it."

"That's his decision. We can't even open the mine unless our stony friends move on."

The soldier, who had shut his eyes, whispered, his lips moving fast. "Is he praying?" I asked. At the time, I knew only a few Spanish words.

"Yes."

"That's . . . inconvenient." Little Boss looked at me with disappointment.

I could not see the man's fear, but I felt it, oozing from his wet, damaged face. And suddenly a kind of strength entered my slender body in the form of a powerful idea.

I said, "I want you to tell this man some things."

Little Boss slid his gaze up to me.

"Just . . . if you could say what I tell you. Please. Say that you attacked them."

"I—?"

"And you should . . . stand up when you say it. Look big. . . . Bigger."

I expected an objection, but instead he took on, again, that utter stillness. He rose, then drew a breath that made him larger.

"Say what I say. Say, 'I am the one who attacked you.'"

He shifted his stance, moving his naked feet closer to the man on the ground, who now was nearly under him.

He said, "*Soy el que os atacó.*" He didn't even glance my way as we continued.

"I defended the mine."

Little Boss touched his own chest, his fingers spread and arched in the shape of a spider. "*Defiendía la mina.*"

"I defend these people."

"*Defiendo esta gente.*"

"I defend their village, too."

He gestured vaguely toward the jungle. "*Defiendo su pueblo también.*"

"If you strike at them, I will find you."

"*Si los golpea, vos encontraré.*"

His voice was my voice, and in return, my own voice took on a tone I hadn't known before, certain and powerful. The man on the ground shook, watching the figure above him who must have loomed dark against the sky.

I said, "I'm not like anyone else."

"*Soy como nadie.*"

"I can . . . become like stone."

Now his hand became a fist, and the other man watched it. "*Puedo llegar a ser como piedra.*"

"You saw what I did to your guns and to this man."

"*Vos vio que hice con las armas y a este hombre.*" He indicated the dead soldier.

"You must never come here again."

"*Nunca vuelva jamas.*"

"If you come again, the stone avenger will destroy you!"

His gaze shifted toward me, but retreated before he met my eyes. "*¡Si vos vuelva otra vez, el vengador de piedra vos destruirá!*"

"Go tell your people!"

“¡Vaya y dígale a su pueblo!”

I was breathing fast, but I'd run out of things to say. “Okay. I'm done.”

Lowering his head, Little Boss clenched his jaw and held the man within his unshakeable scrutiny. Without averting his eyes, he bent abruptly and snapped the man's bonds, first at his arms, then his legs. “*¡Salga ahora!*” he shouted, waving his arm as if to harry a horse. “*¡Corre!*” The man scrambled awkwardly in the dirt, pushed through the ring of observers, and ran into the waiting jungle as if pursued by a fearsome beast.

Settling his shoulders, Little Boss raised one brow at me. “Stone avenger?”

“You didn't care for that?”

His face went through a series of uncertainties. “That's how stories get started.”

I said, “It's how *legends* get started.”

Once Little Boss had dressed, we went back for VanHardt, carrying sheets to wrap him, and when we'd stepped to the mine entrance, we hesitated, I at least in awe of the body, half-naked and tragic, and the thought of where we'd been. I imagined the stone creatures rotating through their caverns, shoveling rock into their always-gaping mouths.

“I suppose I should take the body back to the States,” he said.

“We buried Silva in the village,” I said. “They prepared the body. And VanHardt said he didn't have any family.”

Together, we knelt and swaddled my friend. Nearby, piles of powder marked where we'd lain. I wanted to know what Little Boss had been through while immobilized, but couldn't directly ask.

“I know what happened, how the miners were . . . infected,” I said. “I saw these kinds of cords, cables, coming out of people's bodies. It's our suffering. We bleed it out. I think the stone creatures . . . I think they ingest it, maybe, or free it from the stone. And then it turns into these bubbles, almost. Like gas.”

He looked up. “A waste material,” he said. “It gathered in the chamber. In the ceiling.”

“Yes. Yes. And when the men fell through, they passed through this region of gas.”

“You and I encountered it too, but in a less concentrated form. The break in the ceiling let out the majority of the gas.” He nodded as he looked upward, picturing it. “The densely combined memories of those experiences traumatized the miners, even clung to them. Our exposure was more incidental. I suppose it makes sense.”

“You said something earlier,” I said. “When you . . . when you came out of the stone.”

We did not look at each other. He shrouded Van's face, then sat back on his haunches.

“What did I say?”

“The broken tower.”

He paused and tilted his head as if listening.

“The broken wall, the burning roof and tower,” he said. “Yeats.”

“Yeats? What's—?”

He said, “Not yet.”

We made the trek to the village that day, everyone, leaving the camp empty. The whole time, I felt it at my back and saw it remaining forever empty, though I cannot say why I had such sad imaginings. Our progress through the jungle maintained a solemn silence except for the occasional needed word or the chatterings of the children. Two boats sat waiting at the dock, and it took some time to ferry all of us across the water, the living and the three who had died.

The funerary practices of these people, I have recorded elsewhere, though I cannot claim to understand every implication. Interred together in the ground because they had, in the view of the people, all died on the same day, enemy, friend, and family were treated as equals, because in death, the body was blameless. Still, I wished I could have spoken up to supply Van his own resting place.

A brief ceremony, then a community meal, and we were done. We returned the same day, most of the journey in the dark, slowly, listening, fearful of what lurked in the jungle's night-time realm.

Little Boss walked me to my shelter and wished me a peaceful sleep.

7. Story

Pauline Johnson, a Canadian Mohawk, wrote of a tale she heard from the Squamish, a native people of British Columbia. A man, a married man, trained his body every day, making himself strong in spirit and body to prepare for the coming of his child. When strange beings blocked his path one morning, he defied them. In return, he was transformed into a fifty-foot upright rock that still stands at a river's edge.

He is known as Slah-ka-yulsh, "he who is standing up." In the story, his transformation is meant to reward his unselfishness, but to me it seems that, because of his love for his family, he was punished. For isn't it better to remain a man than to be turned into a symbol?

I woke at first light, intending to stay in my hammock, allowing Little Boss time to himself, his exercises, his muscles contending with each other as if he were his own foe. I took in familiar sounds of the camp coming to life—the men heading out together, the generator thrumming in the distance—until I realized I should not be hearing such sounds.

There he sat, just outside my door, evidently waiting for me, mottled shade and brightness floating across him. He had our bags.

"You went back?"

He shrugged. "I wanted to recover my instruments. Most were intact."

"You went alone."

"This time, I knew what to expect," he said.

"You shouldn't have gone alone."

Considering the ground between his feet, he gave the slightest nod, though I wasn't sure he meant to agree. "I talked to them. It was clearer this time, like a telephone in my head. I believe they understood. I think they don't like human suffering any more than we do."

"What they did to us," I said, though he still had told me nothing of his experience. "Did they mean to help?"

"I have no idea."

I tied back my hair and put on my hat. "It's hard enough to judge the intentions of humans," I said.

He began to say something, then looked at me, hearing my words twice and thinking what they might mean. His face relaxed into a wry smile. "So they've moved on," he said. "Deeper. I still hear them, but . . . it's distant."

"You're in contact?"

"So it seems. And I got the impression they'd like to do something for me in return."

"What could they do?"

He grinned. "Dig a long tunnel." Then he looked over his shoulder, toward the

mine. "I told the men the problem was solved. They seemed convinced. One of the men took charge. And I restarted the generator." One hand settled on his black bag as if it were a fond companion.

"You wanted something from your bag," I recalled. "When your arm was caught. What's in there?"

Thoughtfully, he rubbed the surface with his thumb. "A sharp knife," he said, and got up.

Every man had improved since the previous day. The fellow with useless legs found them somewhat useful again, rising from his pallet, but walking with suspicion, as if his limbs might give out again. Hands flat on her face, his wife giggled into her palms. The blind man now saw shapes. The man who'd been on fire lay quiet and unhappy, but no longer consumed by pain.

"It's lifting," said Little Boss as we headed to visit another man. "The effect was temporary. That's good to know."

"Why only terrible things?" I asked. "Why does misery linger? What about . . . happy things? Children laughing?" I thought of standing in the field with my parents, arms spread, the wind moving over me. "What happens to everything joyful?"

I don't know why I expected an answer from him, and I could see that it hurt him not to have one ready.

Before he left, he used the radio to send a message home. Then I helped him carry his things to the car in its open shed by the mules. All along, I thought about what he was keeping from me. I drove slowly, hat crammed on my head, car roof back, watching for the cracked windshield to fall into our laps.

I tried to prompt him. "We've been through something," I said. "The world doesn't feel solid."

He pushed his hair from his face. "You heard about Alfred Wegener?"

"No."

"German scientist."

"The control thing with the exercises?"

"No, that's another fellow. Wegener has a theory about continental drift. The idea is that the earth's surface is moving all the time, very slowly. It's made up of plates that drift about. At one time, they were all together, in one continent. His evidence is quite compelling, I find." I waited. "It's just that nothing's as stable as we like to think. The world hasn't always been like this. And it won't always be like this."

For the rest of our jaunt, there was only the sound of the engine.

Near the end of the path through the jungle, I could see his plane, the brightest thing around. Whatever had been lying dead on the runway two days before had vanished, carried off. I slowed as I neared the plane until I drew us to a gentle stop.

I opened the door, but stopped, aware of his stillness which seemed to halt everything around him.

"The poem by Yeats," he said. "It was in a magazine last year." His eyes skipping about, he read it in the air as if it hovered above the dash. "'A shudder in the loins engenders there the burning wall, the broken tower, and Agamemnon dead.' It's about the Trojan war. Zeus turns into a swan to attack this girl, Leda. He . . . impregnates her."

"A swan?"

"Pretty standard for the Greeks. The child that's born is Helen of Troy. Zeus's action leads to war and a host of unforeseen consequences. That's . . . I wasn't thinking of any of that, especially. Just that image of the city in ruins." Now he took a breath unlike any I'd seen him take before, one he ratcheted in in two gulps, like someone who had exhaled too long. His eyes glassed over and he blinked several times before

turning his face toward me. "You saw those cords and bubbles of misery when you were . . . changed," he said. "Did you see anything else? Any sustained images?" I shook my head.

"What I saw," he said. "What I felt. It . . . it couldn't all have been at once, but . . . spread out. A century. At least a century of horror. And not just the past. Some of it . . . wasn't history. It wasn't. Major cities burning. Crowds and crowds of people packed in small spaces without air. Fire. So much fire. Everything burning, people caught up in clouds of fire. . . ." I noticed his hands, how he kneaded the fingers of one with the other. "The moon. The moon went red. I saw it through a million eyes. It meant something. I heard whole nations screaming. People . . . I felt them turn to smoke. Not that that makes sense. I saw a lake of ash. And enormous buildings, nothing like what we have now, collapsing into themselves, the way some ancient body you unearthed might collapse if you touched it.

"How could that be where we're heading?" he asked. "We're learning all the time. We have science now, a reasonable way of approaching things. Everyone agrees the last war was absurd, pointless. It's a time of progress."

"The future," I said. "How could they show you the future?"

"Every terrible thing falls into the earth. That's what they said. These awful events . . . maybe they're so enormous, they plummet back through time."

"It doesn't seem . . . scientific."

"Their world," he said softly.

I nodded. "Their rules. They said we know now. I don't think I know anything."

He put his hand on the door and looked through the shattered glass. "We need to make a world," he said, and he stopped talking for so long, I believed he'd finished the thought. Then he swallowed and said, "Make a world that has less suffering. What's coming will be catastrophic. I suppose no one can stop it. I've seen it. But we can lessen the suffering."

"It sounds like you have a bigger mission than you thought."

Eyes searching, he gave me a look of mild surprise.

Before he let us load the plane, he touched something under one wing to deactivate the electrical charge. More carefully than I'd unloaded his gear, I passed his packages up to him in the cabin. We finished so quickly, it seemed like he was leaving with less than he'd brought.

He sat down in the open doorway. "Will you keep writing about the people here?"

"Most definitely," I said.

"Someone should tell their story," he said. "They shouldn't just fall out of history. Something good could come of your writing about them."

"Your story may need telling too."

He laughed in two large bursts. "Mine? Is that so?"

"Maybe you'll let me write it down."

He grinned, ducked his head, and brushed his hair forward so it fell over one eye. "Just don't make it entirely about me."

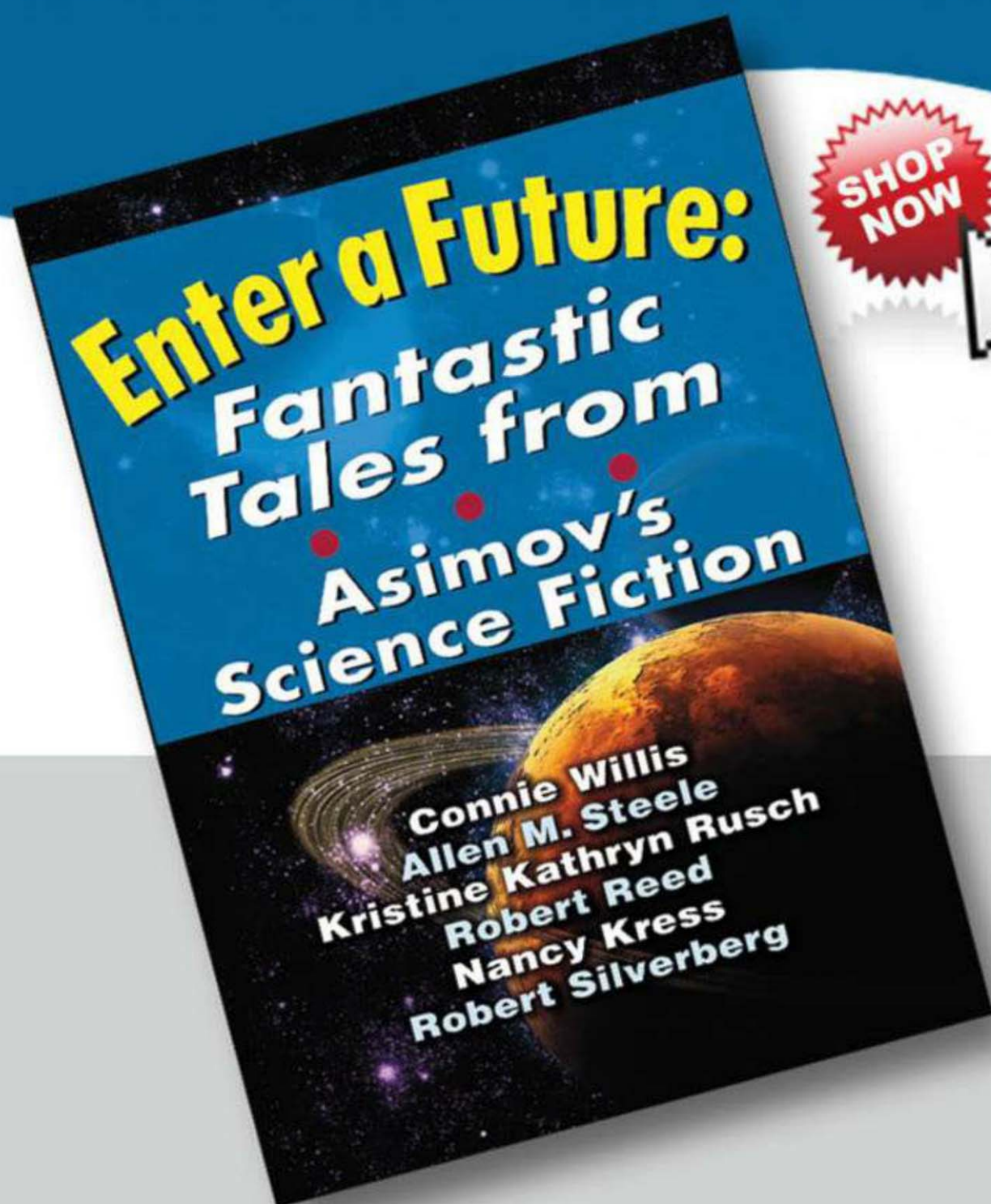
"I'll do my best."

We shook hands, and as before, he held on longer than expected, only this time I held on as well, reluctant to let him go.

Years it's been, but still I see, clear as the day beyond my window, the look he cast northward before he donned his goggles. One hand on the open cabin door, he raised his eyes toward the mountains as if he could see past the world's barricades and into the long years of his life.

As if he could see farther than any of us. ○

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THE HUNGER GAMESBy **Suzanne Collins****Scholastic, \$17.99 (hc), \$8.99 (pb)****ISBN: 978-0-439-02348-1 (hc)****978-0-439-02352-8 (pb)****CATCHING FIRE****\$17.99 (hc), \$8.99 (pb)****ISBN: 978-0-439-02349-8****MOCKINGJAY****\$17.99 (hc)****ISBN: 978-0-439-02351-1**

The “Hunger Games” trilogy is the biggest phenomenon in YA fiction since the Harry Potter or “Twilight” series hit the bookstores. But unlike those, Collins’s series is pretty clearly SF rather than fantasy—dystopian near-future SF not that far removed from what satirists like Fred Pohl were doing in the 1950s. You’ve likely seen the first movie made from the series. I’ll tread lightly on the plot of later volumes, to avoid spoiling too much of the story for those who haven’t read them.

The tale starts in an outlying district of the future nation, Panem, where Katniss supports her family by illegal hunting. The central government rules the twelve outlying districts with an iron fist, in consequence of an unsuccessful revolt seventy-four years ago. Now, as an annual reminder of its power, the Capitol requires each of the provinces to send it two “tributes,” one young person of each sex, to fight in the murderous Games. Katniss and Peeta, son of the local baker, are the representatives of District 12.

Much of the next few chapters is spent building up background and preparing the tributes to take part in the games. The central government wants the games to be a huge spectacle, so the tributes are given personal handlers, includ-

ing combat trainers, strategy trainers, and a full array of cosmetics and costume consultants. Katniss is both confounded and bemused by the attention; as a dirt-poor girl from a backward community, she’s never particularly cared how she looks. On the other hand, she and Peeta are assigned to Haymitch, the only surviving Winner from their district—a hopeless alcoholic and utter cynic whom they have to coerce into helping them at all.

Katniss and Peeta know the odds are stacked against them; District 12, whose main industry is coal mining, is comparatively poor. And contestants from several of the more affluent districts are “career” gamers—trained from an early age in combat skills and physical fitness. Katniss is impatient with the show-biz aspect of the games, in which the tributes are built up as media celebrities in the weeks before they are expected to start fighting each other. Thus begins a theme that runs through the series, where the hoopla around the games takes on the aspect of our reality shows—but with a deadly serious undercurrent.

Katniss is at first convinced that Peeta is going to be mere cannon fodder for the Career tributes. But he turns out to be adept at the show-biz aspect, recognizing that by building a fan base among the Capitol’s rabid Games followers, he and Katniss can gain an advantage. One of the twists to the games is that followers can give the contestants gifts, which can aid their survival and possibly even make them winners. So at a climactic moment, he tells the media audience that he and Katniss are star-crossed lovers. This of course is the farthest thing from Katniss’s mind, but all the advisors are convinced it’s a winning ploy and tell her to play along.

The games themselves make up the bulk of book one of the trilogy; it hardly seems a spoiler to reveal that Katniss survives the games, and that the subsequent books deal with their aftermath—which eventually develops into a rebellion against the Capitol, with Katniss a key figure. What is worth noting is that Collins takes this very familiar plot outline—a huge number of books from the 1950s and '60s, including some major classics, follow it—and makes it work. In fact, she delivers plenty of plot surprises—there were half a dozen points in *Catching Fire* where I was caught completely off guard. And I have reviewed enough books by now that I am hard to surprise.

Collins also gives her young readers credit for absorbing fairly dark insights into human nature, especially the relations of the powerful and powerless. That is a theme with which the young have considerable experience—experience that has in many cases armored them against soothing tales about how the powerful have the little people's best interests at heart. Collins doesn't pull a lot of punches; Katniss goes through a fairly relentless string of traumatic experiences, with genuine consequences. There are also a fair number of hairbreadth escapes and miraculous cures, if only to preserve interesting characters for future use.

But on the whole, the author plays fair with her readers. Like most of the best YA authors, Collins doesn't talk down to her audience. There are of course some limits on what she can do. There's no on-stage sex, no nasty language, and while there's a fairly high level of violence, it doesn't ever cross the line into sadism, or seem inappropriate to the overall story.

Also, interestingly, the trilogy draws upon a fair amount of classical history and mythology. Collins states in an afterward that the selection of "tributes" to take place in games for the tyrannical capital is based on the legend of Theseus. The name of the nation, Panem, is an allusion to the Latin phrase, "panem

et circenses," usually translated as "bread and circuses." The phrase's historical resonances shouldn't conceal the appropriateness of its application to the hedonistic entertainments of more recent times.

In short, if you're among those who haven't picked up this series, I'd strongly recommend repairing the oversight. The "Hunger Games" trilogy is one more piece of evidence for the thesis that sociological SF is making a comeback, and if Collins has more of this up her sleeve, I'll be eager to see it.

AFTER THE FALL BEFORE THE BALL DURING THE FALL

By Nancy Kress

Tachyon, \$14.95 (tp)

ISBN: 978-1-61696-065-0

In this short novel, Kress looks at an ecological disaster from three angles: a very near future, a slightly later period when things actually fall apart, and a farther future where a few survivors hang on in the starkest possible circumstances.

We follow two main characters: Julie Kahn, a young mathematician of unusual talent, in our own time, and Pete, a young boy from the farther future. The connection between their stories quickly becomes apparent. Julie is working for a federal law enforcement agency, analyzing a series of child abductions that her lead investigator thinks are connected. The kidnapper, who has been seen by a couple of the parents, is a young person who suddenly vanishes. Mixed in are a series of burglaries where odd items have been taken, without any evidence of a break-in. Julie even has a pretty good algorithm for predicting where the next event will occur—just not quite good enough to put the investigators on the spot at the time.

The link is that Pete, the boy from the future, is one of the kidnappers/burglars, using a kind of time machine provided by a mysterious group known as the Tesslies. Confined to an enclosed habitat, the group consists of a few adults, most of them elderly, a small number of

adolescents, and children—whom they have kidnapped from the past. The kidnappings are meant to supply enough young people to replenish the gene pool and keep the group viable—especially since all the adults are approaching the point of infertility. Unfortunately, most of the teenagers are also infertile—the result of pervasive radiation outside the shelter.

Pete has problems of his own, including rivalries with the other younger members of the future society. He's got the typical range of adolescent rebellious attitudes and a fair amount of sexual frustration, despite being allowed to have sex with one of the adolescent girls (they're not fertile, unfortunately). This peaks when one of the other boys manages to impregnate an older woman—the de facto leader of the group. The leader's explanation about the necessity of extending the gene pool doesn't defuse Pete's jealousy over her involvement with someone other than him.

To further complicate things, early in the book, we find out that Julie is pregnant, and that the father is a married man who is not going to leave his family—not that she shows any interest in getting him to. Instead, when funding for the project to find the kidnappers is cut off, Julie takes on freelance work to support herself, and determines to have the baby on her own. A fair amount of the plot has to do with her preparations for the baby, and her care for it after its birth.

Meanwhile, another plot is developing, just beyond the awareness of the characters in the present-day time frame. It begins with a bacterial mutation that subtly attacks grasses—including all edible grains. One of Julie's employers, after she goes freelance, picks up evidence of the plague—but he's prevented from publishing. At that point, Julie sees the writing on the wall, and takes off to avoid apprehension.

The three plot strands come together in an apocalyptic ending—beyond which there may lie an optimistic future. But

Kress resists the temptation to push beyond a certain point, and the book is a good argument for the beauties of compression in story-telling, especially given the minimalist nature of the future society. Yes, it probably would have been interesting to learn more about the Tesslies (who do put in an appearance before the story is over). But the knowledge wouldn't necessarily be an improvement; there is something tantalizing about them, possibly best left as it is.

Kress shows her usual flair with character, a sharp eye for social trends, and an ability to explore edgy themes without getting self-important about what she's doing. Recommended, especially if you're getting tired of the overblown world-building that seems so fashionable these days.

JANE CARVER OF WAAR

By Nathan Long

Night Shade, \$14.99 (tp)

ISBN: 978-1-59780-396-0

Here's an obvious homage to Edgar Rice Burroughs' "Barsoom" series, which lately made its debut as a film—but with a couple of twists: a tough woman protagonist, and a very twenty-first-century sensibility. While it's an obvious enough take on the original, it's not a easy trick to pull such a tribute off. Nearly a century after Burroughs' *A Princess of Mars*, it's all too easy to fall into slavish copying, sophomoric parody, or unintentional camp. How well Long succeeds will probably depend on your personal taste; I think he does it well.

The setup is similar to that in Burroughs' tale: Jane, who is a combat veteran who likes to hang out with bikers, is in a tough bar. She leaves after being hassled by a boorish man, but he follows her to the parking lot where, fending off his advances, she kills him. Afraid of the law, she runs away, taking cover in a cave. There she falls into what amounts to a matter transmitter that puts her on an alien planet. She quickly learns that the local gravity is lower than Earth's, and that the local lifeforms are not ex-

actly friendly—as demonstrated by the ambush of a party of travelers. Jane rescues the lone survivor—Sai, a rich noble of the humanoid species that dominates much of the world. It turns out he was on his way to meet his betrothed, and that the attacker was a rival for her favors.

Jane decides to help Sai get back his stolen bride, Wen-Jhai. But first she and the local are abducted and held captive by a race of six-limbed reptilians who are a fair simulacrum for primitive tribesmen, and who treat the humanoids as slaves. There, she begins to realize just how weird the world she's gotten into is. With a combination of what amounts to super-human strength, thanks to the light gravity, her military training, and her street smarts, she wins her freedom from the captors, then lets Sai take her to the home of one of his friends—Lhan, another young lordling, whose world view is somewhat less conventional than Sai's. The three of them set out to rescue Wen-Jhai, and a string of wild adventures ensues. They encounter pirates, evil warlords, imprisonment and escapes, occasional monsters, lots of combat—and way more sex than Edgar Rice Burroughs ever dreamed of.

Long does all this with verve and humor, and manages to conjure up at least the spirit of his century-old model without being trapped in the minutiae. All ends up well—and there's enough ground for a sequel, if the author is so encouraged. It's a romp—and if that's what you're in the mood for, this ought to do admirably.

FAITH

By John Love

Night Shade \$14.99 (tp)

ISBN: 978-1-59780-390-8

This one's a full-bore space opera with mystical overtones—as perhaps the title might indicate. The plot revolves around a berserker-like alien warship, dubbed *Faith* by its victims, that attacks space-going civilizations, although it has a history of not targeting undefended civilian populations. The military has been help-

less against it—but there remains one last hope: that an “Outsider,” an extremely powerful warship crewed by the outcasts of all the races of the federation, can hold its own against it.

Early on, the enigmatic *Faith* defeats a number of expeditions sent against it, and the stage is set for the Outsider ship *Charles Manson* (all the Outsiders are named for heinous criminals). Its commander is Foord, like all his crew a sociopath chosen for his ruthlessness and cold calculation. His second in command is Thahl, a Sakharan—a native of a planet that was visited by *Faith* centuries before, and reduced to pre-space age technology. With the expansion of human civilization, the Sakharans became one of the outposts of the growing human empire. Now, it appears that Sakhar may be due for another visit by *Faith*.

The dramatic arc begins as Foord and Thahl attempt to return to their ship and escape into space—against fierce opposition by locals angry at the crew's violence while on shore leave. The journey back to the ship turns ugly, and they reach it at considerable cost—with a trail of dead locals in their wake. Once in space, Foord deliberately cuts communication with the ground, determined to fight the berserker on his own terms.

The plot then builds through several encounters between *Manson* and *Faith*, with each ship damaging the other, but without a definitive conclusion. Each of the encounters brings out the skills of some of *Manson*'s crew, who are almost an evil parody of the conventional Star Trek cast: male and female, of several different species. They are all supremely competent within their specialties, but each is also eventually shown to have some trait that has twisted away from the normal.

It gradually becomes apparent that *Faith* is deliberately extending the fight with *Manson*, waiting for the ship to return for another round rather than breaking away to attack Sakhar—even when it could easily do so. What also becomes clear is that the two ships are in some

way destined to carry out their dance of death to the final measure. Like Ahab and Moby Dick, they are somehow bound to each other. And in fact, the writer clearly means to give the conflict that kind of primal significance. Even the names of the two ships point to a larger meaning. The good vs. evil allegory is pervasive, though its resolution takes on considerable complexity.

These greater resonances actually work well in the context of large-scale space opera. I was reminded of one of the more ambitious novels of the late '60s,

Charles Harness's *The Ring of Ritornel*, which drew deep metaphysics from the then-fashionable Steady State theory of cosmology, under the guise of New Wave space opera. This new book shows that same audacity of reaching for something bigger than most of the other writers are trying for—an even more impressive feat when you consider who some of the current practitioners of space opera are. It will be very interesting to see what else the author, John Love, has to offer. ○

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SF CONVENTIONAL CALENDAR

Don't forget the WorldCon coming up Labor Day weekend. Till then, my picks are ConFluence, ArmadilloCon, When Worlds Collide, Pi-Con, and BuboniCon. Shore Leave in Baltimore is a good bet for Trek/media-SF fans. Plan now for social weekends with your favorite SF authors, editors, artists, and fellow fans. For an explanation of con(ven-
tion)s, a sample of SF folksongs, and info on fanzines and clubs, send me an SASE (self-addressed, stamped #10 [business] envelope) at 10 Hill #22-L, Newark NJ 07102. The hot line is (973) 242-5999. If a machine answers (with a list of the week's cons), leave a message and I'll call back on my nickel. When writing cons, send an SASE. For free listings, tell me of your con five months out. Look for me at cons behind the Filthy Pierre badge, playing a musical keyboard. —Erwin S. Strauss

JULY 2012

27-29—**ArmadilloCon**. For info, write: **Box 26442, Austin TX 78755**. Or phone: **(512) 343-2626** (10 am to 10 pm, not collect). (**Web**) **fact.org**. (**E-mail**) **dillochair@armadillocon.org**. Con will be held in: Austin TX (if city omitted, same as in address) at the Renaissance. Guests will include: Anne Bishop, Chloe Neill, Liz Gorinsky, Bill Parker, A. Lee Martinez. Long-running Texas con.

27-29—**ConFluence**. **parsec-sff.org**. Doubletree Airport, Pittsburgh PA. Singer Seanan McGuire. "Literature & Art of SF/Fantasy."

27-29—**WinkieCon**. **facebook.winkies.org**. Asilomar Conference Center, Pacific Grove CA. L. Frank Baum (Wizard of Oz) fans.

27-29—**Otakon**. **(484) 223-6086**. **otakon.com**. Convention Center, Baltimore MD. A major East Coast anime event.

27-29—**Anime Iowa**. **animeiowa.com**. **info@animeiowa.com**. Marriott, Coralville IA.

28-29—**TfCon**. **tfcon.ca**. **tfcontoronto@gmail.com**. Delta Meadowvale Resort, Mississauga (Toronto) ON. For Transformers fans.

AUGUST 2012

3-5—**Shore Leave**. **(401) 701-0669**. **shore-leave.com**. Marriott, Hunt Valley (Baltimore) MD. Burton, Mulgrew. Star Trek/media SF.

3-5—**MuseCon**. **musecon.org**. Westin, Itasca (NW Chicago) IL. Greg Taylor. "Celebrating Electronic Art and All Forms of Creativity."

3-6—**MythCon**. **mythsoc.org**. Kerr Center, Berkeley CA. G. Ronald Murphy, Grace Lin. High fantasy (Tolkien, Lewis, Williams, etc.).

10-12—**PulpFest**, c/o 1272 Cheatham Way, Bellbrook OH 45305. **pulpfest.com**. Hyatt, Columbus OH. Resnick, ERB, R. E. Howard.

10-12—**AniMiniCon**, 138 Sullivan, New York NY 10012. **(212) 228-2810**. **animiniconsoho.com**. Soho Gallery for Digital Art. Anime.

10-12—**When Worlds Collide**, c/o 1835 10th Av. S., Calgary AB T3C 0K2. **whenworldscollide.org**. Written SF and fantasy.

10-12—**Flashback Weekend**, Box 480715, Niles IL 60714. **(847) 478-0119**. **flashbackweekend.com**. Rosemont (Chicago) IL. Horror.

15-19—**Dum Dum**. **edgariceburroughs.com**. Tarzana (Los Angeles) CA. Celebrating 100 years of Tarzan and John Carter.

16-19—**GenCon**, 120 Lakeside Ave. #100, Seattle WA 98122. **(206) 957-3976**, **x3806**. **gencon.com**. Indianapolis IN. Big gaming con.

16-20—**Return of the Ring**. **returnofthering.org**. Loughborough University, Loughborough UK. J.R.R. Tolkien.

17-19—**Pi-Con**, Box 400, Sunderland MA 01375. **pi-con.org**. Holiday Inn, Enfield CT (Springfield/Hartford). Czerneda, S. Lipkin.

17-19—**StarFury**, 148a Queensway, London W2 6LY, UK. **(+44) 07930 319-119**. **seanharry.com**. Birmingham UK. "The L-word."

24-26—**BuboniCon**, Box 37257, Albuquerque NM 87176. **bubonicon.com**. Marriott Uptown. B. Sanderson, M. Cassutt, U. Vernon.

24-27—**DiscWorldCon**, Box 4101, Shepton Mallet, Somerset BA4 9AJ, UK. **+44 (0) 7092-394940**. Birmingham UK. Terry Pratchett.

30-Sep. 3—**Chicon 7**, Box 13, Skokie IL 60076. **chicon.org**. Chicago IL. Resnick, Morrill, Musgrave, Scalzi. WorldCon. \$195+.

31-Sep. 3—**CopperCon**, Box 62613, Phoenix AZ 85082. **coppercon.org**. Author and game designer Ari Marmell. Fantasy emphasis.

SEPTEMBER 2012

21-23—**FenCon**, Box 701448, Dallas TX 75370. **fencom.org**. Addison (Dallas) TX. C. J. Cherryh, Peter David, D. Giancola, J. Anealio.

21-23—**FoolsCap**. **foolscapcon.com**. Marriott, Redmond WA. Joe & G. Haldeman, L. Dowling, F. Ciocco. SF/fantasy literature and art.

21-23—**Can-Con**. **can-con.org**. Ottawa ON. Hayden Trenholm, Tom Fowler. Canadian-content SF and fantasy. Aurora awards.

21-23—**Roc-Con**. **roccon.net**. Rochester Institute of Technology, Rochester NY. Vic Mignola, Lois Gresh. SF, comics, anime.

21-23—**TitanCon**. **titancon.com**. Europa Hotel, Belfast, Northern Ireland. Author GoH: Ian MacDonald. SF and fantasy.

21-23—**Fantasy Con**, c/o 10 Haycroft Gardens, Mastin Moor, Chesterfield S43 3FE, UK. **fantasycon2012.org**. Brighton UK.

28-30—**Vampire Ball**, 148a Queensway, London W2 6LY, UK. **(+44) 07930 319-119**. **seanharry.com**. Renaissance, Heathrow UK.

AUGUST 2013

29-Sep. 2—**Lone Star Con 3**, Box 27277, Austin TX 78755. **lonestarcon3.org**. San Antonio TX. The World SF Convention. \$160+.

AUGUST 2014

14-18—**London WorldCon**, 4 Evisham Green, Aylesbury HP19 9RX, UK. **londonin2014.org**. Docklands, London UK. The WorldCon.



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